**Datos del arreglo tamaño 10^2:**

**Menor a Mayor:**

int data [] = {10754,11391,11699,12778,12940,12995,13449,13586,13686,15709,16208,16829,17084,17620,17918,19468,19788,19872,20292,20778,21448,22204,22827,23947,24459,25145,25891,28594,29294,31008,31288,33317,33792,34493,36772,37637,37803,40249,40785,41325,42667,44595,44664,44787,44836,45805,47058,47245,47999,48105,48750,49780,50259,50498,50623,51717,52702,54486,55453,56557,56579,58786,59608,60932,61396,61665,61887,62969,63281,63437,64106,64167,65141,66187,66909,67520,67912,69737,70098,70566,71314,74379,74509,75594,76941,77303,78010,78689,78836,79229,80292,81364,83278,83910,86109,86367,86400,88007,88630,89734};

**Mayor a Menor:**

Int data [] =

{89734,88630,88007,86400,86367,86109,83910,83278,81364,80292,79229,78836,78689,78010,77303,76941,75594,74509,74379,71314,70566,70098,69737,67912,67520,66909,66187,65141,64167,64106,63437,63281,62969,61887,61665,61396,60932,59608,58786,56579,56557,55453,54486,52702,51717,50623,50498,50259,49780,48750,48105,47999,47245,47058,45805,44836,44787,44664,44595,42667,41325,40785,40249,37803,37637,36772,34493,33792,33317,31288,31008,29294,28594,25891,25145,24459,23947,22827,22204,21448,20778,20292,19872,19788,19468,17918,17620,17084,16829,16208,15709,13686,13586,13449,12995,12940,12778,11699,11391,10754};

**Parcialmente Ordenado:**

Int data [] =

{10754,89734,11391,88630,11699,88007,12778,86400,12940,86367,12995,86109,13449,83910,13586,83278,13686,81364,15709,80292,16208,79229,16829,78836,17084,78689,17620,78010,17918,77303,19468,76941,19788,75594,19872,74509,20292,74379,20778,71314,21448,70566,22204,70098,22827,69737,23947,67912,24459,67520,25145,66909,25891,66187,28594,65141,29294,64167,31008,64106,31288,63437,33317,63281,33792,62969,34493,61887,36772,61665,37637,61396,37803,60932,40249,59608,40785,58786,41325,56579,42667,56557,44595,55453,44664,54486,44787,52702,44836,51717,45805,50623,47058,50498,47245,50259,47999,49780,48105,48750,};

**Desordenado:**

int data [] =

{71314,63437,34493,74509,77303,37637,40249,15709,45805,19872,13449,58786,70566,44787,11699,63281,67912,65141,12940,55453,31008,20292,16829,31288,10754,44836,61887,76941,47999,70098,22204,25891,86400,78689,41325,56579,21448,13686,83278,22827,86109,61665,50259,79229,81364,17620,44595,47245,64106,33317,56557,66187,48750,44664,19788,12995,47058,80292,36772,78010,50623,25145,24459,29294,61396,48105,17918,42667,86367,33792,64167,69737,50498,67520,20778,28594,16208,59608,17084,13586,12778,60932,89734,83910,52702,62969,49780,40785,37803,74379,19468,78836,51717,75594,88630,54486,11391,66909,88007,23947};

Datos del arreglo tamaño 10^3:

**Menor a Mayor:**

{10228,10236,10266,10392,10417,10507,10582,10617,10654,10782,10852,10959,11027,11072,11082,11123,11128,11144,11186,11265,11357,11433,11511,11523,11547,11559,11694,11707,11884,11918,11930,11965,12070,12081,12084,12177,12192,12287,12320,12372,12549,12598,12636,12656,12658,12729,12841,12955,13219,13337,13567,13844,13894,14030,14175,14251,14303,14442,14531,14604,14604,14630,14667,14787,14794,14957,14992,14995,15019,15033,15074,15087,15099,15168,15219,15305,15345,15360,15363,15435,15496,15568,15569,15653,15682,15806,15843,15923,16114,16227,16244,16329,16523,16598,16602,16694,16721,17081,17084,17172,17304,17459,17531,17619,17885,17919,18093,18155,18216,18280,18454,18527,18592,18623,18645,18777,18804,18845,18847,18864,18909,19088,19186,19426,19490,19626,19680,19745,19762,19864,19866,19883,19885,19893,20145,20201,20245,20256,20485,20717,20756,20805,20909,20927,20997,21120,21162,21324,21425,21427,21622,21730,21829,21925,22029,22103,22153,22169,22171,22229,22527,22660,22821,22945,23034,23216,23245,23285,23396,23398,23632,23671,23776,23884,23982,24004,24023,24172,24241,24255,24319,24644,24746,24839,24911,24919,25016,25160,25702,25709,25729,25877,25878,25900,26179,26382,26389,26461,26480,26716,26756,26764,26959,27054,27072,27122,27203,27211,27382,27646,27664,27695,27834,27941,27995,28040,28080,28116,28121,28126,28197,28209,28402,28442,28505,28541,28594,28619,28650,28651,28688,28759,28876,28877,28927,28943,28954,29055,29127,29128,29169,29293,29323,29326,29520,29541,29548,29732,29831,29967,29973,30053,30054,30088,30155,30170,30215,30221,30383,30422,30477,30498,30566,30638,30650,30786,30786,30903,30922,30946,30957,30969,31018,31027,31133,31203,31300,31307,31454,31460,31501,31540,31584,31588,31631,31678,31849,31852,31892,31961,31979,32013,32016,32061,32218,32274,32776,32841,32889,32954,32974,33098,33157,33164,33209,33274,33284,33299,33472,33740,33759,34177,34279,34361,34525,34599,34654,34658,34741,34799,34861,34908,34917,35068,35124,35165,35295,35377,35524,35574,35645,35681,35705,35830,35843,35882,35890,35934,35973,36090,36154,36230,36374,36399,36428,36456,36466,36506,36594,36648,36683,36686,36850,36860,36905,36936,37087,37151,37219,37234,37310,37467,37498,37626,37634,37710,37734,37826,37880,37941,38000,38028,38033,38059,38112,38357,38393,38432,38524,38598,38603,38695,38697,38724,38793,38848,38899,38958,38968,38978,38980,39304,39518,39657,39688,39779,39852,39904,39916,39960,39996,40109,40111,40116,40244,40377,40427,40532,40535,40543,40561,40635,40921,40926,41086,41295,41329,41448,41477,41588,41669,41685,41742,41767,41823,41883,42089,42152,42225,42245,42381,42464,42492,42526,42530,42581,42612,42713,42828,42845,42868,42921,43059,43070,43076,43167,43220,43270,43335,43408,43434,43438,43536,43541,43597,43734,43799,43818,43957,43997,44352,44366,44403,44421,44452,44509,44530,44597,44785,44899,45045,45237,45242,45420,45685,45705,45887,45952,45955,46102,46202,46246,46290,46327,46389,46404,46419,46449,46559,46671,46676,46748,46789,46878,46905,46922,46934,46947,47029,47057,47061,47190,47216,47256,47425,47449,47452,47522,47543,47575,47658,47928,48127,48127,48153,48263,48320,48554,48593,48689,48840,48903,48939,48947,49091,49185,49280,49329,49466,49589,49589,49648,49703,49749,49759,49795,49918,49937,49959,49992,50047,50058,50301,50489,50621,50743,50797,50836,50937,51068,51103,51236,51279,51290,51309,51315,51600,51759,51805,51950,52031,52191,52226,52262,52321,52365,52368,52391,52420,52430,52476,52581,52669,52836,53058,53118,53155,53356,53565,53641,53886,54051,54174,54221,54283,54316,54345,54587,54728,54825,54829,54845,54913,54968,54984,55139,55404,55496,55534,55534,55752,55777,55790,55819,55842,55845,55906,55912,55915,55916,55981,56025,56103,56343,56687,56699,56699,56851,57123,57147,57230,57248,57263,57280,57326,57368,57434,57469,57506,57603,57617,57878,57990,57997,58094,58105,58217,58348,58370,58489,58679,58839,58936,58966,59315,59332,59440,59496,59541,59730,59957,59974,60024,60044,60052,60104,60314,60401,60482,60486,60491,60526,60544,60695,60763,61009,61016,61078,61100,61214,61290,61372,61394,61428,61518,61530,61532,61619,61641,61739,61761,61805,61978,62009,62127,62187,62188,62271,62328,62450,62507,62593,62608,62699,62806,62858,62952,63005,63019,63146,63254,63265,63410,63437,63540,63636,63639,63737,63853,63952,64161,64204,64261,64267,64558,64818,64889,64900,64943,64957,65048,65217,65317,65507,65600,65720,65725,65753,65824,65852,65897,66126,66241,66306,66312,66528,66900,66953,67083,67181,67339,67421,67427,67579,67620,67683,67726,67862,68036,68156,68284,68334,68462,68701,68716,68900,68920,68943,68969,69015,69039,69067,69138,69295,69326,69388,69397,69424,69568,69596,69670,69963,69989,70170,70180,70237,70243,70263,70273,70273,70314,70444,70475,70721,70778,70863,70876,70933,71015,71070,71154,71200,71202,71225,71226,71316,71359,71409,71681,71746,71882,72087,72128,72241,72355,72455,72458,72615,72656,72996,73239,73240,73287,73447,73629,73684,73726,73754,73775,73846,73965,74088,74138,74193,74205,74232,74304,74418,74515,74575,74748,74911,74987,75160,75390,75413,75599,75671,75862,76057,76204,76215,76269,76339,76367,76545,76557,76596,76603,76830,76871,77422,77573,77605,77740,77809,77819,77832,77866,77893,78013,78331,78372,78419,78675,78777,79162,79223,79294,79321,79427,79537,79602,79821,79913,79915,79937,80012,80149,80339,80660,80922,80956,80974,80991,81023,81189,81356,81616,81784,81825,82077,82172,82216,82239,82241,82426,82506,82532,82710,82740,82873,82884,82896,82903,83019,83176,83214,83355,83417,83440,83466,83664,83664,83687,83847,83924,83935,83991,84064,84254,84275,84372,84375,84463,84527,84564,84588,84600,84657,84709,84781,84808,84888,84994,84995,85021,85202,85371,85392,85498,85576,85581,85588,85588,85641,85686,85700,85823,85871,85951,85954,86044,86045,86124,86281,86349,86571,86625,86650,86780,86822,86875,86920,87015,87016,87054,87166,87237,87301,87353,87396,87520,87581,87587,87594,87659,87667,87769,87790,87844,88085,88104,88105,88127,88376,88516,88795,88884,88952,89063,89267,89441,89637,89651,89685,89818,89938,89961,89991};

**Mayor a Menor:**

{89991,89961,89938,89818,89685,89651,89637,89441,89267,89063,88952,88884,88795,88516,88376,88127,88105,88104,88085,87844,87790,87769,87667,87659,87594,87587,87581,87520,87396,87353,87301,87237,87166,87054,87016,87015,86920,86875,86822,86780,86650,86625,86571,86349,86281,86124,86045,86044,85954,85951,85871,85823,85700,85686,85641,85588,85588,85581,85576,85498,85392,85371,85202,85021,84995,84994,84888,84808,84781,84709,84657,84600,84588,84564,84527,84463,84375,84372,84275,84254,84064,83991,83935,83924,83847,83687,83664,83664,83466,83440,83417,83355,83214,83176,83019,82903,82896,82884,82873,82740,82710,82532,82506,82426,82241,82239,82216,82172,82077,81825,81784,81616,81356,81189,81023,80991,80974,80956,80922,80660,80339,80149,80012,79937,79915,79913,79821,79602,79537,79427,79321,79294,79223,79162,78777,78675,78419,78372,78331,78013,77893,77866,77832,77819,77809,77740,77605,77573,77422,76871,76830,76603,76596,76557,76545,76367,76339,76269,76215,76204,76057,75862,75671,75599,75413,75390,75160,74987,74911,74748,74575,74515,74418,74304,74232,74205,74193,74138,74088,73965,73846,73775,73754,73726,73684,73629,73447,73287,73240,73239,72996,72656,72615,72458,72455,72355,72241,72128,72087,71882,71746,71681,71409,71359,71316,71226,71225,71202,71200,71154,71070,71015,70933,70876,70863,70778,70721,70475,70444,70314,70273,70273,70263,70243,70237,70180,70170,69989,69963,69670,69596,69568,69424,69397,69388,69326,69295,69138,69067,69039,69015,68969,68943,68920,68900,68716,68701,68462,68334,68284,68156,68036,67862,67726,67683,67620,67579,67427,67421,67339,67181,67083,66953,66900,66528,66312,66306,66241,66126,65897,65852,65824,65753,65725,65720,65600,65507,65317,65217,65048,64957,64943,64900,64889,64818,64558,64267,64261,64204,64161,63952,63853,63737,63639,63636,63540,63437,63410,63265,63254,63146,63019,63005,62952,62858,62806,62699,62608,62593,62507,62450,62328,62271,62188,62187,62127,62009,61978,61805,61761,61739,61641,61619,61532,61530,61518,61428,61394,61372,61290,61214,61100,61078,61016,61009,60763,60695,60544,60526,60491,60486,60482,60401,60314,60104,60052,60044,60024,59974,59957,59730,59541,59496,59440,59332,59315,58966,58936,58839,58679,58489,58370,58348,58217,58105,58094,57997,57990,57878,57617,57603,57506,57469,57434,57368,57326,57280,57263,57248,57230,57147,57123,56851,56699,56699,56687,56343,56103,56025,55981,55916,55915,55912,55906,55845,55842,55819,55790,55777,55752,55534,55534,55496,55404,55139,54984,54968,54913,54845,54829,54825,54728,54587,54345,54316,54283,54221,54174,54051,53886,53641,53565,53356,53155,53118,53058,52836,52669,52581,52476,52430,52420,52391,52368,52365,52321,52262,52226,52191,52031,51950,51805,51759,51600,51315,51309,51290,51279,51236,51103,51068,50937,50836,50797,50743,50621,50489,50301,50058,50047,49992,49959,49937,49918,49795,49759,49749,49703,49648,49589,49589,49466,49329,49280,49185,49091,48947,48939,48903,48840,48689,48593,48554,48320,48263,48153,48127,48127,47928,47658,47575,47543,47522,47452,47449,47425,47256,47216,47190,47061,47057,47029,46947,46934,46922,46905,46878,46789,46748,46676,46671,46559,46449,46419,46404,46389,46327,46290,46246,46202,46102,45955,45952,45887,45705,45685,45420,45242,45237,45045,44899,44785,44597,44530,44509,44452,44421,44403,44366,44352,43997,43957,43818,43799,43734,43597,43541,43536,43438,43434,43408,43335,43270,43220,43167,43076,43070,43059,42921,42868,42845,42828,42713,42612,42581,42530,42526,42492,42464,42381,42245,42225,42152,42089,41883,41823,41767,41742,41685,41669,41588,41477,41448,41329,41295,41086,40926,40921,40635,40561,40543,40535,40532,40427,40377,40244,40116,40111,40109,39996,39960,39916,39904,39852,39779,39688,39657,39518,39304,38980,38978,38968,38958,38899,38848,38793,38724,38697,38695,38603,38598,38524,38432,38393,38357,38112,38059,38033,38028,38000,37941,37880,37826,37734,37710,37634,37626,37498,37467,37310,37234,37219,37151,37087,36936,36905,36860,36850,36686,36683,36648,36594,36506,36466,36456,36428,36399,36374,36230,36154,36090,35973,35934,35890,35882,35843,35830,35705,35681,35645,35574,35524,35377,35295,35165,35124,35068,34917,34908,34861,34799,34741,34658,34654,34599,34525,34361,34279,34177,33759,33740,33472,33299,33284,33274,33209,33164,33157,33098,32974,32954,32889,32841,32776,32274,32218,32061,32016,32013,31979,31961,31892,31852,31849,31678,31631,31588,31584,31540,31501,31460,31454,31307,31300,31203,31133,31027,31018,30969,30957,30946,30922,30903,30786,30786,30650,30638,30566,30498,30477,30422,30383,30221,30215,30170,30155,30088,30054,30053,29973,29967,29831,29732,29548,29541,29520,29326,29323,29293,29169,29128,29127,29055,28954,28943,28927,28877,28876,28759,28688,28651,28650,28619,28594,28541,28505,28442,28402,28209,28197,28126,28121,28116,28080,28040,27995,27941,27834,27695,27664,27646,27382,27211,27203,27122,27072,27054,26959,26764,26756,26716,26480,26461,26389,26382,26179,25900,25878,25877,25729,25709,25702,25160,25016,24919,24911,24839,24746,24644,24319,24255,24241,24172,24023,24004,23982,23884,23776,23671,23632,23398,23396,23285,23245,23216,23034,22945,22821,22660,22527,22229,22171,22169,22153,22103,22029,21925,21829,21730,21622,21427,21425,21324,21162,21120,20997,20927,20909,20805,20756,20717,20485,20256,20245,20201,20145,19893,19885,19883,19866,19864,19762,19745,19680,19626,19490,19426,19186,19088,18909,18864,18847,18845,18804,18777,18645,18623,18592,18527,18454,18280,18216,18155,18093,17919,17885,17619,17531,17459,17304,17172,17084,17081,16721,16694,16602,16598,16523,16329,16244,16227,16114,15923,15843,15806,15682,15653,15569,15568,15496,15435,15363,15360,15345,15305,15219,15168,15099,15087,15074,15033,15019,14995,14992,14957,14794,14787,14667,14630,14604,14604,14531,14442,14303,14251,14175,14030,13894,13844,13567,13337,13219,12955,12841,12729,12658,12656,12636,12598,12549,12372,12320,12287,12192,12177,12084,12081,12070,11965,11930,11918,11884,11707,11694,11559,11547,11523,11511,11433,11357,11265,11186,11144,11128,11123,11082,11072,11027,10959,10852,10782,10654,10617,10582,10507,10417,10392,10266,10236,10228};

**Parcialmente Ordenado:**

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4221,41448,54174,41477,54051,41588,53886,41669,53641,41685,53565,41742,53356,41767,53155,41823,53118,41883,53058,42089,52836,42152,52669,42225,52581,42245,52476,42381,52430,42464,52420,42492,52391,42526,52368,42530,52365,42581,52321,42612,52262,42713,52226,42828,52191,42845,52031,42868,51950,42921,51805,43059,51759,43070,51600,43076,51315,43167,51309,43220,51290,43270,51279,43335,51236,43408,51103,43434,51068,43438,50937,43536,50836,43541,50797,43597,50743,43734,50621,43799,50489,43818,50301,43957,50058,43997,50047,44352,49992,44366,49959,44403,49937,44421,49918,44452,49795,44509,49759,44530,49749,44597,49703,44785,49648,44899,49589,45045,49589,45237,49466,45242,49329,45420,49280,45685,49185,45705,49091,45887,48947,45952,48939,45955,48903,46102,48840,46202,48689,46246,48593,46290,48554,46327,48320,46389,48263,46404,48153,46419,48127,46449,48127,46559,47928,46671,47658,46676,47575,46748,47543,46789,47522,46878,47452,46905,47449,46922,47425,46934,47256,46947,47216,47029,47190,47057,47061};

**Desordenado:**

int data [] =

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0244,67083,62858,64261,83935,35681,15435,64943,31540,62187,13567,49759,31849,71409,37498,81356,31300,19680,56851,58105,87396,81189,75599,55906,63737,67181,67579,37310,58679,30786,29548,67421,85686,69015,30946,42581,86571,30638,46449,74987,40109,64957,69138,46246,46102,85871,80660,19186,12656,76557,68716,28116,29055,22821,60104,43220,38598,38033,28209,83466,35882,47522,19885,16244,41883,30566,43818,58936,24919,86349,85581,69989,57603,49937,88127,70444,61016,42152,10852,33164,73287,29128,10392,28541,10266,34908,35124,82740,38968,15363,42921,46404,35843,42828,23632,25900,15168,87581,28651,72241,28040,44452,49185,86281,49648,78013,50621,62608,24172,28688,35574,21622,26959,18527,36466,28505,68943,68969,71226,88085,30650,59332,88795,55981,38357,59541,21425,77819,24241,60526,84375,25729,18847,23398,63410,25878,89637,10228,40532,81023,63639,87667,74418,23216,23285,16227,77422,26461,65897,62328,30215,50301,24644,31631,79602,54829,64204,85951,47575,70778,11694,48593,20245,46676,23034,82172,36686};

Datos del arreglo de tamaño 10^6:

{55550,60791,39911,46003,52324,51855,48715,41127,31806,99879,17445,71800,95022,11966,80833,87464,16016,94702,49045,97225,20274,38117,84432,96645,94120,31096,30493,20282,44643,63014,24100,86012,12119,47131,26076,73702,57924,92017,85696,25455,88293,51624,94026,69847,43423,77696,61128,40992,79942,60035,62876,57808,82276,29222,39388,90102,95343,24468,58677,23872,15547,21253,73734,33796,16807,95287,68249,67968,50201,47247,64923,29247,22031,28572,49286,84800,37485,44951,54075,82117,68126,31485,58388,13859,88238,81138,96704,61248,37825,61256,24373,56078,21247,50985,19293,52961,50813,37709,31042,49543,10891,42840,18071,75902,33220,53873,65611,15983,12661,52775,79655,92236,32214,84844,39780,94681,77807,86887,80267,79034,81166,18251,40728,37957,37663,27101,36187,57224,79132,77753,32831,22569,31129,73667,88589,48801,38681,73679,96151,24198,79603,55857,38125,11056,18647,22802,50379,64049,40879,54740,92298,28104,27559,43955,43408,84029,36292,62056,52681,35563,94042,47536,69690,83473,74773,54797,44556,67237,81859,80138,81234,76528,49601,54278,97033,98696,19231,33308,19664,68995,18237,56274,29254,95085,26784,45867,21178,86400,83773,57118,95354,47012,27077,56218,24232,22198,66883,10551,58146,43249,42697,18639,74588,71444,41638,96569,85599,42741,88754,23157,32953,95281,24935,19870,88361,19993,92916,56928,12938,99509,66068,47258,46738,40779,17608,38349,15509,81171,27569,39879,90583,26555,39741,31164,91406,94776,56872,59410,47760,20546,43476,27681,55600,19752,87767,94033,93555,13559,34220,51855,45563,99027,90620,74550,26869,55474,66702,14180,20238,26778,51037,31908,36077,43232,78888,18201,31264,64411,79199,11246,79206,80100,96605,97269,25594,34418,52600,69200,42067,70097,62503,47181,62804,76654,51637,96549,74401,85339,19991,57308,89157,70772,40773,57434,74099,12688,22066,17993,91724,88700,88771,19072,50463,17890,85853,55173,15891,87888,76169,33682,97431,65872,94948,22634,81379,69130,97487,19919,52837,58524,16567,19465,69016,98232,89342,97473,32976,46473,65123,19233,54393,17132,81909,64017,45887,91330,60775,86262,25633,41136,50953,27887,54318,40398,26884,70510,56051,11725,64966,95871,27940,35303,18060,59402,79630,12958,54098,35080,20820,92741,16361,50399,12609,42952,37395,71256,50757,32259,59643,91670,51361,11248,59940,74047,77155,49045,66197,24969,32859,24728,99636,77795,37041,76037,42641,49066,63194,48561,73689,37019,82050,61590,42788,16190,44257,95220,91539,72972,20005,99938,89847,45769,25241,43933,92251,66292,54878,51828,13952,30141,73484,44419,39956,73180,55861,43695,70534,27511,61818,67101,19062,46098,53687,21035,80730,62795,42908,84052,53931,83819,29049,34567,84084,60021,33185,27614,41232,74433,38704,68898,16150,41228,31664,75636,81737,18000,40158,97236,46731,73923,51600,71124,20967,37391,39954,48918,32163,70385,49579,41958,39450,76499,83946,52630,13316,90161,11536,65213,17180,22151,58725,67021,86130,47695,21306,85046,74579,52899,32350,10988,90424,18436,33717,36539,48080,33158,70533,92497,88423,69758,85641,67195,49139,27250,25882,18183,44472,29432,52190,29157,40164,51022,12487,85660,55611,15561,32345,65349,45059,29744,44549,16766,76391,54689,97649,43864,27144,45641,33861,80464,85090,77680,88136,84403,81919,60930,86136,77290,81993,54103,93771,75051,17520,93577,22285,82200,63931,89252,13179,46369,71415,69305,82436,94992,40426,31360,61497,26005,75876,78151,59613,16032,45826,99594,25348,90400,90540,88083,81236,70541,93440,87624,91819,29307,33813,17295,71112,74413,34626,52655,12803,60499,47283,37294,76592,66778,81156,93204,45787,20230,77662,10407,16168,67487,70801,71394,40051,33108,22355,70379,18813,22366,21998,62296,93692,33795,30219,29324,30588,15908,48290,80194,52198,46139,37502,66861,91457,98729,30396,38484,55726,82842,95990,73781,92272,78012,57204,36157,49180,11829,74556,60257,12536,47297,48593,64080,34200,73821,37761,33812,55102,81150,18737,18288,94785,57194,70039,20020,40640,82614,54719,75556,44483,38072,99845,29028,36464,12845,14106,77046,35163,54705,60255,50771,13766,85340,43943,39571,24687,20906,54805,24343,98267,67795,67155,44790,58350,78239,45565,47551,30691,84309,56012,23290,31138,28164,70817,27338,45664,71321,69660,37304,60593,71233,49788,39900,26412,91592,39806,73781,68537,32220,50335,90461,90484,53343,71204,81589,53774,73354,87188,73664,11668,33649,81307,48221,25994,62695,80535,10099,63010,95440,47412,88730,26493,35004,66049,85204,69927,40612,16756,51447,88831,73034,22180,14051,28513,66240,44882,12043,58129,68428,11252,85620,86482,69888,58606,64163,45165,86637,89909,37326,50586,17349,67098,13755,83040,80552,90046,38687,63269,27452,21316,21315,70984,84367,44977,20304,94384,43439,57224,81529,47974,56611,96618,75351,69693,72364,49925,33425,49432,20843,16511,43929,77995,92829,79968,71871,79271,90641,56846,66312,76590,17388,22562,65656,63609,45194,53886,18197,58127,57183,59422,72586,43176,95676,66730,93790,72508,72357,36387,18204,32525,26173,24562,94209,32705,31650,70562,92305,44411,77271,73361,99068,42425,52811,48345,71017,52454,48455,93089,24282,66070,56480,79161,38065,50467,31539,56229,27784,93616,79690,32144,63083,37683,86368,33392,56695,91007,37930,41895,41348,62797,51667,15893,27077,57589,13281,74485,78853,88799,72498,58500,85821,80928,68677,70024,10333,81452,87782,64553,19501,12046,49459,24369,37764,34247,37187,66811,44515,60131,35059,61369,94604,19191,44952,22915,87814,31683,86339,56260,90128,81908,32161,21425,44226,42099,54418,99349,92535,99204,34635,85710,14896,40628,62856,38055,81498,78318,77015,56780,70822,19903,80285,39674,80133,24028,79991,87813,69092,41915,23110,82679,24804,25338,81804,89770,23180,55889,37180,18847,72117,87669,22911,18198,29899,62551,16537,23519,29642,32827,72081,42193,32327,65229,68103,72602,58281,60646,99541,42732,12166,95265,96790,90727,49768,38479,37982,26579,91973,33903,36189,44219,50637,69225,15289,87755,51273,39318,88623,24082,54410,24140,98270,26664,50952,84490,79515,82264,62757,28326,64515,65883,55144,97760,76718,36633,82982,95658,51180,58820,97252,14325,20554,76653,62127,92834,50686,16319,83065,75123,85424,84498,42461,45473,39482,82292,17631,47941,53630,28789,21575,21950,73129,11066,94509,54090,13540,19457,69014,50995,53015,61594,23360,69822,30649,99925,46210,17610,72872,83367,46737,83353,64256,43906,40186,25455,82711,33910,97398,96352,96289,41185,76741,61765,59006,25354,75203,27889,90817,28347,48305,11465,72855,11407,45071,96877,97884,97172,43815,99665,18363,19871,44114,36866,91541,37782,65545,11803,39099,85199,44691,33538,50184,90751,51568,24108,32482,78984,51231,93060,17943,66227,89778,69643,85968,97538,88599,12062,18573,29643,24787,29818,83962,20438,51530,19508,66219,24577,32063,38999,97970,83465,39602,95276,49662,27091,53382,30210,37854,16176,31910,71019,69318,37313,13532,92327,39420,26213,16700,45526,79620,76741,65239,47837,24144,22529,46843,66174,83145,31085,20705,30640,41515,41808,23262,84029,94080,43238,21198,43215,10790,35012,66807,28568,53076,72089,86311,10331,36113,91927,57904,43392,87467,80159,65016,64175,79691,78357,27307,48879,54221,94677,46909,44157,77462,33866,56253,79558,16171,61647,90956,28628,22838,67109,39161,80663,10943,93193,33646,27675,81985,52677,78523,90383,85414,12779,38968,99175,97829,96553,74807,56676,75735,19742,83460,50274,66424,27246,11531,29155,43324,60079,44296,44451,34536,89387,97130,26588,79170,19117,21777,59621,96999,19797,94476,14895,82426,56739,15323,54621,40128,67427,22403,89868,37717,86718,85304,90338,30407,49664,75709,88573,59655,64203,72583,32070,64687,67739,37890,22582,85797,24104,56884,55272,38703,19929,98451,60857,95795,16169,23157,27578,69875,72319,49733,40460,41593,19135,32764,20431,56299,73447,54953,92731,29208,22318,84296,48379,48102,66390,82384,50025,58461,45941,46505,19168,61607,30098,94482,17092,87331,27614,14353,28356,74622,68776,78755,73765,31096,53890,97736,55289,37762,91665,64539,54260,23919,54314,57583,69180,99939,28292,74895,26855,81027,11164,47958,39840,57412,80682,43342,67196,21249,15898,96129,62005,10369,90128,43442,10683,11289,92842,16385,77998,94331,97969,50218,43064,63548,92488,62958,97964,97987,92518,58462,72720,33757,10645,69386,94650,67718,69063,88186,96342,54925,30902,77891,38483,75163,70962,60525,96580,61389,60571,38576,98702,66808,39360,89039,85271,51331,18079,53073,98661,53512,61613,81707,33607,78170,93235,13424,19205,71926,66021,85864,95675,57074,78767,84503,61036,93136,46822,34361,74258,25291,68805,23830,57674,55724,89993,12961,84431,54719,25834,31345,59637,13347,10172,25200,93949,45348,12098,27816,12985,38717,93807,60531,93393,86608,11096,99230,13311,17841,76937,82816,39630,99376,93133,54598,37265,42618,25433,12076,33012,85326,61349,66817,79849,74732,77465,54232,82297,12145,87347,49441,23049,43342,72527,79724,57599,13780,86610,41016,34132,27071,92124,97338,65578,32555,68870,67999,63713,17030,27892,83399,26004,67206,36956,70499,23382,75540,14229,93094,50383,39052,50089,93879,34947,99116,12138,29697,31381,57242,47816,64654,63203,40470,34256,49659,83651,43816,56678,89916,76764,17176,24020,92404,51768,21733,17562,33795,32144,44551,35312,65993,22543,24680,44344,89399,14074,61371,87337,32648,93968,84386,84963,97669,31410,57552,63972,56849,42804,32975,37446,76215,58362,60502,74464,72382,34241,59378,87020,37849,19942,92237,24047,67354,73192,79532,47116,41678,58991,55550,45550,74121,70599,29679,65091,91399,70461,17428,97741,32944,51464,79407,36672,91258,22059,71890,60097,73989,90925,61298,27998,84390,65157,63490,66331,44473,19634,39440,35167,91936,70897,55988,97616,61596,24070,28037,81544,26128,16788,96062,61806,19898,48295,60728,83984,89505,55310,37779,18348,69460,74007,79243,31301,32944,78716,65520,87298,26595,63619,25613,40933,87703,46557,21069,19862,33802,85255,89896,62524,20973,62136,28882,13321,63891,74055,57478,28600,93812,36995,28122,40507,35254,68275,77105,57749,24233,64148,70569,52146,18249,29095,95458,68011,88160,48977,99394,33746,55212,71472,56863,17021,46517,90956,17294,76063,90484,49483,61227,79825,86645,54128,29983,16756,74646,43390,99988,46561,96247,49669,45288,94738,69182,95892,33305,30381,65104,58316,53508,33177,18592,59136,27780,52703,29204,45325,60486,36690,56530,95549,50939,16596,32009,12263,84381,95694,13286,53836,34079,84344,65935,40316,87174,47329,26492,68768,18936,52841,44834,77183,18521,90013,52592,43278,51942,79567,84509,57794,46901,54485,54630,35525,31330,39826,13447,74231,46846,54259,49660,46673,15930,32778,33946,32637,10358,38895,89247,52444,96315,85896,43029,64868,15706,93805,61616,66316,94081,41002,91797,55479,18423,35711,53443,81210,44482,66751,75807,85983,36855,38662,62423,74708,36492,57855,64960,15233,63967,42057,77341,51953,82403,58986,13869,29476,53093,13755,68675,14654,75310,54806,75268,88531,33478,38428,83948,79827,18197,65279,22594,95181,61936,51579,38076,13863,47500,24028,65916,16600,45573,88169,50925,71920,15608,95674,71283,42235,69522,52880,75416,89273,43689,48513,17360,52124,99325,84298,24395,96668,93661,81467,50702,69795,87425,55063,68179,30624,52679,23270,13779,76923,93950,82425,94258,66738,60433,30027,12250,26678,80275,81016,16344,45423,85785,94552,45102,86763,85844,38476,59625,23438,65318,84240,81413,99386,49378,83130,51512,35277,75983,54577,94294,20216,85977,51737,62169,24214,12775,62412,61339,95132,35363,60742,98363,31980,93756,45952,42217,40117,67923,26490,65813,65390,53800,78951,45788,26542,49453,91405,72526,56086,78978,92185,21990,78805,13822,18267,69730,29383,14735,59426,99534,24576,79982,48716,37094,11013,97497,56203,17226,96622,86336,15177,29303,11504,67049,93002,17594,25865,97288,87095,43772,58573,50601,30282,86608,13496,21146,35916,55986,25588,59610,55894,72013,10869,96864,35636,39779,26054,53317,63458,45507,94928,35928,74975,75602,43262,43317,16263,29619,38163,86599,13486,81484,56184,45364,80782,58548,29335,50989,81938,58545,19788,14650,32943,23016,98526,17776,18260,63370,75054,32957,63109,37887,93483,62128,17495,73518,11712,22431,27908,34706,75689,60741,95273,70901,15311,83251,26914,55477,92927,81916,54984,98631,18886,15931,36253,32554,82955,78646,16743,10988,19590,57544,90061,23798,10988,91732,93285,80770,59126,77185,61045,54224,46099,12041,95684,47888,66803,78003,85509,79797,53546,29013,27167,56709,71156,75306,74541,31002,25542,70510,55051,59173,75728,25343,54648,83981,89723,17382,63757,26019,65559,52936,96960,14474,96448,59595,39990,96568,81915,33570,26414,39697,88785,86491,49551,24279,13543,96752,92554,65748,62840,72181,60427,48140,21954,99694,81648,88970,82804,42750,11853,43687,80084,49071,29212,83662,94865,55258,98694,90057,57083,25491,72609,41274,81155,53659,68933,65869,40296,83974,63111,89747,62617,12209,38496,67198,66145,50366,61889,34096,10774,11988,95709,66862,88297,61647,59735,59705,15883,35396,99823,13012,78891,66906,84959,73277,92004,76274,23948,50411,36209,23934,19077,76006,73826,68698,73898,96779,63787,42625,65568,40053,16777,15674,75990,15958,54378,86607,97591,98811,29848,51271,24284,54064,70166,23566,48127,25100,13660,71603,73083,57028,27724,17791,47633,37722,86546,63240,86560,30569,79423,27353,41046,21037,81500,46363,50412,84008,76641,45768,54595,11759,12536,68102,30983,76214,41851,11226,45011,67922,45275,35291,55264,62212,14149,23304,21332,43622,64192,38652,93675,68950,65917,87683,24575,35125,45551,71195,95847,38524,75781,49799,51689,59158,75586,77908,10981,19893,94045,32785,68823,25678,50695,26799,83765,78648,26150,25358,49577,86826,62275,60230,88062,89719,73985,60509,90565,81508,53334,82648,34176,18044,88952,25737,48121,64247,80704,73130,32610,97569,88880,37518,58867,96425,12623,88984,42770,80583,53120,70945,12041,42605,92169,37732,62532,79204,39653,57122,53656,69896,55147,14158,98036,38237,70227,61733,18568,88521,83405,28673,67263,55654,92476,49051,89203,52982,67851,94244,93476,38391,76262,33349,84364,43953,89713,29646,62424,30550,59082,56742,56301,65993,56503,35049,31807,88773,78553,21223,22802,34388,20012,32313,29766,57940,59030,22354,17706,29148,38839,88859,57074,61557,21635,24038,53451,85297,19973,22931,86788,23446,84759,10545,28182,20623,62757,69308,47416,87371,64689,50807,16114,95685,89059,16220,97263,16628,29287,75974,43758,30834,53224,76604,70446,88398,19297,47300,13125,47831,70688,16720,55544,93019,33538,60092,15153,45299,33860,70678,37191,32124,39338,26967,84297,66270,94890,81405,68815,87307,24685,81695,84861,42925,85834,98617,98163,50814,84212,39108,53773,95959,38358,97635,42985,54788,96197,51242,23778,49116,13786,55963,52517,59943,37672,61107,90087,14118,74859,81001,23958,17065,18153,83392,70879,93843,53602,92461,93405,31104,67655,95703,55993,19521,22152,93521,25606,93554,81937,52795,93431,18240,97240,16610,33486,81472,14783,77231,94540,50841,40684,58365,43324,93663,16957,99268,83013,69906,84948,23752,44836,37004,58640,94842,57445,14835,47745,34956,72105,41444,88611,47747,86191,35255,42069,14300,87189,91903,37956,50191,35830,46302,95909,30323,95366,55241,44493,94787,53507,77293,46556,46745,86084,31574,87372,77995,96524,50828,50776,95800,33493,52525,88080,54124,22132,22251,56248,11979,96811,62410,95792,54619,28875,16844,40369,13898,78462,57223,63988,21321,56616,74486,42832,97471,30532,96541,99198,42329,22994,34237,19724,21124,56162,81209,44855,27629,85848,94184,24373,32236,99554,63705,85250,54784,74486,76574,35848,85432,64374,23680,12137,39856,89858,38681,49322,84319,44025,34304,72673,32431,48393,75428,81237,45870,78585,54602,13008,38617,64641,75201,78213,35853,98005,85102,23938,56133,65962,96723,91273,88609,56522,61526,82765,26195,26164,32607,40306,51028,67264,95523,44781,33873,21264,22054,66570,85958,69090,68613,36228,13295,82617,16328,24390,46795,16164,98201,82236,38119,73383,20620,56802,79906,97832,50786,42676,50791,86640,11199,27914,90717,27152,91709,47398,71076,27430,72288,42146,12287,18674,39314,38428,40350,71993,71390,18441,20720,55449,14678,15423,22543,75862,21877,70292,60561,30293,29571,79533,52756,11584,72487,58969,57254,87634,85229,61202,81272,13325,37364,71809,57969,86042,78439,92649,32423,38238,35282,51814,48729,52293,42414,60030,53216,99537,86647,12100,66902,81407,62550,55115,75211,94831,66756,33542,71526,22313,53859,60357,74299,20476,61810,78281,37435,83230,32872,69726,66804,59643,61000,33824,94071,20796,22668,88233,21810,87993,88910,20590,32998,83898,68988,85598,34202,74169,85930,15348,21279,13174,57990,30062,57166,31735,52689,91760,13463,40360,51688,98651,76117,76133,30690,23672,77024,69470,10929,33612,95920,70730,33346,31627,76899,16864,84757,58309,29157,19112,80951,89694,48656,60189,32672,23132,94764,85279,75677,90818,69753,40256,10393,83269,94225,20542,40176,16044,60168,84738,68304,66926,73386,48527,39574,62218,76765,93504,94071,27128,61940,22012,40145,36801,16970,62243,85181,98882,48109,87225,60493,72459,67155,61062,76428,83900,26246,28056,79248,80407,67392,49746,27004,15963,71747,60476,28511,95853,95058,74963,73566,94758,69905,21771,56818,75005,60114,94318,40807,96365,72838,91895,93564,56911,14715,74412,35924,52817,25075,82355,37602,40901,14584,57607,70428,26062,68118,39425,22178,91045,61579,91463,31907,46321,55699,65763,88722,70775,11151,61064,53280,29127,15322,39970,84665,54549,67677,36785,11091,53283,38346,40273,60184,12743,16928,97310,46772,95853,20522,70166,59666,89735,89762,30268,48442,54906,87089,92384,59586,80067,33479,69958,71427,39429,89217,76139,99452,53871,24658,17718,86119,46215,29406,50807,17535,68153,52943,36526,37887,45907,33183,50180,46766,67953,37009,88994,23124,18166,20943,31125,83591,55366,66813,90883,51229,87306,81481,13355,12250,22215,16476,54315,16826,48535,89833,49257,79704,69324,10740,38763,20424,96597,19654,87536,56954,77693,84414,94178,26888,98222,59095,79805,70241,34852,70517,79013,64962,68489,48561,80894,36271,36740,85403,98870,33171,10517,55427,45775,58883,27036,13500,11114,47005,45040,20322,49386,69176,47591,69787,68968,77073,31597,26095,19652,73497,66231,57425,34885,83547,33813,70696,80564,26937,13438,85225,47660,75612,87930,31785,62654,56383,82954,76052,52670,65206,27777,15916,52785,71715,82587,36358,12697,13767,67699,64817,74767,97461,14561,31248,63959,14656,83932,68740,19789,12810,38323,94391,75804,17021,44929,97906,73854,51379,41737,13372,74570,16938,11980,14581,70541,41387,61548,32360,48207,97616,20983,95004,93895,26441,78985,50930,37716,79635,46832,28834,56977,31900,58208,37513,58411,17588,20855,73380,99484,62558,26038,61177,26867,20195,62035,62795,92089,33928,78661,46355,58037,54587,39715,66829,30697,82929,12960,64089,89832,73759,93461,47971,66451,16698,69339,97511,20741,37487,98714,97119,38832,12379,67123,65349,38036,57512,68854,23367,43427,63043,28581,83441,55876,10134,60748,38087,75988,43386,90100,38541,63559,99894,27340,97851,52171,14068,20226,32138,48933,44297,40302,43041,26735,45501,57550,72483,65949,27103,30185,44212,34297,47402,29525,12029,55301,94978,85002,49360,25053,32923,85524,21580,64681,74010,97529,75377,77096,95055,22700,70299,33071,32124,49042,38287,30923,43485,29662,52741,30183,85492,27698,80427,55695,26260,25935,34283,75342,29200,74909,77862,36639,61707,41540,82082,79494,87967,98319,44739,82162,60146,89342,39000,65374,97127,53736,70977,84018,64312,35754,38694,64733,32552,22375,74862,36085,60818,25427,81220,75923,64900,66241,17800,67358,85607,30523,96072,68298,25999,68687,81306,83670,55131,10604,86929,37976,58957,81963,47637,19318,84787,87963,45623,82682,36174,26230,96629,43157,12032,95551,60201,79715,55049,55661,41754,83171,39638,48565,18174,85167,15949,70684,34467,47962,62666,28837,91969,70366,44526,85360,24078,11973,77988,11847,88959,84927,82321,98111,39644,55579,66829,46790,52962,67724,11802,79232,21387,84740,90997,85154,16350,94982,45139,92753,18123,53572,89556,52905,96727,41279,67373,72771,58194,81626,54176,68539,29878,41717,98619,28323,14831,47579,71746,56280,15756,35260,16750,93593,89348,69628,14486,73704,36738,68231,97412,49837,34841,59974,66896,27804,53512,36926,62670,45954,74564,81597,37991,50015,10773,96081,65252,20638,11723,46520,13419,45819,49688,89547,22129,29794,31020,69675,26573,15949,91948,53428,31105,24901,12975,70249,35710,54212,31503,65567,48166,86401,86564,91272,29740,90547,72716,57812,24508,21131,77437,31755,72666,16628,74106,30239,93772,52510,74003,59024,25905,96376,22300,56131,89787,43295,20746,42437,28314,84205,56119,26623,77170,35231,51767,41420,14115,70376,53250,68201,75310,75617,28175,57925,47000,11213,77743,35621,47607,87953,25894,38102,68119,78741,34245,16829,56869,49440,14802,96822,69145,46181,43297,68772,36023,69077,56499,53112,91107,41235,57078,23064,54029,17970,51999,35241,48098,53532,16285,46408,59979,85521,35908,83868,85510,80522,81694,12514,44521,35272,74142,21656,59588,81115,43461,40229,97022,53702,19365,17056,21368,37530,40337,36197,36257,28061,22517,23128,58698,57612,91620,28390,87294,20887,68681,40371,78338,50487,82417,75585,80815,57325,31161,24125,52334,42706,87391,80444,57164,99429,61786,84508,43028,82431,16409,48812,15237,33285,63561,17922,23022,27625,79051,92815,65184,24349,72302,35269,25377,78205,54103,14808,76412,12919,77172,20902,50788,16039,62582,33540,78517,58959,59459,94334,95826,66964,38852,55616,33563,30949,64060,70205,49685,10287,45154,50671,70312,14472,78950,89563,37058,74132,84886,59363,21073,52541,31007,44030,94731,59943,15991,70626,15536,38632,95848,87918,35353,35300,43348,75313,63702,84430,15664,65737,45389,42639,31099,66488,38325,18722,44088,76606,47957,68873,42413,20854,98691,12474,98826,41648,87540,43559,90129,39680,99728,93780,31446,91407,18099,53052,58202,96605,42207,84817,23876,58343,61063,92076,56903,68491,72612,19764,26575,65995,59988,92741,88568,98920,86067,41344,77733,49283,10068,21045,61958,35949,19004,69690,53777,31315,91127,76486,13174,50038,72804,13627,64969,62797,31406,69828,81983,86376,39605,10979,73368,25288,62356,23430,72754,46191,78269,28619,98814,66439,57612,31590,29462,91005,61313,41003,53951,12021,69065,97086,37994,95151,43897,90413,19909,19522,83755,73112,83249,26927,22735,57539,71638,21262,68313,43216,18136,45924,98884,47269,75222,87433,26883,90693,13297,75690,32066,68722,96312,55917,56698,71070,40478,21168,37146,43274,19624,60787,26423,74504,56662,12486,19082,61302,87125,99011,83100,49105,62240,22310,93312,26855,22982,66595,33672,86481,44132,56672,62584,90610,88982,36614,65872,71333,59900,88626,96974,83268,88844,98512,19534,47761,44386,34655,45183,84739,84543,93087,76108,87525,74975,31293,39920,27736,87530,56701,60520,22656,77255,39847,29118,41162,33955,40733,97018,19022,40522,15837,50280,57739,86825,22745,67184,68977,44031,44451,88665,56089,53010,57170,25851,72348,49939,79383,84791,12134,47047,73172,81711,28750,68499,15967,96622,21126,89571,34366,62592,62694,28494,66681,99852,27972,56631,97118,83750,14041,82382,85617,77789,33401,91074,23088,49188,66444,77067,17834,68584,69796,48542,16867,46608,63756,82887,46863,26994,69794,63998,76427,73804,19895,35860,22220,33664,77791,38211,29310,60034,35669,28455,97257,41074,91928,71252,11915,58884,29961,14354,89847,96476,27435,98039,96239,87513,31697,63382,81783,61315,69889,40657,63138,42387,78602,53415,12876,45365,94705,44639,38220,95521,30213,83576,21762,22986,40240,65212,25877,58417,78393,20325,79049,37372,38736,14188,53773,26965,11925,27861,17036,48637,13433,35829,40745,36455,25796,57033,79028,46179,56391,10575,56857,16392,31757,73060,96596,77638,38494,55050,92711,60457,81765,51896,81417,26898,46437,34925,19725,91726,95393,25407,78089,66154,29755,28861,35906,88156,75383,34706,78924,16353,20479,57086,84261,86757,82287,53648,96658,43256,29065,64642,17334,85607,25491,18279,67805,75258,78973,25784,18345,49438,62959,27697,98037,96402,70333,61277,43021,76498,76971,12859,88899,68472,95078,45844,40349,18198,89829,13870,34967,32638,16131,59480,76369,42166,83213,90676,78060,85261,95300,87169,76419,30997,65720,44770,46248,47629,39929,71790,89303,31935,64411,23615,43669,37275,71543,79831,55042,56974,37420,91212,65420,90878,74555,83126,82629,78120,95670,36014,21496,78286,23994,41226,29177,96909,99686,40970,82079,31478,73532,70258,23780,12524,50315,62427,72763,36575,92502,41485,91890,95151,24363,94889,23207,47130,70887,69477,80088,89453,42281,64258,72392,90850,26895,56282,47405,29354,34722,88422,87198,65992,33097,71880,52071,38932,83452,78267,47936,17914,67204,65020,86548,43651,87567,74235,21909,77262,80932,37518,24850,58317,22444,63366,71026,92366,55629,39640,90077,45425,94759,35709,56104,10015,64285,78593,24987,25187,13970,95138,75364,76832,11829,41318,31594,67813,66434,96057,83898,62464,90731,91968,15734,82682,28716,62552,34316,96994,11171,32157,44341,55031,69889,68066,70814,97818,45548,94284,47812,65007,87817,45595,67036,91665,79696,71107,83562,92151,21188,71018,10091,50743,38860,49349,40694,15638,75824,95211,67774,46784,47951,71444,72461,28714,52963,40781,76347,12952,83947,37358,97319,87015,31201,41332,33491,43043,72832,28026,71729,53568,53851,51337,34448,68232,45589,77644,69415,40974,38283,36032,63808,31843,63320,75936,90832,51250,22941,34230,46333,41628,22431,60814,52259,62806,63333,17142,40654,56401,65757,25785,28212,88518,66222,55355,54038,81202,90914,64798,25375,10027,99866,12344,13031,51754,20602,12531,63900,19751,36095,18905,83484,26734,70664,74945,61999,75453,80255,99607,43203,54483,36617,21996,12167,63072,81642,40478,57435,49813,77206,47816,52748,71410,54813,56348,75765,81897,52039,60113,26790,45809,19183,99432,96131,22350,29829,29114,46495,43133,85305,48441,51273,73999,46172,40013,49683,58748,72387,38099,30225,16482,17264,33203,77337,33848,51593,54647,34331,67409,97224,97901,17225,52097,79573,67476,11943,82434,81594,65859,32980,73028,20817,12483,25667,46913,96568,81668,18366,62037,91956,19466,80239,40172,57153,70849,93909,97146,48063,42535,32348,64546,19647,11278,73575,13968,98060,45446,42315,85395,59958,37114,20157,64764,91327,63146,34861,98442,62644,13223,46873,35340,33311,26117,79173,34819,75526,90405,95731,89883,36340,71776,15172,56491,32433,98060,31396,42253,15100,71973,88020,34128,24806,75006,93850,54547,42291,50573,30832,87528,51125,47513,68090,63251,93685,20524,45004,90497,26749,29511,42510,66386,61542,65924,60456,48210,83045,20412,91109,60460,60641,27325,79137,71647,73110,67695,60484,44007,10698,73503,89636,27332,51138,21597,41720,55149,47542,19570,23538,44338,78796,47640,47089,54614,44158,62115,33416,90501,22240,19051,40414,52371,45126,25208,72004,70229,47932,35711,73535,44642,53438,82984,36253,70207,70535,67589,23955,64894,14745,17734,14406,65783,91963,45505,57096,94135,68653,34114,64661,34506,69702,45795,93006,82878,81420,41934,13713,80396,74317,17626,19846,74556,91616,71072,28417,52530,47068,73854,20749,93482,33243,75524,60093,87854,96597,21810,22006,48854,90127,72039,89928,88342,59179,34911,92676,11167,40738,42108,58569,81856,38314,96941,60687,74932,30712,62988,38816,53271,83912,52128,31920,18283,72305,30034,39265,95269,24992,18332,68172,11778,36950,39826,92294,70980,94584,18284,83809,91205,31059,69690,68891,70061,14282,91964,37559,62770,27481,35211,99284,98601,31769,90460,45159,68182,88910,70580,85488,78432,26497,91986,21548,17142,96176,65161,68753,77432,71756,86547,53813,48424,57411,24850,87136,39633,87227,95707,14922,42911,23992,11888,22349,22927,75369,19948,52412,57648,76618,78549,87146,31019,93953,89197,77297,49192,11044,31275,68078,82522,90245,56557,66896,32284,64281,58262,69673,21388,75816,26836,70981,48232,16979,68989,82733,24876,82031,46664,98266,92270,43023,92080,90909,80352,62845,80844,73284,77303,91056,74730,73009,56191,43450,54260,52882,88208,88084,34433,62496,43766,76428,23298,31525,28214,99716,83570,36462,28294,25023,70789,78225,44906,53355,97332,98067,58208,88908,28365,59618,36327,55787,96913,46457,13315,66853,76244,52591,78400,99618,54587,20573,49299,61100,95734,26373,35063,90016,24143,25184,67803,92043,10088,68239,93762,93925,63887,27934,39870,83383,41841,53562,90639,73610,75590,17436,57651,53026,60020,68810,80047,86680,94764,28522,24545,75937,98661,93100,34866,77108,77958,16221,99679,93835,63843,99139,35101,12022,12422,75029,75402,98925,10041,32992,82033,41914,76672,26614,60365,18706,86025,65481,30759,29715,86105,96717,90962,63460,26636,50110,38859,25805,86606,55643,85531,85610,94524,92624,65532,44088,57289,15594,89090,50127,23021,81507,13255,77940,38130,78461,45938,10468,29060,21864,73685,11107,42960,93541,38142,91268,49698,46053,25811,90150,22770,74390,76070,31077,25305,24902,52223,62840,81906,26026,18469,24083,98398,19839,42540,26365,15774,99234,38449,57251,42672,93434,49671,33936,24816,50140,76098,89923,33202,61549,59995,93020,48304,33942,87738,55544,82292,13141,37950,87261,29938,82591,57259,71708,52716,87171,75988,55363,77062,91814,40783,52219,39139,42111,96333,55480,81244,24312,28725,73541,12529,96281,38705,65646,97212,75064,35079,25486,43335,55599,82226,82643,95899,25749,50742,61108,53163,69261,26911,13654,25725,27368,49831,85864,30590,71773,44266,90061,88530,41367,59438,22246,25930,79534,41866,20514,91763,58181,93738,80102,78585,36530,68543,27750,63335,37731,47891,12079,55521,25674,57673,46167,84395,12881,84740,93359,22603,27618,23133,73488,33755,35485,20844,22289,84247,21876,63568,24732,40220,47303,56820,67702,63579,90234,48883,50413,29667,65179,14354,16470,71796,49497,58166,74704,79351,90190,61523,77646,58297,78305,81142,82127,17070,76021,74250,28763,67079,98094,19925,21771,16711,26643,84671,14898,97252,85488,31204,76513,94891,12601,86155,86584,34450,69938,21105,83506,69643,93044,59428,11692,65697,14056,20396,68926,36432,35627,98104,98247,85493,14327,49216,21832,26425,40449,82715,67245,93477,24641,61433,51781,81631,24528,80935,69878,90022,84554,64547,48782,24775,96442,12788,23633,74129,29635,42845,22805,94925,53798,16673,33038,83350,80359,54552,38989,95355,76116,87198,54845,80070,99610,62439,83746,40945,90379,56493,39111,88354,33243,48384,75886,43414,64145,50360,93076,26985,43981,58263,41172,73012,93171,58285,36752,91010,69316,21130,11216,18903,68689,90706,59945,34791,75350,59788,84012,73399,45995,16768,72486,91584,75967,78273,49190,88388,94661,74597,78043,33215,20148,44934,40059,14350,53842,95811,32041,55174,68484,42763,69369,79312,14626,45740,74259,59244,38114,30200,90357,26869,39654,25975,20386,52400,13398,16087,32034,15388,52704,14944,54524,89363,73375,31301,65577,36140,16802,76221,97785,67409,59329,53278,36534,99763,20426,34007,75277,98354,13109,81616,84132,93135,84769,76306,37641,49454,65802,91973,83571,42392,69673,84433,56638,56409,58293,21146,61209,97759,30523,21263,75860,65421,21497,40519,45603,31197,53314,88490,36726,70258,41412,73855,92588,40173,68754,46747,39443,52523,37050,45238,51735,82164,19342,93250,33232,91648,71976,92540,23802,81620,57056,44023,76005,33608,40551,46237,85356,50992,93193,60620,49717,74090,31057,72110,79271,53264,50164,93612,19755,27329,47381,43063,34535,26447,54649,28239,62477,36594,73938,21196,26196,60012,34925,54846,81908,33793,29254,48700,26703,41548,51241,15513,53315,13643,94847,59886,44053,64024,23861,10606,71981,48086,18158,48549,98642,15165,81143,86342,60542,57191,77734,48058,15988,91068,48168,52724,76267,58750,58723,74606,53346,85630,10176,38619,74259,79911,49748,64745,83727,10094,26481,20120,84004,18848,49516,22227,93879,79993,72098,68918,40017,25060,13009,67515,18593,61063,21773,66717,11430,58297,68820,10023,49535,72427,21944,84776,87607,29855,64942,42685,16112,75840,74114,42013,22357,72166,26014,37420,37051,81278,66783,31024,58132,72264,19959,60704,81508,32024,45456,12274,19210,58469,52508,24744,30809,30828,87339,76834,85928,65051,61506,25832,27220,17707,74999,94404,85054,25898,49051,95782,57875,72537,12042,86848,80239,94217,40215,53049,54518,46554,33088,12785,48614,91009,88049,47362,35222,23711,31345,58091,66648,80395,55006,21855,36894,38007,14807,51189,80904,87312,64120,16196,90324,65621,61860,14408,87363,70118,88878,66229,76305,73846,45447,77209,56833,56174,77957,31089,45947,58163,65318,80275,41164,96237,11026,15766,67153,30089,39130,61764,92384,62511,74738,14986,56233,71818,67198,29139,75514,58969,61930,25849,26510,11779,42194,63215,40403,10903,37005,91709,46086,84887,85592,76809,23766,71853,77567,35892,71202,26341,76969,38859,20555,45923,74406,21174,64362,21814,53541,74357,64001,67148,68748,41532,35179,10852,59993,61176,69193,99118,77827,89201,64254,16932,75872,31417,27453,54305,43656,62445,22944,40288,28458,20851,37343,72598,88831,39992,24653,14327,25568,53043,45965,10795,62758,67070,79364,52361,69377,34696,57110,76310,14167,18999,72319,20415,88435,99714,12790,85108,68880,53501,94070,39940,26674,29310,92692,89339,57322,68760,50830,49573,27153,32073,28182,97970,14452,55219,59231,13407,73784,78786,87854,88887,75379,81334,16296,29602,91168,13844,84230,67439,60628,72756,95168,61968,77782,52855,71633,91418,67551,15770,97065,43283,84172,49195,88998,20147,15894,20321,64992,34699,34049,95188,99871,67712,97591,90006,67570,26947,10227,91623,11752,92677,87042,11056,56186,19223,88016,76955,45788,63326,59273,56143,75897,96075,74660,22881,81843,22784,57586,76628,40384,86772,79697,69052,34396,37733,78618,20875,35025,23989,72205,49709,36832,84408,67685,22235,20975,39209,29028,78131,39407,27108,55133,44594,79473,11391,82675,60966,57950,70626,36885,37846,93879,39659,15976,87804,10526,86009,65772,42434,18831,32418,26972,12245,58416,58337,63002,43661,66243,51621,54089,82410,86001,67915,91315,25121,40544,21540,37523,86305,99443,40909,50377,78944,71455,22831,48532,23439,30576,25009,51169,33525,85978,43958,43916,67462,46208,31624,62543,44568,38857,40780,44223,66430,70199,29949,94362,81763,90811,51099,67961,14567,51878,87535,92888,25815,10615,87720,88080,87971,63476,46314,30989,69470,37462,37664,10116,53918,72060,42829,13090,82664,43265,78673,46143,83721,87917,19495,19866,29228,14333,20807,31031,87051,29377,93958,54494,71387,60500,48606,76717,71101,12493,98308,59880,10469,74045,14849,86346,95842,25788,36696,65563,89057,70286,67499,78628,60865,69584,12941,75373,48954,37230,71218,88777,51873,97471,45248,41312,27229,32301,28836,91798,85316,37336,42469,98282,12817,39575,44978,12538,96246,99841,58614,25807,67364,18047,27408,58697,16527,94778,34584,79059,69442,28727,42538,75609,53648,71601,42481,73737,53517,23381,60081,23209,77654,98644,11118,35006,42914,19390,42863,86291,41062,71188,12218,42441,21986,83139,56111,50241,97903,83523,20849,76027,53469,72484,88687,77409,39758,81013,97572,74277,35841,74492,51356,95737,51353,92563,42460,92902,51608,52545,69037,57938,84505,27428,90381,59787,15248,39225,27076,32020,18426,22862,99494,50340,89511,71898,29191,46400,39283,26927,88625,18599,12004,29493,30100,31840,70946,61416,13750,60893,83548,18973,16612,65580,74859,90286,18624,21559,32935,69317,67531,14273,85413,70762,77545,62545,42376,14143,71221,66090,75494,27654,30904,31329,47257,99151,84179,89607,26076,32931,26112,31203,34302,13979,86528,67889,82723,32794,69558,10987,84289,75808,48790,42901,88441,58196,36388,84836,95021,10846,73033,98552,13279,22141,53542,84457,18546,36368,55443,33827,87769,96187,39861,30633,62981,71206,37921,59514,85543,79333,46207,85297,41357,47677,30907,41077,34393,83414,89311,11481,31699,16245,44446,98593,55102,10082,94106,14497,19898,17068,31613,77939,40544,49718,82190,44355,23647,67788,91817,64441,55149,34397,20735,41581,65334,77879,61110,14241,12164,55754,92566,91505,54749,42609,83576,27026,84674,43638,39441,53275,47159,32056,19288,29008,13826,48262,30027,95048,27964,99166,44294,13823,74429,58415,85920,99290,73301,53315,58994,82839,13972,24157,69063,57250,57519,39528,64623,82317,39083,70832,49434,77600,83481,59709,55264,78044,80027,88158,29795,24827,78690,31423,33176,75364,80068,35938,91850,30765,67808,11126,52790,97356,43974,87552,20641,52491,63084,33829,85373,14053,80770,53384,77995,25989,27786,40670,73180,61273,38138,35101,84515,51106,36451,78590,67502,78210,78824,28300,48660,23480,68099,16874,88387,27749,53807,29679,47138,97263,49007,22106,88443,39132,70847,45511,17514,89692,95550,38109,67559,83868,48547,67938,82671,63228,88070,86945,43677,43559,65253,55218,67721,34040,49678,66133,87496,85996,30132,98948,21506,19286,21666,37770,69539,22643,82853,77010,58827,91917,50263,58857,95525,15639,75866,59262,75687,37024,66558,85903,57800,72205,69904,68205,69928,65462,63749,12111,90896,68523,17836,56800,63395,67618,82161,11883,76851,60675,62786,78000,61741,17292,39652,14464,78981,89941,22544,71014,78308,23302,42668,59949,20291,58550,47885,54804,49559,63042,15917,54400,27925,44821,62541,33375,37005,27234,76887,34923,69795,60635,58099,30640,42879,94979,73375,82274,60056,65887,59349,19018,41114,85867,12031,91000,30577,69227,26137,68415,86895,32493,20978,30183,15898,27054,54422,55250,26013,75047,30883,71188,10557,99364,48279,22107,63404,51273,68602,17410,97525,35582,46839,34995,41081,49582,52424,37128,84556,35520,20505,75098,67997,29967,44110,59926,22228,72170,35062,51621,14913,87491,63452,18310,22416,26711,35625,83997,69205,60479,88023,61739,98034,39551,24678,55602,17735,10926,41461,38013,83042,43484,44726,43962,11179,41446,68025,51316,52342,33567,17580,19350,42156,80995,37892,68548,54171,84074,23417,64270,98168,82394,19229,96116,21685,13530,90063,54766,19207,38556,99201,77359,82150,33692,16479,52980,64545,47339,73182,58481,89628,76844,22472,38196,49781,37505,54738,85236,10646,22901,94574,71389,73847,93595,52274,79656,93762,33969,34871,34262,59681,73618,61008,44888,52585,48928,85044,52818,18035,77808,57494,44492,65042,76798,73977,38292,36215,82112,52952,32716,79730,89715,44874,48269,43178,19140,89734,79124,37814,96501,90903,98723,14726,20724,37338,54540,96069,44604,66415,60358,14250,84763,41872,80716,89720,54375,83798,26347,90103,45334,94513,45130,52563,34234,17134,93778,34085,27043,61925,87392,37471,33011,95939,80000,41218,32257,73057,68356,43034,46055,57797,51672,19491,63563,26833,31979,26227,18749,46459,68484,30146,33138,14406,54170,16780,45474,13970,63960,91339,81033,64131,31959,97171,21019,94036,41823,16025,10467,41676,63019,14890,73227,93548,90313,37686,41795,54317,18178,19029,81491,64036,50669,20017,45510,65723,30175,78452,74070,86188,96034,86721,95527,77788,42413,22463,40561,55129,47615,45477,79713,52443,84168,81053,14970,13603,75423,45540,13744,76078,68229,55894,32705,59781,87030,99458,93639,30894,50059,63290,91570,16574,88509,31233,40530,71943,97150,11303,11139,72445,78559,10914,34616,97840,92371,68443,67665,67661,33227,87338,39764,23634,33163,98733,93378,31731,52582,81696,65650,41884,30591,36188,39201,29409,76054,65313,40673,72868,45648,63287,74195,93800,31626,35318,44054,18524,54884,11346,56221,59577,75222,82866,84705,73556,34236,76851,25059,49987,18455,12160,82662,41207,20933,76816,70664,49007,75240,25251,60275,39965,37461,90053,19123,32280,54170,74615,40294,77225,44186,38977,28851,68099,24849,36085,68050,74826,49127,50137,67731,10491,85286,39769,28144,35555,13715,33423,31812,90807,28427,91794,85658,92107,52259,92166,80878,32248,76062,36889,27218,65632,58131,49820,48204,94430,93129,73653,53112,55486,99209,48269,66031,97149,38360,98733,88958,12060,41896,12155,13323,21967,46720,65398,54251,56789,55135,44185,27258,50248,90343,74255,44064,22066,39610,70667,88443,49722,55188,70425,25676,74023,44201,91615,16048,74846,12433,65304,25447,65091,61963,95205,51492,24909,54231,90717,61070,33940,70610,86043,47961,55461,65804,10015,43457,85667,27491,86952,97883,13194,17403,37519,98860,59489,17418,52624,43542,54599,41990,74964,49745,22414,18465,55349,96115,51128,32637,87723,27870,77022,20211,52999,87687,37755,15279,25207,31447,17915,52119,13058,80278,44591,20751,83476,34748,62047,56206,77704,73861,41200,66310,94372,41900,60119,54961,51077,70429,25852,65485,97153,27200,12421,30262,21609,19357,34343,83537,17089,58463,89126,45681,50264,61148,90606,74272,26702,16184,47449,65510,76085,47585,98387,89490,99300,20613,20762,42894,78097,40968,82621,54755,40564,26122,21863,35350,47080,77640,83240,76307,22862,73662,44846,60566,96586,75022,22967,57917,83575,10672,66073,10575,26914,93979,20298,33046,86881,70621,57710,64217,97070,89680,59578,65531,66542,28340,16077,27935,83034,50247,38798,41600,29289,20137,94295,64855,22800,31740,31495,54104,65997,64251,26592,89682,90728,57889,80916,57682,44501,56061,99230,62180,34633,61398,10461,66315,44485,37598,87572,29529,24931,41337,40849,73509,41563,26023,95104,44843,39245,80346,58997,11460,17885,10521,88260,17741,63327,47695,56255,99495,66893,27505,37436,72359,67580,85727,68691,63989,62370,65319,75746,31259,25087,68185,40674,51189,31834,38801,48288,28680,48502,87503,63689,31035,93480,99383,61603,79797,90836,43759,45263,83152,44103,30790,47075,88704,28815,21029,62891,59768,14043,15770,71477,63635,62581,67868,24710,41831,46602,47365,57525,76069,32043,62541,11334,30739,19030,78650,92904,26031,79199,85108,56923,67095,98379,74893,90383,94530,40729,94437,69478,97635,76094,27448,11874,70355,48727,22126,95684,57821,44466,55323,73297,71771,15334,60831,70275,82036,64562,20223,86511,28219,46182,66727,24063,87758,34626,81544,11827,68596,15219,80956,24665,35800,60623,43235,29392,88442,10423,97646,84529,67062,30594,52221,92390,93219,23469,68157,14168,42259,63459,46203,38868,67936,41608,97083,71755,49271,95752,58492,14343,49829,24518,67843,77327,94628,63992,84669,21916,31106,47458,30336,92692,37632,99192,19916,61517,69653,44455,57695,50013,11907,30691,48197,74884,79269,39484,29428,27295,48197,20301,72219,52987,88318,41604,22627,66570,48881,27859,63069,51889,63733,39424,40556,50380,92238,12423,78801,41196,72643,37180,94756,46361,34656,27092,66892,61129,42970,57259,33053,32185,41807,42921,99972,64336,11197,72213,52394,49883,92454,95364,29124,79231,14653,92100,28327,36637,63214,35119,28283,34826,11825,56972,38563,72996,93401,66558,30515,86265,16792,93549,13433,42681,74191,25007,36325,34264,70576,74836,27771,60416,24091,13986,19052,45830,23002,42509,59808,73406,11881,14409,25896,79865,97869,53556,57008,73763,92412,94077,93271,63593,64766,40694,91824,40406,57007,60616,19952,62544,30122,34558,18517,36291,23356,39015,12382,43499,80632,16859,92647,86637,33955,32517,85565,26919,82768,15173,77814,16588,44845,72620,97096,49933,42327,71735,84738,79838,80464,66105,49552,90941,17525,35727,28541,67297,26430,67053,24705,76727,53235,54609,11627,41104,29288,97992,57321,91955,96586,45296,15751,39252,80460,91419,78054,63549,88000,10041,62654,27668,63654,10545,51304,34008,39447,33194,11756,41599,14556,75281,61224,16228,97337,65528,38507,96525,34109,46918,68385,96776,90369,89096,42352,30039,26374,47737,38785,61310,35120,72696,86098,25556,62793,69254,53750,27162,53504,46354,27483,88791,64096,65256,20974,65396,96483,54526,63136,78324,35210,91381,76429,62264,74123,56491,84002,53414,52036,31655,10104,53155,71128,55304,97395,34995,52868,99394,90089,65942,31698,99598,47335,95259,42466,96818,86447,13701,51695,21364,31246,99372,58114,14408,58093,28141,45074,74278,85660,32917,30253,36257,23900,60614,76163,18904,42888,24934,70338,80779,61531,11860,81575,43416,98271,59645,24848,73969,11542,63785,69145,98763,42756,47432,43141,96036,81737,24961,90701,62406,25364,30155,32453,40232,21557,75481,69880,41612,17066,23884,21714,69065,36842,85973,23635,55407,13113,97091,72516,42874,80132,61385,58393,67616,69010,32252,72394,74425,50429,90494,42303,19195,58319,94954,68622,35383,22941,82700,25226,76746,29118,60842,33114,72789,55783,39937,14024,14268,90739,91124,93340,22192,57861,27048,56196,11215,91496,45908,62151,17962,10662,74589,86260,83018,30356,21564,71631,47881,26916,93921,66140,75227,74731,18060,61829,91699,61007,20227,19899,51883,10760,78108,27099,78843,66300,40164,98877,45358,90479,76578,49923,63697,14299,34119,36602,71795,90819,96650,74119,88432,79057,46148,50746,68754,90390,80983,75069,52857,48590,91389,18927,59204,52627,30032,35552,17409,93455,77045,64498,23671,49202,22728,28860,83792,33182,83694,99865,98592,79028,47102,55674,32307,50411,39916,78829,64200,62720,21807,28647,72227,86243,66521,72199,37736,64602,44308,34657,19249,62792,26383,90830,64826,93297,91429,41456,65269,61377,49116,27516,42644,45386,74591,20761,43819,42638,73943,12059,61330,48561,72594,46333,39203,54233,82504,31110,25340,60405,89166,48491,39812,65700,43750,28881,12719,59878,89283,83224,98225,28379,96511,93052,83631,86990,87199,26193,97545,53147,26263,78723,15552,80705,37602,89486,78754,32124,65135,64016,90841,29170,94838,17700,51995,96443,26024,19921,82071,48637,17208,85757,39932,22464,15155,50447,60662,83563,52613,71189,63637,79461,88479,16451,70802,64119,44994,40103,99278,84914,74390,38621,57941,54592,60156,38305,14992,50352,89630,95813,72733,38176,71337,31535,86181,82449,39231,73685,25564,17573,40465,75120,40663,37368,13066,71567,11787,61656,26475,85358,50002,22667,99992,73391,35459,49217,22700,48034,18092,71281,23158,59760,73912,40858,24401,70208,44711,50266,25713,12781,94681,58363,42787,63559,47104,56358,62454,15410,27366,94375,27837,53791,87980,43021,80129,23991,46721,35729,15880,62529,25357,59236,97998,97940,48937,37528,59069,14253,97526,25347,13405,21173,30751,13505,35025,27959,37679,68848,66683,18066,35857,59905,33960,94328,60721,57052,86954,70503,24741,36025,60420,85475,48397,83036,71571,45669,71772,86480,81527,42508,36542,59112,50098,87474,20445,66834,65727,46748,87496,11767,40235,48748,40993,47836,95372,16498,86303,32919,79637,38030,23908,86880,97431,81799,29423,40988,62215,45368,72895,66464,26561,51849,21579,14448,44640,21417,15152,91004,44340,90491,61221,53553,18100,33473,87696,38916,57321,27405,52872,41356,15663,47589,73869,86642,65896,91386,41276,18680,95695,39612,33379,74570,67447,52532,18209,79144,81688,92812,30795,65250,70968,62716,77486,73659,59024,46377,43390,25116,56165,52897,42609,33371,70930,58898,92622,99227,87554,29799,25481,21546,64835,81243,57489,90965,49267,73057,21046,49384,77940,10590,29748,83083,86647,90402,28523,11463,62994,38348,12198,75026,90847,96750,33220,35166,33968,71293,22206,37551,99911,90748,57404,93537,17475,86074,98493,28370,81372,84117,19497,56221,64321,77940,44144,28042,66408,28547,20166,94543,13392,74132,76071,25160,76609,84414,57836,19681,95438,63665,52163,59827,69911,88298,61575,59999,81249,66011,12683,67216,22125,15445,34240,80024,36727,14715,82931,13820,49275,14580,56462,86729,30659,40539,39295,55131,54223,76896,23136,17839,81061,75704,60404,34936,71014,82905,12642,85136,59943,18652,29911,33295,90538,10936,90040,69690,60456,27356,42730,46777,80259,33370,11985,87200,94566,92282,13848,17729,89738,28907,32028,92395,14804,28212,83643,29305,63386,57966,70206,83926,22135,20896,36658,58398,44245,78722,62078,29350,71661,51867,51341,49290,32823,36513,51416,14103,55984,47641,54648,69913,79541,20950,27334,67137,19222,92653,92539,69819,83101,76886,11582,38703,30617,46885,11045,76980,24279,27015,26411,52258,44805,64105,11779,16826,83274,69618,11031,19743,70068,25979,13786,31905,85146,13247,29300,50958,93684,30244,67811,30895,74382,71880,15820,71754,82569,63548,32506,19372,84718,69478,55890,73471,60417,63151,97472,85897,65233,86772,13491,77375,13608,75451,29040,35628,98220,94038,89524,98548,38939,72472,90719,69379,16805,68877,24031,30688,62159,15530,14418,88748,83154,91950,25326,75212,27959,75970,75392,96553,94618,10455,95192,27197,87914,47015,44844,78072,35243,11503,32900,17615,35338,54861,15263,93942,65160,69762,36378,19092,98473,50361,74063,25407,24828,60450,22789,46365,54841,13642,65241,57064,72779,80796,11643,70516,62688,75519,39011,12118,38207,26076,52435,52665,67934,23174,97797,52808,74482,46232,62353,67841,68435,81577,59967,73308,99096,57193,71330,94272,57844,68824,54535,51448,87320,81747,90764,72516,33678,75012,64962,81929,76297,26701,25896,51334,32817,45350,65544,84980,30833,69138,24338,42186,44083,94179,57533,63985,51868,26107,19661,58198,87079,26152,57412,33744,38642,44684,94595,52572,43701,62181,38683,89088,98645,10404,27308,60092,45362,65558,40050,12247,77652,21963,81702,28866,72363,74377,38007,34256,22296,55238,45353,17357,36579,44706,56816,94368,36362,17888,85302,67123,91400,27719,18449,77585,43168,19928,67721,87659,19872,84268,81042,27114,75221,14593,21161,80054,63115,90965,77307,24003,94222,84040,56816,79628,68372,75740,59528,25522,78533,32785,56181,31984,82193,64568,34543,43896,13368,68396,79397,44676,20636,53536,32869,88479,60197,61531,45696,81268,38306,24292,38101,18948,41533,34940,96910,92981,97336,48580,65595,40672,56738,67789,85188,43414,72102,24191,86307,50053,33707,57604,86249,11379,97308,19080,55316,76543,99064,67380,20815,72741,86843,86532,64875,83746,39681,11047,60750,94701,64364,98189,87749,97655,43933,21592,57298,91171,70278,66884,88752,63605,51848,52150,66541,93145,61862,49297,88987,21026,26518,58179,17676,90891,89585,37236,12496,77499,54875,80938,44766,87227,64351,67727,66503,82509,95701,37271,96298,53239,10402,92760,62859,39388,44379,83148,17062,59194,69217,30672,21488,10107,96633,90119,98414,99034,14164,51489,64301,29277,31272,54613,21379,38008,55008,52858,96890,18874,77340,26592,62604,55088,29913,59696,62937,60463,13126,82136,60256,56313,77325,75959,38890,58687,31949,44293,94421,53829,76843,64556,64221,57645,15095,62979,91933,69198,70730,82078,41639,15391,68900,84628,42466,67428,54078,54449,98158,25222,84911,86106,71234,39706,45667,93646,43197,23360,68291,66775,67469,64182,24705,64209,91302,51804,89281,44899,25664,92003,14046,24557,50274,46353,73809,30476,58203,79250,34421,12962,18019,84561,94121,93322,79868,39146,31190,74548,59532,94579,96713,47227,98380,82266,66181,46169,62944,10040,55904,72726,34682,19459,70003,75128,79027,97793,22251,90469,25581,57013,76808,65328,59643,99666,95588,40050,31110,19388,88446,60468,24676,32372,41088,84303,78356,39042,33324,52441,62991,19118,14126,68351,93168,92613,14429,60436,50145,34850,84042,87401,91848,25001,16514,38916,19440,86224,25365,42833,33085,27931,93361,23450,74158,67912,33979,83027,75212,55137,53677,60904,77777,28144,40724,89413,96885,72118,41518,21152,51676,81528,38915,62237,17623,55849,77074,89462,85991,84861,54064,87247,62132,15176,32909,26526,56179,27213,51966,79585,46085,86819,51469,74747,78365,66977,90445,83020,35829,96857,86539,67445,90933,12099,21579,35630,44180,14825,57214,64048,13850,46698,31464,27068,66146,45299,53279,21508,18733,81840,85799,93934,33742,24777,45053,83112,89096,76547,29152,38236,58185,46886,32989,21889,30827,35750,63371,95158,63472,38187,50362,93522,44121,88768,59547,26663,75076,38567,78238,35976,24850,99624,29384,25514,24659,68566,49794,58481,51231,63758,90900,58665,46541,25022,28507,89588,63014,47076,75901,99119,44954,14795,64504,14514,81974,30070,60621,87995,72058,44809,54997,91501,67714,67737,89737,69726,97532,14107,49861,92310,74577,78700,18903,23618,65607,96966,95896,89077,58058,79971,21968,34006,56401,30113,36188,66345,18707,57403,62225,54459,38305,97201,45723,42106,22533,31988,52418,58132,41984,50213,69189,54494,38958,74812,60736,26608,59348,46028,89137,22190,26872,96072,80186,74898,63072,77891,42116,88972,42567,74778,28431,68783,98899,44382,62965,60901,14016,66392,95468,53074,59249,67597,13109,45004,31366,43363,92337,29629,69418,22498,76867,97965,14050,64049,95062,88372,87728,44019,56147,82207,50218,23563,59558,14577,50464,45093,75659,53764,35557,65084,83169,84481,69524,90579,29501,71207,84097,17356,77656,75267,70116,93150,49616,33620,55450,69892,12361,81182,83153,80214,56447,84630,60115,62306,76745,54992,73237,62255,96130,18373,30269,68194,42698,74348,52392,82383,92403,84842,15875,93400,68461,74169,81523,46922,98347,31209,52988,85743,30745,82930,21674,43755,29885,23917,89590,40873,80896,66300,72036,73495,48688,95757,75856,90031,11323,94803,93240,67036,65801,75153,23336,29568,39984,45214,51129,91312,99568,40544,58311,73081,23717,41505,49636,59912,27490,21397,68556,61324,76076,99517,66520,13729,29351,89103,18797,72913,66315,10007,70719,81193,36230,60122,98555,52292,60745,53641,23696,65506,88441,46540,72516,68255,56811,61730,24395,62974,11737,34510,71425,39269,64752,32591,28686,33489,35306,42240,68182,36873,38054,60898,21968,80785,80673,44691,64169,61647,18655,45502,59410,60678,99935,83252,25134,89611,34488,48326,35567,78257,86729,69695,52395,53131,84984,39231,95046,42258,88186,38035,49401,64850,75219,44078,24634,14481,16816,71876,75742,68977,25059,31054,87506,51851,26239,43969,90868,92526,21045,29715,64825,60976,68544,77067,11448,62090,64881,57617,42597,72326,99934,68549,15460,45722,84425,89611,71908,99680,91170,79960,84090,53259,72595,53671,32366,29342,56586,37933,42518,44318,53193,29228,98785,87104,62506,32310,34888,80410,90890,32717,81343,51181,47685,90787,89754,60126,65219,67421,56806,75420,74724,31910,88538,74717,55585,77307,55490,83177,18478,51833,68217,49388,49052,63590,42450,26308,99877,93718,38396,41577,22811,52257,30255,63042,29707,50151,81663,90160,71782,86307,92990,28337,71522,15306,93058,18159,42190,96563,71076,90141,39253,85978,31194,25052,51351,60565,33695,41112,74653,24079,60731,71475,24679,58220,27186,37243,16390,79073,80034,16257,62433,87242,62991,84914,15183,76044,72991,34531,60207,23650,54498,43789,15426,32523,78626,27548,28405,28470,51142,28182,98178,40061,47324,55173,22026,70044,65321,92465,22633,81771,20610,62242,50820,24815,62989,33201,96150,68228,91502,41212,69817,28613,82645,47555,98894,47981,98365,73522,87460,44952,30838,87557,17551,49329,72365,81069,59831,13019,84632,19896,43785,48755,95616,81657,80637,27411,47555,15517,79314,66876,30850,35777,62176,92488,52516,37497,59354,82581,45137,34366,48468,67154,30363,86416,98592,95482,28589,96600,36784,32112,97466,54635,21257,18878,20520,65424,13815,32858,61953,75482,44325,36782,79226,25650,59689,93865,51306,35939,11633,58704,70126,36576,49278,29314,11802,90393,47516,32407,38733,79400,50404,34665,63151,97265,44037,75979,34222,68407,27854,30978,62674,14215,21202,73094,35156,34236,73481,16096,29907,34393,52200,41810,32565,49454,57292,26614,11009,78937,55054,17510,88791,63522,25896,54603,47560,49251,42021,14466,15435,67416,93956,51795,22919,56368,37341,49830,31061,71960,93339,68162,92327,91462,12989,99019,56773,87946,80483,27432,38004,50160,82819,84369,76692,59026,48908,51622,85408,91504,57801,42976,21186,44715,96147,23984,17823,93200,38891,42583,15021,13630,33315,11779,12006,92778,84817,61539,60272,80605,13603,49867,73132,78073,40165,35729,26156,73270,56482,68566,51462,44340,59155,79401,66681,83420,87644,62355,30467,54637,90702,19368,33208,26070,26736,14224,65038,52451,81975,56007,82839,73826,67395,43129,71972,22491,39337,43101,95280,97962,42798,15598,92292,17140,98132,19172,78071,10211,84214,24332,15718,30102,91903,13791,53904,95225,98593,57531,30032,59253,67389,16301,57503,49719,33624,83926,77785,65787,60370,89308,95898,91016,52036,83963,48431,65871,21176,45177,68939,75800,23605,86363,75332,51784,24945,95742,79018,55393,78666,63410,89706,77048,59105,45306,55510,29269,61581,97372,24725,20690,14174,81132,51573,99709,10780,21681,65842,60970,79228,82657,61037,39114,10567,58258,91856,15981,62314,31711,39268,32437,70567,52337,23497,26410,77059,38902,39220,12337,50674,90601,34596,45625,87057,91182,83347,46722,76110,21386,25748,95453,57984,47625,34026,69213,43021,75150,86406,29179,65301,97672,77826,58612,84022,78359,65215,13056,84911,56028,74780,88322,85443,98358,34823,31843,98921,85519,92947,16139,11514,56393,26007,96857,48583,11926,25260,81022,67661,56175,56143,28923,86700,52734,60430,68170,57915,62837,23018,54763,79008,85412,25495,43878,76593,25357,20463,72552,38628,46526,59035,73271,25311,31766,89406,50483,98190,80463,39321,22011,75758,36735,63929,12536,30786,11211,94897,48501,47000,75071,68945,38929,67954,13136,17371,54946,55995,32758,14605,90417,36365,62206,58712,66650,89414,17143,12371,17105,68377,59812,50290,77185,55270,11631,26532,89861,99014,35582,28594,60628,79941,25523,33297,79799,91750,82358,72995,23844,58794,25179,44736,22501,16367,48714,22001,39518,75339,55560,22413,47254,75836,85094,63581,33663,67693,95656,25650,95603,21960,79871,40906,10577,98746,23728,73735,99962,16013,55566,22492,16521,99269,15716,81650,91410,84213,41498,39758,30775,86766,19978,48918,83925,24822,62408,63180,71788,91343,97361,21643,34132,44007,38391,28003,14350,62178,95948,28678,93045,48734,89127,51257,84827,29404,78087,16833,98151,86831,31181,45955,31708,18242,95319,30829,33796,86296,78751,91314,24681,40681,87652,73531,94794,20454,19609,58320,31800,36114,39487,20606,70234,64433,64590,53958,25983,89066,56568,55906,67446,21381,62677,91995,50440,32829,80864,64004,35595,52549,35139,59869,41881,48820,78094,92822,10717,49582,89453,93342,40235,49879,16008,25400,83378,68361,21209,71101,90835,21912,89768,34849,53415,49824,70813,10785,18842,86101,30616,75648,71934,43961,18400,35873,66471,32745,86039,97331,67108,23942,94019,30735,92910,62677,94042,65436,40391,72319,70762,66606,43512,81490,91360,58253,38779,96275,55486,69352,70007,72741,91287,93658,76501,75349,12966,92623,52952,26344,69899,50364,85910,16845,53399,74954,45262,98794,30806,66743,73356,97527,70369,45257,57563,66398,87084,23145,76967,87112,59759,41660,51957,86068,40755,49415,77894,17038,37274,27418,81495,22245,93626,64298,94189,20726,57564,92650,88561,71103,48143,86707,57122,64209,91702,26742,59056,77432,37540,81390,55037,99811,96556,64795,83325,69007,23574,62156,51327,10999,22732,89721,37060,40542,25583,98722,99591,18028,33959,30741,54206,92995,15666,64289,86418,90472,32509,92981,46610,75083,12295,79870,16210,61376,46154,10017,15691,20506,35974,32233,88850,80756,81812,10000,24234,72544,88989,58150,68037,66369,61149,81346,51141,58539,33270,60807,57093,33603,99011,73922,90556,28563,32665,28135,32061,54745,60550,75813,71601,40803,23885,86338,88128,96916,73071,16641,44886,50855,49003,78577,39972,54037,73419,90486,39395,19016,30230,26288,21685,63735,24738,36779,20643,27816,32087,99585,72886,60041,58950,66130,86323,48398,66498,62493,26671,35764,90704,24014,28486,40437,73904,30297,86471,69898,26621,49465,53669,11877,98402,58166,33557,20991,83235,74474,14796,75946,97854,21412,99159,56207,11020,23494,26030,48487,75671,72949,79219,25351,16858,34052,17903,20514,77169,23375,61101,88096,58722,79132,52398,64980,65862,23295,90054,72649,20631,50062,15996,64353,52294,88270,20908,61076,30128,93316,79419,72371,96486,61721,65078,85404,98058,24480,96764,75493,15384,16083,17490,24782,66431,33019,24160,35530,88561,39093,39919,50943,87330,11228,74269,10567,54764,70426,13000,36295,76230,31491,83603,96790,51229,87434,19664,38732,52424,42781,37636,56642,38260,26976,23394,78356,38299,39616,16833,52110,60191,67277,22562,14980,37431,12802,62185,25426,82659,13988,61874,33887,25857,14634,90870,34543,47756,70373,24215,53625,60739,76059,22590,89078,64280,43803,92467,33690,96301,27834,75754,99869,31778,58549,48792,14706,84120,53884,73859,54902,73124,44357,42708,35318,68438,80505,15158,79309,32110,59026,94912,66323,56730,30167,61504,50490,10977,89698,91529,27311,48700,29136,71685,58283,36197,17501,58235,62745,19998,91906,43730,63538,83594,50717,90960,69363,52327,70085,86115,45016,22927,56816,89741,55989,69439,90243,43448,29287,88795,36522,30022,27229,99021,85504,91574,22621,23632,27802,65762,51037,93328,68920,60505,45155,77744,76399,36570,78586,70245,14186,20105,77262,14165,80943,92171,19380,26247,94611,27412,39260,96304,84724,74067,93498,28296,41627,89902,73110,23078,42565,17580,46943,57007,27133,10574,72312,80227,66639,76673,27207,94913,16103,14049,32623,33547,22457,38772,89923,83121,17423,83869,76349,68546,31920,78358,52007,70503,43114,83567,62965,17294,67540,55665,69459,99950,69447,25533,97888,70270,37788,23613,47182,73862,39660,64750,79433,59779,16621,53514,93616,61512,94727,94209,52192,62337,97950,73621,37470,46368,50311,20006,84409,28201,84856,58608,29212,80484,71092,51353,63852,53192,42751,78748,37137,81909,84774,56730,98091,90300,52918,11925,14916,70759,60575,63699,43095,17562,14190,58543,98352,24099,79619,43916,72749,27063,60860,36061,46517,70540,41228,75725,90832,50053,47102,27198,27607,27791,58365,97554,43713,28376,32719,22087,71645,68576,54225,88228,91562,40389,91129,49470,60397,52126,94456,31169,84414,86547,87872,51214,50177,92404,65169,30938,45901,36692,23050,45993,87894,45365,27939,80403,91797,59792,81050,63314,97250,28658,50502,34259,82673,39679,87048,57193,69446,86712,93732,53738,95702,56457,29949,38776,26704,80549,61349,80131,58293,44319,28768,15578,10499,84106,15848,66207,24514,95349,47705,61823,66230,92932,79054,52912,28965,40501,34967,68771,96687,69279,60670,34479,95153,72615,77039,88110,41991,17924,17074,91559,46830,17036,15036,88469,74176,73398,51260,29026,30573,81731,34361,17985,16533,53136,39496,86113,63428,11073,44459,17833,15242,31726,24967,24972,81951,76147,37436,89482,56169,92779,25267,62457,66302,43641,56109,37087,44914,54365,49434,45482,11483,58329,26152,53750,45572,86440,27518,37152,12202,39242,93003,68236,34393,10892,31433,89793,74400,99565,45958,52525,68452,69549,93185,69792,44846,93968,50271,26861,49376,77770,90101,11908,43502,90930,10357,86551,64415,98359,95467,77424,40420,77486,24002,38795,14819,72175,12590,65146,10150,65977,94841,49356,80303,13615,75351,27060,47020,95746,11973,99623,24965,50047,13219,86112,46887,63530,43607,72562,72758,25703,25675,54044,91628,45551,17219,49545,37610,56077,65132,79352,26562,30130,83226,65898,16523,38838,62621,35061,20899,87899,89695,35576,73852,31401,72214,25040,54178,20587,31460,63116,16986,74429,71412,87055,18249,55622,77777,24970,63755,66332,46656,27460,69977,20386,53664,75486,88448,24388,89246,92766,44776,58882,63210,76654,34129,38031,93880,34710,64300,93735,41359,66629,43376,60994,91854,39582,99546,25375,16370,86223,64305,98241,41780,30136,45490,33016,69662,34973,69865,93941,55896,30452,67889,29630,27172,32618,52304,35840,26184,67186,88785,85769,22509,42433,77739,81014,68423,77247,77589,28749,93363,67555,79179,91922,50194,86154,99084,74742,59701,94311,68380,30241,83473,79875,45722,88039,65019,56165,88219,58989,48894,55050,59487,35098,36627,41978,96376,11477,11434,35073,12020,34262,59634,24163,42438,86879,66154,64739,60624,42515,41108,58704,18095,56953,54156,52358,96401,11754,11663,63030,52853,74516,36348,28053,57596,95575,95741,66997,40386,58291,89625,23623,89455,48083,60516,38761,48119,70048,66825,61702,52411,25638,29912,89253,63832,20982,27771,39277,74591,12226,50505,21679,70157,58142,53264,50862,87593,35100,94576,79959,22073,90923,25055,31440,38655,32542,58654,35827,13298,91112,44346,42729,18413,42203,14852,46105,34188,19886,34694,87861,32528,73915,41300,38012,23974,10416,52450,17724,81422,91419,75151,84526,88618,37654,88734,65942,91998,11081,52330,95033,61674,32129,79600,88491,30019,93318,25666,69337,81411,27124,46118,78583,49736,18292,97498,75722,59634,53399,89366,37145,77419,57183,60734,98735,72541,70636,75060,46109,78210,38707,85292,32091,23296,43180,34142,79133,26151,85759,92318,85429,91781,64461,37609,49873,28032,37991,20789,57411,49921,46666,67996,48730,25776,54752,10970,66213,85375,83085,18036,12676,12927,64552,70447,57373,37789,14150,79233,81467,44175,52982,82855,37777,51768,24601,24240,54524,21575,97878,40765,34689,64222,63936,94141,32427,34530,76853,61653,53842,59862,48928,34516,67555,83441,26101,37904,24732,94434,42623,61232,11603,13220,92300,95577,75721,75921,44340,15352,55003,70522,34841,74895,84020,56792,36994,68839,49240,68098,75287,93609,81881,29598,47229,21718,74208,99947,88230,96753,66029,10155,52556,89619,94044,46873,11778,51475,74458,95089,65742,13287,65817,52221,55524,31068,19577,10926,55717,70031,25254,51219,53587,76008,51952,91944,31583,70655,35907,72572,66680,58248,33603,43925,93349,96589,65172,99368,86203,70570,29234,53518,67256,26426,83698,13422,97887,58547,80268,50709,14503,40859,66907,70882,75634,85093,29827,55377,59016,70009,80865,25162,88195,74456,68214,10141,46022,79240,44011,49829,21901,83676,84608,51165,87680,23832,48341,65106,79442,83292,81236,72252,43942,14294,27117,55094,71785,36234,19960,98795,76312,43982,76204,12792,50988,66471,13201,13157,19525,31170,19002,61329,96740,87086,60424,68566,37904,25557,98304,49336,60538,64800,34023,76985,72331,73802,40117,16515,91369,58857,49270,60104,86390,32081,46210,12956,93090,70781,26435,35526,89777,80695,85900,79751,17199,12461,66956,86754,39702,80809,41264,63754,72299,99128,70999,65723,78729,84397,71230,16419,68760,86087,75655,95997,62519,85111,43828,42699,63293,37827,73364,28950,30214,90936,94227,82430,40200,96216,59618,74810,74436,14237,81477,29970,73332,37571,28605,22345,85657,84062,21531,74934,88028,82356,55400,87461,85095,83441,13346,90508,33857,90534,42479,79744,53125,67179,38187,18493,42992,13168,33567,65588,65346,41549,23656,94469,56167,79949,13317,68067,96294,53642,25244,42378,17265,96957,68093,60833,13931,48592,51398,63641,29774,57131,97325,28481,49121,12430,96164,64919,77805,92233,39087,31237,14306,86537,56673,25336,98570,23032,80569,15992,77703,89852,78564,65261,81437,72446,70225,79479,65965,36055,34459,63130,34559,93690,42237,49780,73331,98102,88772,85120,43734,71581,82378,61819,95530,56156,58417,31483,35397,40696,62306,53145,65409,47293,47138,10975,16510,91826,15957,38844,78141,40305,64508,76892,31942,29219,40292,20657,40895,28159,41211,43871,76687,84247,48621,53724,77144,10643,30616,20278,88628,91491,30257,53871,45773,42166,29431,94640,31678,86455,78252,66771,97904,13957,63894,58454,62210,25310,32880,52337,35720,39444,33745,86252,19664,18921,43815,70470,90068,42316,93010,41201,96391,42880,67167,68156,35453,44022,49473,58896,54237,12847,78770,26883,13325,40581,70051,31086,67710,83960,45645,15225,20447,82438,19188,53355,75235,98627,47782,22466,88500,31763,48343,64833,55358,92462,65875,85419,42296,40000,41885,64156,86522,80485,73133,64114,96646,38388,76400,94946,24586,29872,73221,38902,93438,16175,45467,68074,89707,69353,52108,17034,34994,54923,22139,72403,13347,62588,77872,13510,85932,80877,38729,60737,46082,79304,13075,26424,97175,21715,16635,79676,56018,39781,33989,72854,81955,69981,49179,85966,96332,25776,60694,80188,58461,81455,36466,34927,97826,65515,13350,95168,10936,79519,16501,13866,14995,71174,69743,23891,22570,42484,88745,86615,58943,16312,65256,14869,16950,48875,50547,43140,61440,63667,18576,58361,51626,94463,23832,82284,66265,42204,36126,70194,38108,67894,61432,72970,98985,93453,79172,98547,45570,25345,91356,64761,16246,67899,48990,98373,75208,18768,19607,76626,41598,92153,17445,88558,48159,17118,17891,87631,68960,75179,66103,68260,16794,61559,39247,51219,83425,16130,39373,36948,72104,12833,83048,59547,36085,35657,56867,28589,39661,77499,59271,58685,30339,50039,85158,23386,50037,71805,12209,16066,19331,71520,25262,41470,52666,13506,60397,83269,42276,11629,27662,16980,32815,17777,12852,75704,48541,68657,63204,99565,56633,26379,35057,37152,37857,22542,35317,48977,27908,68329,67244,19225,98367,47685,84305,20072,46978,93891,89665,89466,69267,76295,51022,55475,53517,45947,59239,65213,26171,12121,19825,38035,31665,59845,60534,69290,97379,67394,35284,33162,80739,34827,95331,44159,60546,55479,63119,92308,34628,68778,45308,98075,12649,72264,16460,68325,26374,20337,71166,58653,86545,38390,92376,51414,65148,46523,68758,21210,19514,53284,85427,55152,55569,24742,66124,47052,65369,69184,32409,30244,18786,57429,20240,67738,23484,31787,50166,31350,11515,45464,48121,90799,60311,31804,29584,16466,94147,31741,52451,79834,65122,28966,59006,10149,22539,67513,81868,87917,10083,90592,33680,73104,94187,84879,92107,19265,74435,42474,84513,77244,90640,77093,90298,73798,51111,62747,17181,58671,38690,59548,64591,12667,93050,24796,40315,67655,54944,24636,79382,63952,37131,55238,41727,37348,89108,26130,72956,36333,27285,36531,92815,82989,84899,39378,64833,18307,27824,57843,27027,15451,61986,33531,54609,18544,16378,35704,57251,68183,99336,59459,57835,66201,41669,55947,82811,30008,38215,57041,57877,60256,25720,36728,43080,94202,63157,49302,54161,62602,84793,14230,88854,83507,38949,70531,15053,23594,35109,66395,35112,17529,48690,71259,27165,49766,28031,90766,94308,23197,90467,57046,43828,28869,84853,51199,63473,76724,89892,82528,22027,86779,73198,90945,71907,95247,94797,13162,93463,17231,94381,84744,65596,32723,34790,52607,49746,37571,66149,89237,60414,48671,76854,31925,94034,72002,18361,98469,18529,77252,45332,54252,42686,66696,14508,86498,34584,95321,18412,52632,36989,98216,48732,50439,56263,22417,25417,92336,66366,16332,95737,39653,83112,78996,43687,25912,77273,67658,90974,92207,62505,41534,41218,17112,11749,17051,31760,20931,72812,38291,92793,18341,12745,70144,85388,44695,53745,81668,74820,94844,59867,59597,82252,27014,85468,55030,93669,11273,11820,43164,66034,32067,57332,55784,11370,27238,51118,85572,93721,41739,64494,86004,59902,70171,18785,34655,33315,39049,75238,50819,96201,98217,89015,69806,65716,64941,92426,58557,14079,68240,35297,60042,81673,92099,72189,69902,72672,40672,36892,80227,28468,66832,82712,84297,26188,68838,16768,83687,59936,89272,72705,39663,87280,46714,77059,67906,85297,49635,97066,38050,15279,95077,39004,99955,80260,24764,31730,17987,30912,94940,69787,75562,51977,82822,64799,55149,34757,64188,61554,74529,15559,36992,36233,89258,59124,55104,71966,26079,95005,82400,15703,67101,31420,10454,38337,78116,68940,91010,85388,23426,21095,18033,66180,83739,75585,78239,60588,99009,77899,87525,54134,11717,17767,46686,47152,64865,49514,41249,48899,61739,78419,18767,19230,25063,74185,36919,84961,60412,26108,71068,80677,74379,16303,72575,23208,19782,72817,36432,46467,11945,80294,90371,19147,33448,34579,39539,13123,70263,99872,12848,90936,78903,99874,41740,91207,85791,84761,61998,27535,17868,70270,57373,48900,63060,84547,83486,18685,96059,25790,71966,33646,41941,52395,16696,68657,71192,81736,90677,48881,22495,22039,20385,84691,42292,47639,31018,42012,14335,25624,62285,33038,50721,51061,23248,78382,56752,91952,31492,63735,38972,27425,24997,48323,83763,18046,19095,63200,30174,51285,83983,64337,60003,33761,86776,85370,69336,14014,74036,43931,94129,21003,53430,80710,84719,88198,75247,19911,40597,25201,80176,64140,40760,63049,14175,54509,90593,60890,83502,68559,76449,42727,24093,22019,32350,51697,69955,77795,72577,81188,98562,88185,67697,59492,26559,77971,59551,85481,94087,93361,17143,92327,77041,15160,34205,48659,37727,45989,85678,29250,79565,39009,69158,37561,25139,97202,53403,20606,79828,43172,48129,70248,94327,76431,83214,95553,10980,41878,92614,62777,90339,59523,84402,14368,36403,43773,33878,20179,21422,55140,99867,78137,81866,79228,23449,29023,12809,91815,33573,38299,70554,25234,26392,48144,31702,76372,29180,92846,45761,69181,86749,22523,74742,81736,81079,78272,38182,25257,50835,81925,94212,35953,39418,88757,58247,90525,19322,64082,39328,75201,13547,92753,27924,53713,18216,10173,18964,27202,56980,35962,47988,26182,88073,88578,47364,20517,72065,96132,59775,45813,33659,39132,24288,55243,99597,72636,75163,99826,74061,51936,81646,65362,36635,82323,62042,85275,16836,16907,22921,82532,94202,44555,40200,77123,69145,20071,31732,10805,45504,81457,50909,91412,11689,18979,56888,87045,19284,39056,65086,84994,67035,33726,72183,17618,42171,57304,32297,59097,14313,93739,30566,66557,52236,89340,34323,36040,43746,53880,54515,34419,94214,25958,94509,33414,21823,63556,49682,17903,82973,48506,63312,44576,59703,29715,68301,79435,74509,19956,16112,31150,99894,21365,28025,76589,11742,73386,47729,16665,29712,32395,85055,38905,17961,75629,55799,36094,66953,83953,40950,35212,71989,22929,99608,75452,43921,10911,72453,91472,49265,16383,88495,39144,80094,98421,47378,64279,66401,10642,70545,25829,25563,15219,61306,18835,76437,20551,58595,78329,83982,32276,65288,27580,61769,14068,72121,73387,13436,57290,66708,45918,93589,92680,91733,76961,15405,20608,38688,99056,30229,12498,46731,25607,66629,16762,86388,70717,32861,64066,59013,17372,49732,93852,34837,15377,51466,53691,94084,50176,91711,86322,32316,86305,58865,61839,71484,54336,64705,61133,45673,49657,13671,62183,38170,25147,64094,92459,53457,51024,56708,29947,40782,91019,64275,24644,36113,16278,84880,15166,97853,23310,37596,80082,12430,30073,36641,65650,97696,33108,37659,29597,88217,93964,12860,14419,66346,43276,35253,84990,60787,21318,52307,49238,67626,80730,71132,91523,61807,86094,37657,97116,58374,33372,53948,52906,78367,11957,66073,11168,38568,85802,52464,95081,62426,76594,63930,14920,44339,35554,41330,14007,77216,36612,70405,56741,98672,91415,84913,16995,75170,96454,92736,95558,61975,68557,67227,46324,94405,77412,37259,40758,67376,91417,77659,63658,96556,38853,51586,67830,18567,43677,96354,35516,90536,32846,52187,27308,14028,54730,24905,40249,32478,89735,37182,65302,35803,80184,93910,25341,35909,74519,47223,77964,87021,14543,17600,46372,36940,62705,19180,63836,62496,27952,29556,72690,52740,72457,33423,37501,49192,17804,23093,46660,47852,17049,69336,91817,21035,92567,29619,56679,83444,46364,18093,30883,23894,48642,93584,42044,39725,88252,82293,49375,46711,48251,67209,31610,41816,64129,96412,13741,43424,81369,84051,38314,56999,86501,57095,53347,43987,39100,77973,80616,58467,88898,21383,54145,55660,30570,80427,13628,31572,37534,29627,71709,74451,35752,21226,89539,73065,16797,14681,91288,80858,75595,78979,93636,98595,91368,24271,95224,85753,76842,26766,49424,49275,72976,41768,46335,77258,30161,51579,44399,31146,77498,50499,90472,39460,32812,99324,96547,70139,24814,78120,40204,34182,42839,61616,79042,37756,98462,91790,93901,46319,19993,85659,34117,90082,26157,68129,62181,41376,85850,27247,45487,26709,28793,61023,50218,77712,23584,44822,59755,78996,14738,22772,81080,58964,69921,58605,65698,97253,98299,86246,44738,43203,54512,25920,49263,38588,23657,79097,21519,27470,32136,38741,76594,82060,18852,40643,77855,41916,11116,61228,76342,19826,48350,90318,54909,12110,80667,68576,40745,78121,41104,85738,53183,58800,46768,83239,48625,42168,47968,54250,38194,76067,19639,27207,38099,80958,96451,27080,88271,89895,59056,34424,28929,51053,31012,31413,75060,95819,95079,93851,78459,21103,94726,82768,88243,17831,93487,17814,61650,37735,78013,40204,82259,89207,27828,95079,30239,20315,59318,67589,28670,22436,25088,65373,22443,67493,15883,44930,84768,11339,47709,69062,73230,23454,23128,15773,50980,78003,22349,95090,60525,68186,93518,16243,70633,55527,99147,40745,77880,23924,52665,38420,13627,84533,44546,48240,74270,91992,92676,82355,72799,83153,16093,30551,52004,73151,73265,36724,15579,77892,51073,95475,54210,36436,95762,77994,62049,23923,97383,99553,46330,99614,97015,33328,63916,37336,61232,85615,93455,98983,83081,22807,12989,56635,26196,12636,90146,65169,23042,10035,89121,58982,43658,76520,87866,37165,90632,99081,19957,67372,35731,55830,80933,60260,58077,47642,18943,77022,91992,74235,55765,69717,64132,25291,54513,57799,91401,75247,27566,65156,37550,95379,69277,66300,50913,85937,46014,35937,52574,62774,82003,33539,91411,91901,53633,95572,37578,78893,60363,82553,13922,80350,70281,88895,58761,27401,29007,51412,82382,41809,26034,27652,90773,75865,47829,12133,70425,65097,63111,54322,58231,69230,79092,85172,99086,21149,99983,62565,47736,25942,49518,56069,88644,94852,44634,79226,39536,21703,78308,96600,74216,67390,74624,58236,46376,38306,37079,23247,38958,41038,66100,51931,28439,31799,91751,38406,99044,95375,55519,93457,67809,12472,26101,48808,98750,32149,77431,14514,96756,34686,36614,25877,92899,59544,23229,75604,33030,26016,41174,80664,98331,82734,86418,49570,77097,94190,52247,94896,58277,39531,85204,92164,62447,55809,72444,46858,37098,60319,21223,74175,29397,33459,18494,56242,95287,74049,50450,83017,54502,34385,43363,79132,21629,84744,35380,81650,99025,58729,44427,59787,75224,47885,67449,16242,75069,66929,41751,84122,64180,88732,63448,26723,19056,53154,35089,54936,63904,13162,73677,68408,64006,54271,49994,51240,81649,77760,17651,53138,68202,40161,61116,38304,57925,29102,89788,18972,65532,99255,47554,61974,80169,14246,88584,71782,94986,10691,45050,56611,94921,93387,72496,28964,95591,53072,96636,50408,25398,19483,11409,94972,84785,95243,34658,61745,63261,56617,61191,53928,54787,68995,53319,18448,23445,10650,89399,61695,75348,31882,89594,72847,37873,76796,66631,58345,76649,88178,85598,74941,55609,48306,53527,13470,23801,62319,37888,81951,91626,38945,66921,50301,91563,98965,45218,90276,35662,93614,78730,97440,53315,43990,50205,32841,80758,33533,84831,28275,61758,92972,35463,10630,36765,94952,65920,90541,94767,28333,38937,89434,50378,50347,20142,46848,40769,90118,17297,94143,78448,13135,25058,61452,27151,91852,66431,59649,82970,39041,46920,77436,31274,81154,39155,21355,59836,79930,38099,71064,83691,64535,72091,81384,66706,19446,29629,46843,53759,56234,57354,44393,24080,99003,61326,11870,31499,94365,73085,25034,81749,20617,63922,12099,26094,29591,63970,16940,39315,18462,14722,14659,91007,71869,23587,93000,68362,40952,47837,21158,86405,60274,20423,15717,10616,77798,85959,40358,71680,62970,78431,47806,36461,46192,77469,87392,97327,19771,89802,52474,83553,89205,81202,71488,72038,84993,27734,49843,35598,65374,92366,15941,26197,27259,53849,21554,47935,24247,99552,13208,30591,65404,94417,90033,45951,65983,66933,46289,19598,49088,38315,32479,16435,45398,70796,98264,45751,76091,44500,74854,39622,47615,74469,34814,38390,71873,93209,94426,30920,27765,11718,33652,76137,33753,76881,59148,94515,53930,44165,60840,72139,56387,65021,61950,59214,75858,70441,37250,63420,78381,98254,31822,77524,39188,77595,27524,91745,89728,72320,78618,67814,99183,20391,78786,37651,10056,35764,27808,88857,46515,27856,96778,46020,55114,77254,50873,80974,61444,64048,32808,91752,70771,94153,65832,65440,23773,76114,23262,24371,12677,68633,78787,61985,69151,50819,47238,86904,44113,32301,70108,11134,90852,75083,44018,50572,34212,69083,77281,70385,45552,60233,41801,36421,67723,69937,65017,39394,69757,57636,83891,20437,91230,66920,31726,17652,93970,33791,91012,23305,47859,48919,49767,44876,48547,70494,42517,22666,12891,57225,68979,94035,88266,90853,52759,25968,55829,78335,13287,40750,40651,70686,47721,73909,68020,61355,42390,51125,55294,84415,42237,57313,36662,86206,69225,21066,68393,93224,48282,88032,74680,52631,86064,83232,17624,64304,13133,88437,92695,42312,67324,17409,69462,74285,35407,14583,65728,53484,42487,62399,63854,27854,28009,25740,10928,23056,87496,86701,64107,49475,12126,65783,47762,52173,86292,43875,90163,24645,48251,22954,13708,18329,41540,76972,92385,73980,13140,68384,38756,24924,65895,52395,19251,68083,40630,12287,79703,29127,58934,76912,94410,33215,22764,47709,16404,87025,18316,11098,95488,71705,59647,74136,59873,30293,42379,11781,15843,42243,38440,79647,17053,21735,53202,14157,54561,77551,31125,89076,53850,23369,42854,12560,32579,83577,69317,84372,91648,10295,90865,15584,16392,18499,32693,51200,63356,62133,43458,41898,73782,28367,99679,26452,64858,58699,74718,87285,30689,76460,12868,62088,34729,71968,49650,38403,72064,66068,97550,33393,16488,92901,43354,96003,15517,86145,62850,19172,46638,36108,48792,42348,66851,67041,94505,84328,71842,17127,46556,38198,12465,14846,98179,29991,20852,93147,10057,52046,42610,91870,55015,39611,87634,50276,55390,98398,28837,90053,24403,29269,76631,85257,72247,80927,63625,29026,59178,12401,80592,31921,38596,60518,44071,18955,96571,36415,98081,51020,29152,89414,50536,94785,72082,16981,11473,57531,89323,65365,95513,13959,15767,72250,72829,97851,17738,24227,91379,83070,63870,79743,45922,34204,54135,52020,89654,39838,83270,97586,55083,64612,80233,79463,68721,74122,49173,27096,30386,75311,32587,88419,63748,65295,58501,57146,24846,40718,22316,28282,31223,65732,93421,37376,49098,49282,36384,84875,50388,98440,23307,13647,97713,43099,50591,64504,40654,43877,44961,45207,12666,28998,95728,39742,72168,66310,83746,35398,60983,93994,57031,64578,15003,87530,64745,97181,95442,61388,28769,31831,97402,95556,74989,21499,16268,19383,66966,34713,76253,14058,66226,12212,53953,83134,88384,62598,12093,42500,87276,97375,45695,51525,20452,72036,48943,80916,21198,89307,93213,44968,29062,29306,65283,67641,41114,19853,15483,50086,29503,27627,46190,48902,61614,35185,44799,78682,92244,36509,36647,75790,70028,78238,20017,58470,59230,63227,43202,44986,50438,58740,51567,38962,87796,46094,79511,15410,21364,48776,97090,72990,71229,35663,26379,23085,83715,62143,76563,80275,73418,65956,81935,34777,30745,62544,96999,62156,54022,77302,55586,59446,49646,15825,25759,51411,77989,90587,93972,53493,91914,57939,81009,92772,55640,68989,17692,27475,79755,38721,76447,99173,36849,60594,14485,92361,99006,98592,42725,43184,79541,86342,89273,51098,69488,65041,83993,78535,41785,19813,24369,55556,32837,14194,26744,60442,21296,26619,95689,29954,48273,73020,70367,23513,77586,83429,45400,48182,28456,16488,80216,54568,33279,77902,73993,18013,85999,77752,14983,68960,15177,26537,47226,30600,45311,25865,51456,32805,38598,95156,16794,89158,40728,84640,22735,21445,36077,80670,61520,15298,59953,69640,61243,75308,20264,63606,11654,82966,77230,25266,41465,38659,46231,31811,57804,67884,80921,19055,53124,70725,49947,47415,51324,13041,94807,70945,18223,74432,60105,32903,41804,34153,49863,55394,31412,37498,77474,57140,39226,64094,38513,27803,11736,30687,84352,86172,38043,66099,96416,54325,15564,44313,94336,83586,45836,62405,66642,40619,75688,69118,14531,23111,83109,49596,16063,10481,66400,73150,15218,30403,14782,28191,85599,70309,85881,53083,94769,25449,90403,58353,15653,38276,28256,46189,95013,28485,84393,82544,97094,50238,78863,97003,16772,67632,42823,19767,60186,93712,98449,60099,56343,17599,45279,42946,42574,11190,82605,60143,10231,90336,43611,84484,23942,50707,23504,35585,54877,28205,59786,85488,67530,75263,93349,53288,57921,79608,20132,80634,54542,74550,85067,23460,67440,63321,25946,23238,27045,52658,73053,82612,87682,95448,40957,52867,64000,95050,63407,78992,99586,35433,24199,44940,42575,28308,58261,41625,89720,24471,81152,59108,56168,20067,82746,77544,91008,83509,42424,87055,61498,69612,91461,21193,23669,84690,37574,98690,57546,69785,75136,62738,92016,36975,39378,71114,41965,55350,76963,24225,31918,60296,30775,45379,42678,31093,81950,50459,66211,24523,93784,45233,50171,34776,68358,94635,19661,63046,96489,55334,99066,15596,79584,37202,95880,33589,97914,79900,95477,44171,84120,34963,36536,65033,77655,62073,38683,18861,96867,58105,26333,39422,96028,42790,74869,68178,51112,81394,23426,90956,33769,48037,71692,28483,60190,63220,94792,31490,24930,12653,74504,58681,34038,10352,71820,12352,64443,61654,33227,37383,52144,78881,71999,61182,95564,71434,83051,93731,41104,39323,29525,61007,82098,65988,66614,54749,95006,60254,36134,69282,76260,89858,62397,81800,89610,81448,80975,56080,54014,30884,20844,90131,65597,35341,45154,84618,74170,62230,59748,57686,70271,64928,52837,19756,13870,78201,17998,26289,90795,85807,42858,95727,87893,19007,33510,95362,27945,99852,89269,52523,95374,40891,70048,23938,76695,69651,83369,15898,80610,57151,84908,58475,25822,66903,76202,99029,38786,51172,64321,16454,16189,15595,89060,22360,63085,16987,42114,40147,89939,11646,94766,23830,99619,92605,92593,16002,61942,67783,87851,36552,30614,95516,58776,38072,51092,31214,95841,61565,87445,48317,36946,74756,50042,16733,47763,62412,53473,88441,50968,58010,55494,27104,68588,91041,79132,88429,33433,29642,26122,21405,12500,33078,84691,24120,72143,19810,72543,44177,96628,16364,10944,84594,68881,91349,34121,91584,20808,87244,65439,14651,77138,29433,98776,34334,43005,63420,72525,85572,40430,11710,14989,11176,23251,70121,65176,35518,40027,52388,45387,59052,30052,97257,33911,93536,45652,74769,93663,93006,78236,91395,93145,38801,33087,37832,31593,59499,13865,64617,83204,53861,84064,89260,53296,91306,25202,18519,96970,99145,49763,82190,84308,80764,16935,26316,15343,48497,41477,71116,67171,72237,25374,17049,99056,79683,91388,29628,76017,79981,31049,98187,89227,41024,19206,75821,68094,18945,29381,83864,23648,81147,20169,27166,46431,60174,54218,68364,49156,60597,64096,48298,39214,73808,64282,57887,34939,58387,47309,88580,72731,31041,39117,37959,50713,98106,74710,44529,76082,13736,40465,55438,54969,38949,20824,38553,10912,13419,17755,31300,81654,52236,91327,88472,58482,10746,13962,94839,17490,23037,67511,85050,26488,68653,62419,73265,76102,38800,69658,51244,64226,44672,12673,19749,85906,17375,59567,85983,60438,84471,29553,33588,33071,57736,21087,48754,36515,29413,28527,31262,98014,19631,68979,44763,73617,39323,50960,86435,33002,69642,22653,84139,98635,39711,99637,30893,68460,66453,59336,36625,40821,32943,89639,53862,36416,61586,17037,37258,14265,43312,44375,91580,38843,35974,46935,38946,17278,37018,31592,78534,61100,51821,11122,69124,16286,61261,31736,47070,40103,52994,10581,64474,31822,80021,38203,17698,67388,41808,67921,43684,95502,64854,81394,37700,34411,34811,86921,50873,54896,98520,96742,83455,92660,24107,25032,70499,87635,26805,63001,26439,30097,84316,34397,14605,28089,15210,33568,29903,96743,79057,51677,62364,99630,41822,61075,45308,41797,39394,82388,11737,58400,41900,65873,41070,48597,57752,72564,82863,95870,96214,45107,53855,12688,37649,33613,24326,94034,85216,85307,43194,63685,44959,88536,26402,82417,75219,62369,27777,69468,70939,93472,57375,71890,79982,14694,66565,99758,41437,91479,92478,68826,88122,45637,19816,82532,24691,80736,52085,76513,39262,70938,33295,64181,72821,48868,84725,56172,89844,92199,57695,81037,67064,28782,32934,11266,64247,26213,47923,35192,42027,31701,46572,95035,12582,41859,89165,90354,78362,73484,43088,46937,84479,84777,53042,25939,62908,58580,88469,90157,94949,56454,76175,99542,93738,44469,83168,87343,10024,85629,98872,46944,33191,97442,62989,38925,67961,86430,66030,21794,78724,79504,45030,25472,40753,21258,28213,48604,82750,98302,13761,83488,79751,24705,76462,77664,39611,44708,96203,73928,79156,83919,28744,82175,28201,82005,82353,15651,57889,30036,30206,67465,18175,49544,42311,63876,80808,75467,75186,45282,14568,28598,19278,51660,59900,33045,54103,91863,22107,23697,64273,56865,54658,69856,87059,33343,95618,22904,94627,24733,20314,87260,23167,32318,28612,60106,67757,45531,25273,43479,16905,66704,23440,31137,15429,90905,70794,42502,99099,94895,15200,13942,94219,71750,11515,82029,41332,47555,71888,68811,57341,69823,41358,43418,48193,72425,20510,70342,82600,71286,91921,54246,12858,76088,59640,21054,62699,95494,97043,84469,42089,49558,16387,46562,34571,62323,95794,36939,69637,10486,11116,13338,88596,89964,32702,83479,83940,44462,53337,45298,69434,58314,31882,88282,16249,96926,31890,95969,86574,82079,57551,55996,69916,61012,45066,27609,24802,60209,13117,23729,61649,30278,71812,15025,93113,44707,27728,31581,53434,46946,78674,90302,55474,32824,51728,91124,10289,91916,32654,49849,14891,89679,46151,42018,93458,67640,48913,30374,18029,75110,65215,99822,67108,72857,10754,48963,12923,93836,75582,12685,44821,10608,91643,83653,28378,13308,46851,16132,77476,11425,26689,22590,52300,77128,86255,42119,38677,80856,95090,41625,51771,77162,29247,42182,81338,66441,37946,25543,53550,85756,56567,73045,32761,39906,20884,34471,30520,82376,67265,18415,27925,30130,78296,43462,58190,51805,39914,59554,54501,27215,94039,13309,22584,69532,20437,46927,16323,86968,37335,12111,99298,56608,13641,40048,23081,54811,48648,84298,71589,91690,24734,94119,19060,30100,89238,87309,99448,77862,43445,57696,80196,60398,56731,63128,95496,24958,49508,14432,90084,26203,31073,19187,57231,42663,60557,51413,65578,51795,60241,80972,17952,39029,87827,99553,16019,34997,73602,72869,41215,12851,58797,58765,14987,34919,46200,88735,12950,14230,63043,68716,32252,41210,74099,79153,24114,43329,45979,92642,13023,13323,63104,18368,13329,42959,81221,13236,11482,96784,24673,56728,90980,85115,62009,89676,49663,99622,64460,51768,19643,52149,92902,90844,40022,98143,40141,25288,10316,56400,55576,39194,27166,89188,58255,51991,51692,44237,37981,89713,45208,92936,76558,96745,17189,12581,28378,12612,24360,50314,20700,97379,61007,30227,15664,77388,49656,13533,18166,87766,43198,70462,90407,22721,34469,55040,16612,13096,10642,71596,70501,29727,62414,90487,62327,54290,99079,21386,62761,16888,39402,70740,84319,43835,21590,50922,36729,59751,22185,83694,72993,52027,49647,82773,68955,64116,44661,22815,56342,60791,89322,84902,27778,66470,62377,83088,32768,58578,39215,64734,92698,88312,16364,51898,34615,16878,94705,63356,61795,81709,59010,90548,99490,95495,40299,23459,73571,40865,82699,87213,47742,25778,99263,53411,36224,32644,52257,41428,84262,27148,96205,20978,42949,29623,11112,98634,77644,66026,31870,30673,37134,35150,32616,34128,31615,32570,83657,81324,99814,52336,67340,53711,18198,18046,61629,70007,66735,79620,93774,31119,36800,81884,10115,12503,62026,75125,98553,94308,51941,49225,67283,41018,94335,30643,72097,65577,39158,72329,37527,18365,54304,81833,53563,64863,38879,10016,14250,60114,58610,17852,85634,16226,50994,73927,51540,53702,59120,17607,82136,76107,48491,19661,49442,54267,57610,49118,43835,59351,36619,78519,44796,28167,89563,74480,43382,67755,46711,77103,36826,93478,34891,16675,73896,83444,19285,32867,95088,62746,48104,61237,77479,97303,25333,70627,31837,73932,92539,43488,25859,74746,86141,38189,73253,80777,46455,64564,34285,22330,33100,44973,53034,95099,29798,99815,75606,87471,88510,13217,26974,15684,49084,65712,72682,94776,92985,60007,89524,74156,96831,90084,18991,71845,38280,40167,54821,49789,48608,91124,86998,11111,13124,44891,73410,29809,70255,64534,52419,79043,42220,18973,87607,95652,24237,68344,71232,11930,59804,37996,88068,34354,77478,95697,48407,52288,35563,63591,82043,54583,25388,69598,62231,26052,11323,68809,94315,39124,45621,54921,67702,72636,39154,43321,78989,63134,70622,79084,70646,90389,65571,41220,30159,11952,56557,57640,89051,27609,42494,12353,16945,79603,59586,86908,64143,18052,76446,14369,22949,48235,17711,15317,25359,42706,33934,43921,43972,64152,46592,11408,76630,91578,21939,21624,22030,87978,47261,35968,45903,78524,88141,50628,42711,72790,47726,26222,52264,15397,30059,76442,43879,64686,64969,84178,10339,32625,30485,83330,93512,77262,92779,66563,61987,62061,71663,48026,28637,25996,80292,85360,63582,91293,22537,53804,95646,56817,11411,19625,52240,12529,63844,58529,21378,21728,66142,28746,31630,38896,73708,66142,23279,37865,70925,73854,86413,37998,28444,44573,90191,58345,12260,87139,43742,19804,48218,77076,36388,59862,51761,22799,89117,67756,20196,29056,96839,36993,77418,66846,56835,39910,38001,61884,82660,78355,24326,93857,29106,50456,47966,62748,67451,67288,71395,53358,36837,48371,62168,24313,77520,83235,14858,27569,66640,15044,38425,36856,94359,25736,75070,30855,45173,19255,41604,14289,14226,42213,96559,40396,49437,97517,39010,81035,48538,68457,59114,24568,15712,81398,59401,26143,70280,63658,54851,91991,96047,50149,95666,21842,17158,65894,35117,24424,37702,25430,46611,81350,75590,18542,41271,22207,55677,81102,88184,35345,91564,28027,80118,40709,71579,29077,28915,67550,19224,42326,61417,84757,20599,52831,25561,28151,60769,38973,77196,60216,20381,56317,45976,92459,47255,67939,79382,72491,41441,35681,93665,74522,42215,14540,50272,33826,82700,22418,37012,85201,77715,29061,96157,73466,81950,95320,71850,78961,65377,45685,14441,56370,23332,86485,84562,79043,35028,83295,49820,63523,62120,82141,74615,16530,17247,84485,89590,99479,79508,60238,93554,89245,76791,51247,12097,81416,40187,27027,57308,56285,39549,14131,12630,83755,65828,40084,76809,39490,95823,27006,52224,24288,50973,36613,84839,54637,50284,78410,38904,74568,88258,95830,81287,18647,92677,22749,37739,24444,64978,35998,40341,13655,39417,35430,79532,80804,82678,16022,74212,43816,88995,36986,23451,23652,59285,16042,68956,90799,20941,69522,83925,64443,95045,36296,25273,97623,24246,68557,25908,63059,23655,84361,18977,73860,22643,36866,89602,74145,46696,89786,89483,26493,65921,22438,45702,26744,32005,83986,33025,28790,55974,77380,23034,65968,91770,16615,45946,25741,17968,29759,70673,72098,48311,28298,34885,44770,45316,81775,84867,86823,25042,69465,10606,95326,55969,24745,70105,42760,14643,65688,36826,55472,53837,47888,29530,36089,68064,47161,61033,38194,53804,21397,39467,93668,68808,98541,79892,88791,88773,11276,83660,79608,27521,41401,11284,20700,22755,74932,26810,96768,80670,12764,14023,91966,20650,78588,91984,28286,52968,54446,35239,54985,63914,20046,31706,34394,28710,76039,89736,70635,48542,56039,31398,99511,75299,38926,34569,62643,70791,24455,90439,52685,12266,42525,54774,19506,71245,39392,69617,18309,74470,77563,17799,42567,12189,76431,49583,26724,12207,43120,53949,88389,84263,48652,27030,13273,42074,76446,46548,54413,48076,11589,71858,37145,50671,69578,83402,86105,81262,78487,66590,84116,85123,69422,20147,39355,16858,17951,77445,71459,44943,71695,39793,60575,35891,38330,79369,23821,85927,72825,27274,34626,75080,23407,97046,87489,15031,46698,78599,93169,24855,39663,39546,38278,34386,59365,15301,41117,69837,63554,10047,77651,12711,73558,98024,54687,81201,85847,64755,11883,66901,72682,27752,37968,10058,60542,76506,22430,97395,47600,78213,94127,28727,90689,23945,49633,22290,36879,42603,41908,66118,16010,12162,21352,19878,11559,92781,67492,68350,29388,50854,10261,90598,78922,91843,77058,67922,53835,44377,99334,47171,10322,48256,29962,84496,13855,78331,14220,68563,88459,44892,22965,17251,15005,59288,78584,87591,76971,45952,60938,36707,41207,31553,95836,56103,99527,20903,47928,64701,89251,71458,84884,17895,81365,18896,10335,37294,57430,79656,63616,97020,84310,20001,94550,93220,73879,22336,38985,11742,58001,24263,54274,56852,88653,29467,20186,19851,12335,85878,81816,48169,12285,34473,43437,68403,33334,27551,14345,15085,82450,19897,32653,73178,68111,74195,45243,40700,86170,86315,52181,78195,26105,70869,53768,32642,79588,42079,43524,62644,66387,93907,24035,79418,25309,97351,26293,87237,94333,21603,70464,24652,86810,38164,17570,48376,14097,56858,60792,94116,84178,92172,45883,50536,38120,96563,71221,72354,58571,53399,62193,99840,87152,99317,38939,52454,63673,69710,30463,27466,72366,75425,29514,93729,24216,46076,41969,81088,11778,72824,45867,65561,63798,21212,84796,83426,56491,63667,39073,37503,18569,60212,79386,81688,47519,25071,29138,58880,57495,97801,84210,74333,89227,85723,17035,42742,84916,21172,43632,24129,66557,93136,38329,65257,97724,75379,19759,64716,50634,57216,77861,59543,16248,14673,34681,85515,81682,50318,26665,66293,53216,48479,68122,20345,54186,77705,48954,40584,47494,32783,36427,25802,85605,10824,32621,17473,13212,17933,34269,46772,84270,71549,88961,75221,57244,19588,25963,31746,58707,75502,20479,49436,88468,63023,14766,70706,77846,14359,64841,75641,71033,60257,23628,67501,98980,92093,81093,23792,90746,51741,65934,91096,96984,85759,72792,75319,56691,97839,59312,14155,52967,77529,71880,72083,36384,80971,63787,10654,13663,94337,12458,78516,97790,85745,28276,58161,99167,22632,25689,45806,52025,63372,41272,70083,30774,74525,56712,99436,48724,34551,28565,32019,92099,31298,29538,39958,53668,78528,98274,72264,11465,47640,95393,25801,38260,90122,82530,68291,53641,58371,30488,29716,54152,73393,66047,82607,97200,24295,86345,40752,11232,12543,23011,35373,75528,60118,26965,27033,44315,49512,46103,67626,93535,88976,24711,15883,69748,74763,90410,63179,58893,43131,69173,36047,51251,19571,26513,88498,52262,73513,78808,27724,57826,19484,61764,80234,15910,91712,12844,67076,57459,95973,78187,20290,45565,38657,29975,52532,47656,58188,84211,97257,30165,91137,84208,88746,66383,19545,62365,40086,74161,38336,86740,61611,78287,48033,28745,20989,64200,40673,39450,39301,42528,51384,42207,60247,70743,40806,66399,66545,50632,53247,47995,97872,78611,37194,43753,33668,40834,52402,60646,62854,41588,91684,68223,54147,41161,95096,21116,96190,10975,15403,16859,36874,38818,77959,52165,18463,33560,49146,68451,83851,81079,81378,14304,68194,22265,35792,72290,21720,77128,30443,68853,37207,10251,48356,46373,54564,30449,97469,41990,27046,36122,13172,84962,31085,31511,80565,74334,27338,65737,54418,60002,38648,34516,15852,20767,97873,23594,73908,63088,95909,35604,95851,50286,52654,42620,57415,61696,73063,59340,74394,40466,13536,21831,19390,64384,52845,12385,90700,80010,74395,83262,48144,12111,56488,52709,54983,22512,78220,31018,57440,15329,10351,22815,87419,44707,16774,14329,52018,98527,67278,31154,64762,73765,83190,55637,84003,85315,48917,19675,63224,37729,20985,59934,30725,67862,67696,12370,75544,38925,81292,98557,78555,66976,82792,59267,78136,13836,42047,13003,57097,60787,27224,74946,73491,21679,20429,41691,42328,54740,82558,21734,89748,83130,51942,23900,59187,56585,65794,71596,79342,49176,87012,95205,71441,27747,70388,56399,42648,89760,62926,37402,81681,63092,76786,96361,52084,91473,16189,62435,74111,19847,17829,90930,17886,43725,92215,70963,22797,48335,30732,22447,93706,92096,57091,30976,92273,48079,98631,67650,97475,84305,29554,22158,47526,50362,63377,64085,60629,84159,55698,94572,96866,21857,80585,88212,93729,36197,80131,72542,92050,90773,32012,66850,44157,40911,25207,12647,23313,74551,95425,95560,47756,63010,81720,62407,67779,26489,33303,73070,37130,14936,23398,30090,59449,60121,19795,18101,22138,33819,71732,95545,19893,81803,23897,22342,57666,95204,38449,77850,58482,82848,82201,72954,65801,34030,74305,93690,58545,16577,32123,98574,60053,82624,37466,70031,13033,89032,27465,40596,64987,81620,13282,30655,71978,34955,22727,59934,50699,71479,12589,21399,42611,69420,23766,96934,52064,71383,96281,11163,31722,98666,27825,79202,61683,11306,47851,87299,63630,84865,66928,78560,97042,16641,24336,47856,86257,31174,60091,97763,19359,99975,39792,95953,22130,22573,65842,49650,65757,22268,42166,70821,21517,28745,69441,90559,70230,12913,83898,87132,93834,19961,42871,40949,58294,73279,93012,58928,42823,52323,41481,17946,48672,25863,87041,98329,91355,44945,18108,75743,99467,15621,96634,36617,47965,36005,71026,40966,64149,25481,29891,86315,94525,35164,49418,69437,82117,69906,86892,76458,42321,19003,88605,23777,22976,31836,78232,95794,25993,25529,12544,79345,99532,37361,48889,47255,61245,69886,65628,23959,73381,28972,93554,91813,74394,29022,42927,16040,10859,45829,73326,27804,93546,17882,46744,13243,65783,56948,41399,33676,55635,89234,24405,47395,97725,78075,89809,66790,46091,23872,84984,56376,95964,19842,71768,48091,17377,84436,82257,87227,34676,24187,57462,21606,96719,82767,69806,28267,48418,22913,22428,64273,79613,62524,62911,75498,27182,61078,27226,54229,30940,21751,87286,52506,49743,99477,65390,44730,76900,46176,14524,28115,61119,98655,20339,47645,23924,67384,84165,86799,88689,50221,26773,37088,50184,36168,28885,81827,48933,19766,21937,91464,15965,61021,68940,25233,65089,88959,18543,48871,20248,61599,22711,85482,81141,95591,31230,30370,18143,49544,76694,15007,73808,70496,14869,83253,64470,56263,35465,89841,80558,40482,99014,69378,43530,22464,91140,64752,21922,70497,80613,18150,90863,70062,80529,20940,85082,70551,62720,21117,50789,40949,99747,49125,83337,57293,28030,48887,91774,90429,53664,52203,56575,60839,64852,59284,76762,53673,48261,98214,76381,76424,73640,72360,68156,92055,63692,21205,14715,32745,16833,44968,42480,13558,56873,43216,49675,55036,93109,86883,95930,18647,26959,57990,14159,60834,63010,47658,14658,51741,35224,80862,41638,70913,83853,95134,14311,50532,81292,87500,41178,43719,36195,80973,13400,77685,92461,26394,32255,31336,72340,98669,64263,49805,70065,65336,28831,15972,95951,86881,65427,57716,40268,58301,54362,96782,85273,66306,64343,13830,37279,22861,44926,18882,31915,55224,19546,64932,83229,18261,36363,58075,93042,49503,62799,57890,24609,67674,24683,63283,69837,32900,51878,72976,82853,75418,35672,18758,19549,25642,24328,25482,77029,65632,87413,94894,48152,70855,17908,60874,65963,72907,83659,71101,14410,47881,85302,17125,54813,41678,55385,87695,39079,60485,55307,82397,76449,17310,56370,35993,55402,48244,31637,27274,94466,41458,35089,96743,17208,21072,44607,25989,12082,20441,47198,99472,66462,92609,23105,82995,77757,70299,14184,84100,92183,19276,80579,58220,94239,21699,61838,33569,78231,79966,53917,64288,26368,80716,44265,95844,83279,67198,86887,47565,98337,84505,48961,81393,22497,42342,68905,72129,32802,29812,42830,67427,87930,34197,21205,84690,20556,19095,12800,31664,30970,75947,86263,27109,44773,91772,32951,65409,86973,82819,86065,25282,51255,48725,26521,68480,67859,36293,67374,79671,38822,64424,29298,35405,13685,33321,91789,75177,70937,60111,66933,13287,70555,46107,59760,64370,45778,10969,29480,71554,11495,52510,73307,19935,74941,22410,54167,93152,52061,39627,58573,36651,41643,67702,97697,79353,99760,32806,18899,75484,18036,34532,21314,21163,76271,54472,45727,30956,88148,79533,94516,63605,42347,71336,77133,33719,80118,48989,17399,82993,81976,86105,73495,11392,17306,50295,65258,38145,53178,87689,32352,44282,79497,62646,73044,94946,26839,66839,46991,58067,87306,54621,11340,68406,65123,44244,46683,59200,97497,83209,82211,74377,29273,50577,73154,55150,97451,37705,37400,54892,33670,51564,52841,54448,22257,99265,62013,73287,65847,43373,35931,57874,89582,91658,18203,11674,13624,11106,65823,57028,80169,81864,69899,21593,79408,10018,11685,57788,59672,98349,47559,59823,42829,17440,94219,99503,42815,89041,14378,76012,10613,64667,59733,36238,75382,51924,32342,40753,75289,49994,52443,73454,31004,39648,31962,85667,90950,26543,27292,96312,73722,10157,48470,33793,52799,59580,60867,55155,33224,83593,49192,86759,74677,79568,46511,79906,46111,58736,76746,65958,21248,72890,95206,72904,68317,60662,31965,32432,56592,71835,41712,10461,57566,22174,62531,73205,22928,94291,77495,20200,42082,63371,73649,26718,51512,25331,90675,80359,65330,65832,35384,21178,25891,38372,49551,27835,23519,40415,21592,13720,38090,34202,47847,41359,30984,14750,55642,50597,48267,77303,53920,77479,74250,40280,33952,79617,28067,32179,40045,75162,36080,37633,19542,41597,81241,51323,51258,80697,75720,74476,29477,80027,43275,15346,93744,77724,57298,71946,18683,97562,87664,80218,17444,39995,43588,23071,51158,98613,16112,38023,23852,47214,72227,90682,82974,41286,30930,49293,53821,16048,74337,96292,59577,17962,15477,41005,35461,19096,32985,70838,25369,79126,84229,15732,61163,57180,83207,59586,60424,70789,31354,53293,68101,79338,86602,60273,98307,52259,53676,56714,50511,43234,66976,54083,91919,55913,15484,80519,45654,50013,22296,60171,60193,46547,10141,59099,96778,71523,79291,86945,54557,36699,51474,14024,50475,70469,93806,19008,79649,40676,29771,55198,40859,99767,14850,29737,30798,48286,80433,17067,16834,44313,28470,19400,10251,58414,45428,36224,27881,60487,80068,89904,41529,73857,19293,62922,65741,75005,69609,86814,44038,88010,73133,86569,94477,55597,54639,83510,69440,24801,35401,34381,59655,63088,92678,42360,64282,43520,55521,62918,31790,67420,21358,11622,80255,20912,14031,14897,21183,86404,85982,80894,84701,54124,21052,60917,55087,44401,37261,48256,75451,20302,72727,73273,11018,32733,97646,61605,23809,28728,75481,39796,30118,88801,77380,35620,31678,53939,83324,21275,51686,71639,79051,15798,98965,92057,15419,23720,87585,30872,70966,61248,47431,95853,12460,77422,16589,79297,58658,33420,42164,70767,72643,72049,83854,56884,36594,56537,85843,46974,24648,24529,45945,70034,22658,12838,34660,22484,44550,28479,90968,85347,29035,90990,68786,71239,13798,85863,14896,89616,24462,99440,89693,39744,28127,31826,99768,96643,74867,20402,90978,86192,77114,79475,14924,31505,41202,68517,96492,23658,83870,80753,71567,22598,64738,32373,62061,27667,87894,85896,94411,33023,49641,92843,28494,33492,51049,88347,91092,24796,61102,19176,46046,81826,24532,49290,28017,78237,63371,63471,36193,47618,50637,95786,72894,14320,18876,12663,14716,28665,23462,47212,72841,40258,74031,74205,73684,48648,44071,44909,74304,36010,52456,67232,11862,83752,72651,29554,92430,19362,20198,65926,95109,25248,88616,34916,34356,29695,61214,59645,69539,49976,17865,14423,54480,15826,42041,77725,61168,90613,13172,43638,82162,13571,41419,97835,53624,16018,24410,64166,31854,57746,50632,21981,58817,29280,82679,90403,82705,74624,90584,90907,16167,10076,77452,50043,82255,14377,60228,39796,51225,27913,67871,96612,38770,90774,93540,74641,68811,20153,35086,51327,62711,57117,66363,36146,37065,52043,93868,55410,21112,72057,27908,23523,37949,16550,77890,76198,39253,18889,44617,90410,29464,67990,61139,13569,14814,41454,99310,88827,78188,25591,58610,88587,38175,90105,20749,65141,51791,17682,20255,40003,36839,52629,44737,96390,35786,26246,25470,40361,48359,74146,11345,31355,35039,40435,48301,22690,13539,26192,50607,78637,87005,53738,50127,74470,52764,84604,40574,58647,55298,26757,92376,83006,79631,23241,32080,90880,44643,92792,38500,93754,95221,40172,76587,64807,30599,17539,90959,51951,87533,90612,84497,94418,65920,47218,56830,15398,13714,62007,71628,86468,29132,79368,83442,49547,69792,64131,16167,44363,44859,45517,40918,64688,36081,70924,99177,64843,75097,49186,29687,86561,84078,97518,51806,17760,39773,30804,99107,21383,66857,28417,57257,30898,36455,91287,31212,21929,36091,93983,31728,98502,65581,27552,99607,82429,44570,82959,23179,37917,11448,62466,70652,61307,52386,35299,29842,34913,53059,58232,42918,59050,87481,54641,45046,63804,15451,19479,69097,41027,10366,16243,18663,44798,25469,69522,98015,15195,64014,56234,89630,79410,60702,35803,37950,77110,97556,76873,48031,65135,69025,94526,57444,94469,69346,51496,86078,42099,81301,58985,17879,48370,74095,27287,26447,90653,64479,34882,98199,71259,44664,65542,21828,78506,12614,62317,61022,93241,41981,50448,21278,28382,56862,17099,82698,96609,78025,38135,83356,45181,17991,15295,80087,29192,89366,81300,33604,12898,31576,64354,59788,73321,51782,84132,81015,97237,97368,44884,27684,54725,66089,39727,37368,26237,33427,88878,49000,89152,97101,79912,72192,15042,62266,50669,32645,51900,40212,96603,11856,12444,81272,13193,68039,48689,15971,69181,44207,17171,36601,58902,16010,79480,92755,83718,92068,14164,34381,15122,34412,38370,26837,18050,82259,90957,59746,69562,66376,67601,47104,54453,73842,35322,78053,71460,60756,78147,89126,77067,56497,71231,99762,48099,75312,50985,35547,11006,30037,51365,28387,82444,82936,79862,56569,23375,69234,78250,80127,67592,31015,85139,46850,61645,25162,68037,38834,74734,60332,79191,39822,73032,72444,79125,11079,18087,93144,33896,11923,87358,30237,80913,50207,66572,12003,34811,97748,99969,61816,17635,18952,63110,79004,14516,51865,40418,10681,77490,47258,61282,53497,41853,62405,91171,60458,63467,13961,71333,89698,88041,19336,42938,33638,70697,77899,23982,33410,80011,39418,99891,48029,10739,69836,32023,17326,42466,73351,84561,71277,81660,91129,85531,35947,79299,61448,85588,27820,90049,70269,16165,95179,23269,31743,84644,43571,44981,41452,76348,60797,53150,76837,12427,80741,77958,17580,29258,68395,71802,79027,27256,90813,97565,18941,12859,10865,58663,53901,82333,31100,22887,78196,71153,44329,83022,25813,57710,52124,36147,82123,82034,41822,29763,15285,34242,18846,68564,18665,23645,19886,73496,15642,47629,39789,71890,92667,30176,30220,38288,59925,39880,32152,41441,95962,10454,61303,71778,27577,64114,24342,96678,94719,92206,79946,22353,33174,56281,49850,53561,39875,64189,62154,19405,51030,17514,50913,43925,75975,85874,62628,63274,33024,81727,16781,17665,14723,14569,58023,41226,21902,38606,61323,12822,48829,79131,28420,73202,37977,16644,23336,29613,28948,35012,11100,96360,27637,37641,80254,99950,81614,44989,21072,37766,33828,69070,81017,98861,77437,41617,15309,96903,54501,58086,95114,22479,54289,81197,86909,82129,30948,72865,62177,77138,30231,37439,55610,53279,29627,56645,52578,54635,25063,96414,30164,98645,25868,48637,35300,40059,72866,64196,25892,61799,37598,59800,18299,47993,37025,17919,48042,40210,32506,88631,18494,10063,31532,42065,47488,27538,34695,76132,84338,51766,57728,66193,22309,77072,68134,55827,21899,60113,44087,12959,63294,71524,29375,55448,51732,63930,74440,47862,32773,48391,64513,89083,51088,90626,68254,58991,30078,43161,97834,94995,54050,12031,53200,13395,19450,66252,43785,72549,71535,38772,64107,13633,41646,62844,96131,33508,61690,22364,82512,99327,26749,90993,56677,59390,62858,38462,70643,25369,35695,66668,74978,61901,84884,89317,15140,51791,59430,22652,57199,73707,84221,64560,84616,54743,22455,26132,59279,89888,39045,56025,10843,76299,42399,50653,37595,56315,84260,20033,80298,10892,11013,90011,32103,76890,51118,70975,57924,95924,45752,61213,46921,42889,62054,41211,56758,65747,63893,95357,60408,47403,25080,88700,18610,46283,36167,89852,94964,84326,30820,29288,84280,88333,22494,36778,65586,17457,93570,90763,43562,86935,87774,26146,80765,57834,34759,79176,65904,30288,13707,86986,28424,62435,31065,19530,39977,42133,21371,72764,97192,37126,18015,39263,70429,97289,78079,66696,11121,54696,68669,96146,38179,17887,36203,42179,14307,91218,89185,87822,13278,12839,62390,24491,59372,77579,46079,65437,30589,64119,59227,84688,91200,90288,53479,50436,90810,92630,74528,64077,47185,64970,30722,63522,67403,89286,40466,14612,41172,94847,84388,94031,51702,72622,30603,92358,87662,45820,21877,14681,39025,74857,36828,73462,93437,23706,87244,83063,47725,25346,62940,54170,35414,48228,96752,13493,33144,58252,67685,37739,84071,37234,44441,22786,73873,52950,11061,55711,60949,75635,17096,41609,40501,53187,77510,29019,86192,59225,91948,98659,19097,76442,62265,75306,22862,11431,33093,16379,39765,90111,87221,88909,61848,52986,19101,14938,30811,15584,93215,16857,75607,79549,80038,38713,19509,61812,88538,45030,79925,40480,84603,16151,15883,58277,66352,93715,61729,34612,16524,97921,50673,35004,12841,98770,21765,41865,59530,15896,27634,78545,24258,80249,82943,18640,95026,46933,33507,38302,30762,81395,66669,71885,31090,91935,25263,64417,30610,67710,96102,66211,47580,26730,92484,52097,58322,10425,77515,72133,65724,47329,24572,94833,55936,17063,86686,60306,21306,58173,81848,40011,70848,80675,31386,96727,91384,71706,18835,17558,98544,35109,18004,35708,50801,26226,83691,81849,86381,41312,13176,56667,83431,61580,92796,50326,10193,73987,61998,18087,81595,48263,93110,36516,15264,44900,57199,66929,94474,92886,38012,46062,78004,58520,78188,27083,64444,64824,86456,74727,93174,84032,30406,23382,91926,77332,59121,39824,54688,34379,21744,61724,19317,71991,98343,85265,81759,66789,69564,69291,94129,38734,97988,16217,34390,14135,75570,35338,18386,21500,21046,15940,73150,43335,56044,64983,53492,20132,29489,92620,94205,35334,63184,48253,43721,69446,95002,86197,96407,15260,80731,96906,15737,28173,15152,12409,19409,82986,48717,12706,78999,53773,33021,83406,39381,29810,54753,50462,74689,86743,31579,33924,32190,99710,48710,40570,40579,55619,94951,17738,33813,73665,22226,60882,53836,77607,31262,57369,66243,30960,73339,60317,82250,95806,47315,94170,54827,38141,18762,96876,68537,31225,33655,48471,64442,13690,33121,12784,20212,27090,60339,85774,33702,99614,42381,58318,38307,50340,28794,79691,28606,43764,61258,39158,81759,39335,27265,54494,68475,40617,18333,87926,78834,43819,41862,65786,99539,97247,86169,64251,29799,60023,19250,53963,59635,18435,60383,24055,36005,94623,69019,26423,66202,41242,61750,37641,69182,32789,62287,76300,25391,14704,54080,63985,74259,89830,38374,31509,56278,95456,22176,99496,61903,45366,89169,34537,22810,55759,93359,64963,25011,25927,82511,87053,30063,23725,61087,16452,19546,92265,93413,79441,18679,63699,88867,11845,15648,56417,15056,78984,91397,21778,56559,30411,31489,40705,40216,50010,80801,77604,67580,17209,25668,96561,85015,39737,78767,45445,16747,76851,94596,62454,94804,26231,15908,40330,34971,23466,30226,87237,53873,44672,19963,12041,79042,34219,62647,39241,52110,31035,29931,87553,74640,85993,10175,23624,47183,33274,18141,14328,77188,15330,10257,81881,29457,86037,77365,41860,83819,16364,80938,12481,10474,39160,23638,44793,95567,65758,71739,91973,17889,78006,31464,98779,94205,63976,16384,41146,23440,61580,75837,30031,56823,18747,70664,72137,54148,31027,20047,33631,20402,92849,38078,87331,50123,38427,73033,32496,73641,23721,75457,95961,50438,90103,35897,25063,81065,90758,94033,19528,89201,79287,31545,36536,83064,90702,25721,26981,32997,13976,21741,11616,26491,15842,30462,85566,36289,18395,31352,48635,55717,33364,87873,96144,70743,51531,54098,39655,60400,38027,54828,71935,36479,15168,23716,88004,33792,88196,11502,17481,51767,18177,94945,51580,81796,64475,58460,47314,93027,93986,77674,71103,84510,20959,64170,66852,64479,41903,83314,82766,11438,79065,91924,50875,64926,82279,31810,91502,16962,23000,70534,69388,91292,70470,63041,77988,70903,84477,24466,17344,14467,19835,59822,89183,54237,49024,87074,84189,50345,79392,82702,15796,27302,61949,40676,52782,69175,42498,20365,57002,68910,28096,32228,14989,54703,58580,36648,50871,58262,83320,59746,37184,43262,96453,35920,33702,93064,87140,28944,59521,62695,18076,75837,27121,65907,48675,79253,82340,36605,29554,44981,95975,62784,42430,11517,54485,67271,60271,86054,71963,77766,79315,96885,97133,78983,20685,40623,73220,96813,37117,38934,46438,19533,14004,65056,96980,89727,23961,84780,79709,43345,96851,90349,95370,68930,26722,43391,15032,26325,46545,90064,70381,97461,28059,58380,49665,36744,58962,81646,49771,24635,99240,94678,35600,30269,99761,69358,27999,91807,37158,82609,99425,71436,62801,10752,74524,38893,72162,95435,67115,56185,92007,15267,37052,26492,29395,42831,38432,86918,35400,54789,36222,99265,98284,58299,19719,83305,23140,85360,36637,64801,25654,34258,76699,40521,81257,65632,62263,54922,54421,40828,82227,39670,40739,19793,28049,46225,28059,19139,17210,82949,98921,19654,93875,77146,32247,53795,82598,17922,80888,42771,90794,48780,67385,35229,74359,53110,25526,76030,76775,73284,42791,71312,22581,43366,59443,70629,38557,48514,40999,52044,19172,79304,26662,90235,21995,52250,13202,29293,62860,29240,98767,75489,46215,73375,30592,91605,55723,29894,17109,91927,94102,37889,50909,48526,51603,37690,44716,32349,85388,87552,49250,53246,76080,25907,25120,38929,73725,39306,93443,85167,93658,67495,35072,84983,33752,56439,94195,91819,14795,84639,68250,15614,81283,41761,56064,52209,65233,32758,87956,88545,72716,94822,84845,70359,82096,41452,27124,23765,78403,94550,32864,96834,37970,53514,62067,32086,27017,16358,65501,86862,23277,44909,69222,51421,64631,47551,20718,77377,34595,59039,62256,31453,96241,65125,44204,59541,73197,73896,35829,86086,94151,12276,79899,20529,40256,18452,32564,25923,15927,16348,89581,70243,41904,16754,95703,17673,78231,37374,37149,31588,21641,42466,29841,37774,14366,60837,94266,87171,48387,19323,33647,85781,99578,96563,29734,96550,24715,54563,62297,83355,37645,95113,70796,70246,81215,76963,65600,26726,32623,85740,22851,40315,14504,57108,57726,49511,32702,29098,83228,81546,36091,33653,94729,92178,28743,58165,85133,98455,27534,80770,79141,69772,38440,33088,91836,69530,78449,82817,60011,65464,72312,95838,56533,89238,43142,86029,97857,56026,90516,13112,45385,19655,42572,78040,54072,37110,32080,67988,29026,13586,27808,93267,68045,22655,48021,83943,89788,52397,13823,40819,31663,88733,39707,85599,99206,32654,87697,68603,73122,98089,76601,38160,96214,38391,60379,29780,97829,72470,72584,69125,99359,90159,65361,83717,81181,89826,69895,93693,53684,92917,46398,66028,12828,71007,44458,92639,26475,17655,17308,27374,97868,22947,92608,53220,39121,54414,47738,50110,89969,70705,44554,19441,33635,41500,20349,96736,24390,63177,32277,57786,99129,79774,61023,34608,17876,98081,47863,43589,97754,63799,80636,92761,57269,39709,79891,35475,60116,34336,93280,98314,81482,19002,61677,32294,24983,48498,73360,97711,30638,30921,40716,59933,85974,44297,77072,99502,35137,82966,66169,71115,83843,94522,30808,37401,73472,93561,72209,79967,91429,28693,98757,73552,41277,41089,12939,39632,88073,18489,77769,30917,19515,46670,98168,98877,77922,50243,54049,69908,97005,96000,29987,17908,69881,78123,91278,32165,63327,50626,21842,57792,30683,22294,74933,27273,21573,31737,65201,16152,85259,48740,53640,91626,94784,99412,36453,32735,93015,82034,98785,74671,71719,82219,68247,28137,55802,11512,76341,67163,15086,34719,54053,25669,68393,16126,37965,21576,70190,43797,65147,35514,53243,52036,33832,48157,87798,49718,12914,36225,95679,75041,61365,26418,23413,67574,59314,98949,83681,20317,27187,36938,74859,58306,11398,62902,45900,71271,54189,85978,45286,92378,49871,60738,54267,19341,31613,93517,62032,18548,66864,23665,11289,46385,17951,64461,67140,75989,18415,54956,23239,25154,56180,92571,13259,51916,51707,34918,53843,50954,86574,77422,83144,72003,84579,60324,22578,58600,54894,97191,23025,41823,45219,12426,85881,15184,56981,78037,95230,86463,66090,92108,89689,97516,53265,39813,67375,38051,71167,49717,35670,36830,93612,85960,24458,60871,53727,19250,29246,80248,81342,98115,32909,93014,52763,58263,96833,41045,45836,84158,32761,60408,55979,33475,85009,76766,54871,17693,74104,94062,29892,91342,34234,60725,19705,75074,90644,14436,88678,13709,68014,74537,42377,72826,74040,27803,28304,33716,12579,60400,54748,32732,31437,98838,48810,36150,74225,92105,65956,82261,73887,48824,87563,76740,26467,33444,95718,88105,24927,23526,35093,48292,94739,86966,33568,45797,80489,93143,32196,62107,80333,56184,44042,35855,78336,14043,24876,47088,32014,72679,89299,16363,27722,33269,11050,73199,42292,87010,79378,46987,97849,90555,51116,48820,77913,13956,46963,64149,59901,55406,31385,93162,24322,95447,50868,52569,87275,35994,23717,93649,14374,48871,64770,72670,36976,51690,14257,51874,23256,56776,11093,38188,99706,42642,36859,74943,30615,76284,40675,39028,33076,81790,88762,44406,69965,29673,47352,11199,33704,40465,86470,99893,47637,38558,55757,29711,54173,78333,99934,10342,72279,94158,30689,24990,67847,93365,99194,71676,39524,54623,60156,59168,57791,18102,95625,26135,90710,38925,29387,80263,92006,49353,71180,94675,99941,67575,32012,68403,85325,14012,47259,25898,83838,42280,29806,13649,99493,58939,98513,82314,92337,17832,83778,36762,82581,38644,56805,76079,81975,26653,23722,94916,81159,27419,96682,40849,43670,40478,98314,31444,59000,60880,47430,36471,81732,45974,19649,98543,39254,87945,24869,65594,85329,59011,17419,63432,76919,77492,49927,20822,31362,76752,49729,52631,75743,85260,90227,99913,72612,30856,85149,91107,87677,90633,12892,97118,56089,90782,74351,13653,71566,80912,87423,17033,68211,65539,64847,55462,92934,69412,39690,24595,99249,43290,86078,54437,33776,53969,25381,68304,97685,84010,29043,74295,15839,73043,48390,15642,68242,75173,40405,65977,25616,26656,16798,72690,46367,23848,66209,82240,15346,60678,98759,52409,26963,88865,30320,64446,54906,67400,93205,19754,35141,13783,12890,57926,43149,56536,10517,22728,52394,65114,90264,55186,33717,65262,49026,26490,50074,93810,28674,81377,28277,11939,58399,28874,65278,92162,37290,47718,37184,68955,28323,87472,70681,47894,92715,35459,58255,63058,56897,73834,69878,68680,93366,75595,55662,82826,93386,87246,82505,91697,63628,65446,25009,46474,99268,86649,42640,51447,99946,30832,95388,92143,20866,68347,47678,21464,27196,63584,52580,19643,97204,88424,29566,63021,24810,77682,48388,62940,33740,31017,89581,65891,51344,30959,84579,62225,21092,16233,37341,55204,28997,66191,78633,74743,95780,28396,95087,28439,35153,92328,90335,67434,71766,90407,85841,56104,88394,33340,66728,68952,31588,43346,86235,59452,45374,34004,18604,52122,57686,53808,83735,51169,74273,91910,14295,60529,20085,61461,85320,74936,70220,41198,30508,48264,23679,16540,92957,98779,55284,17855,46470,53132,70916,33905,53960,91633,25954,41700,35870,90200,61889,32629,35122,53059,15895,43096,82942,99246,47979,62941,63025,51203,13068,61017,68342,70337,74386,50352,54985,58256,49488,34442,68966,62104,65785,25428,14739,48541,71145,54613,74405,95303,25206,39987,74598,69670,49967,48107,19495,23612,31094,58987,56043,60489,19870,26647,45270,64224,25905,51801,79374,88829,20480,98594,41783,56189,70572,26790,70866,76205,74662,97503,98624,52398,22946,99005,78115,55134,20809,92136,72981,34675,91231,77427,61326,15456,80318,94692,25852,62431,36962,32607,60002,86081,81135,44138,57526,44606,24372,17538,28768,19485,68558,75477,20607,11606,53378,58010,66711,44824,34992,58164,13299,78035,89490,13398,98332,48092,96472,99936,30358,67667,72989,75614,61146,47815,40756,75322,76796,95599,88788,17287,29974,45508,79729,42326,83350,95611,28873,34063,50440,77034,94913,58502,56298,85859,68340,16223,28012,91767,66797,83936,39032,83773,94722,89907,48204,70474,14073,39252,92365,21812,94259,31814,82904,11052,49679,87070,58142,21876,76194,11381,79699,14781,78888,96791,71047,13165,37860,15478,18702,31817,23026,20803,19560,82127,92143,88142,70969,19863,43135,86659,59464,54427,44584,33905,18008,40289,38189,62234,16518,87291,89752,81964,92811,43565,34763,52114,41523,41125,59083,47969,42436,62855,59498,23424,79763,93655,45556,58290,73770,82348,76681,92881,24541,59099,41118,55001,53684,83463,22521,79872,86616,53083,43033,70600,97271,14563,87527,12124,37340,76250,50871,23602,16859,95293,93886,45326,52621,80858,40943,81551,11223,29094,74655,19035,75400,49329,51640,17084,60308,70540,34152,19105,42705,49203,75475,28044,26116,78681,84655,37806,45461,98520,87814,59888,17097,36578,60359,40310,40808,77461,62281,76429,80992,61878,23646,76990,40788,24029,92117,72164,75046,54750,84323,34599,43054,81918,16995,56264,79479,33808,83474,72091,53937,47432,47174,13300,27730,26466,80367,68963,86174,56494,71039,23313,64812,84126,52563,34794,53611,25755,98448,97247,70062,59182,34087,34023,31575,76566,81441,34222,29308,62442,92370,43332,69244,40237,42559,51464,39465,94084,25921,46580,79102,28113,86920,81750,39855,20297,99666,91009,67242,82063,14652,93872,88658,59284,90082,78475,83396,51233,28130,44548,14687,43487,92009,33585,22418,20561,23067,57595,32858,80047,33759,80886,38359,26969,66632,40130,67184,13116,55035,16971,53453,12724,94447,25386,30233,67408,91447,60304,90970,54679,35193,16299,87082,13961,33013,74855,99188,76294,50165,24421,54538,92298,22360,39447,41323,58297,79404,21281,49731,99060,17401,10355,59677,67527,63771,81941,42843,38613,66603,71297,45758,68195,50392,16298,88109,35616,97967,14343,87777,63837,96589,92862,94484,93388,30717,68863,48652,35903,65914,93123,52927,37810,63026,60090,64823,60940,88610,52684,66945,15805,78635,40983,46822,63820,74849,13818,44808,46852,79905,27258,11568,89167,68297,25108,84293,84063,55433,81404,35509,83859,65176,85039,73644,71423,43277,66104,26766,97334,39182,84173,32997,90270,12086,52218,85029,41925,17224,20897,74683,71439,18025,22137,44930,49558,79649,92287,92517,78724,67736,12333,94512,80834,89592,47566,42957,90709,62423,89699,95612,73474,23039,84232,46330,15150,63534,85582,43592,97750,88615,77562,90550,10114,22935,76346,69002,84852,74191,49018,62894,19045,70394,94024,63675,45259,68217,47840,43589,68636,82328,69234,77045,28896,14408,69894,53343,78810,92668,18347,45754,44002,83008,49637,21523,35206,72196,71798,69091,14313,81027,12644,54329,28931,79132,32168,84601,73698,99490,74430,75430,32056,16656,66533,60773,57036,90850,28808,21978,48087,83512,48944,22460,32617,54958,81884,42641,33273,56757,79071,74718,81848,11788,81236,90011,57575,40806,94608,33648,80266,69455,59730,64719,64515,42728,78258,67882,78845,19981,14905,56202,89865,45901,25932,75543,83557,22702,93709,91667,80269,90515,68804,54334,12478,42202,17545,28920,17059,65644,82381,46927,45701,70061,79303,84225,16549,69215,13646,47752,77418,38026,20556,76588,52522,36502,98412,61525,75628,64931,10406,45071,27292,11597,80701,16373,66204,94402,94320,28029,27825,72392,10369,78228,44820,16639,67651,43740,81535,95103,45334,70296,45379,37228,75032,73281,66660,26610,21024,11500,32719,63562,95434,81195,57613,57795,78658,24409,45816,98713,26504,43894,48091,66502,10092,56078,51092,65418,61977,87671,39596,75634,44496,10138,46352,70394,72333,75567,48788,48388,94203,69386,77455,56379,21777,43968,19958,82966,32293,35227,41270,59081,10792,37103,89596,51700,32516,89450,63007,62092,76889,69164,11899,83716,67101,80584,30163,50339,57720,42302,64485,18625,48123,86538,55372,64973,44704,76366,81437,59849,58590,54670,26013,39237,47639,99348,76936,76644,76714,19800,67892,44038,56804,97172,18184,21668,61275,50479,83821,77826,53111,94624,44240,79408,33413,17463,30037,93350,49100,13106,35031,95156,24857,75819,31904,94366,30911,42490,28780,74973,98058,21837,30046,68865,15027,71670,81067,26175,76578,82452,29127,25897,65407,34111,99594,36234,80672,52308,23508,82427,27929,30743,70082,93081,91438,41504,62286,59799,55790,90694,52645,34719,77535,97714,83425,48349,89745,87530,36452,36369,15406,76873,41801,72082,82758,35125,89186,94165,77958,25118,73821,50581,14824,68442,39120,62591,11510,79713,51943,60611,33014,67264,34157,48504,55914,64125,33622,76519,10801,53454,70510,34975,46214,51687,96365,21328,37134,68755,24426,46478,60175,69583,26369,99202,78800,82501,50786,31868,79421,15273,60065,47254,98983,70999,41471,87200,15344,48273,71765,92811,17623,18870,18229,61364,56405,38463,32851,60355,25658,87905,21161,87457,61917,76991,63276,49023,59467,46859,73893,66586,62016,37561,67585,72743,79776,58442,49683,69632,94013,26545,86261,64563,61398,54725,42887,56680,62604,67019,12703,24822,44040,73917,98377,72513,28712,39750,40708,68282,76184,79348,69520,76831,26514,51524,76391,68069,61807,70007,49739,74802,37518,17187,33282,47350,68155,18642,72965,40356,95737,94102,10893,18589,97809,84653,53895,65054,23567,11349,91575,18510,93921,19166,14439,50216,96488,36890,33796,77374,87908,73579,60972,10454,36808,99241,64410,36743,21584,15992,22012,84325,59478,32321,15135,30088,33819,80406,73866,39260,38808,27297,27482,46753,60729,34094,43703,90609,80795,62761,97536,88606,33798,13555,50733,51399,41148,67330,26550,55355,60048,96867,77328,17481,88853,84185,94697,84239,35800,83471,31404,33389,87787,50098,91399,74398,48587,31492,66764,67611,40987,80473,25984,77518,73423,15422,48389,25651,63574,89849,30822,16936,74540,47453,77661,85443,89143,64533,76649,72765,39343,80595,48434,23841,30342,70664,89829,40927,10362,69479,23411,62609,78576,97601,19327,31847,83151,45388,19796,96824,62933,82642,29937,52086,71004,81881,70065,76898,10017,21163,32023,80171,76007,70632,68869,45628,84901,69338,37278,88562,37438,31701,37800,49292,95193,22159,76789,26228,88691,48011,91303,13447,63619,19413,36582,47782,53068,21550,97894,29510,24868,94580,32981,69631,47834,18967,65784,14440,42621,95873,33972,79163,57992,75012,30622,80897,29493,15817,88969,65557,40824,33134,17687,46655,63659,15710,99323,99684,92976,98164,69650,64303,91249,68709,49797,22818,74461,19713,11362,99026,42495,30026,64794,34833,84022,74254,28604,89066,80311,19343,22181,47065,68993,15301,98285,15696,72258,70082,80750,77495,33742,32887,32067,40217,97284,23917,46253,72227,29500,54970,91147,93053,47452,94812,53734,45859,51879,16209,91301,77616,21358,48911,42932,65335,52733,22615,66855,27089,44254,91372,60492,83547,39883,65422,19913,95363,27261,41373,90519,83965,77874,30785,46758,24342,27162,24793,26980,55700,43184,83593,14150,64523,19144,20501,80156,49207,39398,73441,23707,76425,51787,32432,83290,81547,57342,61109,24296,76447,83710,19152,50138,32772,50251,79655,78121,36105,21269,65325,25426,65817,13898,68369,23470,83336,42997,36135,82149,29839,13623,20913,24222,93760,74666,38683,37222,74280,26349,24728,77828,86483,35549,44538,82545,34410,53261,12104,36719,60408,18590,85493,20247,82686,84083,48375,47163,59144,55813,45368,93007,43976,17256,27553,70063,34988,47128,32907,74687,64036,69872,13558,12353,47190,28368,13356,42031,30838,58029,55925,65921,19810,96459,71866,65918,63178,39962,25017,60929,63227,59955,44524,15123,84941,58806,54253,50407,60422,80684,53832,31589,98007,58207,95786,91949,12609,88821,13181,19457,23269,96288,30647,36550,80481,56234,10418,38907,94615,32291,79559,21501,38619,85349,11944,17924,64241,95706,15559,51697,12912,97316,34691,25006,25052,58162,31073,53007,10245,66309,91400,91898,38018,94133,11823,70595,46308,16141,31334,17543,98821,27391,48440,65900,35234,58922,32316,11054,24354,93364,83005,75671,81672,15900,58380,72011,59126,43150,35560,66636,19952,68284,29896,13054,76518,88708,96412,45982,75335,31913,48568,92460,44580,95264,72694,81285,84835,83805,81020,22493,69796,92844,70992,63335,35127,30483,33303,92444,92660,66613,16216,61688,10642,35716,69093,74025,45357,14765,71587,19255,61935,38635,83774,73030,58464,84399,58728,39641,10516,68194,61276,76767,86306,56233,45542,53221,66495,57334,36974,12758,53348,26380,57326,21771,38388,44689,64778,30654,83172,44936,43974,64073,33056,17798,69451,87944,52026,38817,44806,61810,68513,32020,27331,35602,58773,75965,26409,57254,75009,52699,39205,72682,14415,48817,90734,86504,94075,42754,46829,83971,72315,98969,64036,71633,99666,45865,63016,37408,42136,27259,64377,19890,47444,35796,75733,16056,51008,56047,27232,52665,15436,42801,44457,39103,33521,89755,62786,21168,22856,50917,52797,78748,18118,65459,42037,29484,91514,57196,25858,87834,87278,95288,54655,96320,64152,73136,38642,37598,90853,84286,57056,25569,85946,24302,74933,55180,41759,59409,99593,91917,63484,51958,41969,99486,95948,50841,60523,67357,86695,95360,49170,58754,65875,17950,77775,17400,74087,87375,73302,45514,49902,52616,46699,34999,71842,39620,36974,90809,48556,45705,27968,65152,98614,62735,56504,41361,66060,96965,67881,47694,70885,63714,95790,98799,63741,52001,71878,15785,45756,53866,47854,38057,18809,26977,51262,99949,63168,19914,13906,60276,17756,10056,92817,99045,18628,52349,23592,26216,15767,41234,89440,15599,45573,68961,35096,60622,70232,36676,91481,43629,10613,82864,38532,53083,58018,71839,54400,53152,17581,94980,51808,33555,40906,89493,49657,19182,56380,96192,48765,62906,75781,80053,27052,94606,93901,85018,69207,30397,96537,56367,37929,23368,31058,59298,83892,66969,29994,98694,70974,40339,84817,74720,47534,69549,30035,66771,28563,71144,37099,18946,89712,66033,11768,11700,36768,19541,85072,67358,92308,13061,18582,74855,11790,97245,40698,13288,85499,33626,67672,58521,82041,10524,49706,77038,65934,86352,82235,32234,64428,81053,62480,36369,32929,79214,91018,10458,35492,65798,27588,14613,73593,50176,66759,47803,90506,13323,43769,38278,66031,25141,90038,84982,97173,11468,36476,43192,81787,22663,43867,94175,34734,37939,84576,60715,64211,44170,46087,40371,55542,13153,29331,53242,48859,61686,86456,63240,74268,90697,69796,18107,51200,22621,38035,64686,87215,34673,68052,40029,66222,68644,46327,87716,27828,72252,15328,36805,60137,95052,57386,12132,22616,49161,50821,60706,52310,19170,22351,11474,21793,39963,46528,84732,63625,22860,11311,48343,97629,28934,90016,88132,94283,67135,81645,89453,36672,25297,66617,11370,49453,93682,52865,47986,76935,64545,65587,47455,17870,50315,12141,45523,41096,53736,24404,98811,73506,27786,88002,34616,19515,29082,30671,95882,52187,47881,73291,51493,26138,43732,13807,76605,30092,71302,12775,95735,75910,61409,50821,97448,68663,11121,65380,28949,13911,59009,47361,84899,78488,90709,37369,35379,76892,73869,86267,18702,38811,59926,25435,48672,34824,54338,69737,83269,38974,89053,18267,55772,84941,75134,30317,72235,52103,19095,64543,88133,73490,57694,66434,93545,34487,84647,75304,17184,86414,24706,99358,68579,64920,45023,61964,46393,13500,91536,86083,46564,36979,14139,50796,93216,32483,15806,99426,16925,43700,22877,58746,72289,33663,36087,49025,31533,26673,53580,81751,18646,39217,69880,49309,99810,13754,75233,56146,19322,19985,13691,66830,71228,22973,27417,45799,68537,53198,96907,98315,84633,83159,71612,24442,90497,90198,91154,57726,86436,95273,46148,17019,12852,89898,18997,73125,15058,63361,44104,76923,55230,20347,85958,29874,88997,29573,56684,40094,72330,52014,42329,77079,10016,21775,26195,15382,55751,26054,23274,28984,10701,24127,63900,60380,50159,12397,53521,96997,67701,98312,46276,50560,82627,13750,41423,90321,76741,79897,48254,27957,99550,39789,28462,54564,78175,92781,99924,12002,96449,20153,68159,62167,50070,80586,47019,60058,57554,80966,24358,69073,20225,38223,81490,26909,20381,26025,17072,19436,88302,71740,42844,15881,80473,16148,75323,60441,57006,88248,83674,18143,27711,56117,68881,76862,48780,31837,33772,41762,23168,58923,38825,26421,49423,91742,10165,27684,19807,97939,82462,32148,43239,37777,78919,50575,67217,19155,37603,25836,92747,78799,49962,65521,99573,45216,91658,94807,17449,27541,75042,49583,42621,16576,65351,68625,20967,85062,66688,87358,93098,21461,40850,89235,15945,23995,74823,98831,56655,87354,97762,71110,17611,29445,12660,84691,97758,13820,57426,37009,12601,87202,31108,47566,35157,60987,13457,92986,37580,21868,39479,76975,61506,51476,75796,31995,32290,49002,25848,47710,54390,21664,35919,10750,33903,34760,85158,12731,94697,94610,27761,73702,69002,99149,53567,69909,19764,22695,76494,55277,22139,12690,76163,71831,55099,72774,28647,27900,25474,65360,11355,85232,21104,65685,55511,39220,91720,27042,25544,40378,60140,44290,27810,18363,70205,44506,66675,36533,10711,60345,91876,25702,85260,18321,71565,85275,86852,38188,94441,92480,68940,20130,70490,66141,75662,62433,20969,63610,77602,54436,40147,91367,51846,40299,35703,79621,67649,54115,62569,12379,41231,97291,36969,56089,33478,48360,11524,40941,77542,48237,43803,85847,54682,63168,95028,21507,42587,38909,95895,62180,42446,27501,94334,39594,78420,78212,36943,11797,70814,95017,13773,25953,34489,95019,61038,36281,21145,13107,20658,36628,38691,72543,91340,57543,37551,59250,17261,92222,19544,71882,13838,63210,12925,81251,38761,33128,54256,46497,99327,89139,19185,96483,61004,26673,52850,42903,34551,59705,61519,21192,98294,66691,24335,88570,23176,88636,25262,56799,43479,91595,43572,28604,50567,83633,60680,91450,33741,20336,30959,43359,27876,35752,45268,24117,29953,46957,73473,76229,65867,17093,54507,18962,42066,37309,75026,55096,73145,64223,94502,98092,33013,94557,37858,79636,28860,36226,95030,11348,51109,15240,75073,80080,53871,49793,65932,15685,13710,42826,67755,51167,41483,29180,43904,15742,91588,63333,89707,70385,77499,97921,67344,62261,35125,16528,55345,96005,60105,20392,70195,79336,43546,34537,59647,57638,62298,27862,17473,70866,81839,66118,10358,65828,92118,92565,22365,40353,18741,90159,43536,40663,31687,77447,72486,67253,70107,77458,74212,36368,76307,81274,88187,27229,67717,83258,57475,85442,76384,20175,52120,67908,52435,84517,94664,57257,78891,26424,56560,31623,33075,51042,28752,20973,70978,91489,67356,40149,98805,95736,26673,96729,92196,41259,80719,39439,21925,26910,41603,64680,17491,12936,57234,89881,19508,60563,97582,41194,12123,89092,20611,96394,49625,76113,67847,55193,88293,15387,63692,25175,63345,81750,76184,43309,42429,67943,29643,50178,82163,98274,61500,29508,14771,78826,52333,92164,70918,38950,80105,46675,93533,37555,42467,31618,11838,41656,29889,15718,82473,42300,57970,53708,47809,10273,88665,44213,38254,70924,12610,35370,36717,95012,79735,51773,88006,94447,56704,12910,85227,41119,41216,44200,57788,12434,35170,76363,79959,56853,46665,72002,15955,51152,93432,54387,38349,98789,89926,74447,75483,48068,33827,69677,43636,19376,45200,75523,87877,19768,70690,23124,84461,81049,24325,60279,67061,67142,46205,21470,60576,18427,87327,42244,53852,24729,76274,66395,38973,69426,53805,71432,37388,26321,47550,67599,43523,95063,79469,75506,39229,93293,56728,87022,96749,91209,95586,56427,39038,64297,85183,67881,49111,57340,18782,65302,92981,53904,27151,42963,53460,31810,59932,21096,84364,49200,14251,42022,56153,66388,98913,89351,85261,10295,29775,50345,11029,34118,79437,99459,47647,29220,16949,13124,63180,43976,89853,44847,43463,68615,23506,76384,84022,65482,46207,78198,36103,37599,39006,43095,48073,84041,72667,79615,76671,55644,13618,91706,28673,87009,14615,71671,14159,61438,98558,56421,96491,30870,20201,85941,99879,84152,36836,58867,76612,83570,66201,36024,11417,18446,77030,34063,63403,54754,98984,23368,27487,94212,61377,54291,86267,31014,66370,51049,79714,82164,92394,20763,15840,56276,53688,94823,81930,57958,33850,35744,79221,17851,24082,60711,85042,30901,29598,22141,53759,15127,80447,44528,82435,41423,34729,95843,86217,56163,58631,31861,12348,15279,67483,72961,15059,21673,93421,55894,15769,69501,43320,52401,81977,35353,20326,24909,40801,31844,63748,59157,28176,37561,15942,68855,48430,89666,34788,59813,83795,64331,62199,12085,62793,51128,84337,13274,49907,48122,72698,52173,81227,33421,32877,60527,28579,83583,87316,15603,32852,77848,92381,98733,51840,94106,13294,26927,59956,27613,39855,82550,12329,96141,60620,85730,89455,82901,39644,33426,62572,35905,11051,53198,31116,43586,53391,92014,29943,89184,52337,53559,94259,48772,72950,25936,42197,14713,20013,98592,78174,66840,34891,20014,54443,92595,58982,30205,30658,73911,22820,45393,15643,40619,61573,71857,55092,73878,12070,24399,39354,34345,61324,29330,82285,53643,55600,19368,55731,49145,91980,29506,49618,77852,12907,66470,87309,36609,72287,48344,73392,31382,22946,73374,16529,44450,40615,35278,94552,40946,62045,82572,46239,13816,66086,68772,64442,13350,35827,90468,99916,91228,80688,74647,84383,33936,99808,62928,69320,13347,64720,39549,73838,96562,65760,45459,93148,23472,64441,78703,10409,30119,69569,69829,63851,61416,62692,36836,28109,88383,30360,58591,39695,78269,88027,35578,16195,63008,53761,34990,63560,34609,34644,69409,26996,19898,46142,31425,46471,75576,87830,68322,35317,75316,82653,18959,80015,15527,64306,48181,12239,57132,75657,38127,25836,98723,93700,86032,37327,40777,92725,14535,64183,38191,67994,76779,40384,52209,14161,83063,58924,48510,72794,69278,98614,64874,18584,94541,24063,93490,86177,67225,78290,79639,67330,48727,30577,71602,30600,20851,97674,68436,14758,37498,33136,62928,36269,58522,26537,77229,80398,97051,40988,46956,93788,87355,46540,83336,68827,97618,17849,43687,63587,56266,61501,87731,62690,13877,65963,63629,40593,27019,98870,96553,97837,82143,67301,79009,13399,44296,51851,22118,30466,98224,16556,20344,64622,25730,34767,69415,75897,26162,46334,55262,87480,24736,13330,62621,75835,53480,97960,68853,39227,33065,48488,64497,58978,38559,38459,65249,81136,98188,47648,11910,74699,37579,56279,74200,27680,95464,39026,25769,61712,30409,86122,14399,97958,16496,86041,30628,51800,52055,78954,23633,61495,51360,53512,86295,30577,27062,14528,67044,86924,72013,13905,29117,77183,40326,67521,54301,97925,83162,63252,87450,65680,61330,16448,47007,10824,75480,63453,65475,88105,61532,32003,60363,48299,18374,60982,18052,68164,68087,60660,57147,96848,89806,20930,42409,73083,40266,91998,36795,80063,87930,63578,63881,63589,58126,92784,85499,91311,86199,10229,32003,42441,89673,16158,81388,50392,19205,11920,77488,16920,49424,27450,59862,54646,87718,61414,72130,78784,53346,37285,68242,24905,23831,66341,64600,80429,11395,31848,94803,40397,35436,33954,96177,96161,34106,20065,63234,49982,23047,93107,24073,99632,65276,47591,46722,41010,30443,79790,99478,72827,96237,36921,96599,14144,42093,99404,78382,36459,16458,45747,42153,69546,23456,37555,33529,24374,90639,29584,59143,16980,81478,15551,92232,61971,81027,14082,27361,42365,55532,20740,77243,95491,87879,96637,19138,37638,13262,55341,34523,48867,27362,85560,25415,61600,85747,28429,36025,12511,73251,68063,58905,57528,12109,67794,81732,57515,86192,11030,94747,35690,47588,78156,53914,65004,98751,39544,35322,92619,58770,95467,12715,50721,51726,92634,47158,74149,44465,11934,39563,85535,92732,64625,58338,15480,23195,75747,79762,39980,93888,27294,52993,49926,75128,89654,26255,54233,12454,52884,24571,88207,38685,51783,70235,72187,11322,79960,42976,39531,91411,35178,65080,31367,14726,26421,84892,77178,17897,18263,58522,94482,22276,81546,11517,29349,97719,72363,96367,58892,82450,98657,99666,20948,79265,54233,54324,65664,70311,14042,58757,59011,91749,67117,37371,78142,86605,56753,10720,69540,71551,95819,59160,18371,88559,58991,13115,17672,88678,43524,80134,76884,52502,71082,16484,24844,74130,19838,70502,74980,22208,11703,87273,49876,94141,14690,82434,77839,21609,49342,16691,27098,45788,96910,79718,12979,28049,33618,26116,37172,26509,19240,72818,79223,57294,35536,66840,37105,34284,14325,28269,90842,11723,86034,90419,50726,22779,74649,38341,49047,14798,58487,43175,33165,14184,28953,72250,45706,43751,44978,38366,63311,70488,65446,91121,12889,24946,88116,96550,95819,42645,83432,72215,53171,64501,64421,69511,26577,11656,89189,78550,10747,46827,55452,60324,45056,49727,70391,18606,39561,78563,29600,46005,55675,97979,34344,70545,64500,53637,50647,37622,65269,72999,34024,68643,66317,89064,21503,58579,43638,91547,76937,98294,26205,72511,31198,95345,14878,65711,47749,20770,99439,43941,73398,62695,28762,22800,23180,94516,93676,59324,62922,81111,26217,66276,10303,44611,59282,24732,56173,52493,45653,28326,75786,82723,18257,91132,42236,78136,99554,28161,20892,62957,28828,47379,70528,55897,87620,99002,51386,70270,30995,79314,25300,35693,75914,16073,26677,70656,58132,33172,32992,26161,21431,51506,14373,42545,36660,83832,64139,18497,38839,90914,68389,77624,21157,59596,35119,73254,37753,65529,44800,25165,70822,22358,82945,91170,54013,32610,77372,73812,67791,43250,34612,33341,16165,92002,84239,35387,95493,84850,12917,11669,30681,36425,62206,26380,76657,90369,74889,61705,92974,50531,40209,30685,40140,82741,33969,73198,40529,85722,18254,95776,65926,58030,95210,84389,35067,22609,73199,51265,44021,85689,14910,95660,17771,76774,74986,10183,31538,98574,38338,20319,46990,40427,17388,77451,93331,47915,26439,79164,39136,48792,82042,63349,63299,51824,11756,30842,27554,26814,11391,95984,87908,35184,47698,56712,73918,15680,84536,25516,64295,56720,95234,51208,86409,19809,38031,46478,62065,67272,62236,20150,27844,48366,58408,49701,35157,51730,34952,40873,83540,14958,26373,80104,52789,54243,92139,91494,14607,97161,48489,50405,65464,84321,38711,46662,18573,70813,66973,18242,85912,77040,73850,15278,52191,79880,43568,86632,49808,14227,71740,99082,42834,55183,52775,57373,74873,22038,89516,75145,72661,75711,38198,58793,29869,36591,19849,98177,44416,90840,89885,16337,95275,83044,89623,39524,92472,14057,35322,46719,10457,45627,73251,41783,36620,62150,15415,95728,55150,34012,72701,13427,36972,73824,30494,53180,97794,65587,95340,97270,80208,31010,78086,72438,22694,31165,24330,52121,87457,55601,35696,56429,91337,12213,78506,77779,54927,90259,25146,11841,65770,90630,14564,41270,59301,94681,88490,29388,74213,79130,17028,84040,94693,27258,11084,77946,60361,53087,11651,24105,75560,52836,74927,94902,39751,26373,45829,73659,50523,45124,71842,51969,55000,95079,82289,70161,67772,14341,61185,52406,47100,81751,60148,36578,71620,72192,77552,34083,38887,69748,39629,27629,66822,77610,60423,33486,24397,60813,37415,63568,84089,15339,28290,37204,46853,42949,32431,36316,31160,21415,31923,10823,82587,36957,15559,42986,19713,54698,98571,44577,68915,22651,86140,89617,92703,28047,74440,21309,41851,11612,13928,38088,29369,31461,16289,70613,26166,28066,98872,44117,93970,79740,73673,54854,17766,36666,46000,53932,26604,60433,18797,14513,65582,79323,77266,57100,32099,10407,30071,21194,68352,12462,10912,91435,31170,16714,99294,30459,84773,26825,26696,27601,51761,56464,13143,12137,16893,98558,77937,56679,59802,18772,33544,59617,36896,79435,27840,78956,61225,32218,11568,61584,91709,38505,29867,21781,79530,12181,46222,59068,60306,83077,74065,36070,44522,88153,57214,19481,77280,42174,28969,15652,15175,40356,76738,66976,56174,41619,22660,44939,61086,22651,39557,44036,97388,23530,49696,34945,62969,11622,52623,20756,84827,20262,68630,28988,15845,26332,81328,99370,26753,26356,21533,89541,18210,91128,14910,86562,43019,86273,91114,84278,89713,33425,16966,58670,16663,90041,43321,58964,46912,42973,18282,83171,37080,13127,48906,62075,39727,87457,10550,72381,58039,32579,35838,27310,40575,74448,94489,81014,71414,29119,98579,89587,28019,65845,52357,90169,87307,48150,54622,96573,53068,25891,59860,41886,50263,96162,64025,86752,58510,72863,43805,21965,85206,25215,92989,82325,72960,62164,54852,99589,16304,31028,46594,80229,53233,83414,50804,49166,35741,70236,89939,65230,64379,87244,80896,42091,69070,15758,29355,75235,73813,16544,57989,58261,85575,40635,26024,86829,92003,24083,50916,38241,24568,62041,48419,70053,90699,95948,74406,10461,99046,87535,95899,40648,85821,55613,78385,24166,95094,60667,86784,20323,93472,23173,20638,28009,84203,83104,39723,55029,71705,34600,37915,42037,86387,35480,68911,35477,91971,95030,16722,46471,74159,59141,80572,82408,70006,91351,99437,86437,83323,68858,58983,65059,32585,75379,20001,17306,53419,60994,32315,97473,21885,46980,90516,41069,64286,88787,54080,33389,77020,39219,28604,58767,89266,14995,31322,50065,88168,21240,10111,79783,12138,89488,81043,91516,46937,16198,79175,63721,12965,44547,78890,16592,84575,72866,29144,32170,35762,55097,37555,99521,38427,77080,47244,68167,79336,64376,16080,13982,87350,53695,81978,89650,86008,30952,49971,77994,87327,85188,39486,85987,29300,48428,59335,90146,16824,69236,77259,17173,63224,23236,51788,82463,42255,79693,39608,15979,27819,21782,19476,69632,64682,84202,69130,86990,91017,32677,99695,63622,60912,28050,55214,94378,46313,99808,62855,13911,65936,19233,86009,79044,10037,95859,57183,76749,21272,43320,71373,94412,38426,92964,62046,68143,32803,45705,98345,34527,23222,88270,79613,11894,87148,17942,10050,66653,66830,72505,23655,80892,92658,96304,28275,50936,58821,72873,89909,95503,26933,33434,58701,39716,72310,93782,39810,75201,10987,82144,24415,91885,57223,76535,34596,95184,65071,49737,46991,58031,70717,73410,23736,30530,36755,13094,34431,80574,72230,65083,85365,78732,83731,78949,63977,31689,90186,44098,23167,62716,92258,14248,99422,15476,15386,67115,15338,42272,56620,43371,62032,73064,66984,85644,27016,90972,54862,19502,72872,34173,18186,62754,18102,85163,37393,31717,24268,73825,69164,33095,83268,59729,75811,57712,99099,24276,35338,70755,52247,74029,80519,17470,50320,25606,51728,81426,56729,14622,51979,43987,38854,61831,71646,23825,94846,90373,23896,70318,22289,15400,18671,67207,28047,42272,38086,33990,52920,32148,27251,98093,90778,40671,44475,57643,38148,28543,60393,56468,58530,79171,40318,54642,68992,70552,42061,24731,97697,92973,71759,92355,63141,29356,64552,93833,11788,67453,58634,41407,32490,12491,71066,94468,27230,53074,38499,14685,18940,90963,66567,49193,11540,16093,97209,24638,92743,98001,75879,17480,29672,91548,81312,16361,48736,25087,24151,69779,97313,31304,16986,43758,60266,16676,77258,61560,76359,69500,31747,59047,11309,51398,51862,57870,63777,25819,24033,35276,19453,59669,87435,83641,84769,54846,72027,50311,61731,27305,79033,45864,58874,54405,17020,75846,28661,11238,87334,76453,70514,41414,26559,81768,68571,89104,38855,45035,77896,10022,15926,13093,48349,47888,45299,86452,79479,39773,77701,51471,36004,88394,31837,80354,89360,99248,94600,51409,20850,27929,82978,57212,62589,10220,75302,33614,77723,36885,39022,34975,43362,19496,21942,12928,73152,98315,87252,40961,66126,67463,39784,91530,16724,95996,80930,70255,58670,95423,92447,54963,61757,65709,14949,73013,59773,49695,50088,18659,29546,34309,82026,53123,18634,98560,14993,80581,44213,40196,82997,33354,51635,37122,51110,66184,48307,57699,24123,75095,41199,80412,36544,32661,95633,59946,94580,74278,37907,56953,18024,35040,86353,30489,36562,46052,57945,24684,15926,91110,44261,54406,46143,44165,20727,24270,77092,30314,13243,19019,58164,80704,40445,72083,99854,44143,13349,86554,63711,43003,34290,28916,22789,38266,15696,56923,99782,54210,26842,74685,36273,62596,73368,47193,80704,98774,70052,48187,73885,62076,49963,35323,70656,33089,20152,18485,73745,25242,34880,64105,95945,56121,18398,61675,15985,16502,60384,81164,46159,91850,37380,43724,42484,66611,10821,66764,38878,48706,55985,38337,89703,71517,50272,47569,90342,90247,63923,18057,88284,17773,78666,92973,78005,37250,23352,33413,55483,76030,24041,19780,58118,59342,42464,47270,23219,88292,32772,53249,96197,53451,38790,78440,24465,60720,37011,67807,66199,24904,14272,92376,35887,31469,45636,56333,39703,60982,48544,25531,80062,23238,99897,50426,88676,77502,99408,84430,32596,99810,24973,15986,73718,83066,55204,76729,78976,57936,52272,34458,35929,64699,27803,77287,57850,62601,74297,45265,35745,40986,45745,49037,36210,96463,13128,28293,47954,42738,86850,77247,61852,86142,64687,50112,32567,79043,72990,40296,20999,98285,43721,47288,56773,76683,40454,19925,16467,99309,23794,54826,62385,73338,59912,25708,18120,43954,32598,48464,25441,77766,66036,13131,59710,26004,16050,29814,85290,75586,90548,33216,86662,11583,82033,37097,74415,93751,37324,92315,89062,12365,51487,58823,94409,10860,27036,15369,16726,60097,10698,25261,22733,76060,74491,24243,39567,85578,29005,33497,89425,70510,97706,86408,45911,56303,48841,92766,16252,31608,32278,80161,45637,22663,98391,74889,46143,72682,51393,70346,45548,60701,16067,28436,10954,74284,57072,39213,44795,37903,91207,92462,94084,95425,34237,98893,62042,58380,39610,75544,97320,82418,40739,11960,46984,62845,34106,26797,49258,77274,37231,67575,17452,18300,75994,15303,32826,99463,12079,90979,55378,73379,73850,56192,87949,92489,14882,30998,81396,85077,91210,49389,40790,64281,42864,57531,98382,16693,75719,69074,25288,14462,26290,53181,87479,68264,96263,49345,47145,73582,47838,81258,28501,21857,50263,86786,89656,37238,91642,42023,56170,71104,56720,13424,93209,92840,72619,90262,33976,17461,95359,51634,27672,56166,23799,83728,53942,92674,26112,90286,17470,90849,86342,98064,25143,69335,78976,39531,23710,33529,86624,39527,58537,26040,73854,54540,54897,41732,10054,68097,76479,90446,98294,10968,99789,53185,83972,99903,84932,20558,19176,68549,77842,49808,65002,41873,15472,70740,52068,76333,33930,74859,49867,54435,40166,55419,37788,91809,87441,18673,31309,49751,14028,91048,65525,99308,15265,91039,90609,43287,99926,83771,37090,74446,34748,42966,68382,44750,34390,61392,29931,15942,15950,49419,14609,11573,19291,82694,80810,11376,79082,77255,69702,95245,28580,19293,57890,20445,12564,49126,97977,35378,13715,94218,62787,71253,56210,46802,26694,77918,47231,64917,51249,87633,19914,83042,53928,65969,49192,61918,36816,46546,19382,91345,27795,86173,30658,37826,51536,94641,57262,13639,73717,74426,17831,93436,11158,63865,35912,63253,55753,89917,47735,24134,32742,82139,80149,27143,30989,17564,88098,37738,77343,66510,26113,31679,38429,13406,95094,10389,61320,33732,44486,47621,76354,93263,79953,66430,11491,56658,12649,64130,98566,64533,78276,48550,57798,14675,97899,18193,21842,21511,11753,99997,44399,68460,28264,10716,91593,83497,98197,78444,91095,86804,61819,10876,10293,58367,27883,91138,99156,47205,84334,77012,65790,90685,45332,37745,47091,32046,57954,75109,28099,64138,13247,17916,47258,88721,55212,54906,94005,89824,28488,73243,65034,15451,20775,40201,23880,40456,39507,55005,19441,79704,13626,97442,50618,84669,11065,57273,44863,28114,19647,35578,97941,21444,97341,10069,58312,13898,27235,54376,45752,76821,41644,50151,96897,68284,63391,83698,37144,39183,50430,14965,87371,63674,96722,51540,12437,48473,27573,57629,27345,78109,46901,15077,24786,58138,69572,62578,18468,74088,65263,75713,20594,37647,66304,69042,69273,36023,76759,72841,43511,81289,23520,24181,12371,48824,78316,70565,56275,83811,85761,19059,10375,34670,50097,17033,55249,56669,65269,24702,67196,61993,29555,49015,14138,60561,82617,93905,78879,59707,26814,42492,85221,66448,54392,76282,76954,91199,74700,42147,65326,55221,71892,69930,50680,58550,48388,96116,13337,65452,36995,40252,31969,69156,69688,62465,31241,96311,84071,49679,54383,17940,76789,21752,45783,90943,80258,35440,21906,70209,99445,74598,33830,43258,18544,17088,56581,33697,42598,18511,33880,50618,30046,92311,92480,11926,54229,90272,36081,32025,94411,41037,36549,32375,98987,22598,67135,27056,93819,46806,97861,82659,10554,82078,59032,89770,33024,30554,60223,43963,43102,67004,81311,73922,29785,96330,17301,12546,32766,82017,15214,16107,78277,23488,44524,14466,58791,48088,27831,44980,19287,54678,49608,82553,73694,71527,52638,52373,77560,98647,27648,51681,68182,73592,74699,97326,29402,27305,58782,38254,16081,65924,71563,47056,44467,23757,82265,52595,59329,45651,19947,67766,38768,69595,59318,95310,18578,18956,63043,91349,48499,45056,64371,26079,68028,69174,19459,91854,45264,47983,48513,10638,18758,43819,63017,89108,79425,88443,48013,14089,23241,19594,43603,94113,41364,72459,11599,58921,46494,94381,29981,62374,75252,29152,49219,14331,69474,43616,25568,91080,71689,25962,50219,30442,66493,64322,34373,99858,49856,45511,13221,31541,31749,74364,73437,27989,39191,10345,56249,69768,66217,19796,88047,94834,68685,86786,33782,38859,79485,91443,30047,97859,57476,72751,21622,48302,70172,73567,54031,72213,60574,54063,98297,66153,86412,55972,36100,58186,17449,88581,87286,85025,32531,34927,46282,10885,17965,87548,25472,50016,27075,91332,95681,29985,62556,95453,33045,44359,97321,62841,91485,92106,43898,66879,99978,55427,89282,92781,49555,76967,14433,32787,79231,14326,92954,25922,54355,78743,76926,55915,69698,44779,25889,12153,18892,10760,66860,59062,60799,83351,72493,77936,98919,67940,80230,89386,35850,65453,79557,92081,45985,48657,28682,57888,51147,94020,26046,90570,58452,20523,62406,15597,94075,21618,51319,24958,58358,48612,77207,94972,11983,66725,52582,98627,28765,71015,46974,24235,52455,78254,53828,98735,26893,59631,42394,34038,73572,70015,38171,25548,40336,96689,58194,26606,61533,12946,70712,75584,81998,18966,88940,58258,86713,77665,10280,25295,26277,89693,29676,29497,85588,47790,20816,99230,82622,88528,88521,90372,64828,30349,69114,44630,51334,64715,69043,48179,76447,75268,65088,90654,86892,96646,76384,49257,86174,15770,43007,59686,89812,69206,40436,10476,98987,41133,33824,19511,94754,91805,22212,26725,91327,55018,78192,56782,37417,55082,50620,21601,69457,32697,39537,92201,98591,50849,71273,37658,66176,60536,61173,62067,91517,77646,63491,40072,80964,27831,69701,62137,94855,33803,60422,89219,48496,34937,23287,49850,61139,44989,66603,31732,47809,97656,51000,89883,86855,90042,33800,40670,93470,92788,83639,92294,36990,59379,79349,19915,27488,73161,99446,28422,19080,99586,14155,15555,44828,84714,94595,51939,71894,44895,37850,18291,43474,80588,29699,57612,59120,55123,16742,92880,97161,32123,66989,79151,89743,82872,83809,36133,15972,77615,47218,86166,33090,38884,46111,32027,57357,55516,57574,76974,83635,77523,99475,73070,30726,78076,82740,88136,52102,76327,29567,67629,38042,90054,14597,88871,57622,70088,94485,89649,37254,65570,90738,13469,85159,26571,12931,12171,71972,68248,84521,23092,29232,56954,50554,11196,75264,36196,48906,37708,22934,55893,28621,34824,50752,65121,71120,59802,75390,33863,16598,33980,11252,99261,35477,78702,55784,76424,84075,52157,97854,70675,54227,69928,14708,37549,72134,52420,83031,59961,26561,49974,23519,84160,39611,62470,68135,44096,64472,48886,67185,39442,60110,78034,68845,84412,78289,84518,12300,65439,38886,68905,14896,98445,79451,47817,62980,39675,77151,15717,96557,49825,24292,76406,66467,30140,78358,46812,95140,28238,58372,23620,85420,97584,75154,58117,85740,41990,59898,54718,43198,18191,13762,60619,70760,37848,68211,81638,67015,57994,44907,27013,99176,56428,26811,70223,30277,68795,71956,61634,45785,68421,72479,62372,22927,47810,72060,71422,24746,58674,71762,45382,65375,32226,77637,65837,46518,80229,47056,46129,55216,20979,14469,78211,54513,22685,83915,70950,32338,32208,26090,24078,36428,10673,49366,13788,85762,34559,26518,31597,89464,97389,91126,61887,27883,62251,50689,42977,75286,28664,73999,91544,26578,42581,81893,47213,47619,60925,49835,10959,31528,25981,64151,38429,95993,60853,15030,55724,12517,75269,92250,27513,28294,81949,50498,48996,56194,99476,45334,46902,81001,73308,61575,51644,30836,77060,72666,74609,27475,83249,87405,99695,90046,41825,63811,90372,21686,85577,51201,20750,95885,63949,49311,32594,80660,82268,57865,52967,86730,28366,88707,47167,90836,40244,81305,73183,16486,11416,26773,47096,55745,31551,61150,76761,53758,77471,89491,15093,17542,54140,55215,50139,18178,34780,12979,18076,85666,64776,12462,44810,40020,25264,83004,83186,27321,68213,97324,35546,58475,30937,65004,32959,93132,82369,73311,87908,44139,15217,55591,31769,73142,38922,57848,83935,98260,45978,39261,58647,64817,74434,34753,98595,53215,62515,30162,41474,58389,98476,85545,92587,44054,54700,95985,61317,85343,92070,91714,40194,61054,70562,78198,22418,80056,17988,43649,34619,67866,14706,81193,20052,85433,49186,47149,67847,79870,69812,10207,33173,30578,32284,78405,21858,92624,16190,74857,20156,27178,83919,47733,90575,17807,32958,40005,30006,44041,73831,76987,51074,11458,54749,75314,85615,31822,87518,74013,84788,85932,73359,18530,81030,47933,47986,36262,81815,10903,74891,43057,54865,62008,66282,56213,23488,14475,78319,84758,24908,99228,52438,81921,35611,88803,62228,16627,46418,15256,91744,25831,43511,33207,47623,66761,95803,85157,93610,78147,27216,72023,84887,10011,52544,85406,84491,11742,70069,54849,94900,65553,38591,64109,66140,17478,54958,21613,77521,18309,47708,18327,55772,53886,60683,15896,33470,62887,59205,37004,92317,87885,20199,73998,86709,59082,79846,57668,28265,17506,78521,60332,23308,51813,57339,82541,30514,91936,12950,34408,16889,69370,96888,91814,25178,77521,82049,42820,99889,19967,77456,20216,76718,94843,49286,71989,14365,17004,65593,57273,46899,70635,58485,15146,63801,82665,89108,84937,39630,55434,57643,51334,34218,68293,97419,59552,96000,14113,97899,26512,92537,91843,69488,33373,92275,53320,96613,52061,81724,28528,94512,53433,10535,61039,40351,13310,64969,95462,10793,44904,48435,93778,90106,36176,42266,62808,22976,46367,56669,62096,12112,66363,96640,89965,26762,10012,42286,58170,93081,50672,80058,12352,34070,14698,87296,43577,93932,41531,17894,24067,70808,58928,42429,81536,93693,21616,46506,35983,35561,50128,95313,36593,63764,23169,26746,76469,31882,90342,70087,68701,59922,83906,18497,62195,89942,36887,37468,78202,71171,20078,25236,30714,62576,29084,17561,49362,27154,23816,76317,94587,73020,98197,57508,59181,22352,53423,52175,45860,90697,20358,10942,88585,29119,89007,13857,66167,22691,79671,99188,83519,77902,28981,47608,36791,82674,48026,23817,83392,29599,67094,19948,11225,40948,97185,11228,75918,74956,65675,21522,31756,76514,89472,50459,12522,57199,69954,51893,86197,83025,87822,54837,87406,10510,41963,78846,79450,59845,32544,62733,17396,85511,33602,47755,84256,50461,25425,92197,80315,24291,97979,60371,19473,73889,84800,35796,65310,53697,33626,88151,52848,87863,11401,14688,74948,30129,35786,51170,95676,70759,22500,27147,88964,66155,74903,77698,82855,23758,41001,67263,88819,81727,74416,58739,97105,48323,14895,40544,22494,86981,57229,13124,17183,63776,70962,19999,84347,79908,93439,69172,53220,33112,61075,43131,65198,12594,64180,41059,36407,17911,48692,48928,64572,18422,71621,82454,95047,83455,87508,70248,25356,68308,47111,82377,93820,77144,88055,88410,96248,13837,29213,41982,62243,12300,34615,42030,37719,88997,79751,91687,14861,47541,85232,20877,44932,11758,14345,56869,44858,24135,97269,29477,82817,35814,66467,64575,90182,38140,65842,62874,38843,52791,79511,46116,88000,49450,53769,63653,76105,58396,33121,63269,98312,16451,26640,62248,24205,97007,55965,58462,85251,32421,10906,25005,98944,21400,73670,61078,31915,87550,62954,35954,77346,67241,94260,64855,10610,65404,70080,77648,66725,93413,12839,84277,80169,50902,53077,54551,26979,36845,46192,97089,68227,73080,29868,87767,73069,60052,10902,14067,53963,18098,70243,34978,33612,85779,74071,54354,42884,27048,29583,60268,57628,27765,64991,62273,55134,87621,34864,35257,93485,13686,93027,28045,27446,54624,27759,97579,87158,35674,16052,84695,11285,44915,25098,62602,79651,59196,84313,38006,17124,18777,13619,85279,96791,30558,53903,15883,66130,68273,25808,81067,56333,39237,50353,70052,41261,62554,74356,40251,94227,12024,91870,23727,57234,44782,58217,28894,73707,73567,90795,33830,40174,56655,65630,71120,50569,26153,86396,60880,37928,43050,86685,53519,55897,73021,35994,79249,22142,89774,79153,39197,24080,94269,16485,38301,56191,30573,78698,87323,27970,64355,32399,97666,97501,56988,92418,56584,66057,21048,87580,77354,18231,91587,88462,72959,49523,70746,46833,91130,54239,52774,19005,64562,69858,84740,45501,56400,71234,77730,25992,50783,86731,98734,89640,55511,79766,52773,62110,75755,44914,85957,43901,89887,71632,44928,45686,67901,59215,21285,52605,79782,34678,48981,65843,42881,64362,68247,32664,49747,63708,67671,62699,11320,25715,23688,11312,82056,48959,33028,93913,11627,83730,66452,44400,36192,26070,99105,12100,61215,63319,34623,11472,88870,84324,17703,68910,11601,36856,69090,96744,20496,22564,92364,96602,28699,98372,92832,22780,89395,52386,97279,10966,31537,55208,25139,48971,73190,41452,59023,77407,11914,14952,43212,49665,46985,87511,53682,71490,76173,56140,89111,87497,15210,61192,58875,33437,23234,95167,73154,44869,89506,22056,53516,23281,67385,58527,95310,71467,73758,88801,59942,89104,36923,10349,87578,72241,17141,78704,20987,59162,20159,24240,22282,91529,99034,29343,34850,14812,34847,72655,55190,11961,35633,81430,34262,42863,33284,37177,43942,73459,81520,94384,66324,78254,58587,60854,67002,84248,61644,29027,90568,32814,37642,88924,41072,64747,46104,29922,79031,79726,95338,79096,71825,60629,78789,88432,41168,70125,60952,47349,17776,52026,28054,26365,66344,21278,95341,88588,18496,23206,30317,65931,58222,98636,81641,10603,43725,94912,57283,59089,52395,86181,28863,63151,17110,45500,65670,73568,25064,40870,97134,56617,90950,16433,54202,19465,88919,93841,14383,14671,27163,40794,38894,82814,79996,93974,11457,37844,13446,42128,43539,31281,50874,19709,32704,22884,26132,47540,61196,41976,81821,22852,99807,35812,57946,26836,47758,57480,31336,22119,79688,76087,75562,31923,96126,36812,36422,82350,78706,17342,46165,39680,75719,24821,64526,81141,73582,10337,64592,17642,46285,64008,72257,63477,14863,80857,95595,16549,94492,70760,75448,59819,78837,64909,57332,10813,71108,95572,86944,47338,41886,16272,96221,77443,61887,41797,17080,43801,74391,37367,98947,48740,84651,25086,28026,25203,23932,47987,12873,35051,14933,73416,16786,37005,55402,31431,13725,39394,19397,23547,52982,61736,94814,46159,84561,88503,25877,75094,39516,30801,49208,13818,99258,26687,65938,62948,45379,58105,22614,52108,69187,18529,64043,19921,25974,40228,95379,66302,65588,63533,20451,36045,61105,19886,21291,39179,38234,27078,16004,20772,28120,11277,44919,50300,94971,86061,77548,78414,52187,40213,76643,20879,54951,85740,65988,41319,50338,24542,75957,88532,25528,60712,70907,56114,32524,48493,87583,51324,57418,12963,49487,35679,24073,97528,33814,29909,71075,71135,35377,85465,57970,52772,30450,57558,69260,34917,58564,98153,14871,43949,31958,64125,56896,90470,86556,36036,68964,20594,53986,88687,27491,24938,84398,17698,66156,36596,54113,91001,76733,77394,80433,70813,97521,41257,86033,10453,81102,74498,23374,62226,46987,37989,29006,57738,69669,91067,21892,49773,71854,82571,56529,16366,96411,40549,76548,61530,89235,16894,78393,48939,53415,93513,82102,58021,97123,42883,54652,11324,18432,96634,89589,76231,82037,31272,58304,65822,72026,56270,10354,57080,33709,11481,52802,49658,36600,18361,42031,89819,69214,15279,55796,12700,62102,12899,98176,10408,60483,71405,94094,77416,95793,66647,91721,72342,45488,31949,95168,55032,19550,41428,44289,94578,13200,74762,51539,44039,26251,41497,47619,22450,80954,14836,83328,98008,64590,74316,84514,63405,49408,23768,81505,20495,41489,83476,27350,29335,40001,69106,99153,38700,13558,28029,89329,66344,25925,26552,90321,26385,68825,23229,33981,53186,53844,32797,88541,78496,31876,23627,94829,44614,96201,41274,54110,68632,91550,28533,15251,81376,23210,86031,36373,12229,59725,62862,87507,71425,14184,79168,25475,45214,33263,31156,20515,49795,94664,15483,49402,81028,41411,81999,80751,60951,85545,87855,82587,38706,13580,81045,49264,28615,81632,22522,31063,66335,52897,16528,33004,77850,62170,77374,35244,42714,21144,43735,60604,43958,25876,99419,16379,25152,10654,75732,64348,76596,59756,38001,28084,98627,52520,19863,34676,34135,14360,17125,76001,78544,91099,55313,66620,74141,24436,54109,10196,88537,67700,97948,56660,20293,60507,31866,97361,99225,71028,39095,33160,86700,60227,93568,90346,52992,34037,68021,24750,27492,43831,11237,57495,39612,48878,51826,45506,74757,85079,80901,95970,17145,99855,21685,52482,16265,95971,99395,11228,56455,11139,63380,14591,48262,59084,47131,87322,92907,94192,80076,49894,77510,25402,75657,84587,81798,64842,14260,80056,71007,89833,30364,60580,79657,54892,26448,78515,17463,52096,41887,29380,54956,22048,22598,41363,13245,21331,57323,63734,31896,63746,68193,44185,26509,55013,70865,96890,55357,65054,79344,78748,47393,36129,13228,49207,45669,46028,62803,62954,33334,34256,75224,78565,12168,60076,28759,30866,24990,51376,17071,77534,82632,29062,26416,79652,88349,30988,30352,47574,85178,36912,53094,46716,49382,77179,79799,48782,77092,95334,35455,67164,17181,15525,73701,43479,92413,64237,75276,93477,60328,14830,52429,25555,86702,39662,83600,68574,52725,82086,51965,98424,16825,58747,77111,51128,25505,30018,50622,27998,71529,40777,28610,90672,30791,37545,78311,40080,13829,54969,54331,96960,14867,98975,60108,51545,29073,96123,59600,48436,51769,55750,54141,18794,58079,16778,49725,41846,24190,11825,54528,55963,95586,92976,62553,41430,84388,57186,64309,80930,75855,24763,65482,71511,11088,67772,59644,15755,48410,18570,17640,68084,62231,23964,30533,54261,18043,82427,63734,44916,22809,36105,64286,75841,62083,75666,93234,88500,18675,69934,83421,69318,45656,91615,73401,82823,61292,32096,10180,90007,38459,57938,60320,69186,95553,96800,47104,57968,39916,21647,44717,20291,23578,37083,73045,98984,44610,52048,21934,53324,94247,30574,59382,45931,73075,24819,51944,60063,58441,74441,76721,79934,96430,86299,49059,93913,97437,11810,85548,38662,86463,89375,64925,55124,66551,10831,93804,14249,22905,72519,47615,64465,56948,19861,65673,79494,51566,16691,97443,94107,75709,25648,91163,64452,65121,91408,95907,59870,98117,65646,95795,93429,94531,47123,76574,36446,48558,52382,54912,49330,72089,83897,71367,47887,67707,84616,67898,37598,42743,96773,14864,32916,97752,19950,51072,26491,53343,83933,81550,30817,89429,34362,37641,58738,36954,46889,63757,74746,80102,48570,60420,96096,44620,82403,92551,70629,95925,50400,14990,82931,61185,33453,33539,84200,64190,35157,39057,93929,28819,94833,20022,34502,32301,85686,28538,12041,76907,64388,41998,99678,62903,19960,88338,16777,54739,71433,72830,18989,98544,37694,33735,18215,43890,68910,36255,18846,30765,88514,77958,35687,23578,71645,54765,78601,17758,28115,81589,51648,51040,10973,93104,21151,25125,97540,20791,98941,11448,47294,61121,23226,35659,69332,71652,79852,68497,95151,83791,57797,37307,30255,27203,56699,81979,34181,40586,86835,24964,28132,77332,93312,15728,81350,62933,17391,59393,14202,46100,33514,24107,96659,11249,97380,37686,60441,50719,12543,83591,40921,20190,65524,66034,49680,73243,16137,99814,43201,51642,84756,17098,76282,13552,80976,28079,71912,73718,68690,48785,10217,34842,49055,81090,39332,42620,51750,70687,43256,94257,78595,88869,61866,16611,76049,98213,21326,45732,72242,74196,88019,52856,65527,63663,19047,78793,78155,49019,10777,39902,53898,80263,64814,43629,84296,24239,83815,21378,71549,32803,38519,92027,28947,56563,46750,48818,57689,26102,94752,72434,30687,89459,75106,79469,86945,55749,22728,42999,48936,35697,33331,18706,37588,96694,77048,52589,80399,38060,55265,47107,76850,28558,81382,68387,51539,11882,93118,57283,26028,58884,40160,72165,93939,55086,10530,97596,71932,94969,55156,46379,74815,65589,17872,85321,50767,82468,79293,68136,84717,16332,92278,70075,13550,94787,31503,71358,96305,23489,87906,81056,29785,71450,44637,72165,40008,18133,52160,37101,72954,72173,84279,16585,53237,21061,17041,96363,67203,34053,82178,42309,77276,73411,88172,62076,19683,30030,92190,31050,56587,93968,13320,14157,85928,24717,50746,63161,11242,83594,95544,17954,92767,38927,45151,45672,75736,89088,67416,84121,78752,14084,15038,40753,94269,78138,18719,60836,25809,20477,67099,94156,91810,98623,92142,10841,94287,42053,41285,22616,76181,98781,61498,57392,67010,21502,59487,76015,30236,27255,19097,79922,32035,90910,66823,56590,56867,36469,96106,42755,56654,69781,85699,83254,32238,77452,76637,79773,16384,95048,13801,52401,27134,75906,91843,76547,34879,46460,91455,19370,82420,99075,49244,75146,93315,26075,42753,27873,54576,51780,67516,56082,82118,38928,64606,42924,57475,87250,77789,65742,65184,78165,48842,11190,62521,15295,52663,20705,10164,16635,68378,52307,99388,69020,11185,87191,90801,87463,91399,50605,54184,54146,11979,79290,23925,97697,98571,86957,69947,59882,61490,93715,21195,54552,25037,82253,48484,79704,82788,12362,77491,67009,33394,53544,26446,12536,67063,78029,79627,47368,55152,71131,63253,54205,10465,49043,30054,24096,25943,27241,71124,54226,61684,60317,85561,21156,36037,40345,35147,66356,12164,74530,17753,20225,34595,39271,49855,54238,67220,55521,14299,28843,22170,42814,33560,37763,44839,66728,96871,94208,58908,12303,58145,64373,11588,47320,29941,51138,64019,77803,21349,47455,88576,53428,16210,15386,69588,15204,26237,13607,22867,43707,63558,23704,65759,47800,19022,29055,76548,60799,93291,80416,25751,70116,26154,32286,88003,58533,59316,54673,37545,79761,54116,89213,17975,96013,45107,32006,12595,63412,70693,72597,13805,81359,11435,87421,78023,46531,49569,52914,97092,84300,25843,46441,72627,53973,62552,56974,17349,25288,96859,72135,95771,24359,25900,70956,41257,59733,92164,22086,29937,45726,60173,13638,66311,25716,19064,56248,14356,53922,89212,49090,94621,12476,48523,46631,40662,70883,37088,40411,73654,52046,77161,97734,27857,54815,28674,90554,55772,70739,14155,15019,94712,81445,94562,46668,18911,20078,22992,52707,72140,96680,19576,62134,96853,56697,54758,28058,64742,68055,45543,19250,71511,40021,39864,56203,60134,84117,14451,75548,30666,13361,65476,75371,54441,87438,96549,81557,71520,50686,57483,39645,60500,31443,13531,76562,65360,54891,55569,27763,54448,30659,15354,95947,60279,22583,86957,79891,17496,79292,11622,63487,47952,79281,54297,96015,53511,92303,52649,10621,16157,54787,88237,66635,56808,41523,54450,71708,89656,61970,29107,85365,19743,77034,27606,77499,72142,44614,48196,18471,27521,46912,56092,66076,44898,13202,21128,61955,64310,66425,45573,17182,33029,76059,90020,56504,92574,27370,95358,51847,28790,72713,14507,10228,40919,22182,15950,86267,26049,62052,84223,93895,45234,76314,38076,54908,86829,73405,87093,66666,28376,36054,92357,75402,56525,89239,57454,88744,12594,87032,76669,53703,60887,89038,46905,33707,14877,41371,92237,84703,19259,81038,78929,73407,59724,59746,15690,74413,43038,75184,99173,13240,68789,90067,19297,67580,90748,57226,50662,59666,10170,67502,37740,70179,12617,92111,62561,43078,64512,49001,97510,91835,53420,16388,79665,97012,86708,80020,64237,76141,39630,56743,58899,17024,18446,39096,80983,12162,15288,27908,56663,33888,30314,89145,97333,54798,10322,36992,87017,50290,14349,77396,86964,69329,71259,21110,70590,79998,39309,70970,17734,53060,91838,11584,13188,94719,59251,54403,29317,60520,53024,36040,64002,23206,76086,89249,48594,84607,85109,81875,45302,29333,99871,15020,18714,25155,51975,53087,33961,28614,99387,78493,64478,87630,21203,49908,17205,18627,64533,91902,42035,35348,76412,41235,87880,37627,34394,61296,59717,59896,86038,38036,27044,67620,11009,86058,40678,43593,41069,95856,63983,72922,25340,46789,37409,49012,98707,16058,15953,93459,78918,58933,10116,11037,92159,89275,43267,16371,98806,71573,11447,58958,75490,28744,63350,75354,72429,46535,55381,34407,88421,32043,73909,53935,36909,18461,87001,58842,12885,58650,92172,35669,50418,58428,98121,79259,80960,80163,80245,52373,35845,68307,35202,17447,64079,65825,84985,34964,53127,87095,29141,50046,54198,16872,65104,84077,27379,49586,54401,50364,65549,17069,43975,71980,73516,47554,27308,95063,40738,20451,14450,12964,27577,58802,64670,19707,41411,40329,37705,33370,66971,24956,86171,22129,48933,78029,31219,58787,58405,89889,47317,41684,86873,58571,91301,28872,97954,79407,45279,31225,50240,86183,30346,38171,68061,37294,89769,46129,57119,52186,85167,18019,48519,80826,52979,13548,51126,59635,66921,82249,69816,85259,32474,65734,97261,37609,63940,20446,95062,96592,93320,84470,87117,25694,70805,35225,22108,58836,11090,22789,44374,77369,88529,51689,74467,40056,64484,95800,38829,89115,56697,86975,92530,81383,62256,46066,78583,82248,72081,82243,83878,41167,42583,65226,67086,89891,67110,41717,13293,68705,12495,82145,64386,94132,22264,10372,22376,34291,26840,57566,34156,69062,39220,53444,77092,22587,14946,72645,20887,14499,67779,93998,41993,60471,86285,46629,90080,66008,17039,83420,48581,51385,70204,32043,44271,96725,32978,96075,11764,54320,71799,56230,18817,45639,15228,35791,28654,20298,27790,60640,13420,40177,66133,67721,76717,36276,24779,70991,63454,16995,67313,10636,80728,53486,36102,63602,91125,84738,68295,62220,98168,26015,66211,22713,67233,53735,20255,95704,38776,74561,55832,30784,33883,87633,93205,64101,92112,38852,98016,47460,57191,67517,82089,21205,95951,54379,60268,87099,43127,96381,34692,38704,87056,58179,85402,80294,80885,13918,16736,90208,82700,72957,99600,44573,93409,25241,13103,34971,97397,19136,56683,96985,76105,37807,15133,16706,83039,12607,77047,21273,99367,87896,59354,40098,67867,71058,89703,40448,86240,78754,18179,70862,52691,36026,30778,46756,48283,21796,13276,28757,71890,35151,86278,17954,52130,42470,73931,51675,59316,64051,75271,18568,51011,14418,57880,37254,94165,96637,78854,52299,81442,53573,84040,41058,33408,64970,84123,57774,25959,10935,12472,33865,51109,89413,58765,41680,71559,48245,52641,31794,53645,88753,78369,73294,60704,56961,99172,15161,46063,11677,48552,69257,35650,68813,49956,64392,80844,42360,20347,97174,25416,57248,69657,17928,73917,46976,81028,22148,23454,59850,30608,81218,77333,23340,13294,99396,78710,30732,81807,70117,46744,80641,98670,85752,94950,70268,44534,81208,60661,29294,76807,84467,37808,77344,68473,75634,71164,18237,64278,34317,37838,96823,84194,29793,96915,61261,56215,28889,69810,97407,49996,79415,45602,88167,42054,44547,94678,45259,52071,97006,21419,90278,97417,68715,32820,70172,80874,68233,74942,83727,24618,15775,11464,78144,27126,99451,53523,72026,69168,84695,33052,41898,69854,68912,87265,78924,65067,95514,84987,99140,27536,37813,57357,42244,19625,87123,93817,21569,93401,13071,71212,15125,72515,60047,69281,70322,82184,15926,71410,99401,92229,57831,36023,41175,91623,11612,93797,35683,76595,78034,25433,20832,95717,82970,89687,31916,42788,56129,69412,68891,98549,36336,45315,41731,40941,56575,62882,91132,19187,31059,79257,14382,21310,70443,76091,35994,62601,77856,78473,57755,82516,53505,20279,40172,70652,98159,32007,21625,30315,35546,44172,25580,72069,98561,15786,30120,21796,69642,25499,96702,91053,81633,62588,29195,98346,77947,67970,47720,27871,11246,16753,88621,36211,34396,93423,78056,97998,98293,14409,43902,76962,35505,79006,89290,76892,19474,19311,27500,92837,30750,77122,70841,70610,78716,93332,77935,35997,42750,15652,10350,65663,63301,73945,54933,73084,57296,82313,61003,35246,49508,45484,77591,30387,80628,42476,44297,32490,44596,31116,95004,27845,68596,16347,33935,20821,45858,36141,94266,64369,26772,51652,87769,37758,75307,59436,49892,46715,50693,23114,56512,52054,29635,17433,34511,73096,88846,27175,78637,89410,72088,56290,33760,92212,75249,76010,72860,82000,57327,75051,38754,34068,83729,50181,84970,95292,19658,96737,98691,49401,92087,29602,86118,61587,99051,57952,18905,42314,45628,20071,49924,84842,26446,45193,88099,69006,96815,27297,61291,99848,91880,38965,91521,14624,60659,66099,58766,68543,67269,45400,92834,35643,87627,60625,79069,46612,94493,91933,16292,74566,57818,26557,25094,92671,12942,40991,31618,49402,11083,59772,85322,97017,31666,90446,59794,18798,90274,60161,21735,64490,87952,36737,34484,22570,95895,20466,66793,31788,85730,65453,39944,15722,77681,36426,90814,79821,78018,71518,88700,17372,92737,85522,69395,74731,33194,20932,55230,96480,90626,55973,51636,16701,58704,34635,54509,95625,10895,66059,33656,96039,77370,65022,27835,45123,32076,47703,77841,54335,81306,49642,38141,54240,71354,34420,95612,53773,56871,19595,38015,65047,56342,19848,35685,33207,56248,59399,65863,45790,42950,51236,83652,94907,32106,61288,54701,16897,53167,31985,77788,56698,71265,71023,40035,94132,23504,90542,78407,57882,47736,62367,45535,66023,88950,62544,73845,23417,79679,16984,32901,81130,57321,92755,15648,15399,97722,64612,67227,58742,98113,25178,99369,82751,47236,16046,83474,22895,83523,71092,28199,80790,11346,35669,97315,38548,94691,93971,63973,94417,69798,65981,79160,20102,13464,34463,78083,86017,77172,65640,48849,58528,82526,12627,32506,43650,17786,65720,87202,38315,25999,14692,50922,15970,83340,95542,66806,71076,75356,25723,98926,65031,89664,43552,88082,30367,46366,50535,26700,53673,30140,47823,81683,21818,86992,11958,78939,20769,38331,15661,99856,28802,72204,10604,89654,99772,26324,76114,66316,65660,62502,54404,40145,80628,79896,48932,83704,13999,10670,75032,36613,63710,96401,56392,15314,21662,42994,28069,21603,78675,98436,82107,45919,12976,66940,84226,14262,19353,13130,85592,62464,72860,21350,67852,60593,92787,17564,50040,58674,96615,67442,52923,24423,39054,77929,42596,73361,80141,29796,76515,87427,11060,55007,48175,12830,46301,86682,41684,80847,90125,46871,41722,15453,85050,53917,83625,45487,78114,44343,84574,45417,60513,86931,17237,30886,27916,25251,75834,57498,14729,65559,64237,99264,96154,58448,67432,65563,10553,98581,30395,43100,42273,15461,42901,43094,76033,44238,61654,13488,45802,84067,21276,68936,68823,18395,89439,33059,91035,64721,30627,71641,21149,47613,26078,29412,30995,74800,61797,36493,94891,95011,75583,44884,63318,29822,78792,27880,21439,84522,86415,21500,66471,56465,21894,16075,85750,26314,79691,55897,54988,44158,23659,71565,89988,27699,58515,22399,84652,41935,82893,95122,20576,57430,61245,38296,76005,79135,43633,87349,58098,16177,59323,18067,82467,69654,72266,44868,92906,91342,66324,82968,19715,91126,55869,27652,94058,65346,38246,18015,25595,36554,60396,57983,74315,48531,83373,15191,37294,44295,61740,49929,38720,33177,16216,61534,67415,88996,22087,86059,16265,62592,49536,20725,63622,46583,14028,14489,87446,73472,45938,25754,35664,93740,97001,75028,44178,50231,20666,56583,80767,88388,67540,14700,46576,28458,85035,33981,69651,85732,18701,75843,97240,15949,59186,68173,38038,87250,32651,38712,90020,20018,36717,71518,86984,93657,29932,97952,44692,19866,82991,46286,62831,88782,82285,55741,63678,75713,88126,69116,62543,44644,67180,31105,15786,33410,19865,22946,42017,26654,42720,40784,39167,83512,16240,42126,64979,96500,41639,41545,67975,40922,96254,99038,60505,59275,99283,88319,80363,53010,30385,51197,56925,98017,23148,88000,19617,71386,91344,65582,37902,37549,45489,65120,37172,97866,52384,74165,73040,31645,52744,85150,74837,87571,92768,17199,93159,45471,86641,52342,30479,53178,70762,29914,14761,15425,27852,91430,20638,77969,23186,14805,18851,19509,43089,51091,56463,84839,77518,82288,30839,59117,22701,92441,42707,17615,33041,77545,31750,95421,35450,12907,59602,90838,23653,22601,72418,22625,16281,93075,16274,85160,39790,90499,18530,90259,41141,30254,69936,17647,69497,64718,22996,87418,11260,17131,74284,25956,68990,40548,66635,49379,30758,91152,98506,35115,53183,25540,71105,35195,81414,88525,39755,12426,46585,87267,84656,39910,87861,76629,38388,17953,21551,96340,54414,32824,26948,95699,57055,79977,20403,25844,68835,28725,17590,58099,39021,73617,25359,53313,69894,49601,65675,47952,24196,36794,42253,25815,16641,57287,60060,54212,56239,45569,10980,38730,68713,40953,87586,53265,79206,94124,39515,21470,82322,57778,35014,93425,22322,42900,75361,87670,39369,87141,23868,57274,14843,15869,27330,43440,53324,35208,96336,40195,87918,60047,97196,90974,50275,12157,54704,46113,73910,95221,33798,75541,29108,22706,44553,10525,79916,59546,24066,49905,15779,68916,55647,73197,82209,52302,89196,93529,82601,80038,38199,46010,50450,97226,59807,83781,20696,76693,76534,95874,80969,18545,78950,45531,26477,80246,69667,52251,69535,12873,82263,31930,85651,13005,54680,92382,93296,83502,85192,33210,97760,52076,23399,92302,21290,75273,84231,10899,26350,94936,81094,40784,16510,70795,83061,86089,61783,37870,68769,20165,87485,66143,16886,50236,20025,33160,57679,53547,98160,37830,25558,90940,15192,19525,33224,28983,60046,97232,45346,10173,97803,55973,22878,19103,65976,52876,56037,55260,60231,18271,56924,32952,54386,18976,86903,31427,17645,19767,94343,64442,43104,71709,82278,67465,45131,23421,87107,56159,24644,23829,12196,90776,36291,85818,13082,71737,54876,39720,94765,54814,56099,17820,57473,74262,44429,76275,84744,15920,35260,82979,37177,26480,85081,60421,36154,73190,22343,58215,63820,67120,18040,42219,84827,11582,82173,54417,41045,95253,30329,78951,83623,72512,55522,10095,38130,66382,22146,82447,57623,60048,85547,27157,28134,37763,82262,40371,40472,59883,66961,99363,59108,14442,89298,18916,39342,71324,61217,95638,78490,88228,43423,23562,32066,77789,74752,52503,88330,16217,26011,54700,66372,27421,66339,36608,16545,92761,15828,42750,95542,73829,23417,18906,29980,55105,30599,13228,20249,52596,47313,10384,13200,74173,45161,86485,85638,25751,64594,85763,55609,27517,51722,18731,89822,32920,66030,95871,37980,87921,33909,76955,65186,71100,46496,36310,73565,91730,21796,16799,39583,77805,42647,90468,91099,42902,93843,67186,43572,95413,49297,69056,46363,41593,12130,12829,14378,15973,79059,86378,95467,33795,70286,65288,44577,20655,21873,83024,19938,88436,27201,61927,60502,23185,92767,47547,92215,31933,21194,93660,10480,28100,26327,39249,40119,83901,26732,86977,54118,75134,28990,12107,75676,92985,74380,77369,54371,30511,64630,17588,33185,83461,18228,28511,27657,74304,64129,30189,16028,22061,25350,33113,14971,13496,99746,21901,15524,53617,43072,91708,33393,58375,54742,73260,95875,59606,43068,67112,99852,89833,87023,37723,28863,57845,40593,78080,92686,34176,19748,53940,84624,52178,23099,36788,54555,74233,21183,85221,30326,65540,65702,20680,17022,21666,89859,63952,93126,90200,31939,87133,46699,33283,25080,19312,83365,43690,21300,23333,42972,41017,84481,24598,78406,68071,52478,95374,23384,61039,72852,96448,32378,53757,81041,14730,78675,62787,99342,27731,68044,74320,49054,12714,83245,59679,71267,23453,21323,93562,20205,26383,53679,38382,90979,94913,24981,93663,96961,19198,64002,63724,82620,70263,41305,96030,85955,51647,35430,78633,13595,81852,72727,45238,12851,56807,27591,19593,48775,48786,32306,36085,62674,69202,27740,45650,75517,40731,23041,63076,12346,71672,75107,71126,37648,23035,23170,29583,35174,32946,59551,23301,13781,16763,31628,34214,63323,98915,87222,33627,21855,43554,93616,86657,31225,89801,12810,68543,18498,46463,46733,12525,29939,82994,15952,19044,51633,43218,35746,94879,10171,26875,83536,55383,66581,83510,92700,51502,76097,99037,37764,14396,44328,37212,57058,42954,49034,86844,35710,30964,41311,69010,81256,72574,45677,67404,79618,14380,43876,21775,67043,42055,67157,18338,38547,71441,52757,57467,57482,51730,98790,90706,60323,81630,36006,65117,73621,73951,43238,46953,45073,83146,47210,70523,94687,12208,91018,47008,88796,52544,48672,20429,90751,65611,40492,35622,52193,71305,52495,91366,74789,83725,32845,51715,78450,71712,58275,21256,37777,39663,75760,81690,26130,35623,67523,27018,76007,89478,22571,39356,58821,22799,19211,81407,38031,44216,62310,57895,78789,63575,94162,30258,43791,76033,71629,16683,60186,24333,47634,96654,76707,77352,78607,77942,74483,51975,20534,34789,74645,60190,40266,89207,63401,94252,77531,59478,75124,20436,43069,44409,78938,13533,97272,62228,26670,45616,79059,79640,99597,25443,33176,85967,26577,72705,45471,66622,74102,67381,55964,54851,86282,19636,25573,55394,35449,21370,29820,58275,64951,47582,22630,31636,31067,75362,70934,92719,45474,81704,28094,69621,64089,73437,59288,52277,18189,71379,91124,31268,63345,39347,78802,34845,76025,20459,74568,31060,28171,97548,65576,79111,51649,95569,73211,24556,30718,34273,49663,68846,68041,49458,93304,73751,23014,42725,30225,31555,43718,17424,16688,62654,22534,95730,63024,38648,78579,79929,38630,71655,98683,32179,58790,84588,48417,64702,78858,77242,97727,35698,98092,58174,39556,24057,81362,50887,51751,20954,25265,33220,70123,73093,65198,21041,31187,16841,18226,89635,20647,85299,39452,78063,94276,93888,78138,31136,34318,25451,49049,89298,95604,22214,53214,11527,26153,69989,74559,35269,85154,38400,36947,22067,63309,69151,30330,59763,51751,23878,43560,88660,26114,20442,35206,63400,15116,66247,17493,49645,54812,41775,17820,80680,46454,22820,41052,40431,40561,51231,23519,98342,18731,71943,49135,10373,51623,75310,77517,14763,55719,61496,18151,80338,72708,95326,37936,41468,26394,50734,62466,27015,26028,18216,58416,43812,58292,87123,97592,30995,35212,18423,18415,62784,92112,66961,87842,88106,52541,23404,84021,55962,15868,70000,31038,57475,67163,89673,24963,30935,54407,92777,17665,78677,55124,43039,64217,92645,33840,35259,33661,34595,36757,72225,72413,75180,85789,68871,82433,73255,88516,49940,46519,71165,35405,87074,72441,77291,21406,93587,52987,12551,47524,32454,16500,23449,87955,88524,65352,19669,18937,97604,39772,58800,63924,97846,77680,77903,90016,52073,73846,31894,71229,74175,60503,69579,13585,99601,58549,38022,46831,57250,31922,71062,15288,48988,97814,55865,60061,52558,81851,44566,64729,53114,89235,41408,18121,72922,20028,31581,24747,33931,87172,61026,96407,25637,56633,92024,81842,37509,58414,73101,36585,55839,76116,70935,24108,52368,85999,82510,14376,92401,29229,26880,54087,81860,78826,14371,23518,61189,23972,59237,70481,88496,52334,28984,85461,89451,73496,60249,86512,59203,90391,44068,15665,47819,68173,53411,79688,65979,81517,26842,79058,14533,66244,66448,78378,88027,64819,31611,79745,48346,85182,62458,36524,93440,27277,29115,75422,60796,66038,19612,64562,54267,94721,14061,57305,55949,79177,69548,25671,16568,18087,18583,24020,76223,98467,26197,47760,78938,41715,40013,55753,43099,77607,81768,22349,50086,51266,56210,33443,33172,42887,20718,96684,79415,83878,63972,47044,68911,69019,64073,58922,79545,75420,88082,83114,74879,35043,35841,51994,69552,42872,91934,84966,90507,94783,92849,38281,59303,23181,24930,84554,82165,16690,38368,67572,11867,23007,46399,48879,61197,80351,73733,30035,56096,95841,51209,50298,85458,26814,46435,64670,52498,70327,87584,63538,84888,96543,71042,60342,11337,69097,72068,35021,38676,65324,20588,47072,17040,49775,88881,64176,77925,24281,80211,24994,18228,86845,78064,87193,67177,81550,95173,42535,41355,51324,29521,48391,62244,43206,97996,83557,10602,44858,11521,24206,85390,88296,97328,95915,81843,84328,49118,13578,26400,37696,35255,58375,64722,58379,61488,21226,52316,39962,42920,65923,86334,85551,18485,40962,38990,59666,94415,97382,23718,85767,88666,76007,34092,12157,16769,15422,21582,91055,56643,59377,18379,21661,89455,14462,68054,65665,43808,56714,16576,83973,85580,34850,27448,56657,13903,77105,89846,51189,45482,18137,43262,78719,46041,54928,26398,98968,80985,39809,31385,16198,55721,33510,92026,39744,48733,34679,96083,91696,83366,17042,19176,69512,34374,83988,53435,91909,65644,25563,73683,48828,62304,25653,42574,12416,17090,90977,26853,20246,86901,99037,47085,20942,93553,50222,80049,13736,73295,29644,92228,26594,14321,80534,93441,54612,18441,15589,89875,97880,22492,22507,51679,13236,68196,46269,84456,64582,53555,54813,21296,14872,67217,66256,37242,61172,52146,43749,23671,62322,79722,19033,84283,42173,99586,43609,11782,86605,61849,68187,55332,59594,68790,77708,91187,30187,21316,67853,13342,97989,75671,64495,24537,29359,21256,96008,67955,44246,92281,38785,61335,89520,41859,48379,53278,53377,66486,84550,22560,73288,84310,18414,89246,43335,55097,27049,10076,54479,49777,86879,64840,14358,95758,70838,25311,70787,42131,89183,48547,27044,77964,45987,34515,88904,15204,41381,15201,40551,79066,58951,31739,14087,78060,35078,97191,52121,81736,42059,56850,58931,99136,54235,14564,87701,16254,58180,15309,92350,43943,66315,30452,15793,20098,64332,87146,60437,73641,53613,28869,86615,73441,18564,60128,65332,83607,64294,57813,97838,71781,22519,18988,81544,57702,79919,69603,10630,75142,88715,74231,91774,70008,23084,42445,33569,13541,10886,18160,44107,58948,49840,20487,94574,22760,12705,73276,40867,28445,89113,49196,93634,40850,52827,96603,81396,77194,59456,89730,98512,72439,38702,52135,18174,59433,47600,26202,55296,98707,42214,24593,79020,78467,98216,53109,10083,21911,36406,44081,39262,32549,93972,64151,40257,78045,49702,73827,30754,52931,92228,33833,66449,48830,13579,55384,91621,84525,63477,33340,54435,92063,36357,44093,10733,31534,22547,67828,84576,40218,89251,42595,30088,27131,82661,22759,81937,73771,99592,74233,82876,67926,51161,22590,14437,62214,70990,73962,20017,44561,28810,23687,91633,40914,97292,87401,24346,65056,36725,67466,71375,58860,92223,85736,16355,43883,87607,15209,55793,16966,21911,66931,28401,63653,99050,70305,44337,56349,17859,80331,19980,93949,21172,52040,78653,32053,70316,84575,86211,80090,14635,67271,67462,88351,96871,85888,72955,25419,85634,87189,38798,47373,50362,45283,94259,75357,43343,36798,27495,51154,83370,85269,27940,71835,28677,15767,94130,95205,21021,47505,84493,81145,92278,14543,15282,70462,97444,48355,97431,27813,58468,28892,78399,60869,40140,30087,44593,96251,81856,68698,91922,99904,73631,68063,79298,71068,51098,79043,96364,70152,87000,45200,92071,18009,63656,92679,13884,98773,63583,13630,49725,66484,69036,86053,28320,94656,74167,48110,30486,38993,13336,16315,44909,20185,50236,97303,71595,30097,36282,88516,38728,55743,66882,53282,50479,19341,35775,95547,70878,34000,22174,41026,12335,45674,20262,95631,58560,23728,94999,51908,88232,77209,88007,49475,91195,12464,42365,73245,91298,51787,46298,79696,93832,36493,36530,36809,32439,39010,64297,26734,44681,91297,35510,85843,93653,57815,86609,86202,93825,86738,65624,22622,54325,56864,57022,29299,37413,58164,98602,10774,17475,93165,99161,87610,27592,99598,21206,58276,15567,41022,31102,62356,99845,39302,66627,97959,57188,47625,33301,98847,19827,40060,97868,42975,14397,21852,99360,65971,33755,59915,81936,57229,87613,53014,87374,15423,96183,13545,55452,77758,61674,20723,12534,44117,38940,18885,60333,23189,69795,54672,82550,36056,86836,23925,10273,21317,84774,85449,65772,11298,99806,15589,59380,71384,75035,11756,87218,39184,79008,33523,47531,44547,18391,36037,40418,41677,94087,85472,63783,34902,96066,66779,48557,71270,44887,53848,81985,77815,92759,14040,65127,33852,61793,91166,49980,76911,83952,63244,97245,71894,95498,19913,98753,79731,42766,72970,19095,58468,91082,68196,19405,11751,91950,52030,57146,29875,93711,45788,50112,80002,13363,71452,30237,50046,22276,80984,17554,58527,10062,21033,49084,22389,46223,67960,55373,96425,90227,33507,99147,30071,54562,23425,39100,49184,10068,77282,75480,21540,43045,80396,29149,73580,46374,84200,66026,73456,46333,82590,17322,79956,77302,35416,40653,46457,59672,59201,61089,65623,41923,54169,37369,76529,69314,37221,15761,27835,79924,80596,98369,10405,22879,62763,44959,68909,66496,14002,13102,72374,49718,16409,51218,58023,43947,23876,43459,39509,16287,31041,97946,13718,60325,56252,34561,94820,93245,59570,36630,21618,47114,76326,91917,13817,37667,23411,63697,92288,34736,33312,14374,37944,10124,73606,19252,85509,67194,43288,11843,11812,17060,67717,89204,95592,32465,11945,33131,77367,53948,16585,71320,16447,29040,25686,36427,81538,77170,90126,58160,17946,96579,96992,55395,48041,12922,56524,42268,20841,50710,71925,80750,84380,19656,79385,21282,10742,70393,55939,33138,22303,31214,90160,28933,14164,41528,30563,53516,86471,29424,93365,95078,69744,77879,24226,56054,67165,80666,77248,64357,49369,71104,13107,44048,79332,87973,74598,74030,99062,33939,28603,55713,30438,57852,55006,29529,67976,83156,99175,74904,15460,30326,89705,46116,66468,69547,28595,10475,41468,48550,86170,19807,57051,26039,12176,11988,90341,81321,51013,50034,28879,92082,15095,49047,45125,17431,31047,30263,86300,37204,75025,91471,35907,18904,54800,10305,83807,51138,50308,29546,93427,92263,62344,12866,23724,48309,45953,57980,55340,35461,56807,80794,16348,93310,39820,34322,90203,86625,57023,62190,55744,68048,52627,84705,57907,69805,49215,29083,80650,89557,97072,92296,44791,23607,46815,71364,32673,88482,81700,27342,59947,69238,86797,78794,64909,29061,32815,22971,75735,45296,68459,12337,97451,50990,31132,30919,75303,71605,26475,65688,17957,38580,84498,76180,29581,76187,59458,68411,79037,47023,92102,68784,27057,45160,37541,24625,77649,93073,46406,29671,41880,30895,19490,95718,60587,78041,33163,35377,66417,91920,13626,92482,29156,42893,39008,54739,32359,28546,47543,10051,61355,75127,20099,74936,31225,38141,84812,35316,21518,67002,60663,36006,59417,60439,96400,98349,16271,30327,79939,96758,15893,52672,44119,59074,17869,39592,43513,68712,17681,53921,74734,71823,56736,68496,79197,70511,59769,62901,85830,62960,46190,88742,92932,81868,54597,34162,28088,61934,38004,52379,82057,41712,79314,10382,55740,25015,82152,30571,35716,58713,42701,14094,63272,52663,89628,45131,24219,36721,31416,29662,52993,96018,42731,76882,85676,12500,43768,45371,75876,60397,10927,73621,28130,68411,19005,72585,19564,99414,17675,65651,43536,22762,86396,29064,60975,42351,82313,97219,28329,37435,63069,38848,99174,98692,13121,80189,40240,74006,66029,31958,30317,81985,24247,49804,90938,46562,68778,81435,73812,82744,23836,52776,85227,19970,88197,48393,12430,97379,62972,58824,74872,11036,78788,23692,59408,65312,61414,84043,23232,40836,51030,94794,90551,33772,37729,78325,49187,90370,22617,79033,56185,48412,24865,11835,34928,25169,27481,11342,70635,23644,59681,49134,55336,95560,97325,16252,55304,45678,44734,20589,46181,75786,82083,74427,80267,85777,20137,95409,93817,36865,81608,10834,99405,46385,65449,49965,33002,25452,47618,16564,35637,64131,94975,62224,62225,86221,29256,48766,54802,55457,33734,20854,10330,45159,27343,84410,86784,95203,21320,76976,67479,18453,73875,11589,69054,24005,38328,80906,14816,59872,68235,42161,24113,54092,73173,27582,61205,23740,93377,83990,10636,87253,67045,59596,82794,56292,87662,79120,61393,77463,52631,84011,16750,75446,42283,30874,46296,58737,52603,19911,84989,40073,36153,46391,83139,75535,95259,27980,93773,37151,16928,56953,43640,68508,62873,57397,31336,29542,76260,95482,72768,80326,68268,43540,16997,67314,76527,54592,96522,62046,45889,86050,82973,46226,19358,17032,67093,49113,49270,70610,19303,57281,69859,65516,95977,19019,95260,20349,95372,70644,49042,66354,83472,57735,67158,19592,17236,47492,94696,67318,19211,11877,27652,31831,25213,67931,24439,69793,81001,46909,48561,45432,20710,77239,99802,62166,52027,24841,75829,85716,39612,95518,90105,45787,28182,69380,84825,88818,72745,31532,74019,13047,91741,61722,56104,18039,70909,76925,86102,10784,95520,16517,70102,95748,32100,93122,71689,31805,48967,48938,12595,35802,37454,93970,50315,94563,49879,66937,88932,12056,45770,61798,83456,70523,79526,87013,64152,71955,27908,23160,75105,35775,52910,90863,13144,85760,76343,51107,31266,97224,86563,42243,14865,93814,46280,37496,62743,74284,71533,79780,58833,91251,80287,49377,96829,97968,74576,24153,57128,44167,26280,52424,86825,25421,38765,18457,12236,10267,99591,31533,27047,38010,70208,48447,93523,16658,49051,60913,68867,21907,83651,72647,33274,89995,42756,34236,95850,21042,21604,20465,40890,22171,35031,20276,47283,37875,51341,65577,86182,64485,95925,91506,16325,48293,32141,74076,38827,87570,80058,14665,72851,70582,81442,83027,71211,98011,11723,24330,78038,50837,66622,33577,67696,91489,56226,83607,98881,14823,17194,54778,31087,54531,47427,72849,99657,84004,83162,99102,95012,90324,36486,35287,38759,66234,15751,82446,84695,16392,23612,26114,43412,41165,34250,90108,78462,81015,12142,52833,66062,91015,55993,46490,24271,90359,38146,43740,39205,47283,61761,13077,86530,19465,79655,40143,45631,34024,10656,31293,10646,14780,48845,21217,14279,88500,83326,44465,35173,13776,83601,87956,49372,42525,39280,43158,91615,76499,37855,15451,36465,62631,45779,85560,67908,82685,84780,55634,49434,53762,81519,91233,48176,96068,96050,76544,96532,50321,98180,61634,73378,89439,23985,14103,98924,64314,54365,25612,85964,72436,55247,30759,94886,26629,23845,47967,73040,92907,16152,44885,52360,92481,15965,28510,59534,11622,78387,19496,71204,91874,28370,15555,95875,61233,12824,95635,11320,88589,83460,20236,46588,84220,25159,96950,86152,34619,19669,71657,63904,33667,58831,57860,91430,89592,94425,27097,70807,23516,87515,39401,10430,20756,75472,93871,26408,77492,30491,63510,79460,38618,87850,15363,74194,51472,45735,25392,40440,25871,49634,12407,13391,53253,48635,69147,70842,70351,52796,45548,96407,97264,90163,36897,50445,58351,42670,36926,42397,28270,34028,21920,74498,55093,48840,82379,11647,15956,91532,76969,98005,63788,56506,38853,58291,30822,41770,69948,56750,47615,25274,29863,80117,21177,91780,53388,67640,24640,58333,58024,52821,87385,27004,80833,83600,44633,23582,73950,27645,23502,31796,76749,66242,93787,90153,57320,34134,65260,63423,26901,79057,41135,43734,94908,41523,86010,77506,49084,58550,12435,52204,61574,43920,81597,84237,50672,87078,16258,40853,81212,99778,90747,98079,12746,18388,94757,83441,38312,29984,87183,61755,10191,23582,72763,11852,88190,63621,65922,59525,89352,34432,24037,85790,91321,72782,65622,20226,99289,74111,74209,43573,55397,74276,16793,26262,35511,76716,45561,38652,64038,38430,82531,31680,64910,95763,62568,19422,86003,27869,84521,53314,42698,74708,41976,41977,35500,18487,56472,84056,17129,67489,59114,60785,59389,90848,84524,24644,76528,27399,48342,33959,98862,81484,68767,17683,53589,51370,35422,52761,78228,32727,99709,76777,21696,87380,55301,93511,90304,24117,23460,81095,31012,37038,27385,30689,73356,14199,22927,66152,72050,37738,99172,75733,35017,76745,73435,72702,56300,19244,82005,91770,52232,49447,87412,16940,73522,42046,14292,29078,84487,66911,72817,49570,91234,75853,60695,15957,33862,74223,43204,72817,39041,71247,53728,20113,80048,71746,95365,96073,84168,83831,33719,84703,24423,77562,74540,48993,10895,23939,98764,85732,54023,91651,33559,37515,34759,28039,56467,99458,46350,98712,51493,95049,74960,71689,47969,83229,22424,61692,53275,88514,43526,87948,39953,50958,61811,39868,94555,51827,55966,95999,13441,51128,85762,97990,51131,76147,83963,28485,69863,62181,70767,46893,86451,18630,93650,52454,24996,75902,74953,13517,79138,11683,12538,40722,50428,32954,18418,80249,63148,72708,96887,49099,56713,23908,72122,67749,69566,37847,51792,72809,60195,19401,84545,90722,35541,66098,28358,67799,39508,67591,42526,54449,56090,86644,90438,11873,42908,97254,12752,97646,46572,66437,92207,13089,14105,59559,14087,39725,85258,34266,48608,45936,74194,34377,51459,22100,12665,28333,91551,25847,18703,50298,18490,41913,12235,11826,80970,43219,70544,81292,34340,17090,24018,45890,12111,89676,97829,54964,73141,76576,15406,54568,75223,99803,96119,75250,61688,68911,96480,67339,84242,89722,50307,44081,41861,16003,88150,16813,68808,22693,31014,98054,86755,73606,89203,64577,97681,28143,98337,83593,94403,41789,58148,47469,66483,18529,39901,13110,25226,67499,17352,61717,39916,29477,83201,57547,93327,43741,60041,83227,48120,95291,67450,58517,89627,53146,13887,48215,86744,67813,12162,39623,62643,14022,13503,38106,62761,15932,25334,27528,60653,22365,23621,40142,95268,18717,98082,73575,56757,81049,13537,91634,60479,54529,34957,81445,96551,11111,98544,42638,99401,38683,28174,62204,19766,34288,30907,63994,74005,49739,64989,78830,93787,94268,31017,13831,58114,27847,32722,65847,84889,90102,56327,56230,56142,14414,76265,48498,68694,27887,39490,42243,70746,21732,33456,26888,25869,15156,43267,85893,85341,84383,41917,90900,76666,85013,29105,32447,74080,77303,27176,53790,64800,30791,79930,23842,28827,28292,51178,67168,98557,23819,86419,37474,90976,83480,50297,94104,87039,18533,15208,83152,47669,74565,74843,86473,50380,32652,73835,55171,75914,90202,79324,16660,43829,29955,18824,83202,97739,83293,20716,48472,95688,90446,53329,11984,82490,51109,51482,81475,87779,36482,84417,45909,81604,54362,37145,43459,64359,35170,72255,59550,99315,83033,93377,77415,11036,17853,92551,94606,86522,25089,59750,64916,91552,94507,31351,67087,58021,46317,83097,12143,44251,67316,40009,78011,87070,93527,15085,18363,27125,62876,82846,29729,30932,72559,84640,29878,14281,18667,70509,15425,62686,67459,88075,13847,14637,44203,49575,73718,88659,21417,41867,84816,12490,77003,54802,44854,16508,22111,38592,66644,95479,29747,29873,68964,47814,55284,86204,37257,15733,78119,23043,15401,60780,21392,42885,27838,91060,30518,75641,72457,25661,61927,56418,67153,21590,16059,59774,94151,22838,75184,31018,19220,37046,10838,40339,99452,32742,60992,20783,14900,42859,38869,96704,71760,11997,51052,96505,18881,38231,75986,96908,22138,89599,73217,44671,50902,71838,11040,29745,92287,51349,28592,37844,40236,82505,31107,29935,78402,35744,83859,28422,87378,20856,98268,13497,85441,90107,84024,19223,43082,91946,41915,33202,49489,14921,52763,44282,69424,68420,44711,70151,25033,90829,54992,50755,16563,84780,29329,85089,89034,49489,90122,76389,68249,19536,18114,50026,96012,19252,91501,87086,83230,87431,20891,92872,70606,16352,14152,68740,21934,12205,60175,99655,64324,88698,99757,16539,23092,43622,87630,47161,26261,28756,67603,39085,27634,38803,76405,88593,67168,45565,30117,83556,46644,71920,72018,25636,55855,56375,66600,98621,45018,22940,67407,84484,46415,97722,85849,43061,54182,52486,54000,42721,20761,27259,18745,45021,48840,46608,29993,70560,75855,77578,32243,74791,14563,99050,42636,73026,99324,29893,93821,86727,25932,32076,79890,31662,64227,86134,32120,19744,90537,54318,20746,48797,15674,59647,52258,60709,20419,75561,94411,77784,95737,82577,12644,18533,80500,58073,37717,93689,97068,32027,88042,80579,96373,68322,52210,54687,98123,84754,94606,56857,85444,81248,18141,48448,35781,73868,16682,47493,53280,56563,26851,66887,32607,58738,27224,78012,32957,42402,45645,42061,89150,44534,36016,10409,40858,55382,36958,93452,56175,47326,38585,56609,72844,83518,10888,43579,12586,93937,47824,10385,74667,93823,57475,17244,34704,16599,97512,37656,35366,82486,18377,72532,20595,28837,34048,59047,99917,25834,63439,45227,65074,36988,85366,82415,61850,66841,28731,21938,48595,96407,99506,92113,35679,22190,77609,51152,47779,11052,25597,41835,18942,37391,62483,56188,51828,76862,28861,70846,77039,83168,61730,14588,67169,83776,14338,48831,33221,49588,46420,32537,20402,98566,53392,94512,37559,30595,10495,95984,42605,15396,15262,50976,59932,89598,67737,13445,12856,89800,23625,98711,30718,65203,20027,66901,59902,27422,65747,35850,32173,67934,46491,51099,73447,98554,71230,78824,88071,92610,30707,75489,55684,54512,63693,97530,62919,35991,20675,81807,79836,91699,74639,75126,28593,30981,47291,49155,62111,71191,96220,18524,20652,19413,99467,77786,17852,43808,91325,11979,19745,57707,27873,41743,10223,86726,73192,66433,22538,61780,53555,35572,57239,14670,17353,18900,80202,55783,74464,32271,47380,70484,26318,60164,79283,93971,92131,35881,50727,96208,98148,31518,95922,46098,45461,54473,28200,46845,88055,42528,99025,59414,79745,30611,74503,82671,87738,88405,67422,81659,30302,82389,90388,45675,78745,18668,80417,21750,56521,58297,34098,96840,64849,50532,78750,38450,73020,58596,25634,56730,67551,85861,49698,17084,55282,17575,98212,11307,20529,99070,56534,86326,82154,13904,59837,50469,49239,33217,43256,93556,88548,58514,31249,15106,27656,27322,70104,94015,31457,32710,31629,42121,81238,43321,48505,88461,45825,86151,52257,52657,38401,80926,77674,31410,36242,43802,40638,24187,83797,94373,57338,17408,91533,88539,97383,44074,37976,48789,29471,47649,41677,13125,95545,25544,75095,85499,54236,52074,58636,79062,18131,15910,83031,67598,88876,70661,97737,96415,47622,27903,53649,44146,46724,35165,19369,90035,64598,60133,96747,78834,97319,61535,94463,67011,72197,90323,17498,66199,33128,54200,74590,97817,39119,55157,53624,30434,93384,57565,94486,79891,14925,98711,92984,21706,13448,38337,73518,84077,85509,29051,63903,64932,95616,72682,30201,67001,35958,78740,80332,27655,51693,88888,52317,71324,66241,77461,81641,27390,36989,79379,44819,93702,72079,75310,59283,90593,87966,23391,37340,37903,32543,12748,48678,21810,12123,76731,75582,57812,39601,98191,52383,87788,60557,59560,69951,99174,90021,56664,64962,93604,32796,51102,80488,34694,64115,17132,22626,61926,72666,83521,50427,24175,47884,81662,86943,89893,80057,48797,72856,86157,21183,97398,70891,41137,33285,30787,54264,59489,92278,93800,58304,54170,32185,91399,87033,72630,42541,19839,87377,11735,51123,90361,95754,54552,43818,48446,31914,48245,37618,30621,43504,34462,50721,77879,90569,51668,71038,95869,74999,33554,25327,15272,11270,56307,99925,46623,64736,31759,68035,90394,21197,59757,75898,29002,38066,66676,81809,84635,79280,38545,49434,86847,32210,48770,16486,14430,77947,49795,71919,52576,68693,32723,33602,19273,31936,81690,22310,32395,66322,59742,11487,26978,20622,38784,42325,13670,47318,12588,83775,40808,48526,29765,34748,29563,72483,84535,45609,58529,88544,15526,60679,67435,84221,72742,36035,63216,76809,19335,41216,36765,53421,50254,61611,47018,69617,93517,87138,59788,88622,31354,75367,91227,71845,78741,58574,12678,87383,69714,16830,97362,27009,95022,66341,57731,72372,27587,31193,78186,51796,19528,51970,23089,61076,80828,30588,31260,58568,69342,83377,97038,43586,81090,34659,35075,45806,15668,94372,17700,94737,69621,95889,98601,64390,21417,70072,39378,89727,71615,25993,56781,12757,56808,78574,71873,87491,91778,38894,43249,17344,65728,54403,46118,85060,73916,22409,94127,99761,43032,61871,35181,43115,40091,46642,62126,54712,69465,93007,55381,20847,92001,75584,45047,86796,84500,73313,17895,52606,20913,25145,10493,70793,93111,73852,20214,17240,62060,52982,82834,36751,86685,92479,38265,88452,43305,28624,15006,52847,14257,44157,18283,63908,75132,67568,25850,20506,25278,41960,92181,92490,33920,47996,39435,20053,87325,54333,59081,18121,21537,53282,66659,99942,62880,21413,27319,79880,58355,24607,28617,94087,44933,89892,43279,64721,33202,74287,64963,30965,14162,97845,30847,19079,82008,73224,10611,67856,16186,26822,66349,50723,41031,66981,57634,99731,36480,78555,89607,41609,47677,23803,53467,88117,11881,23754,42485,44581,64615,94620,20898,86127,17657,40234,26582,98933,14423,21646,71057,45888,72174,78051,76326,44556,57922,89753,10977,40969,87892,85974,31269,47676,98719,26304,66361,24453,11347,99850,73984,59044,36868,25890,63013,75450,52983,88250,20837,17005,46454,29267,28228,59583,43088,99252,90598,96489,76639,21889,21293,92136,32493,47319,66238,34806,82778,72324,98303,81580,69802,43353,80212,42714,90422,76501,60155,28213,76591,60549,33806,90256,51017,80680,98482,18802,16927,15683,18644,58972,61930,96168,90619,25903,14910,88359,59431,84768,81807,50109,23924,56717,89468,32508,44830,28180,26510,95266,10608,94823,43666,14657,60854,61349,51956,55600,87100,60265,26027,31826,54280,65969,73292,50246,58731,57650,57278,97167,31228,59824,65906,49220,56240,15410,29439,92880,61183,96022,87980,73899,22576,78294,31458,36562,10555,56547,40561,81899,91240,26914,89802,72054,46279,76593,51216,38161,40844,73773,66418,32379,20005,40189,88931,29792,36052,25582,92840,68120,27386,34840,98029,34671,75269,97399,36323,96207,41183,68466,39280,82212,27428,43759,66329,28486,80494,69220,50734,65387,39793,98990,93442,93813,22061,87408,48328,30349,54252,39496,23356,55910,88750,88957,29497,89603,81510,97741,78259,55656,71447,77816,22939,64477,87575,49506,55315,61335,89874,62370,80687,48758,60548,63919,32915,32404,46697,28012,17727,92336,55750,17086,71215,24000,68184,40077,86305,69382,81490,63953,36130,18466,83435,53771,11401,87672,65848,56598,78609,39982,66488,14469,35625,22377,11710,56694,99289,68271,95678,42939,98840,38382,18680,33757,47935,44088,84250,63199,92202,89669,64450,45448,48685,58517,18990,95705,87587,27415,13509,59868,51690,98747,80617,97130,68358,78317,31787,39508,16759,78660,83142,99433,61960,91564,27394,91687,56158,95576,83105,87588,53662,93588,84935,44437,22651,25106,44036,67478,41653,21749,18938,72273,51965,15414,22656,70330,53997,62526,37042,64438,79771,28106,59696,39675,33147,33135,46286,54532,92290,93770,55430,82614,76104,59530,49973,65461,26815,72797,74062,95414,89767,92894,38064,71405,40928,49001,21379,73293,66844,94943,22878,96461,82193,94792,56776,50128,99565,70955,11644,49938,66910,90451,89457,48165,38347,67479,67352,79208,85728,46625,22006,75392,78472,61764,98558,23920,80706,33600,56284,63881,87843,75437,86597,34719,55799,38400,10310,38653,60529,74490,70864,90207,95797,62983,16468,21619,60161,48118,70933,83850,74069,14233,14237,39400,44266,91133,19972,13660,28163,59780,99605,63789,22637,78884,50467,26131,22319,34523,67057,83962,47286,46663,85704,27386,79072,37227,92022,23135,86298,44254,30387,80862,13320,22665,78449,28690,83883,22687,79265,10580,50828,96362,77309,33849,21700,76627,71857,43524,66293,67022,30223,83691,76335,26738,81351,78950,45924,36668,13337,16820,55307,98030,32804,50374,84789,13232,67571,39208,30381,65726,68977,34366,38898,39842,25046,48605,55378,79834,84782,23390,92427,72683,78680,65617,53030,56714,20849,39069,12148,97600,19275,96813,82113,54080,11370,85683,86235,65470,54413,77229,49874,60552,88156,52088,65282,97475,94627,98131,75523,30738,46838,13308,97251,55921,36084,61516,57245,74071,61757,85508,51013,74758,80473,81810,33715,76802,58213,13373,53480,17619,63330,20943,93635,83093,70773,95259,81546,72613,18992,22706,19338,35847,57513,18333,35171,13398,12833,31228,65861,13415,35540,91996,49972,30365,37955,31353,29943,82301,99569,90506,47994,67465,85836,79011,50025,94209,37446,31530,13336,87114,70734,48402,31495,12335,72943,60903,88912,64201,77519,55234,58456,14956,53538,15070,91270,88172,93628,71754,83409,39916,19520,97692,15105,92936,99787,68156,61522,18629,47200,20459,94063,39607,53159,70509,14359,97067,40078,17624,22322,22701,45585,78966,74110,63506,96213,41326,97534,76162,70533,86186,39112,66488,80671,30128,12580,10507,23834,89463,42335,53416,30734,19492,10685,14695,55007,88654,42567,10915,64150,16191,33241,88219,82588,27379,84742,62843,11752,41762,60147,32272,18999,17857,92582,53868,31100,47153,86638,80884,85530,41440,40996,22965,29794,11769,54453,41569,99064,36654,55474,75860,86535,37785,49705,53194,71329,94925,12117,40596,17729,50125,32476,48410,54841,81507,74320,63284,33055,73493,35441,56448,46416,22722,71750,52953,26744,80754,98506,85502,96800,22939,52052,11966,21830,62698,76916,60369,88001,31243,77489,95493,48626,88826,68231,95001,23172,59663,74047,43571,25424,12415,15868,77187,98058,43846,12685,42307,33440,75274,84906,48645,43344,96442,49768,21286,42871,27302,64520,68001,78773,95482,20867,40194,11946,43312,23517,93972,37588,63241,83280,75854,91740,73227,86712,71561,46342,40982,29156,98725,67170,30916,70990,30061,35800,86214,77854,14051,35823,43285,19284,88308,19850,62201,59623,19743,24805,33350,58884,81267,66636,85863,14459,97196,22471,13844,21835,73586,74697,54489,50173,45627,85126,45527,83623,14930,78920,29965,74130,62710,34957,15233,53789,14727,35500,98594,45673,82384,77667,37861,33152,43933,15428,48289,73124,28884,51577,58781,66929,73059,62828,46808,39487,69588,91436,13871,75879,31769,72270,65518,77991,59103,84421,56431,58459,65948,16848,71409,52153,97003,18333,15364,28380,64047,27636,57596,58660,44661,92174,41195,48115,30119,84013,27213,90745,67113,30030,74322,50862,68574,51685,39041,72692,59682,22177,23224,29369,36471,59963,28409,25459,30681,16416,18246,28842,99068,57254,94495,43321,74296,15471,79919,44851,91407,20819,74193,90279,37399,34691,64698,53702,73180,66794,19159,17527,90603,81017,65671,18314,78922,86154,37515,50332,89235,25615,46382,67126,59540,77888,68330,61920,68104,22511,15199,37308,46504,28030,19478,33925,69972,82108,57064,66345,24769,84952,78655,91251,54508,94547,34968,37152,92322,51077,61246,69619,63393,34565,52093,61995,16706,34091,54171,53571,56653,79902,81799,91426,72447,97679,36413,99111,64595,40536,75308,78831,87808,34737,26211,41656,45328,69657,30815,23949,47558,35476,49410,57730,87830,70865,47012,49397,69040,85252,91129,25128,22120,70413,71174,64815,98962,42157,35220,88774,88177,39315,24181,40501,17711,42657,94655,21854,99322,94663,40903,49318,32082,84185,43663,64182,85782,31219,24379,79582,58634,70769,97954,95064,79813,80906,71803,56660,68925,46699,54555,88203,55792,73069,75056,34775,80803,87343,50924,70010,12872,49290,25529,73370,14767,21167,28341,74465,60011,52639,60226,15840,56847,78283,39333,70151,23927,37552,64546,45759,62932,58077,35990,81873,56804,56265,15821,46182,15286,79409,99698,47467,57542,20656,57130,74858,82821,91675,16695,61636,34244,61837,62101,78969,99867,72867,44539,16499,93551,58100,69020,93216,39485,91996,15310,56884,74339,52636,67610,23609,22543,79597,46420,61692,88452,88297,96250,90339,40170,92853,98983,67609,45143,56617,67455,83700,44050,96221,51951,90863,65355,60949,54980,50251,13215,12656,55992,61157,11438,57723,41168,20766,20502,52236,85833,64700,64841,97368,13909,88764,78924,99912,34148,80239,77189,41712,48542,60790,69805,50444,17438,77493,18947,38625,84927,22985,54870,78152,52333,93044,15042,42167,17072,69246,13143,95718,11905,84108,46751,46630,73429,36484,88549,16822,41213,78796,86843,21000,46493,87397,42717,19226,43123,67028,98285,30447,51063,67125,10997,79733,98128,25633,88719,91604,91375,27814,44391,55969,13001,30249,62477,37208,72495,96273,69105,41136,54403,46471,27714,30727,50399,12185,70361,71920,15357,84654,19989,11503,93357,93987,63830,84825,23132,63027,30349,64769,18194,12695,27914,93410,54557,42425,41263,34500,21450,21408,41895,78461,91479,93233,87129,46847,13175,84858,97682,35910,90120,43911,66146,54215,91351,65926,75316,63124,73559,62757,45995,18815,94199,97369,86069,48999,59579,63474,35941,17112,70934,83854,24797,64618,31481,78028,28256,46638,83996,53743,29233,47520,65731,15626,34300,81612,43433,27820,60858,57072,99140,96906,59762,71676,43983,67775,57231,81001,96035,24392,81811,33868,34961,12761,27659,62569,17560,92657,30442,77043,93598,60753,59074,94967,37727,74495,17058,78710,61330,23769,62554,27662,30374,59805,91267,72784,83657,14451,58113,78752,37062,30828,50557,57519,93968,46872,69857,35872,48286,71508,48657,81257,25142,90849,37153,47813,89963,36553,93823,71181,31450,53322,73252,52646,84462,53884,48732,19783,71441,97259,67720,37748,61881,18336,98235,88181,73202,22682,38716,34016,28954,87690,23613,53585,27280,46661,56363,25116,24093,62909,46907,43091,94821,25342,90207,32706,71878,21277,87403,94978,38984,27000,73764,52677,60873,94076,86762,37819,12387,93758,92933,78383,71089,94090,75483,97535,50877,92671,61439,61034,40838,87994,14636,62484,94724,91361,44173,52709,40177,36956,44063,54577,56287,74703,58611,74007,93737,96456,65158,53779,68220,35623,23407,79018,47592,71532,19831,19345,95910,57385,70946,65289,58232,33128,70599,98707,78254,33851,30896,50070,91005,10714,74907,17776,24590,28554,65945,33843,14195,94555,28433,14028,79677,57932,74875,89278,27092,29682,27863,38578,65578,19402,86062,23967,79126,79856,77056,69657,68832,43293,13692,25876,65082,10240,40847,66430,11672,49315,67200,83729,49675,66490,87456,94624,13843,78643,58472,28438,44065,59878,19508,75714,60742,96072,47549,39510,47027,61221,18618,75865,26270,75407,37942,40651,61112,18751,53937,83424,80181,28238,70573,78020,12812,44503,50362,39558,98157,97032,83220,50723,42950,70783,16682,90376,29731,99326,79590,54001,32893,27794,11175,41375,69246,50897,48116,82719,64014,80598,84595,94407,28077,31088,94900,90178,14055,29955,22445,25234,95447,78562,58433,86286,62889,36541,78788,49485,83635,54843,94825,74471,95172,38634,83654,73447,59018,24584,17080,35222,63343,18592,17424,91497,65149,79688,51887,89204,17766,24939,24062,81198,75153,37601,66193,20097,25990,28954,22079,90147,99538,44444,43156,10783,22681,49530,26396,20473,63770,71569,58181,80459,62996,30034,72097,47542,88379,42205,60748,11894,78704,20595,30593,72681,90969,19948,86477,58055,14623,10831,26326,14295,27712,83411,46049,74278,69087,80110,86782,19233,65863,99956,67061,38467,90774,39073,25953,70534,32717,62535,37762,41204,84798,69249,44057,83278,89944,82239,18653,13369,25344,75686,30509,98710,17287,28343,21603,62487,97557,87115,58822,97274,40847,74122,82593,21128,92914,63556,26469,29077,22675,61060,14136,19114,16143,27763,33587,70133,67515,71964,83066,52908,27330,23043,36749,50368,76124,60344,97712,62206,36694,42425,46496,48661,76484,59432,96866,27615,17961,72564,32891,50164,55499,63680,79381,64149,35158,88809,60585,13583,60965,22809,95882,35325,12854,17966,67106,87219,20670,72451,35582,81885,62712,88015,83896,29315,57167,75086,23513,45735,10796,40347,26179,37482,73390,11928,81612,97281,46101,14942,76244,14461,62404,23993,97553,45721,92330,36699,53518,48801,86083,73458,27823,67817,74035,45665,63694,76109,79887,78375,78331,90880,35847,88946,84536,89515,46220,90491,92219,80663,19417,49798,72960,19685,73331,33195,77554,54917,58614,74635,28156,35596,16055,95225,22184,93156,88180,49944,54166,71655,29685,23555,56884,15927,19384,80396,16019,42593,16725,79595,79160,46232,95564,99878,47751,86143,91885,45590,56701,60782,13067,99112,14275,74052,10210,34625,21996,43133,94992,44949,56916,94277,14592,45727,68402,64761,27369,57517,66745,36233,25896,78447,78519,40330,46893,14942,43613,36279,68859,11587,45695,37322,87914,50342,99317,52547,74410,72835,51519,26399,49617,75202,79026,93073,13999,57407,46970,49100,93840,68846,80472,41230,84437,32741,66922,75826,83343,30066,65400,13132,18374,14433,43404,48497,49147,16663,83102,96313,60289,49921,19011,35000,42410,74477,59285,79400,22100,28102,80039,42857,72861,66803,98362,13673,17908,46566,10077,30471,47813,30753,53962,89884,54563,74420,66423,76616,99038,21342,18780,58181,74817,58901,81871,37309,36519,74988,79676,80840,61028,67277,82549,22884,91510,34574,56954,87528,16051,90016,57083,98980,58427,25928,39475,58938,52177,94296,89089,90249,15164,38944,48756,75900,40117,12294,32031,81759,85092,44115,90305,86755,88335,95524,81599,55698,99554,94605,60982,92537,81976,96871,81451,76298,92366,52602,50625,54819,40904,98809,57368,95156,71216,48476,39158,32631,88540,84017,11765,11920,54551,52963,62500,17452,90660,78512,78855,96291,83681,93610,37903,46123,96877,89279,66136,65343,64332,75321,16833,82279,11759,58633,51920,93897,84362,86151,16524,31752,48307,93116,53676,41772,21715,62210,40619,51379,27238,91140,70516,32960,41247,62833,68198,52818,85270,90047,79127,14691,21544,66723,41668,35537,34847,39944,19416,59970,91828,92785,43248,53666,57861,84306,98747,94782,10042,92592,54305,69466,58406,58155,67878,85214,35593,48673,46561,83914,29576,49928,10593,28465,27648,24204,98695,60302,76271,34766,79139,70820,87505,69389,68669,31926,79206,35911,89128,73219,29074,70717,19360,81640,55662,61346,74992,74344,12934,80466,18683,20191,31248,81045,22944,60543,71213,99317,67340,94860,80100,28413,23935,41788,33121,90092,85500,35182,44425,74016,68372,79849,54888,73479,11106,78434,96283,47951,47539,22520,37131,45536,53787,78383,12112,30393,21867,16420,54578,17996,99710,76393,91733,53385,55301,23786,17017,99509,97840,32587,12012,31153,52034,92475,71349,79401,54917,46810,42184,90445,24396,78428,58124,94286,32247,20882,62153,60670,81663,73356,35347,99158,92470,31027,82142,72588,17782,76111,68126,88909,44489,38867,39855,85439,28497,73387,89759,70156,54743,62002,93928,75248,65144,23641,84853,34998,39092,81878,23135,72879,25800,46336,99214,8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32,78358,64408,40958,42109,45138,86740,21635,75266,86789,63314,51750,84022,68806,33782,44288,95544,19135,95366,72785,93701,94959,50510,55813,73582,83120,98544,89065,78612,16237,83265,94079,97164,31216,35725,19237,55161,33811,32465,99332,47448,74353,12068,89326,49756,40491,53837,32326,21404,46205,36576,20820,56460,84571,64128,64633,89469,55926,51302,26563,14193,37443,20257,27181,86768,56817,72353,37527,67228,40654,57215,98596,15749,36818,74551,96515,60674,12318,65067,82299,71944,63648,58307,94402,80803,22729,65617,53672,63866,45676,44012,76812,22238,72788,55073,35212,44463,28508,60928,97737,70863,99371,49277,61192,81666,51325,41815,46726,13481,49419,86929,62509,87534,38428,76742,10605,91352,38187,23381,32688,10263,22425,25270,77440,80759,97907,76282,43015,70769,40866,93301,98990,53711,41349,29887,20935,14853,56927,25084,22294,61346,97603,45748,95385,34318,76953,64050,15583,82577,60051,16779,35558,17366,39654,62381,14358,92066,48839,71417,98605,10243,79071,68220,90883,32806,58260,30027,90785,73858,50140,67164,24630,31975,93145,88295,43054,93559,16971,85856,16237,59108,46777,17635,64178,67404,50051,95517,91507,52323,47978,95405,43954,16925,63610,77068,86604,76911,76688,65114,72383,81930,69839,68297,15262,54498,47462,38212,67691,38669,49608,37633,21806,45788,86609,55189,63844,82411,69909,14168,66291,92103,30800,43694,78550,17342,70729,64494,55216,13549,18066,97649,67871,12979,43740,90083,42745,51664,36348,71616,83361,71495,42180,52956,95534,58133,62661,37608,14162,64796,37683,81892,59714,31410,93184,54033,96996,97924,53702,84520,63681,26297,42297,81447,96574,95007,91285,82081,89875,73205,42258,46426,40316,42190,84263,13717,16148,77287,80802,61168,16851,28502,84793,64145,34928,35230,37004,79063,11713,43193,98534,34300,72557,96698,34331,14626,75367,46770,89921,42476,14989,94041,22622,29510,41658,14188,21244,41919,63128,63851,50950,10204,74758,95347,25929,92928,88682,97625,36903,23000,99370,63184,62449,68719,55009,71547,23679,94576,87316,94053,90035,33633,64203,14631,50036,38429,37477,60208,80430,19978,51673,62621,34840,43616,38069,82026,52285,14389,63949,82829,28215,84194,74600,84069,30174,55934,19065,91388,53254,30394,61965,38125,18131,93816,71244,64884,17351,64491,84692,70849,39606,58792,61777,84258,53406,33367,19768,13441,98299,27824,48356,27707,13778,32191,51881,71771,29949,85893,59357,16813,56005,20979,93187,79686,74157,11402,28323,71945,98429,37310,19514,64628,72499,72753,29050,79520,97738,29661,53904,53865,55206,27344,31781,62999,74128,83444,42509,59695,33017,82030,30147,78022,62096,42509,56538,49331,73760,21469,11833,29709,10917,72275,84915,19454,73735,43955,89721,29714,56354,19998,37585,84959,83905,34414,61342,30469,36073,28215,13273,21263,57991,74927,32926,15915,53060,89292,64754,62552,36071,80313,43855,89449,43071,21927,13859,52193,40393,93872,10370,67056,94869,58621,65426,47502,97354,80215,52452,43179,83650,40685,68287,61086,42184,13208,18383,51852,87892,96349,53520,29831,27758,98290,49945,17425,39253,80492,79788,62946,61649,24415,96507,48027,53272,85948,56513,78701,55997,30264,94746,31338,49210,50651,51074,56783,42123,55431,16111,93566,30200,72954,10587,62862,48377,97966,20810,25162,16583,97237,67292,80658,52365,78467,22152,60207,15871,93007,80116,38534,29267,51953,37554,21343,72198,81060,13439,64722,66272,98421,85779,39936,66827,16140,13725,89347,48182,21858,99768,93459,55324,15692,35941,31242,44867,71451,60551,25900,28360,91587,34842,60116,43669,67983,66515,19171,43496,32795,10905,49024,46896,66691,69776,77941,21586,98873,85572,76339,87768,82946,93035,43850,57111,12594,43517,45096,68786,77576,41969,99823,80559,86832,79051,71268,84494,35491,72147,93174,33692,57202,64771,95254,43351,95216,70771,75891,77627,39686,59486,11366,45040,11040,63335,89573,57933,37167,66971,12587,31901,19532,26846,59896,48954,42465,75250,50273,10021,89164,43330,71079,88018,86818,80937,19833,99868,36196,82036,45996,98535,64639,27196,78908,42269,85099,55216,95978,97378,40201,67682,97621,49735,13919,55247,63234,66018,23434,35313,77517,68757,60422,67324,30400,22273,60335,31554,89688,47789,47917,89600,80889,94891,25964,18655,25681,78766,90504,74780,17064,37777,35805,81825,37155,83168,65395,80794,37741,30031,72049,91430,79786,23644,33838,75455,42239,18159,63335,88650,76465,77449,71315,16407,66104,12662,59199,74845,87535,16952,11539,98588,51604,41075,61271,19565,74618,49842,46747,49181,62371,80779,34195,55260,12407,61234,71623,56851,73300,77534,51096,50571,28086,92137,61678,75508,89930,16700,73905,35196,91112,43247,22864,12632,77346,90110,41338,50002,55824,34497,89511,56298,53520,80295,29666,54023,27034,84479,69273,40868,55554,46132,59736,62697,37655,67414,44739,64591,70967,15276,14079,11207,13542,77742,56863,80704,24198,82282,28789,20816,98670,56934,72202,79821,99939,41093,88524,34105,63739,64851,10523,76733,53931,23680,66610,78404,70822,64639,50991,17149,30485,46183,41865,13921,55662,38673,47949,87407,14891,23707,98214,46010,54594,85669,82231,18727,55710,93806,90436,82387,27697,50517,82942,21612,78626,23602,63545,88695,43865,68951,91270,34819,47906,44209,92161,40567,15399,46844,26681,33852,35136,16632,81631,22952,32254,50936,71295,15199,77878,56184,39359,13256,68570,68517,29126,76680,61382,79114,63289,81764,78641,53181,51716,54555,16577,90500,14456,70377,86715,69006,66485,99487,97399,71974,75901,60864,16781,76696,50236,21848,41715,81674,23157,86485,87447,19241,64302,65435,96755,79620,85738,40257,67621,33622,67646,93816,46403,84450,30374,50975,87746,46427,57166,14389,88487,92504,38687,97979,77776,28624,34937,13701,41434,70862,14792,31396,62096,61834,98323,67036,54836,61752,44705,17919,27650,32206,68677,98611,92093,35804,54197,17317,79087,58472,29513,65148,19738,74458,87662,27876,94160,94433,98898,24597,37884,67804,47917,23150,38808,23839,80039,54578,27237,50278,87374,85293,13386,71205,94287,29419,67167,21801,65525,17330,63430,64703,87464,68644,56881,11616,39184,23536,75733,70963,61957,65626,77210,41962,45231,44006,54888,53674,46324,96124,88914,54106,12128,98186,71690,72499,92394,29546,78353,62497,73180,47987,99324,35902,51171,87926,62682,59277,76242,40371,34330,49119,36852,48050,90307,19867,91911,86717,69780,48275,41230,19552,69658,62804,61343,98790,40533,42534,41888,16265,91436,30550,72105,82758,41419,93843,25624,45259,29640,31515,40179,54659,71313,24113,13831,96724,14398,68320,51985,52847,13898,95198,18709,61561,76260,82746,73461,89040,90825,49953,46510,93582,19134,21700,36515,98671,19519,73732,42350,66320,25915,49443,98743,65882,51905,31209,84784,68479,72800,91972,55034,56213,49582,52311,77551,34268,61965,61613,68927,54484,41743,61723,60187,38134,47136,58983,39937,98800,54647,73972,48197,76074,21895,92242,61305,38541,73856,20357,55666,45886,55625,75734,38363,27116,51277,21863,73996,54919,60288,66314,60886,71732,19829,78181,85033,73577,57209,50895,53219,46983,35566,68037,87087,40242,17517,38381,96376,97172,19580,42838,58798,44846,99470,72831,55640,23927,49811,94832,17400,15049,92840,92234,94143,64412,23729,46914,30579,27436,88786,86573,67022,36764,23843,29819,44309,76508,27545,13504,86500,20800,11760,12028,96782,50508,58483,43696,11610,53608,24905,76947,10248,85162,17329,80990,85793,74014,54100,60925,71345,14291,61280,28414,27600,74284,45365,78367,59558,98872,41811,63986,60595,11196,61591,22546,44653,56368,70098,24860,54677,71339,75630,46374,63231,68458,27720,98158,33724,99336,81153,86092,16288,93864,35604,66341,96203,73170,43314,81375,22047,36240,82427,79117,78111,35958,23733,41719,87625,70403,73972,96294,11280,22843,62333,52147,41224,83354,32855,94957,89293,29599,39108,72496,22206,96561,21481,98929,88469,15691,37724,35894,19569,31402,83353,23011,77171,63627,48640,54693,76584,58714,78864,43355,72074,19237,79358,89730,92234,42612,79086,49162,62640,17408,29265,77652,33229,58513,90342,91722,56160,61525,35623,71129,36865,80977,19767,89577,20975,92611,27287,54854,91115,26994,38099,54250,62450,45178,72909,44385,96846,27250,65892,29074,27403,46926,43064,10507,65519,14448,19801,24581,74403,90530,62631,90042,31978,23903,38607,89577,33659,45993,58738,64584,81137,15091,20849,28418,84059,65885,89373,43977,37181,92761,40916,59564,88665,22106,30885,39900,95674,62213,12903,99851,36651,82623,81111,89160,52063,85485,70917,93179,43961,65606,40962,73500,35151,63912,68864,16339,95688,96387,19204,98444,35839,42516,72085,35469,35550,97647,24768,10560,72336,72736,97498,19622,77144,97961,78980,60687,29142,65764,13380,53024,18803,19304,57139,16926,74600,38324,87329,63436,53878,92619,65543,94927,49625,59559,88861,10812,64217,71474,75935,64621,19729,92022,75969,99897,70547,33505,57040,72349,75952,32685,25464,57872,66898,90726,41234,78089,80519,19060,34094,76719,49309,88252,94677,24244,72725,15101,48707,85918,66803,81991,58271,98039,33616,63389,79119,78195,19330,16625,21493,86695,24849,97633,58408,30555,51997,57436,49738,98014,73152,32311,81732,56197,87778,25444,27756,65511,63946,67468,94996,89733,40783,81207,75367,36814,91905,48654,22631,81725,33200,11655,53466,60502,34488,93272,57914,67706,26220,83114,63340,55173,25811,98381,87459,42086,93540,85513,85427,63693,75192,57016,29446,15519,27309,51629,39987,92733,85422,20438,64874,10943,90246,70064,37717,10976,85968,92207,36948,30442,63286,56021,43058,25525,54580,25386,28476,19957,83525,53261,93016,33017,87432,97938,34076,56768,35438,36098,16486,14373,87873,21215,92815,16669,44553,32717,67795,37675,79705,53678,78600,59041,14565,10412,83407,19245,93897,85546,43311,84614,31837,63269,92339,67291,14919,26924,96777,59244,68535,12206,47629,25855,72133,54575,59760,13988,47265,23925,38339,12489,86653,89733,98915,40636,26055,69962,75700,86326,63264,28224,41103,34707,78646,30495,40250,82038,99383,88267,21521,42316,58126,18604,13662,29922,20817,19252,57592,21198,20397,25183,86380,69552,87709,62298,56790,65025,63619,92017,37151,11022,33801,71409,78933,73719,20185,64907,29871,40466,14087,40634,44224,74897,84486,80317,25732,59201,95204,71769,53794,91397,62585,85868,98040,38891,74367,82650,21598,98931,71748,46138,74549,74357,19680,49800,32292,35627,85216,34972,41800,50671,86033,72729,99231,51580,93567,82223,92991,80087,80093,84871,53681,66330,79967,46115,43806,39045,38809,58424,76026,94844,83059,14575,10465,18875,68917,49465,31458,37896,78243,81864,13958,15616,91304,89495,52568,68384,81418,80943,83340,33014,16642,98894,87545,80354,73818,46416,61481,70743,11400,93105,80579,74329,14175,46152,49393,28801,30904,41755,33978,53752,40466,58262,34491,34883,63798,76805,36766,24530,25913,46857,72754,26135,72517,85594,47055,15384,49711,72215,21982,15922,28495,22585,59967,24395,65504,24504,68925,56003,26719,27346,82801,42904,38666,24135,67771,15857,31684,21854,72083,70247,19124,64140,51807,97222,49041,57976,23223,39949,78704,61852,26433,71338,23645,21952,42316,49884,24038,63844,75671,95329,14188,96171,64459,77408,23760,75158,25018,34546,92547,53734,63579,32509,50442,39868,62960,68032,67602,32037,49998,35266,53660,21696,61984,24961,11006,40527,77037,22296,29641,17045,20484,62076,70606,47447,80632,36201,25318,84381,78398,32511,29895,32510,50019,54504,22563,54070,57433,87634,80279,23598,70057,21692,27518,13276,49759,77867,75231,67234,66395,59306,20151,18800,14236,93275,83717,12987,87569,94947,20355,69045,57414,25004,97584,43283,59162,48457,67449,10237,79928,36759,39279,73335,63336,66274,63110,67882,67995,40837,71870,31410,92706,15139,51928,94408,84905,32143,95152,72189,30999,83051,30269,93121,49755,22114,39343,33529,98580,39805,73607,20828,29497,83637,89400,75988,77281,13708,96341,92557,84809,63388,87581,32481,93352,50645,17886,57895,23956,19755,13575,47956,19589,15337,61739,49503,14451,71630,95322,49983,60017,78475,19915,28315,50537,54468,61564,16495,52661,34672,67830,71279,89837,40404,53013,74530,88343,92429,48054,11127,34991,94923,86472,47907,18993,96736,46330,67686,32612,63542,20657,28463,51690,92140,95580,24653,50783,45019,41935,16114,71973,38415,27723,18480,28617,20332,23277,47488,55564,31719,36115,98983,83740,82491,62071,17722,78203,34122,31228,65966,66374,85476,77082,28082,24810,20015,34204,70957,82954,25887,23923,90455,10501,90028,33804,28617,81936,54815,19585,93021,81927,88500,38787,14209,91515,79900,98764,19004,78401,42677,26931,58840,64789,91468,67453,76388,64786,11757,43457,67297,36217,47897,68784,53940,14974,85556,62483,55630,47437,50988,64831,12083,79372,42930,62958,38673,56313,44363,53947,93899,72125,11074,81816,64889,90563,85712,74246,60382,82940,33897,91104,30939,41766,56389,62694,22487,78235,49293,45647,39879,33945,83022,37445,45087,66067,90075,91434,16198,81917,53769,45144,21771,79902,43160,83268,38577,64443,82426,61391,69908,70415,61197,88913,10512,75284,30614,17596,99689,79933,18324,96736,55543,14668,65155,25878,27713,13413,24325,30877,33423,74662,29691,89016,28477,27715,36255,35868,11968,70298,61012,31967,76271,69099,41674,37010,97112,54190,88022,63403,50379,45844,78923,55266,54824,64644,56556,58601,57350,48988,72315,44613,30696,90863,82268,81346,93602,54682,51048,42839,56932,53251,12477,48695,81897,15759,90053,38046,47573,56405,24510,24575,51652,10759,96013,40854,63844,70592,95544,84274,38905,97545,13633,43901,75477,75946,48401,29590,50745,92187,20570,30168,56043,54042,75352,26478,57142,37471,13641,88172,68621,30583,59064,16147,40150,57766,24915,72552,25839,32305,26647,77104,97011,14966,38372,62409,25580,64873,46529,91880,35646,13024,96440,12851,79919,94666,63240,76233,66300,89006,86518,35624,64613,80094,13608,47560,16353,16416,87491,81977,52120,30281,95050,40395,60866,56283,53781,97599,49608,58239,31356,36352,51682,73258,87813,83251,67030,28714,32141,46369,68510,12006,45519,65428,14121,50466,59796,26078,21315,31129,49247,36892,96264,12892,70189,49371,13575,91588,61645,86178,48931,72048,39965,88674,20982,89465,10084,25340,65840,85718,77272,32582,10655,40375,48526,70545,21547,31875,58268,35098,37246,63378,21302,56730,88771,64911,80477,96223,88162,10242,33545,26725,55158,30866,12246,82552,13037,48568,19010,54099,61563,63737,31915,48346,96523,78600,63267,74192,24150,25335,88471,26771,28140,74739,94198,91633,10760,12375,83974,54579,64703,58950,19551,21193,73076,23327,57868,37207,17263,55026,56043,69948,88484,52404,21110,37375,24046,95964,49154,25017,62983,58603,82338,24589,28688,10627,57159,75487,82202,69362,70976,62519,88666,50409,93514,57514,19344,91826,35225,38182,54885,11365,44884,96718,72832,96234,66783,64125,69689,33972,99457,39858,15069,43144,47735,47997,68038,96959,62037,36049,11836,12285,44356,63604,86568,34970,78219,78859,75725,46515,41827,65485,57666,96796,28189,11942,74041,93954,62194,43980,23085,31036,52241,88416,25628,26012,15096,60216,14503,93536,65219,82694,21434,96159,11227,27586,56118,28259,57926,30282,65200,71423,62038,95413,81072,87989,35466,56972,14381,20871,45824,94615,39595,41991,63597,14126,51877,48897,88985,20342,41320,34944,96685,50074,54994,86389,86817,31032,98907,37962,89857,17126,55142,14790,97938,99562,69285,44974,26133,92099,20087,19521,31824,96321,94021,75033,28790,91093,31580,79024,82220,18314,29683,92205,89991,28525,90426,36399,48056,78528,15807,62586,40218,51204,64037,10401,87953,14104,32979,31382,14980,89963,81938,84571,45788,21725,57944,22056,34181,34741,47652,96683,46549,42069,81159,22458,27399,59478,58010,14442,75519,86347,47550,76558,98595,75644,38126,52982,10430,22673,44255,55195,87609,18954,84275,57961,77409,82649,87492,15017,92287,28454,56617,35438,73176,31535,72848,74616,31348,56854,26267,26878,79289,79562,68369,77410,68564,90187,90707,50133,64568,64268,29363,77938,58979,65472,55537,74457,64005,48676,73854,93865,11345,43956,84018,70036,20797,55719,90185,26927,44481,79983,59726,24312,70517,21575,60325,96038,64539,24191,19884,75385,75871,86487,35750,89113,63111,31026,54252,10302,35031,94151,65457,69467,91432,62269,64110,14251,41048,48948,35986,73162,74640,68213,82458,15490,97944,98502,74007,40800,74560,66231,51402,23876,97867,28436,72171,88087,75064,69149,37631,43649,41811,65341,66281,96384,46138,23484,11708,48558,16741,98931,58088,26426,18159,37527,74851,95340,53498,35208,45800,48152,34793,24290,40031,37788,94500,37813,10982,14785,14004,50551,37078,40057,40083,54730,26355,49375,21441,34134,14824,48332,42481,84850,23227,30638,80319,19740,69494,38288,89026,24617,78710,21933,50557,96048,88282,49906,99375,57631,67913,37498,63901,73084,83255,96741,15961,33156,13502,67464,72568,20799,69658,84501,23571,72369,81606,30787,18175,36413,30345,98190,80217,61412,90063,19726,34592,96891,51811,36218,63572,12633,54196,61736,55049,99521,80785,46237,22366,37153,62199,17015,22272,18766,82042,93516,25526,46427,38844,27265,66875,53865,18107,13752,18299,92016,83976,86411,38763,32349,19675,76239,37727,13341,98017,50413,96855,42849,88565,31113,43931,95742,78092,52824,31000,36447,18742,74610,76060,61858,68032,93889,64277,19697,73842,98236,87299,95719,77855,32512,72745,95241,47256,44895,15572,84984,59126,24780,90862,86302,52648,95280,30352,63507,35193,94482,57162,93112,84770,92859,84943,48937,64645,10493,83090,31583,96245,31865,64872,74988,85241,38561,95613,66871,10372,14043,22796,60678,27054,79255,94043,48513,51555,54821,12331,64076,81367,94587,14812,85084,91619,34378,21678,54661,89735,83410,63896,39869,12826,50634,98189,70965,11609,29915,86112,67594,51431,84355,41252,98528,21685,66878,23035,15519,33022,38952,75913,15521,93357,27268,64172,38968,57944,70603,56174,46269,83442,16333,53724,28203,89098,35279,40028,69003,50680,32035,14878,60968,41059,57433,70946,27174,28771,99544,12520,16536,48187,33603,33082,85984,20055,48200,56113,99820,48768,82223,38353,49560,88034,19277,60466,71255,53001,34039,91168,63998,45759,82473,19292,33557,98060,10244,26021,45894,51239,72663,19411,60386,82191,40689,27283,98912,61019,78495,97650,24969,82065,77803,90388,30997,60289,96383,90408,74835,70913,34372,74905,14190,95304,40479,53002,25204,99985,65560,90754,74490,48552,26202,90292,57551,97062,80515,25146,83934,99131,57253,69749,53013,80530,68755,61263,21496,10949,31024,17356,95216,62692,42255,50468,16752,89990,93314,38793,21752,35145,85758,13522,15128,92014,17300,42285,37414,19076,60020,77990,42905,78435,22473,67791,24852,92865,46635,78832,75232,47948,50229,16757,13508,52376,31662,72146,63867,16559,57942,47317,36176,24497,30552,57470,51162,96163,93441,15341,63946,72734,20557,82246,10634,41876,77973,42553,69341,91249,74473,77886,66011,77803,56255,78105,86040,19800,52681,71602,43756,92894,87269,11734,22995,26879,69138,94873,26735,96533,93129,16855,84168,38577,16104,12599,97675,50066,11722,39956,30831,55538,11146,40294,12678,76019,64064,64713,24934,27472,67394,92209,30530,12051,80662,75268,57651,27845,98611,54311,44086,12039,14688,24695,57216,49095,61235,58823,22797,45111,87802,74518,72933,79542,40267,39642,78909,22882,91765,88821,29717,18469,57050,28795,48299,42841,88274,81133,57890,11300,89623,81417,82916,48681,55117,30546,10906,50395,80176,27476,60040,51535,71728,22835,95485,12543,10002,35335,92136,48417,50485,58134,39551,59043,97785,46654,39533,67679,89823,14602,93614,93933,69027,40810,93793,28598,84956,42931,25553,99695,16388,50956,22424,37214,59180,64432,15711,57729,85375,15788,53824,84295,60121,19755,45675,73540,15607,74241,47927,51431,35072,77097,94875,66281,20421,85616,82170,42684,42779,10683,44464,97903,47967,54644,44652,16632,22825,66681,32360,77237,70245,82324,95020,66354,31455,83859,21905,86928,17577,67106,47406,45275,49930,19970,97649,29623,45652,18469,38824,93517,82587,10887,14836,12997,22817,22033,44780,37418,74305,52629,90651,57338,68209,56671,83713,96350,44950,78259,19845,18364,48068,43358,22423,35159,80814,74532,25065,30678,40037,79543,73456,33799,90183,58420,43110,30897,76024,69727,17693,99311,25626,88345,28643,73117,78682,29215,39592,96530,98003,58872,56562,64861,64367,23747,11852,68154,84377,43156,71354,55924,15729,50974,27014,70749,57558,62091,85519,31771,47400,38253,68389,61829,56117,88990,32282,86060,10714,68046,31172,98323,49054,69087,91839,31331,71907,22555,80614,45148,23296,78815,25740,12706,19586,21024,42936,83225,16101,85831,69238,54067,19916,51348,21620,28608,19571,87449,12364,48048,17850,42501,97480,94308,39738,13340,47780,69915,44271,49566,73682,58550,63403,68279,18901,27173,36548,26061,86815,58147,71995,71671,61554,87517,34537,44714,78623,96465,36718,42477,42624,65967,37282,58732,32234,94742,41627,77497,68346,78356,42295,73910,89229,50573,32549,97528,18589,42796,63837,96907,93140,25821,50987,93646,77091,95195,20348,98482,39837,20965,89692,24353,65770,20396,69928,25878,69049,41086,93870,49455,52049,82028,25688,32172,59045,77063,86267,16629,68784,11626,33725,55183,28291,85123,11035,97035,30665,23529,17233,70914,97940,72156,82309,72018,55315,29304,58033,55058,24046,50816,45761,28838,38500,60892,64559,31460,59070,65650,35413,80518,91919,70107,37495,53823,46333,66340,59788,92609,20866,84391,91093,59988,33622,91029,19792,41222,86152,18014,93706,87057,93602,95019,16053,74445,76079,80896,72103,94120,88970,54896,17716,62450,77687,95120,75055,97416,62059,42309,71719,65018,32368,45044,13700,13676,75519,47211,63022,34866,72800,69848,13020,35219,27479,44650,35033,54645,14300,74178,48669,21079,97230,88133,16896,17184,78427,95713,61834,38274,50839,70636,45842,79019,64527,55184,10931,99586,46302,21664,55554,84214,91683,57252,67986,64042,78456,10079,43185,87341,43463,33122,21393,70952,83863,39099,31713,82837,37583,15739,95937,17912,74700,98293,44937,90684,58738,90852,75255,42975,45270,92128,33628,87057,68530,21603,53013,35482,27087,10800,84022,17693,94161,49590,59288,77074,79947,36295,49967,93671,52711,39063,42140,59836,25304,91052,86680,41623,34901,70524,73770,97959,31243,93561,71239,81221,36981,46163,28653,83142,17372,76554,93549,67579,43966,92819,46335,17248,10624,28728,35576,23507,65492,82441,90121,34761,84651,72021,27093,61364,71407,45099,94872,56203,21884,50834,26181,38178,88396,77131,87599,30053,21677,23109,82600,63721,78630,50443,69344,46518,56666,38846,37878,88419,46601,71953,60060,14829,17202,16476,25976,46997,37908,85856,43211,58565,27003,80162,29655,93987,38412,28344,42073,72482,35417,86184,49699,41306,43254,36637,46656,20520,27364,68140,72437,71407,78909,26247,53227,37920,53673,48178,16282,31463,66061,50627,59443,41723,17339,46763,21185,52303,91952,63067,83476,32329,39202,37130,97704,52049,87974,92928,22558,11361,97564,73513,98517,30786,31561,86382,53774,90526,60438,41084,90544,93564,64915,97967,63382,75637,63473,99255,80984,55636,95685,48616,50440,63807,72462,81224,85958,46364,76366,42265,28426,85995,69343,18871,99280,49892,81227,35987,69496,29393,49757,39507,12016,56922,32013,48584,55139,77796,79127,54633,54187,61128,95428,11635,27795,86889,98647,80855,35329,40303,51986,64246,69868,35764,94753,46322,45832,51109,39667,52463,14352,12061,63470,21061,67447,64245,61362,15784,64728,12667,52055,62995,31815,91130,53383,70336,13597,44644,43817,96065,94917,80568,35178,23188,97097,66998,32022,10809,23564,52911,42012,39692,34420,57492,29303,31096,10216,43299,21941,88854,52805,77262,58452,93167,34293,31261,11580,72233,73019,14203,41911,39584,54587,84189,53044,88851,16007,96138,89898,67976,54846,61662,25779,45998,33224,67382,14948,98878,85247,42468,54162,75874,38872,16024,90960,93545,39452,91842,94496,81270,63261,26243,13006,52711,17148,73347,47997,89062,98627,67792,72238,24832,80189,80729,90295,54603,63815,41269,57895,62357,80109,91506,77366,75701,53977,49519,38230,32494,18859,21971,46011,88423,58623,32907,71687,11392,48645,95540,11082,40179,86138,89366,17704,24791,24962,25575,67420,90277,86011,98443,86749,46329,43148,13726,23508,43055,57433,26932,38114,36686,61259,51212,32516,99815,67206,18879,70632,89020,17059,27881,19305,17289,99794,60433,61530,92666,92817,88372,25424,45797,60398,29379,21782,80647,98426,17233,69280,88857,51730,62867,72391,90831,64181,82387,27088,77295,35147,11036,35611,71879,50736,79915,73349,44023,68102,79390,47127,13462,43588,76276,29492,43936,73581,36554,44865,59914,48402,50663,38636,64821,23806,26897,76278,49597,38356,65361,77712,19348,58834,86418,26889,14787,35983,21940,24431,11745,25160,56106,80529,49762,22433,35206,49505,72638,79399,96609,81565,24299,76617,23074,12199,71327,58727,80959,45298,84832,68899,79716,60462,28615,28932,37324,39346,20822,15649,77222,64951,12923,85941,19454,18915,31441,91373,34863,68900,71327,34353,97304,82470,89630,36008,54785,47981,75251,14222,43824,28622,60423,18998,12822,15003,61576,10321,98134,57651,94569,26228,42638,71803,34759,88716,57315,91500,82865,57919,35061,72135,52400,31905,59242,59569,92662,43738,70014,35320,58990,77119,95097,71318,48667,23595,71615,16592,87499,61612,96968,85529,28194,99474,27342,54292,34270,71087,62924,38553,39269,54230,68201,55923,31494,98843,96902,54077,44421,84968,53988,24396,38991,38349,84164,70104,96750,58019,31971,33676,92370,31141,12967,68896,80059,86930,89613,76618,89006,31244,57505,44409,10898,31028,55689,89312,19280,40839,94232,38444,51883,73967,66856,50661,83670,52063,63980,20156,15474,60850,18732,34181,16337,25915,29925,33816,68238,70354,57477,90906,82869,66104,59102,44202,21279,96014,16243,36202,82565,98465,57075,31591,98975,79517,19928,56461,69139,55751,25370,23678,51940,63309,52409,52019,84077,45980,72153,83662,87255,51236,87368,63157,44251,25928,18515,47193,71676,50437,18792,79030,37710,14526,75917,51929,15369,18084,87654,84828,92160,74966,69897,32097,15705,95659,70597,43646,84139,25453,42429,70302,53597,41410,53314,59836,95701,89912,27067,26688,86879,30598,15395,63314,12986,97198,66180,32344,52180,13246,28887,86015,50018,55217,39273,36996,92087,70601,85910,14442,93331,14040,58043,79714,88799,50343,86713,87996,98364,16506,97026,86247,90907,45679,96310,48244,65244,54145,50593,16577,30193,17647,11397,51478,97596,80097,68393,80516,99439,12621,15356,44205,22276,59104,44777,99444,72965,44439,48784,38620,23049,45596,53065,16162,48261,68889,74498,65221,13264,18495,36015,12637,15526,93256,75013,15869,60142,29566,99408,89227,28991,60282,92673,29917,20080,27777,89608,13929,17569,62902,72961,23312,76201,50597,40591,37034,31245,58167,27071,74511,98359,64419,14783,41777,73885,84151,45153,59138,86108,39912,11095,73856,62934,76520,63449,49003,72750,79377,76100,13710,93609,13401,17826,33109,19049,54777,94745,53971,97636,58415,97643,84696,25778,29961,91850,62231,46547,84033,53729,40281,14643,31228,57369,17702,91658,70151,50912,20980,26901,11304,38544,88039,94029,42577,70192,54914,12704,58820,77899,42683,87348,53961,33378,50333,42443,70227,61859,37875,18746,14734,48612,88212,41180,34664,96030,19285,45534,39913,78830,58667,47557,58121,15492,92718,31787,98790,53356,17542,68593,38755,25681,55188,67000,76761,42809,99316,10057,81572,64842,81943,61772,50977,42110,25554,53307,44323,97258,65714,84021,14554,37637,31463,69714,48922,31360,26715,24677,51279,35108,18871,67601,49042,16763,40447,17829,35405,35380,39399,90241,41803,48483,27108,56866,87000,84715,31221,91907,90693,86514,50619,94369,10887,36176,48237,58079,32371,91455,95568,58858,66045,25953,83594,75285,77087,27383,80177,14130,56750,79698,37636,42141,82383,94345,81981,70492,92903,47375,54872,83910,60674,92294,87541,26827,84426,32169,80702,28397,62736,87948,37551,28448,86960,61956,89238,31919,59678,80784,16170,19181,38691,29334,11856,40514,75876,62197,74577,39942,31831,32720,27105,38710,24701,23396,16332,98157,52631,98794,19581,90792,67041,37254,69036,31416,43669,19879,10147,55598,56758,42356,39559,54221,47803,42093,14916,82006,11771,12107,45059,13575,27121,16444,74777,19462,13955,53163,78727,52442,87830,68303,59474,58721,34485,22902,12372,63680,22554,63277,81780,13541,68809,31970,63569,13987,74558,57677,83075,20175,79034,18675,26196,62347,17788,19964,10088,51001,61050,26666,17741,33198,80272,90064,71601,53593,62545,34636,47898,50490,64084,52798,73877,87685,94528,33478,60034,36263,20179,46692,86216,28307,57625,93488,23748,24933,25968,66966,86737,16275,64397,67191,12455,44449,43724,76519,51321,44447,88996,70968,19814,38918,70217,31669,61261,95780,17435,18105,10889,76320,47872,47307,75540,66915,65629,84026,66108,83349,29880,51219,74177,18697,19487,76475,27999,74237,12331,54449,34294,18858,58008,49291,70427,57650,83980,17787,22898,92395,16098,73847,29788,56931,53475,31016,40971,50156,31674,96099,83830,38426,43392,97370,75325,45362,83439,36018,75116,62615,98394,74822,40930,49487,32141,32203,78120,41389,15683,75110,78923,68274,52150,27057,36552,84605,75192,23528,41592,64731,53777,98746,64878,40900,18961,23651,22138,85923,15125,99097,12618,53945,63976,16949,68391,84418,49732,30099,52432,16203,36725,19905,37565,76904,21482,87185,71016,14575,86556,41760,91330,26384,40140,59271,77955,66996,65016,83028,24108,68522,20310,10349,61023,55784,12452,47752,91961,82477,80753,70440,50437,87049,64434,46546,85848,63014,99589,56908,18854,56331,86865,41737,99129,83523,31170,57690,11035,99924,86435,57305,17813,97171,37222,36979,85635,99145,28879,45093,84102,57113,76708,59891,49495,94020,92020,64719,88874,56612,65816,62171,82706,18733,99388,84152,73956,26049,62255,81653,44070,52794,42662,14875,75098,32149,26773,29405,73097,83622,22434,13673,32741,84320,98277,70117,90179,31026,68576,88180,84120,20779,25747,61945,60990,16303,72355,29524,55442,59628,87121,90209,36522,86132,73364,27001,90274,32504,42097,94005,98686,48948,63268,33540,62277,42726,55673,82089,22016,14458,76563,37206,70607,90935,36994,57815,72784,84919,80573,37141,56690,69626,13148,40920,96691,49939,53875,52263,42752,43818,93389,63226,94880,60189,97367,31742,90016,19074,63228,33503,29491,22826,41347,50274,24652,22541,33544,29238,62506,53154,92633,69797,58425,30973,47872,78400,56772,44030,93192,66778,50880,45015,43028,29118,54406,61531,82585,81364,66067,59745,46517,37116,16544,79331,27153,21528,49677,66412,51834,53958,54355,21307,50593,72987,78884,20562,23106,74430,69872,92535,74623,34648,75583,15380,12482,33257,67743,16293,99116,45072,33092,81591,10019,21775,27041,94367,15131,93390,13022,87260,21711,21258,96509,63883,87274,44955,54724,57403,41476,44179,95468,19645,46030,86575,32611,69375,88864,87467,20932,89936,68496,39462,67143,31215,71079,82918,71257,83290,97780,24103,23341,97776,12353,69122,62157,88194,29642,65900,15020,69508,54967,45500,53737,32082,86441,49222,60738,62419,18321,30747,45374,20137,92916,92797,70844,80153,64993,62603,48036,28443,58199,20083,88484,91576,67745,79502,28785,99694,19919,42093,30617,46190,98621,73454,52649,74673,92441,67217,71131,51905,89318,14275,66527,28658,80850,87808,33775,38412,54677,17361,17485,62933,88223,20321,40367,46780,92612,16615,26541,68882,54675,77017,49719,98666,19058,78597,90789,23444,52100,90691,78429,28870,86297,81154,28765,43991,21654,12440,48535,58335,38406,42762,65589,89778,47760,84001,67087,71094,30571,96633,49015,63499,36429,69977,95587,76411,12960,17768,72635,11415,77055,96350,86152,94317,13746,75365,87844,87155,21700,57403,35117,28306,27484,48633,33701,94461,32225,74486,87093,38643,95287,35885,75393,17639,85770,35817,30113,92714,47115,18997,96143,28869,53436,54269,12902,27205,86285,95472,29367,26978,41863,54675,22478,32113,37332,53422,63121,20581,37528,96357,60069,22511,88314,90530,85122,22316,67443,64539,82963,22668,33837,76868,39051,56466,48608,93461,60546,98375,44220,50592,90431,67182,70501,36891,76822,85634,52303,66984,45547,58397,81601,51461,17184,96221,38513,73462,35999,79908,89523,21820,53514,85609,17893,19087,41337,48750,88238,76182,36941,17474,75136,28939,67952,18954,38521,79877,61869,10806,60082,36160,40322,76438,50859,58602,22705,91955,56473,56744,27129,26352,86706,45566,15442,45550,68874,32984,79087,54052,40855,10358,33907,64929,55395,53602,18657,61170,66691,91365,97248,49064,67706,53658,81369,10882,98565,41023,49217,83076,61082,87203,26695,98267,72626,60199,49358,69521,75862,30488,77522,21285,50274,62428,20703,84741,41752,58176,80287,41197,29440,91336,39405,88710,70466,52928,35891,78498,84903,43832,22381,19142,94575,32710,92451,35095,15039,98787,65039,59430,43685,28560,16468,45006,29451,83947,70203,83883,32193,36634,54064,38668,75156,40824,79576,84116,18700,28118,90440,76650,92275,36325,45064,54271,99092,46111,82341,56629,28879,79306,17966,13735,47363,20474,71221,14089,33479,69804,84696,79370,63957,48737,77142,38936,33831,64332,36182,37737,81794,72442,23030,90362,86854,85358,80844,92814,33016,88922,79847,48638,39969,60854,66589,15602,83608,87563,13871,35954,85895,15631,90760,37900,10043,79849,14884,89243,82894,66557,52848,10777,92687,29597,10885,97100,88093,39008,66853,24908,17128,20113,77568,23386,60671,26994,32088,59874,45177,97118,49692,24363,10916,98328,42322,42173,47146,57765,31766,24464,28353,35766,26690,75139,68891,38345,16758,29512,97591,91932,78777,81236,91820,41708,82913,93275,90447,25495,81511,64033,17233,19865,52841,90124,64125,27673,47131,17771,19282,72914,12339,21060,62147,57202,25883,51944,46136,29539,20828,97064,41216,39964,56710,89676,58965,59452,25447,56459,85925,68340,70786,49892,76668,52277,59602,88731,49265,60624,77423,46829,22355,75285,96748,23788,41942,27998,61120,40151,74351,35126,37972,97635,64269,43336,32902,54446,57360,48539,37828,65922,70110,92212,42474,36311,53304,51172,57271,38001,44742,97432,54725,23907,37678,23661,56433,95611,74150,92203,97585,42630,47059,18456,88308,29379,57792,58708,29481,99797,35125,22456,23796,59956,37369,31469,77601,46644,93252,63003,81076,28511,52459,91742,83536,25434,20136,58978,33445,41453,43800,68158,32569,42703,98138,45861,60636,30095,70910,48144,14847,80977,31074,75156,90545,20738,87348,35503,26602,36574,78307,43484,94777,19959,23059,20094,41060,81545,47009,19491,26380,61350,39070,84048,41359,20031,89473,64370,17528,79284,97323,78954,86338,16688,85233,32141,96230,46318,22015,85203,82130,90489,21287,60989,64313,68798,85026,71745,90824,92671,76316,23938,96225,51565,91781,90790,83141,45907,28265,82899,52283,24110,90976,58113,89790,19563,91217,79431,82761,95673,79734,84369,22135,39178,63488,53515,63097,72047,10207,84876,69809,68207,68523,91309,99213,53311,95286,52691,24876,64446,57740,76464,42602,34527,36292,63754,73378,55086,86195,44785,18125,29783,19068,55103,49364,64805,66655,16826,62199,31503,70152,11545,84652,98954,83577,91926,28514,16633,13443,87395,62097,14513,83694,90217,61578,32156,97703,37287,51382,63595,80619,57657,89795,65592,89871,29222,90658,36527,67611,86648,69212,82864,84834,11822,65946,31107,45514,13539,95880,35625,67633,14097,23861,84231,15882,28672,32166,39735,18823,84537,20187,29262,91130,18670,69921,60346,15488,13292,57336,89942,49905,76559,13570,77513,55418,13146,60805,56588,30527,68516,50610,42162,83529,21997,34679,36428,38451,17928,21605,52519,38579,50003,47349,64725,28077,91210,76237,44078,66569,84038,99488,76628,37074,87248,48992,76423,58650,75095,87330,94309,55549,27437,90582,55222,83125,77516,48369,46803,86004,92744,15520,28838,85619,47440,21340,69046,50742,76693,52402,26975,24907,61653,20150,61233,53369,26882,35063,18822,71705,23986,67990,18729,13964,67349,12292,71463,68456,17657,42765,17977,74636,55100,43910,26306,12524,95186,71810,12657,84246,73824,71313,21524,44122,22213,13672,39530,12446,98141,12589,58656,61234,49464,31288,82708,51624,20843,16894,36266,78413,97002,67472,75172,78306,20714,33763,67699,32975,10520,81602,72062,96424,66436,21698,63225,58837,24536,16587,28399,96498,84986,42251,73199,43371,82511,73204,35134,16061,94773,10142,14572,90237,87836,86132,60183,93248,58110,22475,73785,40792,49197,26940,90584,28026,31707,49765,13624,56635,32443,67441,11284,57915,81361,49885,60960,12701,24919,48286,99119,38615,83303,58415,64988,45223,12868,35559,60683,32635,54389,97454,88253,22665,32064,12223,92038,60905,39336,14392,95210,92368,68132,92265,11900,66214,46605,23454,25790,33433,24838,24169,59156,79613,81041,37173,80482,53516,70541,40754,26271,55708,40861,14404,31555,89524,54678,26995,51551,12466,76633,44809,42139,33358,56632,21965,46223,33283,14453,28310,37824,91689,49312,82354,49315,93643,73326,41635,71154,40709,44471,96812,85483,83128,66054,69039,90688,90485,42123,96223,63361,51245,39211,73837,20710,22584,10901,43341,86491,22230,36479,70190,25041,36261,96427,25866,90853,51503,66752,77204,74777,41125,21559,30869,19002,57937,78157,90812,73985,59248,95059,25955,42530,10055,66153,62660,50476,30533,15025,28333,24876,76667,67574,89850,85285,27890,87671,20726,28129,38717,27826,49417,89921,31551,69076,15893,43149,57493,52201,39138,59001,65165,30006,71233,91960,28687,44608,62596,73778,62785,81542,27090,73276,51996,21063,17521,73595,75979,68732,47837,71884,21559,10784,10560,79779,25792,18216,93606,17581,61840,71606,80226,40867,68560,17534,10698,46328,44780,13925,34750,31108,75037,18025,81558,17444,63441,31584,58939,11940,66920,98810,35713,33182,68840,47854,13563,44255,63840,74225,89862,50620,77218,25563,97444,45953,49462,81653,74632,59638,84870,65505,19953,68115,51555,71660,72249,66585,86859,57899,69864,51781,97060,32106,36303,26211,56123,93689,91044,51991,25789,58976,63580,59079,32314,67721,75379,30668,28953,87501,87012,51890,26768,99563,48459,10990,86936,27267,87760,97023,40318,25303,40093,21002,75155,93060,47698,71595,39467,54456,26601,23720,96775,78280,73528,95747,13987,18537,50913,63788,75567,81910,92898,33374,74847,57719,71441,16588,51925,36796,40178,76438,81295,83315,34341,52883,26687,94028,24727,35771,35544,80148,34615,27079,54015,33201,83221,81472,54805,33011,48413,26842,17478,30797,44024,90824,47904,60870,59249,99482,45098,32787,16726,60064,48498,87595,87471,51570,57770,79355,20373,98221,36626,37095,14772,50376,98313,52683,30813,88440,52055,50971,38854,99468,28424,62787,81782,31729,62483,57373,87460,71623,10565,67216,64369,87461,74913,89842,52944,79364,56509,67855,15606,52127,36338,11606,18176,66516,65303,71457,38295,48857,15888,74177,38436,18980,25829,45178,95362,20625,13500,68667,23067,75850,15309,67234,56550,62704,89519,17158,19197,39615,10411,77879,50045,50955,96892,28483,71916,12028,99140,91521,61706,53933,27389,97750,95051,92698,26372,23673,11212,36780,98420,46869,66497,80875,74689,40473,12045,18322,73868,19976,57908,78091,53422,61763,56107,73290,39062,25931,93515,26069,41022,12252,71903,34574,70004,54566,75193,89372,35532,24316,64990,44847,66019,29132,26919,98219,30807,56227,53631,35323,84842,78738,97598,71282,29169,70649,29712,78011,54401,18842,24540,79551,45268,95442,70186,52607,26526,50899,21358,47919,21009,31617,73971,55348,76624,23802,67748,46345,13365,49938,54784,92484,84904,75800,45111,17100,98439,19437,45840,12181,77138,39908,75446,21570,39844,98921,79604,85491,32153,92202,73659,94685,63369,66749,55756,23429,88883,63095,42496,73520,98965,29906,55182,51803,42571,31056,96425,29545,14922,48304,35509,20606,94605,42251,94011,82365,82108,21013,64773,64892,25764,55267,84518,22156,58638,12983,55085,82508,71784,83132,50327,77371,13255,64133,47797,29804,99208,65430,83521,24609,15841,36596,81120,11996,91543,44815,34995,26269,38467,64879,55832,89114,57834,37369,83063,45915,63539,90612,15309,53154,96357,93055,36076,19272,33420,89055,10144,69259,49424,27436,19460,98117,91059,46785,41611,80208,48259,74587,69646,31450,98395,93581,58317,50712,21870,86338,49733,51673,33341,17595,97496,84828,83662,95745,58011,25163,37094,29000,13316,91845,71644,32371,94306,29968,68671,85643,58207,54522,91983,14801,39380,63954,31356,81308,92697,70295,18855,41443,77635,29698,57711,33053,99263,37860,54365,98245,20781,78381,10365,99704,21311,73963,46242,63814,69880,76364,45087,87607,73439,15869,26272,57940,45579,99518,69729,55407,34756,76089,14878,78961,54827,60738,29809,84127,76210,74052,99733,53344,78679,64323,60746,58943,91382,38893,35898,10709,38175,55735,11912,52791,52680,95405,37902,31754,26133,54141,74921,33622,94833,66214,19129,38896,89368,77508,46521,94385,81824,94443,28178,27651,25673,86561,10781,89041,46095,13192,68004,79216,97942,78822,19416,85823,59625,34816,62302,23335,56087,50631,66728,90192,99331,13041,57541,59033,62561,33234,57193,47558,13076,18495,99472,52374,81710,98395,81910,97915,14198,54477,17786,82088,62854,73919,91803,68636,80637,52936,52799,57012,83497,86744,73247,63202,18069,70916,94115,89032,74745,17818,59217,44184,24628,96720,68136,98886,88461,81017,90196,97994,49032,22918,67605,87669,29933,59939,57512,57829,35951,39631,16919,58704,63625,49348,39456,68376,23324,92858,27806,15780,51779,39659,76359,77533,48112,17881,31866,27506,39910,11124,37212,52962,39277,74741,73079,67966,39784,96510,18751,54404,53231,13068,76934,56571,39579,53027,51787,26317,85434,52921,81204,53517,66908,43948,62619,31168,28025,16986,90595,27572,40123,23900,79106,56606,38712,53437,91542,45071,77826,60551,12540,28244,41522,10966,31297,82714,50095,81901,50129,74759,63755,86007,54724,88863,15808,96731,88787,41947,37637,63716,24490,73516,87276,62201,17762,19450,92650,37122,41808,80415,77259,39226,88260,82103,89860,71269,30815,13332,12530,89916,38238,14018,55802,87671,11009,95088,42645,49470,10729,29123,53280,98584,19923,19417,30281,67287,99209,75290,35486,98254,91254,50003,22561,19000,83793,30541,69517,81830,52059,99583,10797,18880,83454,51874,71107,63538,90052,18356,16261,58518,21114,17114,83580,38065,28820,72436,50752,69836,41825,19911,74412,26330,55035,44398,19060,16755,90022,13627,38780,81085,30456,88109,51241,10110,66663,31317,41431,33963,84511,60642,37287,12792,45523,86664,94381,22593,71679,90495,59022,81872,20920,36065,22535,56684,12617,90120,29481,55516,77569,99523,45607,96533,91407,58427,55767,63174,44107,58009,20744,74731,45032,35872,74278,69203,18798,83147,60261,11638,75962,70768,90755,36586,53961,74584,53615,33506,22191,95024,35171,91727,75549,68476,59452,81011,83388,10989,25533,20974,92334,23249,94171,18934,37709,33442,31833,28721,29998,21482,71244,78863,87246,93575,44458,31537,23180,85048,33966,86928,21684,33200,46719,43637,90490,36326,77831,14944,90211,42405,36975,55017,24470,45000,82738,66972,76982,85743,71161,88850,93190,46767,16780,54236,60203,25651,67668,71375,36945,23480,87988,43205,15898,51964,78256,10085,48285,46812,50135,84728,63283,54984,46664,65288,41770,46960,18173,14304,67179,90376,66856,47837,84066,73045,37733,66734,16613,55250,41745,19986,78991,54676,13855,31657,90042,27442,57882,42072,76704,48295,87730,88874,64597,36070,92785,56558,72469,51450,35384,88574,92432,88186,70699,37553,14738,49886,79714,42558,50125,44299,58876,32408,10925,18478,67521,43571,42627,31845,97304,99247,10255,27383,84597,82038,13269,23436,37353,78624,38473,12244,27058,22594,64747,17537,49373,51913,32805,78222,93909,11842,26913,48378,19258,56933,94980,44497,42330,78970,38714,38371,91966,49723,30762,16193,39377,45377,23625,69939,77664,38132,50950,81501,27579,66978,29635,33137,18073,65609,98416,93098,87784,42302,92926,40824,50055,65050,29551,55271,44090,85856,98078,20848,55732,75278,36735,86626,52972,13899,69174,95138,13807,10282,65541,52710,26960,52086,12405,85955,76829,39951,69246,37115,19337,81569,78480,30000,61805,10882,28349,31098,11892,28295,59003,43502,63683,69936,27086,28820,17492,65525,97878,95804,73836,40324,57244,49170,17588,39042,50747,47685,59328,19588,17300,35658,36157,93173,48130,18902,65349,53462,54539,38729,18694,35258,96920,80387,52989,71998,27305,75435,64544,87902,33576,17723,34873,52213,84445,20507,94881,41972,69360,16861,38083,69437,90792,95670,90660,99056,96280,60155,26902,65883,10381,92964,44671,22644,35904,66770,85591,59880,67476,73699,17580,26336,77878,21305,32962,52807,35479,74475,92240,29212,19023,24684,47572,53309,97129,36979,56820,52581,33908,89628,32253,64817,41046,27686,76722,11437,66012,82828,81226,60024,90613,14373,65080,19406,96900,91061,24435,22019,63178,32707,51679,42778,56595,45096,81324,17918,15243,23964,65922,37902,11249,85021,52632,51069,98058,92113,95224,23450,76085,83990,56776,78412,35863,37508,64267,74601,36669,67818,57512,40312,76162,57954,68323,85883,16768,62217,49916,38825,31306,24264,91729,55094,78046,89803,46580,55187,59895,53747,67240,99671,90846,79727,26433,30599,37668,77266,25673,48978,19075,92142,61813,50470,97417,20893,99049,21102,71320,22562,75658,65906,60882,92059,43959,40191,40691,31158,70816,52206,58052,53482,11578,47825,87416,63959,32634,12303,34497,20897,12715,56674,92139,48488,50801,66113,20476,62698,30585,53393,90105,60879,84491,24599,42324,69252,38284,68593,34826,62982,29239,77979,81173,63418,80299,79687,39504,76403,92007,79588,35335,59536,96414,55403,58137,43346,74423,80156,32243,37131,69432,99603,71298,43485,46501,20710,33062,13287,78325,11131,71886,51065,88842,21226,50060,31864,31940,67634,78871,33259,62566,42237,11597,55957,54044,36450,89682,26798,97528,29531,88190,76098,58461,96710,31770,97210,71887,80286,76161,69143,21007,62754,80904,70101,64801,46262,33237,48896,87781,63878,63301,21716,30855,14533,31819,78587,78795,49125,86389,54784,90495,13992,83674,27268,71979,89092,62645,22317,37728,24600,64513,20074,72549,59948,84348,70506,29524,87030,93032,76297,99040,27552,59735,22947,87225,41108,42918,40867,28093,18666,95647,86238,17440,85192,38332,67013,92068,18192,79749,29767,28592,38090,77299,44406,74302,65046,43272,74448,49657,71365,38379,80885,80047,10187,14996,15091,45784,88828,34689,94448,92384,33195,30445,46100,29615,62264,75536,79897,99736,76818,88803,55295,26457,84620,87447,79499,94094,91409,56589,68113,64604,17117,46759,51383,58839,86193,16241,90431,32063,93721,16620,84680,96237,22083,25130,34458,25550,45223,80650,87170,79850,60048,20903,58360,68212,92784,15269,41744,88284,62855,30268,72948,48607,21685,77983,11619,62718,21079,30044,11249,76670,30786,64028,39553,97525,62482,31535,18228,71797,69021,93129,55019,42191,24174,93536,24578,53916,50304,92751,10366,19204,19231,89270,16135,40806,77012,37941,82778,83702,75630,62114,74840,51925,73139,71294,29702,82759,25028,62253,44048,74788,87212,96329,63879,46722,80028,22361,68973,56404,46366,75553,71330,54151,20302,59544,95486,69727,64074,87177,31963,11042,97925,60335,28424,36057,81488,93731,53369,10072,45040,63375,45621,95215,66524,80525,86577,95805,88597,83706,61962,45701,74754,14049,98413,65040,71860,64311,80058,50174,68542,82522,29008,71502,35644,17897,12960,60666,40712,47023,50749,49219,24000,92425,16824,19398,69589,13396,49231,34265,41791,25190,30976,83364,34428,94582,47245,26450,64793,37057,47639,72637,46206,74477,40935,25915,55822,64953,42380,20388,14512,22736,40060,55575,76295,11221,29318,51918,86946,32388,32316,15480,88060,53233,94793,51920,57310,52784,26475,55573,35512,72674,79710,24763,67804,19982,30274,36660,73163,61976,80114,28419,48501,98126,73115,81556,89981,81284,26317,59192,58540,23245,14449,82629,53141,36325,34517,76103,67047,87562,98674,23886,81179,64476,64570,63837,86812,30762,66092,77087,59712,81290,60934,31090,81981,55148,36823,94849,94306,53080,10237,66283,48229,11549,94312,81447,28470,83594,15912,84868,15775,67617,46568,83977,40877,90953,29030,71567,93469,68088,80741,85540,81550,63271,79249,91741,20784,98966,67823,78034,98264,37377,10500,76685,66427,18309,51043,80146,98257,55897,97367,42657,26059,35718,81688,47600,37958,57983,28405,37328,39685,13963,25485,93310,61794,59527,80188,59337,30202,73220,71129,22795,50683,70479,27225,20535,23235,14908,26473,83106,24283,28466,67487,18031,57049,88561,52804,35011,50302,73001,17571,24876,57053,22436,45781,68929,22300,37618,14516,74637,51667,30947,40329,16631,47976,98866,38614,32435,62983,91891,52052,86590,78134,14652,86390,63012,42130,74474,15385,62042,50217,24945,14506,92152,70891,14199,73496,35201,23929,75122,43353,39592,93559,88123,84250,15104,86591,99641,47518,88087,50149,97326,43957,49430,69970,51328,67040,57490,61417,34722,73018,56460,43225,54182,27559,43207,89346,49464,47897,17453,87590,66168,65976,64719,68837,37826,24885,94375,52382,65111,44493,92561,45105,98976,90388,52094,41488,11288,10345,91525,52143,79312,26521,46528,88568,42171,29219,38817,75483,49651,48509,62690,67710,71602,80585,94363,98995,81495,17327,37785,64625,96164,82326,54097,20505,30856,89840,44870,53372,74584,91231,29756,70122,84955,18500,93081,92570,10206,48501,72018,84945,49019,58723,33156,35781,48065,22708,54859,48558,33680,89281,92556,95961,89963,70508,80547,18721,33736,85435,50605,21655,62423,96077,88026,37528,96130,49651,35426,72057,96478,77976,14176,45975,47253,42866,71520,84420,56189,40510,19899,45555,30145,17589,63391,19932,21426,42663,90040,66615,67867,50050,47285,89385,77290,34673,99219,22445,39661,77869,49087,48123,20625,66550,78575,99675,25798,80866,73150,42284,81582,19460,81117,86095,14092,10064,79258,49405,66348,83932,59905,90104,30509,22178,81003,96678,40393,36774,80721,96390,70241,91154,48315,62884,56720,16614,76251,47633,34205,56748,18363,73085,49795,86552,86412,82645,27376,37580,58810,55323,97907,82445,15286,49266,51558,35726,75555,62789,89065,90964,73913,80011,38454,89485,93193,40359,78486,22921,97977,13138,18833,67876,13995,73871,90219,38590,96158,23213,99299,97290,89137,71595,60306,87692,72695,91134,39545,68449,89361,39512,10347,29463,39264,20402,68003,73071,13761,49359,24680,69252,14631,70408,42174,22435,55442,74280,59195,98936,12069,27646,83448,89034,99074,10549,42306,87456,47108,40807,40863,21704,51257,61079,45837,91004,38292,69179,32917,61796,61044,66722,33434,22071,11392,86037,68283,66079,75477,96619,66139,33101,54959,35440,55112,12037,46624,33892,53184,27154,67710,75572,47300,21137,24202,20341,39425,27464,73279,44694,84407,15417,69953,73515,63501,63371,73041,82317,91471,21383,42885,62364,12530,99412,72514,79701,26110,31971,90140,55484,11907,34185,88712,64545,39145,54259,59286,37360,99935,39290,89003,45164,18856,20846,86003,54702,23689,60554,83917,56894,91962,62784,10025,91508,90846,91184,59225,46075,54705,52878,87716,43450,11691,45697,13922,34317,77691,75694,70608,23470,82421,98988,20939,74343,38813,19107,66163,42745,32107,88471,38854,23292,88106,91700,40208,19835,29082,49206,80683,38400,13251,89176,67031,70080,37544,21931,93879,35687,71053,29964,82558,10500,73075,33217,95142,91779,17606,18864,15140,61797,67689,97056,97718,84151,61114,98315,65336,61733,61065,97344,74114,87674,16600,16367,15326,64126,59941,48769,95602,59108,32783,25336,85720,66945,67562,67487,40589,60756,79697,61084,63203,65508,46992,20224,97632,37612,31944,89848,88921,73588,36993,95736,53887,59055,25057,88015,26362,15393,44671,23901,25753,43070,81687,84773,19379,65704,65846,57073,93961,15391,64784,52292,85742,91015,13560,19703,87901,25686,40230,16923,46563,52779,16836,74104,31381,58083,84645,25249,56390,74529,72981,85867,76234,30590,62602,51195,13144,73371,20455,27540,77502,99965,16954,87375,21289,18735,70656,10709,71300,56013,31173,88676,63015,19354,53294,57269,11017,27026,21476,24522,19163,52536,40179,94481,89296,15330,50971,17033,52641,50605,66376,72200,41641,47992,44608,25611,48173,45878,34464,25285,88013,40312,42428,75541,14045,72440,17732,70470,19869,83896,59030,92331,17300,96329,73218,96208,26194,54769,44484,53407,46498,52571,97896,91002,87930,23045,52961,96413,49885,34326,80046,95961,60077,86597,30517,52066,35365,58720,55699,40393,16324,61445,66674,99133,96590,38784,84060,71752,58702,71096,55429,62431,94452,25727,41588,37581,58679,70147,14706,63828,78579,64051,33199,82272,36948,83105,82825,12284,65229,76466,15871,48042,38876,11271,59238,63163,32386,24639,35176,97489,48355,10000,65804,84419,52692,37462,57619,97555,89661,70890,33125,75822,84099,91252,59089,15567,17433,91584,90402,72271,77209,15700,85480,26991,84886,12423,42526,25428,57294,96527,54409,90982,65373,47209,81706,15661,45967,84936,70713,30285,87426,54225,76456,41783,91475,57656,61976,81534,44547,34283,47192,18367,51068,11792,18859,46481,42979,49044,25860,41128,18120,62208,82054,46069,15660,12742,25964,93332,54228,54497,67108,53017,78843,58370,89016,52662,31921,73883,82213,10672,99183,33599,88550,13212,28708,36215,11626,61776,47817,46964,59942,38542,66244,42619,30109,12460,85509,63165,58904,53433,78310,37832,35078,70794,81114,60577,70424,32807,67232,58925,87125,94854,14989,24206,29860,71489,42138,34980,97527,76660,91475,83876,64173,55840,89002,19185,26945,59964,34063,26972,28943,27169,66991,45825,36671,35812,88004,40016,60981,99005,23598,64340,42273,94898,34551,18179,71630,53021,65316,91739,48374,28520,54630,78317,63922,16571,56990,10092,76283,99603,65691,29973,62458,51375,21694,33588,56514,64579,50753,35844,11421,35318,77090,92800,72458,19282,22711,22626,62014,10324,23676,32854,48036,69342,63760,89468,57199,56641,22691,24731,10910,93539,88197,21109,41654,94042,45202,35242,91954,78709,18140,36454,96327,61252,53884,67804,11030,14443,51696,38232,64087,51664,82628,68815,61209,65514,90811,63343,29497,41922,57097,32298,22041,11952,95021,93636,99800,45163,57800,14044,77223,76602,75173,87077,13767,38305,37132,62621,24675,88720,43335,76535,75586,85842,93741,68225,24564,27876,48686,38441,23987,91849,23573,16382,23204,81181,62798,83657,97833,58623,44046,96804,49098,94016,70395,19310,76012,69294,27955,46875,27433,88058,51980,29629,21077,75170,87138,40810,14680,33726,10239,41934,80338,19114,57854,53193,78794,34904,34302,84827,80666,60627,89139,72310,67079,37549,95476,62186,35554,93349,30295,53464,84118,60695,30296,44030,94734,74296,10447,85670,19919,54195,81374,64087,78514,70701,58629,65733,40666,20078,77879,87054,66991,11933,83518,59254,10706,34120,84260,35918,38229,54902,93348,37649,30972,53135,65654,22825,87454,16162,81720,97239,48164,89240,69053,53763,21387,59914,16018,12997,80999,75578,48473,44869,19735,79607,64640,27613,41453,80365,84828,13622,59505,94719,39759,62707,21911,84451,85162,54258,70367,43700,26985,77613,47630,22000,34612,75970,78208,85642,44978,33077,29882,35426,16712,69818,60922,70954,98718,17872,59513,51678,86778,99594,93707,99795,69394,68504,55891,46575,58304,72072,69570,75557,77550,24849,90252,88458,92238,41005,38998,37956,86178,87796,27093,60680,22242,71674,99414,19191,73166,32617,61346,15649,85782,70946,59007,36092,99097,70417,79762,43288,96371,11283,53402,69470,34783,86042,22074,91089,25326,19666,35846,89962,80715,16469,73179,61250,85783,53831,69295,93359,18593,88486,31712,33483,33847,44225,40417,92922,30510,90102,89793,42283,32775,46996,56385,30909,43827,45268,28130,69512,31093,37914,59119,46758,11926,62001,81746,37838,77567,97792,64929,33322,72964,87590,51659,91905,93266,72897,20899,43725,21322,12251,68575,30592,58626,56607,15896,60265,50749,11524,10013,94879,73536,59311,11650,38958,82023,11928,69243,40314,15172,29324,22870,45069,83913,49463,67146,18678,59871,55179,14328,66972,66114,78823,80420,62629,60067,10366,34472,24194,61410,23258,61261,43645,22056,38630,55691,10049,47316,90430,95567,27756,90837,32061,68816,18500,46398,36562,45754,46974,94954,12386,48093,46791,18110,42226,20025,88137,46911,99204,66319,68239,31091,39875,46070,81779,59605,29521,69201,94439,69588,35397,57813,65377,46669,21951,43294,47140,40821,15674,44562,63970,93499,12359,48485,95442,65115,53545,25847,81760,11884,56933,21308,91613,91768,55526,66733,27864,44077,64115,21054,84357,55614,28160,12600,16842,69938,52855,73506,20906,97971,46932,72094,43983,29398,58195,40192,95613,20775,97709,58671,46102,22634,45441,25136,25599,57958,16303,64494,48338,61219,18189,80913,44845,36076,70562,66467,43557,89767,77394,60105,75815,52466,65055,49563,85112,74366,74383,50490,50091,28318,87504,87744,39783,43055,26668,11931,17892,23203,83280,83966,55034,37537,68096,33292,51914,64399,16881,66177,75152,87335,47777,92435,97786,38208,22912,87701,12738,80191,30903,32820,32074,66639,88262,37397,35226,59665,58319,35045,92974,24466,80698,91424,91831,77255,37534,51142,17256,61565,37683,95942,48925,37368,87553,46101,50360,21395,54064,29972,14431,61277,24752,69620,47476,23673,22454,82479,70356,78568,26798,82046,78117,74921,44691,27647,70009,66947,19807,14925,75419,88675,46914,91143,64359,51985,32996,25554,84324,18458,89164,27355,81970,64481,40023,14618,59984,52873,89014,86091,48916,68782,57892,40159,32056,27961,78460,17581,82117,12405,48029,67431,47146,36547,71349,74744,43191,52303,80296,83328,85919,29029,65202,56372,41553,13924,67861,34235,85160,71553,99929,33175,86397,60270,82728,62311,88680,23980,21425,15683,80456,62022,98337,87003,95368,49677,19561,10457,89304,50681,48941,57530,82844,67370,82863,54024,49182,21905,49402,18116,88703,46140,43606,68749,37440,18548,94237,26142,41243,31555,49592,52198,90957,38716,91655,64057,74410,27139,15615,13555,99717,90483,74980,60983,56460,19739,55177,22064,91605,63499,73493,32543,43482,97946,80552,30297,86064,28587,51771,92168,31341,29441,50923,77459,53400,82718,18299,16184,39700,45336,28228,57400,95811,57614,20393,31435,60828,68161,19225,93948,15132,15136,57634,81154,28290,64967,56578,99320,90838,56540,65087,70569,19209,31390,35645,71106,70525,80889,57313,78790,91119,67074,83008,10307,27126,82806,91545,54871,45333,12508,95401,32483,58519,75000,88712,13234,23759,57186,37633,65168,20287,80393,69989,92160,52886,74869,83141,89888,27232,77949,99625,48392,95569,65518,76072,55798,73185,38601,39533,49988,65192,55985,59415,54578,14120,46520,22160,95114,38053,96092,49063,55315,56015,47289,39463,44919,77490,58568,17502,94286,47592,97101,84120,63217,30459,70690,27667,90368,49213,35519,28602,54513,49316,79212,93816,65814,56591,31580,35737,70593,95174,41899,26044,60722,43463,21633,86153,73697,52852,55920,56424,77765,82705,73219,75088,53460,81147,54830,62524,93119,23710,20587,38968,82966,78240,27874,83576,43806,24667,99731,36715,96385,20968,83337,52924,44760,86750,35063,30211,97698,68702,87539,74709,16025,64088,61561,79383,31749,91493,43395,41910,41271,34736,73313,93278,35918,60242,89063,53936,90381,27774,45621,11153,57845,20599,97691,28071,66914,22809,96436,53636,48982,47458,89774,35801,74077,26070,66441,38820,72275,33057,54987,15779,83089,24506,47478,41072,99741,28073,82848,39339,66628,42216,45082,96173,80827,20864,80934,38462,69885,12805,14160,80223,47273,74192,35541,27530,40241,21734,97633,67961,69520,10966,67440,91993,34115,30864,90117,79695,14990,24326,18216,13486,22975,81000,60343,92446,24335,66865,45091,84291,27006,96661,67799,39684,49930,90453,27492,53982,51959,65346,81942,73946,94810,66338,27073,48032,87206,12949,18202,85219,95028,95643,91028,42959,73410,87392,89068,51051,84477,67990,59754,48941,79539,88461,17024,75871,34569,32591,81050,23910,81745,62539,72507,42575,48339,29729,37080,25667,63638,36341,93270,27593,27676,25701,51287,43224,49821,67252,20735,85349,54143,16451,56892,90200,87850,35299,50201,50460,51765,37910,77441,75164,78069,41804,15918,20391,16770,12290,39421,39301,84497,69139,39031,69185,64007,30927,49439,40956,34980,13448,13681,19965,19149,83305,73556,80048,35965,39996,91298,37363,89771,33905,36226,12676,26230,86541,53615,12716,50273,27602,11850,43148,84263,11711,97624,11117,63950,66320,31742,70549,32403,26476,17392,46772,54161,97793,53423,35085,88527,14381,65992,43275,28991,82733,79739,23338,10628,86619,53353,67224,18213,15487,17742,43161,83207,34063,95174,41556,78117,81465,84035,58626,62348,11163,55151,48933,58169,79913,12705,78760,62596,87297,63836,81187,57251,73238,31566,17050,77155,59850,99106,99826,45049,90410,70252,24888,14965,70410,77087,27118,12178,27357,91653,28524,54161,47640,84893,43959,10190,15402,15188,14025,31256,31200,70536,74109,49521,21532,80196,36735,30928,76973,54676,57467,23398,86767,63758,76150,96562,21783,47511,71055,40998,19733,77205,12455,60181,54247,25031,40703,75329,95795,96157,78179,65641,35453,42354,20944,39790,56561,56929,28808,79385,65526,14272,29381,21252,55223,19909,46155,16763,52983,13675,53581,71359,76035,62403,15049,74253,32175,26131,84699,18408,47596,97633,80279,57951,55536,87663,65963,61358,77070,63672,51783,55012,41545,97766,20880,38013,68255,42953,52906,31318,76475,98763,60475,89101,48249,23946,13772,28487,89963,69360,49884,24230,44137,89063,17639,89174,85699,26291,71300,58492,11947,95773,55975,47576,38483,37653,10347,76033,48873,39853,87379,16603,94447,14941,46776,47384,84850,99830,52065,75927,76433,96626,32353,85681,37956,45562,36982,74463,14805,30622,23448,15753,76592,53710,60877,23806,81464,19128,57194,44769,76114,34456,17147,73700,58821,56207,32986,38415,84043,26747,92226,17359,25893,48557,47613,53219,92146,13731,82110,94887,26724,48303,39096,20190,45236,53296,64378,65230,46659,34710,69497,36222,70225,68107,68896,80181,57912,51115,85336,85293,15923,41187,90935,96888,62890,69437,17167,48929,68214,82215,63851,37678,62865,45753,23846,23241,34233,77721,31554,77232,88171,30825,23528,97961,57425,29913,33707,24098,99095,96665,22366,73301,64111,39563,38535,26929,12488,11406,66821,79543,53737,32020,85687,91017,92751,57761,81472,58676,56941,50125,70483,93175,90634,66810,64238,59783,71853,38794,95674,30211,25877,80794,57428,74420,79817,47505,54734,68811,97407,31485,47049,37078,36464,56160,27581,25834,80366,25188,90159,44134,75841,92670,54583,25123,25673,96602,62606,45071,23686,64684,36013,25282,52841,25046,99988,38884,56583,70314,89771,91577,15115,57350,63641,53733,27903,37504,49804,84729,89045,22911,70146,78884,92592,65842,68517,67595,70764,65381,67648,17014,27083,67602,78456,80992,21375,78363,19225,37612,42114,77179,52393,51830,53731,77291,78650,93803,93952,63379,55382,17661,69920,86024,61879,15748,41218,68330,56031,82220,78348,23501,46081,47082,94763,69436,28277,37763,28290,36244,17806,64123,29776,14715,13456,24309,36638,62750,51536,97180,78568,93047,98446,24201,35253,77362,37298,76020,88382,90854,93886,90245,44260,41046,64746,65039,69166,91140,23784,69394,31432,90160,39587,68521,58135,95565,55101,76083,91125,48688,34738,12655,22093,24659,63850,90472,59979,48914,39105,20212,68292,23110,82205,91150,62574,61598,83915,25513,26287,50002,55861,27696,51457,36980,73789,82142,68252,33331,58897,23555,44443,30169,77790,17550,55166,45286,48916,79672,67410,79279,94781,13847,43487,88896,57672,95787,19123,14111,14149,51340,53466,81939,93939,74244,36530,58376,78631,33124,66282,95949,71320,31149,62716,58272,49115,66139,60426,35676,45633,79555,78464,92347,62167,73553,15988,19160,64859,73024,98428,52362,95347,71868,49259,13070,71167,10237,55401,34304,24921,17941,10583,62370,30188,64722,60183,98398,24810,38027,30941,37768,13966,61975,39339,57015,71372,18594,70206,34526,88805,26977,52858,10277,95256,80911,65697,16012,81918,29250,25468,82869,60705,89989,12696,75436,62091,40157,68808,86270,76187,61624,54687,30644,83807,39826,39285,75243,73973,90078,76747,80471,63024,78685,51801,42268,19324,26561,83488,49352,26216,23965,59247,96464,98980,92192,13660,90568,38803,23153,36204,83710,38214,40898,66903,25051,61832,85846,22361,30883,23015,82921,42586,73118,81538,97032,81964,90056,96760,28222,67683,38618,40869,67435,32191,79207,18766,78083,71699,62212,64909,40987,12257,70440,36359,57006,80748,48610,89387,76310,17198,43886,52675,29406,22926,79208,29103,81828,44039,38377,10219,18436,48204,38933,12414,44493,36449,56313,15529,35671,77931,57076,97648,90990,99437,19109,48675,42495,15031,93256,84619,45675,69556,67789,82491,88524,55332,65781,89682,58124,64962,43515,10036,74000,28339,98579,12470,45325,73803,88930,53575,85669,64094,82166,55084,13024,33747,45962,80588,89449,81488,93612,89675,49183,35821,15372,88475,52874,98922,38215,15219,33163,84687,70522,54869,93074,47578,37078,66667,58446,15406,58441,31892,31091,59742,92967,84008,17022,59143,54373,82808,13141,84870,79617,44908,57235,29633,23199,38121,28558,36180,44936,90534,50497,36452,74112,81037,30603,17021,44384,72113,26584,81129,10310,95360,77332,73112,44352,83545,44203,19606,77331,58178,11490,64082,14246,60788,69518,34459,57544,94561,93698,32038,49327,36469,63015,83048,96702,97515,34052,63162,92596,83336,98916,90263,50068,33218,37328,85974,20769,69106,49520,30391,17472,62061,80309,93963,93735,73881,16570,65003,59736,37447,26726,96512,21157,86553,26056,55612,61069,64284,80231,96629,24342,79855,12469,73289,65753,18215,71847,18145,13507,39804,82510,30389,77647,56916,13119,97753,16653,77465,87655,78091,11879,36415,53328,32952,88771,86880,36034,16930,19501,14089,62410,69327,58380,22450,99551,15198,63918,90149,52637,17828,59263,87862,77989,19606,39202,54666,87131,40455,36631,89698,40329,65818,95596,22661,41045,67412,52400,33695,25419,74573,30352,89538,20195,42921,75330,82701,25042,81502,86974,55365,52274,73394,84034,47036,81956,98341,17013,30635,53343,29005,64011,33519,58429,60547,68211,36480,85006,57982,43255,89707,65152,56446,46700,54392,22302,75844,83237,58702,87785,79366,38624,71718,60551,40615,81589,40853,49592,28425,73664,36264,21227,61259,14284,62396,21332,32855,17262,60752,13685,74657,77296,57184,79292,12090,33728,60313,74141,33816,93004,13380,20822,93670,73861,46185,20493,33292,24309,70911,43549,63673,24094,52227,37596,24140,54196,11514,10928,55161,40142,70308,13182,26613,37609,57586,73589,30826,36036,17431,64109,26439,23388,76705,66604,56668,97552,20867,78319,42998,32033,72586,76534,48115,74755,85076,99126,45002,86827,79470,36776,50846,47617,10872,94803,13991,89431,66322,34645,50187,97764,24332,79877,98638,36033,76030,27640,61769,79850,97772,92914,74615,19753,36177,90825,46133,17481,93644,72978,46620,94602,66891,30354,25741,36465,93638,27735,85499,54628,37474,61409,51768,49377,62968,63375,12723,45867,77918,81876,69624,96602,15916,96724,58826,79673,54113,82659,43729,67050,36413,75129,24650,66236,75396,50286,79689,18083,97012,33042,49997,65988,49627,83721,69403,83336,45884,58408,30195,83998,10710,50332,57915,40602,25686,40556,85087,18924,94517,15441,57363,64307,73445,35377,44153,10561,13234,63721,41786,98660,56595,45432,38325,29975,89722,32715,34281,71257,60806,42811,80778,47394,43979,67397,69708,37587,40789,63450,54571,61503,81237,43671,61006,77901,35924,66064,14977,99827,30208,80285,29403,40974,70477,71075,39187,80814,38403,23586,84279,77452,28850,51308,40216,84099,12313,85944,55847,67475,77362,92817,68979,27168,89370,13461,94280,22476,60252,14886,37478,58310,17015,97653,64649,77758,82524,31737,16783,69501,55181,14125,46521,69032,29143,48923,30093,70058,58310,76860,64051,88821,29414,12178,36916,95025,23871,54404,55352,87245,24287,87389,18175,16995,40038,81870,28825,65759,54009,28665,34179,36896,95280,53455,34467,76876,20764,70831,34100,20490,50188,17500,84232,29316,39775,87160,26176,84078,63570,21988,25796,46212,45701,81412,78286,18932,47511,77600,76795,11716,17971,47293,75242,33320,83145,75379,84527,20558,20906,50140,65753,11753,88764,60093,41620,49218,44035,51235,17227,46419,37905,46360,47974,95073,74503,49851,69039,72356,10563,54456,58949,53639,26915,89514,72425,89798,92369,13950,61183,47062,26320,40815,91333,60284,10724,62814,88824,23555,66466,21326,17888,56906,31781,85642,81448,94320,67635,51254,41406,98031,35060,12582,35908,47057,54560,44749,53989,17023,71395,91460,95849,52304,42226,25279,17350,43003,61624,54975,31172,33605,61184,29690,67451,90924,42194,88496,55818,12207,31185,65788,24477,30397,72450,26661,56954,58829,68263,44923,44825,88658,20272,58383,34156,90387,12971,35756,66508,35848,83734,26425,48257,13681,33896,15230,46257,52426,72519,37309,67158,52211,17131,11985,93569,19464,67054,36865,76884,44743,21996,63977,53351,66086,10461,64745,51089,45343,71598,23057,56498,10399,65069,35113,86600,67478,88609,52061,47524,23470,39300,15178,26605,22444,67863,13979,44335,38819,40815,23342,39267,62036,78113,93641,83964,39037,62818,13162,14356,36265,88843,52446,59207,15974,77894,45812,22929,20012,80995,36860,88946,33681,62317,56595,61343,16387,92057,78572,80166,51259,26419,23792,98203,42758,88414,81486,35574,48793,92819,41297,94121,94154,17079,60603,74094,90710,83200,32856,38400,10160,89064,65773,76449,69992,22694,64151,51432,55777,26953,16689,71060,82447,45063,34084,77034,22939,53427,86664,80609,72942,80227,27793,71610,92086,39054,61862,79554,27506,69452,82415,40832,44072,73744,72067,71974,47652,54425,49439,69958,52277,36532,53757,57220,52391,82055,73201,62366,91353,50188,10837,44492,74751,78177,62542,31588,27715,38699,73274,65117,52607,74354,30786,13582,80302,39472,60430,93384,15198,41016,70333,55776,83778,48080,84189,43776,97910,35476,25111,79632,33397,95970,96290,67824,60038,90415,19523,78147,86052,94613,64696,96235,19162,35066,96188,67084,66276,66164,30027,59598,68336,20475,76957,27060,97903,95491,67008,26515,86815,20622,60235,31019,43862,17376,46404,91499,97803,31796,56428,65081,78087,79081,66421,56156,39182,57773,24007,46204,83947,40721,41691,36595,86788,36338,62171,66225,58756,30821,14220,85794,52354,28415,10874,74487,62374,15287,53071,83363,33091,68872,33547,64531,66450,96417,76947,43826,79056,61648,49773,94871,99991,13631,63856,19731,15623,45715,95334,98473,62365,55747,27489,74748,11866,33928,10395,86802,96981,49938,51218,62774,37796,88376,83869,34836,10647,48158,19531,13144,23457,41498,25576,72021,91878,19435,17135,55909,56271,90582,13353,15718,71461,43308,28974,19448,85342,40753,72563,78888,10596,37274,66255,96556,26951,96028,35160,85848,26751,81445,18914,26019,24862,34077,19171,25050,71257,57708,40497,85238,72640,11665,84052,42203,64276,21904,91414,67896,68306,57594,59121,74050,74373,96682,53729,28548,96371,19351,80965,16487,13230,77132,35192,35907,24603,94886,67814,67977,83513,47466,15049,66312,31776,14120,53262,10101,99052,85460,60007,36912,18992,71358,56226,94391,58705,84238,45463,52315,78555,65985,72775,13387,19635,11361,45473,60945,88208,27354,42302,36951,21110,47873,10356,91141,57066,76211,15541,48655,24844,79740,81471,19839,48911,55559,79714,97941,28814,18465,32400,31485,86375,94633,70180,38570,75313,77725,16620,71230,97420,73650,99176,23206,56694,96512,89025,95948,44179,63436,87147,55645,45026,76802,87726,68962,70026,73475,57937,74133,26360,57464,88842,61480,81579,58552,69671,43934,80830,42838,27170,58760,95496,87820,43926,94095,56713,71197,81249,69676,40724,51243,82626,18323,91395,21775,97479,80952,14328,76741,83550,59529,84428,14534,70509,48482,59646,46227,46731,21578,40156,44388,80913,85365,25712,56560,96240,95568,59442,67470,74905,32314,65255,53919,97552,71185,50471,70289,69301,95868,32971,69511,75347,42583,57484,29082,84613,31224,24063,68638,21649,73794,13217,20635,94962,77030,28469,96987,69770,36840,96673,43523,22018,97902,79274,81297,87887,60496,91842,21471,48616,28119,70301,18330,51755,78403,52916,87771,62022,32914,53014,59056,65129,68315,19304,52575,14408,75595,98891,31537,12172,60849,88701,83459,95488,39614,87857,12683,16388,78365,57469,96592,97335,15195,35722,41076,82519,94862,90406,65855,94331,92146,12734,95559,72854,79150,26491,67948,63035,74024,40065,79483,61373,31165,31047,82975,98261,42304,63940,25385,13659,90407,59785,21482,93309,57264,86726,95760,92694,52964,68207,68290,97082,72768,90814,12909,95708,65710,90939,79063,53576,25409,14824,48728,86585,63867,53005,11679,94356,59202,81485,11670,75067,29595,55220,31314,96833,92606,52753,75945,75104,10817,31203,77136,50581,64230,62206,19531,41694,54968,88151,37706,38806,23797,62147,73835,91167,39883,72001,42714,29117,61634,93116,38481,56068,26565,23410,21410,48596,12776,36904,68759,64994,88715,88805,68995,76545,52663,11276,44869,97682,65432,15789,31301,80290,41231,89538,57084,61393,75805,88171,66090,78172,47562,69175,65422,74941,26862,91263,54388,29938,19480,72250,29793,28629,38838,38494,58916,74946,92221,48102,58274,82111,77480,15545,59389,19435,62097,39886,28148,64138,70904,82965,99992,91780,56936,80136,64877,77079,22879,44185,89927,68071,11819,93835,61619,80859,33061,94439,48691,25198,66067,70603,92066,51218,64944,47932,91735,38749,33986,54112,63993,48221,12278,82475,57823,25940,17590,51896,96838,20132,58606,34075,51303,70958,30550,76640,56240,95827,99366,67669,91253,93479,12585,34809,82050,22866,84776,74202,83555,22042,28656,29942,62313,90610,58873,89189,95923,89530,59798,65167,54427,68406,63031,54982,51739,90544,30616,24865,39895,74283,64902,74548,93732,95987,15874,35316,94147,51655,33386,53230,51937,56247,31263,20240,61593,80769,92426,88815,16283,48955,20176,93997,54977,92975,21676,81926,90885,57523,20585,30291,75000,40251,66211,47851,13930,49354,53059,68237,14733,73304,65822,71341,54167,67502,86821,84467,15401,97198,33146,25089,89011,81465,13181,58693,33207,61253,44591,44825,53731,38041,92551,34237,48608,74026,84312,88558,44496,60280,67341,83536,78128,97465,10198,96246,66643,79060,15126,79923,83901,98933,35496,66322,12990,41548,57502,76133,85976,89752,38316,90145,68304,74200,56941,94206,72683,30093,84450,19661,68518,46928,13188,77807,72594,17283,88685,39010,66258,12741,33271,69033,54317,38961,56642,46925,74921,54045,31732,66043,35917,43617,87590,32313,66351,67791,38686,63893,33768,58079,71733,71187,47839,24708,60076,32558,26966,18538,94989,60983,30566,29601,37342,24839,94856,53338,37282,72264,65644,39554,14780,96461,59206,94519,39300,63056,26995,73060,35277,87039,29212,78727,23209,39876,42614,70078,41656,89307,22676,24187,28396,86463,45469,66240,86278,54252,86268,97020,92140,48420,77457,24527,30953,47239,43119,89617,75816,34773,22101,77383,34086,48050,68892,99220,67917,35174,46591,57954,77076,71280,28760,83780,27765,76655,11270,48381,36871,70756,42075,22499,69443,16026,39354,70682,89380,24888,95477,28610,85230,39454,82422,57146,29609,68196,44847,32025,10022,48675,98219,41359,65128,62092,21679,13338,83835,37887,13529,31260,84794,20395,61460,90441,58943,38715,34482,29690,37173,26810,71894,93605,47639,36675,14715,56318,89128,26301,57053,65198,43655,39330,44666,37549,98986,35771,47081,73911,56711,62238,56442,90031,71761,20489,48735,71375,25988,85728,69611,82835,99871,20778,48211,33952,85392,75912,12016,99895,18838,40347,46940,91021,60067,64762,64233,16056,95485,26238,82730,91969,64145,53648,77494,54669,19723,10538,89610,41415,54161,69048,64278,26648,32791,68144,53994,12931,17130,96216,34631,59862,79803,15064,29561,54647,71487,40793,24536,14453,89116,96145,25599,71451,28188,61146,65587,66634,14463,34545,66038,83857,22352,49419,53224,14881,61727,59070,84754,28758,69784,85643,65649,81287,65689,43370,21546,38633,18100,45492,47114,34076,53914,19287,14950,78861,61844,28805,34879,52055,86133,45793,15973,61061,74464,42879,26489,31687,78000,51508,22377,23738,68127,32669,50530,99331,69331,97113,81158,97961,42227,63554,17078,69241,86954,30699,40344,76849,68442,99888,78720,62380,91185,84230,22877,45902,76366,25150,50856,48969,52208,46436,99311,87910,58022,34384,55689,51784,77615,35740,42703,40435,66861,56366,17397,48234,86073,97589,88825,21437,86824,60269,45254,36434,98443,58689,76436,87953,24550,87042,29952,10123,16760,19496,10347,86623,72093,94269,68677,90701,16567,43990,68391,90964,27919,35317,26469,10344,73574,39031,60159,98663,39331,86801,70351,83146,41211,44109,43877,46540,81430,27882,28642,40687,38141,29293,25355,79314,72061,52577,42416,10684,14750,90819,33974,51113,16763,63117,54019,10629,46025,26042,41898,99845,94327,38991,98391,67864,55950,69530,75778,51912,18937,64386,11044,95110,61465,91155,96142,40390,86528,83080,26862,32371,46505,54273,94483,38886,77476,62648,77627,80147,90595,45398,98983,24610,72709,96197,39367,13709,70987,42042,47952,50861,20448,77786,54404,74536,28504,52052,70772,81664,83580,31320,26598,89805,42443,10898,45342,25656,22640,84833,59873,29681,12834,38615,24535,34943,15842,64893,36100,63121,89817,33031,43590,43700,54294,39067,66821,60447,63753,34680,77182,72024,58778,89433,89100,16713,27035,19404,20498,25531,90760,10730,48962,74041,69618,19553,28542,45667,88771,32032,47801,88122,66778,49746,31619,97923,76467,93479,25318,75050,70653,99489,78025,93666,35151,69248,95618,58241,87909,20267,51471,97689,78772,63600,32756,28763,82455,30012,47346,52627,40556,82539,84855,24621,77481,74187,37987,80781,17279,61932,89682,75926,67135,57725,51734,30262,38985,75246,83401,46880,22458,26179,46698,69674,46325,88533,66874,40958,69207,42274,56282,54633,78056,45599,48215,38377,33417,52896,68419,25546,36854,97353,91059,27509,71983,71177,35025,81942,95604,85423,89522,45418,39622,52833,33361,18221,60152,49527,68110,70226,38958,51007,72516,64095,55889,63688,81098,41126,64442,11504,78836,81242,18230,99855,51815,28370,36901,21306,97904,94778,76193,68853,57516,25069,20749,64797,38141,11047,22594,13535,70029,79124,73514,86010,43538,79782,45477,32881,18993,55539,53796,69445,44542,43450,74563,76007,59689,48690,46489,64962,90572,97933,24854,40356,77712,81017,63185,57277,44476,94978,47481,25833,13696,72333,95653,89706,30509,54811,79009,95242,47293,67502,91596,96313,74113,74632,68534,41819,22356,99160,61094,92437,44626,15881,64108,82617,15454,67753,99247,87264,37474,59976,78446,47566,75585,52412,46220,10502,62177,40088,92701,92320,29982,22772,25270,23866,86395,83723,25934,19510,22381,46357,57049,45374,20085,76748,97941,94615,79389,49292,71370,65911,82461,57171,12944,31411,11766,54911,21117,83566,23035,45591,49304,53887,99860,11790,79483,40110,12919,93853,43426,41074,86934,15420,30752,45680,41261,96711,84946,26908,78804,33440,61741,28080,40091,64363,68152,32665,76309,48478,32667,11986,58112,32006,91296,98238,77976,44709,42613,90712,68174,56230,97752,17463,40284,63208,77665,34864,94286,34053,21443,26527,28475,33589,69142,10186,25930,66992,24061,28931,89480,19722,16988,99609,31555,51970,79028,99812,31907,25015,86691,20530,52503,70085,60404,14667,98146,11544,17050,18503,62501,38629,23821,82629,63191,56044,28390,30207,38024,44796,42782,26068,82640,56951,56854,28970,75359,58131,66721,34684,15751,22437,60686,91627,36398,40823,59115,72900,55119,85696,53439,65546,15232,53650,77876,48934,92240,23835,50791,99002,56150,98350,81587,78207,72269,36203,59593,36097,68438,75736,19806,34412,82292,49062,48502,43194,60837,20115,70402,34520,87142,52849,47477,93016,92784,35533,61299,86837,15786,41262,51070,84509,20901,38370,96984,46272,47529,77683,22519,51736,58031,24505,22952,70799,99772,56373,83513,60421,39923,79980,69059,10843,51821,65651,78271,67181,46539,16447,65108,35971,88755,45232,53620,91016,42113,36253,38194,53190,78873,29873,82736,26472,86857,91624,62356,51161,58251,81989,51839,72015,62973,15923,73488,48555,76163,81450,70809,56296,44438,19663,20306,44751,33253,81092,91914,63077,21159,79911,43899,34432,97853,50911,99985,26751,35773,13162,10152,64819,15265,38863,30241,69139,23475,28042,36653,91919,98049,12300,55312,16403,54636,43004,57107,81885,86193,52953,95014,81226,65670,42524,83182,39677,43451,47161,64496,48828,75901,92199,41076,36563,40916,91577,31457,86268,42762,93919,47181,70719,89715,10461,74694,48483,35069,34997,80083,62923,60906,50802,44332,80034,61382,84323,71709,52726,59278,36070,56989,16728,45849,40399,90742,21294,53444,64324,31929,42780,39157,41294,81620,84184,36116,72403,99327,29761,41433,47488,63643,17564,18892,48587,65600,93994,59644,19347,34849,54501,92352,70187,77667,91625,94877,78876,24067,56558,66245,77681,75418,23943,18187,93066,98023,26520,12594,40040,23486,69538,17263,76959,80050,57274,54386,34536,86842,42650,52738,19925,70086,49724,95037,27141,49631,16666,17726,51134,83722,99206,97995,99788,83463,91939,92617,16562,93288,39690,88396,73905,65913,99072,36159,13410,86472,87722,71703,25661,96650,70481,35332,52801,32931,34059,74925,68900,44993,71783,58448,35321,30765,29525,27485,78823,95968,79801,41565,25063,61043,29171,50558,39180,94058,15298,73166,67531,92532,48059,56395,24264,90827,54220,38578,13032,16725,79651,83486,14598,98874,49355,84846,59105,25208,58211,28260,62303,25395,27912,37269,79347,75782,86574,78837,98787,62485,86291,12043,86242,50120,65772,70074,17933,81226,68505,52272,13736,45935,75673,73457,57275,65022,96766,14206,69490,83881,74858,94168,92807,35706,93982,91474,51426,87677,79481,60707,12045,82246,41900,55116,67973,65500,87783,17816,68880,65957,63257,64778,33993,18339,68077,98926,91976,16218,89309,92600,95474,68934,60789,34855,89753,27774,36675,99692,89921,18117,91337,65300,77472,12906,97816,73797,26362,50695,95489,41353,33330,65838,20721,47917,24659,91905,87098,24239,76052,49654,29984,87541,42271,39388,20901,73509,83441,85159,78698,18977,62076,17918,67363,11579,86130,20525,33593,59196,35638,29608,67514,15499,11577,31846,39014,35180,63475,66062,33217,61325,73931,44013,72917,40398,71927,39739,91536,42719,44838,64527,22723,38636,10832,73222,16383,28421,26478,58917,37335,52526,43533,42935,82001,58999,91188,98703,79094,26533,86209,22701,81424,28586,66408,35923,39383,57967,43357,98820,12153,62026,37230,90081,83734,31106,30403,47932,59110,97325,79930,45371,62884,38757,50229,98124,20149,97189,14076,29688,44741,19729,59163,15962,14654,53342,16319,46380,88705,18450,85620,12000,54971,66385,47581,64251,70602,52831,27988,73789,13094,85795,75575,88901,33203,41293,65508,79772,27439,64080,84912,29631,19993,54124,23770,94750,85900,96994,98737,73858,59648,22304,32847,78984,77348,65952,13171,33873,81468,74514,26931,75084,62370,16407,73736,68670,64653,34531,82966,48531,21044,87009,53606,59032,19516,97180,44828,73457,67788,42450,94246,98919,77889,34021,65808,22560,33678,55542,68831,36000,46484,26381,24910,77448,71307,95470,17385,68732,67045,44244,95725,48766,43935,62203,79760,21166,83359,35097,31459,25875,40800,58798,69698,67610,91596,70426,21749,97997,11069,85113,63328,23898,96347,24023,60140,34305,44575,75223,72689,37930,97531,29924,64560,29638,49297,66574,16348,78588,10827,66726,28335,50066,33517,63147,38375,55768,61144,24263,81231,64421,43676,77862,37368,63177,70585,71760,85340,85121,14997,94138,11554,42641,25377,48785,86504,79988,82992,42506,67859,28807,76007,71093,47072,22481,70967,63490,15544,80595,45465,54831,88518,27489,27437,31838,75212,19928,29557,74700,93110,54159,84091,33807,82155,42221,14823,87619,60132,57026,70702,14757,54344,78326,66672,61414,85566,94384,65005,84660,58853,45027,28380,97997,94518,12094,37862,72013,20851,70020,55071,53270,79936,15078,72092,75692,55561,90896,97081,78183,65554,82348,69222,80657,37667,11228,66131,82321,16040,37281,83130,31700,27027,33607,97072,13658,14276,27159,81519,73146,48053,67563,11333,38234,54093,30704,36202,94675,31783,83066,87407,62847,74601,29441,88833,67561,84224,87953,52603,94106,26671,19472,24186,10181,43958,85157,59959,66417,21265,88391,67729,72112,99054,10440,21370,65284,40894,23490,45739,88110,67635,76340,25020,58516,77234,65623,47554,26072,91237,65604,49749,56373,82695,81025,71687,80087,88706,66286,36368,53463,96077,35303,66592,59403,28024,63750,42295,69469,29794,78240,56241,84782,30562,35083,37548,63006,19561,80039,59670,97910,74260,75987,18123,83573,83379,24036,10722,82009,89147,13984,14175,16258,28315,21098,19375,71764,69518,81161,99497,26531,75913,14876,28570,44929,71885,23632,64031,22514,37567,59592,63251,98616,63091,95142,14429,48328,18096,97794,62280,75696,51310,25210,26727,58549,62586,52773,37735,42338,81429,67861,55254,76467,43051,77620,52623,61589,89871,54335,43768,98436,56319,43150,24416,76684,23357,93892,90723,95114,68379,32340,90986,82562,20000,28522,34549,98648,25776,97317,16771,83984,39443,66747,78617,33278,60003,53307,50963,27627,79382,89227,48146,75079,42717,75191,30775,46482,46468,40567,53876,62037,25525,80881,88069,98610,96390,99202,31307,81114,31585,81151,29701,51568,81402,23147,85636,50211,85455,81994,74559,58639,31026,77676,86191,90800,49103,96920,92213,43180,95785,83376,73855,50135,81263,20691,28202,81859,98792,45477,55267,69759,62856,54985,70196,53173,61997,31740,31049,35425,76650,77465,71163,93902,73051,45516,60964,99958,95532,46447,53572,32337,62436,61996,45787,46164,13318,89183,54378,64495,96941,73074,44823,58247,27203,57041,23996,42792,82936,50983,31434,88842,39281,11012,22806,22248,87405,67962,19173,57205,30479,87193,37911,24813,89134,72280,92324,32058,30015,71653,49361,17434,49401,20169,25682,73284,33304,66751,92095,50427,96907,19674,51241,25829,65016,98886,91009,34405,44590,99038,99052,13992,32029,32234,84656,31266,14371,10559,97512,63736,62842,12251,11944,43461,56815,72277,91489,60820,38602,10675,39928,16881,92933,77208,88196,24776,34991,49148,82881,11878,13039,26380,79292,68518,79539,28479,53301,69535,16508,21204,13408,97273,43670,59197,62658,90283,56238,17107,73084,52916,87049,94958,43384,72591,61698,62069,16324,75006,21997,93066,53077,14024,78242,84585,63807,47147,77370,15522,88785,51490,71968,81426,19353,24567,74896,30016,52385,95054,86673,67502,46795,94985,49112,81236,21516,20516,23920,37733,54523,83493,85145,53797,97751,52737,74405,40640,19831,53602,72077,22660,33851,31980,48997,86133,53828,63009,90350,15288,90472,68624,17465,31610,94709,54738,55791,50509,36507,10340,26074,77701,57387,89127,47196,54502,59326,94454,31785,27684,21682,87618,91866,82867,64194,81308,73615,70067,27203,45111,55150,23729,60045,22919,93054,47868,55154,91483,18666,64911,75206,73385,98668,45914,34443,35448,78245,59326,17478,50813,30546,91772,39741,21374,48590,44846,85482,79025,46527,78984,19647,41201,91120,33149,83932,51663,75500,27088,27462,20474,94533,49928,19694,42721,84106,38605,83640,84697,96445,18816,41106,55555,85362,57220,20456,48223,65791,60721,23454,55154,46499,86490,64481,66207,75164,86665,63792,94009,76087,45718,87481,42521,85379,44407,13976,76876,20583,21772,44409,10925,25594,60082,98169,39669,39507,54910,83817,20924,25344,54569,70053,70738,76211,26341,21412,81372,25128,23795,66637,36443,31954,60653,39936,37496,39505,46474,43426,36830,74326,16196,33692,14649,44943,77400,35210,21138,50138,18228,16690,65036,56529,58412,33883,37481,25303,58759,57012,11661,87398,46488,21483,56662,53101,23497,20129,21148,48120,79653,49470,48140,67483,69384,87680,66430,83354,64906,85351,62870,84185,37311,83044,29753,57028,91615,93705,96300,91507,67904,10216,79489,32756,99560,10330,64075,81654,18934,89853,89197,40940,12388,33154,22591,70125,36534,99343,92897,36984,79951,40214,24252,65308,67639,63999,36680,13390,65966,19520,52484,81254,57953,72869,36786,97872,45500,47801,98788,74741,27101,31424,49322,38943,77763,70944,75426,13913,64872,23541,14218,19411,87128,42524,33731,76524,34859,46038,85185,40411,28208,93406,54922,17057,60035,97066,17294,89316,26947,25181,82042,85943,30216,59713,41349,62690,83132,72704,74990,65499,94583,13725,83741,71815,16137,62768,29323,94423,47477,33880,41343,10755,65879,21889,35054,52683,77670,63515,18760,48287,86417,10244,94645,65548,83711,98709,69185,43329,41852,10239,54468,87820,45788,83832,33488,35486,49988,54484,35371,39536,54325,65434,60223,76540,58030,94288,37830,92775,56269,97148,54583,26685,91792,12517,46024,32212,15582,50508,84496,91290,18807,30247,21517,16995,72033,24736,28725,62965,14744,63843,59278,57146,19956,87117,14248,46659,97947,97969,32578,74249,23805,99946,68675,68800,54415,66672,94379,94561,91130,79591,89284,43063,28005,98376,83650,10082,47622,80047,50493,96852,38587,22233,34760,32713,97005,44234,53699,19772,67193,86263,69771,31313,79964,83290,96168,39779,40780,13153,13754,67516,59980,32051,29300,71573,24219,15540,96758,52299,23702,49831,14015,36073,57249,10686,98832,70510,76207,64692,28894,15096,36266,89870,36219,76253,56503,97955,56125,31024,77896,70811,14696,30306,52672,14972,87527,15218,22381,82974,75693,92474,31356,96282,20610,23111,67136,96735,15077,87514,14399,74902,94570,24367,88107,69764,18489,23084,18536,52219,40339,95397,27511,58870,13785,25493,31100,35192,43564,98469,68841,61488,26702,72375,81765,78542,55036,15456,18482,68130,24889,30071,81930,36979,74594,39738,76372,91845,10800,27172,26093,11688,24874,73595,42788,65324,60363,77317,27740,59886,50220,44791,40317,56114,38818,35254,90656,42848,52178,59831,54871,78307,89571,31462,50180,21970,69524,21333,43831,96543,73310,19528,51223,82914,18163,52614,34815,95593,89460,36460,59640,44145,82138,80375,26553,81501,12912,89942,72265,80573,98663,12425,10985,94726,60642,70022,30651,33989,84096,70330,38681,26892,19830,49979,68384,30818,83107,82934,69938,10751,21472,99369,67495,64868,73277,56891,52581,77894,27606,15869,10660,26482,76751,50981,32300,17154,32824,56938,91436,85246,99704,28131,85497,61273,15743,87709,29079,85634,94210,37911,54839,14822,66444,73022,49811,62892,34034,20895,56672,66759,24935,69288,96087,75688,13761,15563,12330,24602,27013,39454,83863,23436,63994,81857,64069,12791,79185,86668,94424,70971,75102,77238,67183,84240,25543,95388,57598,29614,21145,31473,72455,21334,79232,56010,49783,80647,86787,74282,93233,55060,37572,60790,31424,43218,69701,16149,87023,14760,78765,26149,17337,25788,27560,21328,37637,43935,50391,13971,96521,34311,32649,97850,99706,47577,45181,46227,21506,95116,76830,28187,62690,94092,83680,43237,96341,54884,43657,26991,18336,80306,94925,41806,57505,81123,65826,24124,92646,65286,99043,29454,23919,57027,57812,11686,68247,37145,12837,84290,73007,36956,24737,70605,22554,94105,13501,14788,32763,85674,50120,46281,24182,96154,12947,97421,59717,67836,79094,68574,59373,32024,88741,37794,81928,12160,68060,45313,62618,98097,96671,74025,67710,39385,84591,63515,52096,44331,12666,52013,18644,41177,63447,58789,52922,84168,58223,29511,21509,72129,39651,96849,12472,27341,61655,50580,36940,99554,69666,26012,85273,10251,60670,32713,63653,43151,73841,71857,53860,68863,18428,84106,68679,24485,55673,95466,29685,31658,23616,27996,57074,58625,88119,89148,58281,47026,30220,45994,47168,20569,92216,70027,75165,99607,73846,87210,33455,80941,96422,58315,37581,59869,10928,41322,21587,78789,86426,48441,92454,63911,39666,28963,70043,22920,49718,84548,78646,49456,50550,25222,88573,52199,51138,36667,73389,99500,24550,26015,72075,40253,25471,88698,39316,95970,92301,22617,51898,48998,23816,38818,73173,11788,41499,52377,54100,31332,59953,84496,82397,25636,29924,56086,41848,33435,11411,18912,95610,98508,39502,64357,46045,49791,86692,71588,73263,90608,59434,75993,72691,12432,76323,60680,35764,46663,69127,84323,49065,99653,77516,63334,80766,88090,77776,97358,80299,75642,65730,74476,10435,40696,84697,16810,69574,68876,94747,70245,29984,44502,40521,45099,40031,99006,92453,53783,85021,60710,89037,43807,88502,69523,71844,48126,32256,27292,32984,55519,92139,71906,45630,89748,48113,45937,85801,40374,17038,22089,14032,54737,15014,58594,73708,55331,26990,90329,69363,93838,32518,19427,50162,30011,12660,31332,54605,75906,98821,37005,73016,95239,80759,20931,32049,60805,23487,58378,32310,99068,29070,17326,13415,10682,76860,81373,85221,76816,91333,73891,57707,82897,38848,14339,53525,97735,42825,31337,75828,87050,67594,35681,88032,36394,13166,51802,78154,97490,79543,61467,90653,86055,38301,62901,25583,64864,85722,36486,85930,16919,51708,40914,71866,91658,96434,51576,11397,46268,65765,56370,89603,30378,17820,22104,77944,79589,69957,24177,70681,44609,86145,50859,51421,46811,61396,96969,20848,74143,88451,47669,43642,55923,94577,94407,58663,33207,60396,32010,26956,97879,97721,58539,80463,14503,13506,63518,80549,35319,33928,73766,25031,12690,76604,74483,45458,23059,72309,12002,61726,23030,47448,84298,34853,60646,57377,53540,53450,79984,79253,43957,12394,26065,10003,85114,77725,67421,71247,44849,50799,55911,58746,98967,90120,22707,27651,16773,53032,74259,18552,26781,43879,82554,26213,85990,66779,52256,26470,17127,89079,71604,81653,12386,99227,94543,13257,87276,29933,77780,73953,63619,37762,21858,45140,42579,86982,16343,34857,43102,14490,84931,40921,85980,84400,96459,49308,46886,50514,53464,75371,54278,65182,69398,20376,77386,98110,50553,99302,82417,53449,98531,17728,59081,77712,12966,27958,43991,81000,82091,84239,37493,21280,41766,21458,59719,85276,61830,71399,27443,22917,97632,97201,66316,82864,52651,68797,94518,85262,61282,15227,85552,79647,95241,15778,69301,31720,45748,88990,60650,92819,56579,84964,70933,25339,99849,36329,95970,56723,32727,57794,82117,25536,37855,86475,12927,58927,39760,14633,24761,68847,63653,60998,35387,28552,33374,67276,29775,83161,51096,61228,49117,54003,26715,46348,53038,94657,18469,26564,66003,44643,47460,63283,37736,71017,63169,54767,15278,84101,74428,33763,89934,22979,60605,23836,72117,18920,26516,34678,23381,28325,92403,73440,92307,82525,42966,78213,47775,74366,93998,94104,92828,86435,80921,39312,25747,65621,85540,37096,48879,30530,94907,95707,64230,27536,36728,98792,24126,78681,16593,80287,13843,37087,15378,42426,40064,83203,85995,47904,48897,92192,25592,47363,58230,37775,86908,56147,38342,93631,78746,39509,69550,13205,43111,33630,58179,67717,58546,56143,46322,33416,84720,66169,91908,79158,62467,66719,58328,52435,24646,73852,81939,55137,29926,63997,38815,30272,87832,21254,13450,58494,79518,13965,61610,67581,83196,70185,92223,54720,62410,29385,26643,61830,71287,75431,53491,17208,12695,32570,47283,93975,69492,49391,65803,63021,35414,44720,37043,84525,83208,14675,76443,59373,16935,40576,89515,43567,13030,48066,75306,64682,86281,87578,23434,44924,74618,40006,98059,62198,43827,78608,25705,83363,89586,12415,93619,17155,95513,46656,61674,65600,79256,26386,92151,50805,98077,79570,33960,80952,63576,62058,36954,92656,18613,35422,23802,88244,90589,63202,96958,36905,81635,98718,24000,91206,82212,94009,96293,64083,98521,92258,24162,47763,37994,87664,37729,85993,53241,36324,51701,93281,66441,56522,32233,68554,82217,36492,84132,79177,23165,29649,31439,90900,22869,46635,10332,15283,84095,51830,74112,45431,32066,24800,55080,82286,85031,15758,35708,19389,54665,75902,76184,12178,19593,11280,47271,93822,41765,49122,65942,31704,30273,94864,70923,28059,34316,13714,37791,30267,22009,11954,68430,86798,59317,21934,66222,64110,24883,88100,74657,34569,92263,79650,69574,98339,16834,36375,14983,57391,53657,67981,78915,34044,98779,44602,74061,45055,19546,69003,76744,38996,23230,21724,60565,74865,95815,17351,43456,98844,19768,78529,26191,37849,18599,34878,64242,73103,92177,57829,26293,98025,91991,95302,83088,72787,71436,25674,55481,10426,87403,89395,98363,27989,58694,40074,87886,10767,29397,78214,68038,40461,28668,15485,87188,28129,75304,38279,36764,12736,17999,67766,22630,99971,22054,70188,88464,91043,97957,72500,39209,21574,21412,31375,56928,81034,27481,21893,96681,87971,15980,32060,10892,82537,17149,57761,64694,60976,47942,56847,11438,66422,81229,48872,67337,52037,34829,21371,22459,47608,83019,86165,68870,68997,96176,80945,84906,88233,98852,75136,16588,94164,84783,24590,34790,91455,24976,20512,67479,56614,14956,19269,86703,28476,47077,68378,86478,82213,94707,95105,34820,27822,35524,80017,70067,69691,99727,88012,48929,19911,89267,99775,16922,57065,89200,79372,28930,49047,21565,58274,59310,22990,45421,82271,32731,28355,44886,66097,81712,91331,88870,82646,99644,78133,48880,16558,82795,73192,67809,60734,99172,21581,22803,55367,52310,74925,29179,89348,20007,99782,36978,59984,66878,44909,69587,61505,87658,44712,26791,34533,38491,42034,24289,58398,89979,33579,65894,18387,18409,99793,40150,27148,96635,27985,46483,78927,29279,13755,89279,80252,54775,12701,47920,93885,69311,95448,44482,41344,38097,54257,51791,84498,57157,10899,31455,81221,94345,43189,89752,86973,45533,74939,30221,81957,19610,85246,21680,24927,40017,94766,18249,32479,14034,49486,99042,81731,99205,90638,36680,83815,29514,91402,68368,81866,74740,13040,77062,20313,83038,53826,30313,73414,77999,69100,39423,75959,60422,43166,15465,18081,23178,22131,98816,94812,15458,57587,45602,73392,37538,87963,23037,22968,52646,75705,87211,41644,52009,54597,47176,77486,50902,65104,13693,97140,91453,97494,86552,23329,59640,14638,27419,68067,61363,32806,54171,92882,87530,30935,85319,96423,14483,48175,59023,97445,22554,59399,90028,30511,22590,23690,89059,69710,41659,13497,89122,37510,60026,30427,55467,25522,24729,88698,48673,45947,22004,28862,34939,59926,13098,64377,26598,75789,10834,81209,15505,80385,63648,55816,29997,81654,29701,48360,20109,54397,28080,61427,54517,47928,68060,98351,72252,57162,16413,78068,61410,18114,65074,22552,34237,12157,12375,88681,23789,87201,40705,82517,21584,71244,98249,38879,54549,48280,20762,45733,82862,26175,32333,66683,68083,84510,21877,46187,19914,29544,54719,34398,97649,77612,28989,88794,20158,31900,56968,24845,79555,90995,88184,26857,86469,94360,10720,23109,82265,21749,43079,72548,49075,48078,37989,57413,78109,98023,38920,86370,50898,39618,95847,74718,91639,55320,48195,76180,51893,25844,56127,67712,86037,92193,75860,45166,64194,89408,88327,96801,92432,54258,62762,13129,25905,12943,34032,63426,26237,76503,68921,85984,14300,50163,51551,68173,96583,81944,86829,47455,36649,94678,12266,11857,34595,10609,27915,78452,33905,87393,48552,39139,27057,92562,56986,88474,41003,74627,96024,10206,34750,85242,96564,84089,30768,20372,70115,48023,16672,32094,40298,23908,48641,38497,72164,99672,24787,72764,28843,54137,43713,54088,35295,27465,44987,48484,29537,77679,34186,87884,62428,73952,13392,87955,94026,61467,94488,97188,81288,91932,67312,62178,55111,80567,57154,59297,98816,51810,68563,80142,37559,30971,18736,91521,65871,12253,77323,27843,51435,57503,94756,31271,86540,61428,90523,81383,28992,71978,78419,40016,68518,81179,68126,14040,10961,83464,84503,49328,32634,76258,17962,75264,97661,47050,87192,20284,32155,68824,99167,67420,16695,53238,60025,30926,66657,75746,33463,25152,82444,51322,65278,62143,63656,67777,35230,42104,13904,63342,21909,61972,25862,29265,11790,21722,61872,79191,36175,99384,82055,66705,29572,18608,25147,26433,84678,51750,35748,14256,52414,69938,18083,69136,79468,59367,71226,82268,65523,28027,15567,32166,82017,20105,43811,35645,89558,74341,41297,90191,85450,88254,27019,30940,34896,43385,73398,30378,61374,48877,96647,51346,41635,35369,27265,53198,69944,23804,43637,63859,61701,83133,30313,84819,72343,31671,25358,99343,66325,13404,39006,81867,30592,62712,93249,61000,67058,15064,14868,54618,96170,16376,39792,36032,40201,45759,65414,34661,76712,47667,82029,54068,42506,29606,81447,67900,54505,48250,80482,47829,30899,99746,13617,97624,89331,76406,11183,73516,54685,94135,50343,73470,65870,76036,49791,66233,81341,94484,56051,70518,49004,26587,33300,93346,59022,91664,96050,32579,88833,13574,72233,46743,90959,69186,22830,22545,21964,38820,11354,77304,36892,29580,40401,67192,54697,69987,27044,22775,52949,29778,23026,97996,10050,86133,92184,20706,80788,16394,37221,75177,28922,95319,61318,45610,22790,25980,24386,16828,50525,18097,75656,17369,58272,46976,79531,31030,54644,17124,48670,47001,44092,35779,53740,20198,32036,61744,40935,12521,54068,76627,16131,15724,26721,47527,13388,32663,81486,59651,84773,96817,11219,44970,31695,94973,22423,14824,71256,38454,38134,83845,61577,20638,58873,16757,83356,63305,61692,54199,96860,53736,33065,66008,80072,30171,39508,79074,49456,26633,61590,49555,94632,52458,17314,15323,24188,58708,72035,55644,16594,43881,45125,51957,27888,79776,25836,63432,33226,42677,93255,34911,25532,25068,86300,61930,92955,86443,21158,87568,63344,38687,54502,80756,59017,90925,75913,72695,31313,85555,75893,75957,63082,27250,16089,81864,50556,75610,41420,35967,44676,99954,44225,10498,34528,80485,83220,58275,74857,88881,18106,12190,77007,17780,70114,54082,21016,78840,57340,61478,24475,70070,77158,87190,92860,42134,38658,10002,38859,25067,53075,39126,96433,89172,33606,48937,14324,51553,34861,93348,20158,89654,52594,58655,88357,16420,61551,85259,21935,15311,99024,57877,60767,13053,60050,35135,85119,81161,38007,33663,90812,73322,46209,27900,49244,72046,74722,73504,24152,73322,55969,42932,97230,64465,22880,40113,92370,41376,66889,85057,16073,38019,52006,88257,88437,66686,99629,42192,52457,91983,91577,19158,92168,63988,32596,28885,65479,48719,33622,82679,88179,12191,19148,47834,94847,42427,18612,81091,78849,78169,65672,16085,26789,85519,55278,20568,15618,99865,16744,36300,75782,47443,80079,62470,28605,96333,85340,41145,46866,67004,28534,96933,45405,35834,49417,91110,33990,14252,80334,93315,99665,90050,94018,92161,10888,88168,24160,53052,22646,70597,40267,44475,89331,46459,77417,85411,84825,71244,87095,91561,77087,34688,12474,50918,56704,58368,63065,40485,45038,57285,54084,60539,51176,32222,79126,35722,77763,41587,77684,65392,36314,91075,79297,78983,94904,45306,43889,67846,41269,43854,71066,57705,57520,92753,89378,40081,36500,29410,44767,25249,97255,75030,16881,99202,28691,13780,16298,14768,36296,66098,92741,79741,47555,37442,11208,40231,76017,50911,72960,35042,87051,26095,11042,61469,74503,42288,93890,86913,40544,33645,74625,61203,75641,58816,16756,98901,75815,14724,49346,11832,88303,53961,22162,60206,43802,67089,62250,22557,60026,93230,54857,98031,26168,20240,87827,36186,42231,16888,95265,25354,20102,85841,65061,12302,25206,34897,74258,89127,12935,44846,35128,96572,86757,97992,83520,80085,39247,31641,41603,20843,64456,91180,74744,67292,24182,26206,97351,41213,64865,43445,46320,26764,54782,61088,13168,21445,16132,19010,42718,33593,39951,71914,55624,58810,53834,84743,59033,94039,37990,64751,56537,27112,41738,46129,65507,80075,80330,80594,42723,45970,47970,42764,72879,99155,32691,16294,27442,43324,54509,25205,62805,22749,84617,57525,43447,80213,78009,28695,75738,65119,74217,90155,76334,73505,31790,95275,40709,18493,72199,27785,62244,99860,73700,30913,73485,78963,16616,23203,14393,32815,58705,45978,16462,63380,13419,68293,22465,27874,53574,38569,31207,85942,95926,53906,46278,35166,15874,91073,38147,28795,74920,93353,44348,86559,94663,33809,39906,95288,94092,49833,42693,54114,76588,93727,98059,13175,37868,21844,91340,65092,82830,29632,31354,11671,87541,83229,94682,23308,14401,74572,58379,31934,25168,58607,38538,24362,41721,51789,69207,15881,82351,89345,94155,43865,73691,84701,42925,78790,47378,35462,30313,34214,14705,50898,70741,87611,29322,47349,99401,93782,99415,79618,66057,72077,40769,64515,76702,75411,98093,23600,52182,76334,44709,58650,69922,84512,36509,72117,96738,95853,91350,64239,71828,73949,86466,49180,65487,57741,95696,98563,73164,41905,90819,76040,75042,98749,36723,51869,31353,70694,44234,21929,84443,68163,33076,34147,54246,18728,90212,39476,34905,69488,36396,79767,84111,27883,98091,37294,54024,37911,71084,57556,36547,90757,12381,53055,55910,87527,62073,53446,95039,45019,47029,40406,47583,47277,85408,63800,65573,88792,15310,81271,69892,18598,60907,88496,66899,93318,27028,90704,34528,54485,80675,19991,37271,45563,71685,18891,50105,26438,18131,93855,30170,77106,34879,77915,77637,83409,46234,19791,74291,17858,32365,94751,63380,86977,80045,33049,68768,84555,47614,14534,46982,57423,66886,82317,91188,10284,28630,34942,87288,32888,17692,15119,41679,34913,28640,29750,61422,43423,68982,79142,53626,97136,83637,26041,93201,50312,45462,89578,10516,37190,54874,29126,53295,49116,27077,74659,37168,32327,29450,59130,50499,99312,39441,52359,60459,70871,30259,71296,22789,20801,86250,30857,52225,54890,68556,76524,64620,69314,76039,21105,52731,37896,38842,77230,77558,30706,54668,94945,52013,38244,66093,98184,31884,72845,81405,28267,54558,77963,24643,47345,93750,20373,58019,64304,70034,86235,33274,84746,71759,18688,51132,53585,67932,86220,90564,58971,36386,91658,27592,29290,78081,60589,25138,98400,55189,82200,69092,65097,86780,50411,10969,90532,66770,44769,57521,54136,20740,28314,67642,40329,42093,90559,41009,53325,75823,49029,24217,27445,86685,77008,74370,29264,49372,33666,89358,49088,47631,32673,56638,32308,82244,25691,64287,64633,16276,24029,42746,23080,92317,95630,44832,24341,45029,93633,66176,29691,33463,10001,93789,33692,91337,10941,81108,90115,15084,94475,30294,90750,54001,22438,72278,70162,35501,15758,47522,58672,71787,19747,17834,99972,62236,25366,88248,86899,57358,27441,54313,29302,21954,45189,92686,86622,41033,44691,69768,96332,27685,60414,29839,62736,69198,17335,77041,70319,83217,82934,44878,43120,22587,99625,62371,51756,19551,46179,96956,25568,83196,83619,83617,85098,93029,90075,86912,74381,82056,83064,51960,14651,24754,90376,16040,69487,39323,50435,60820,56329,12182,49362,38039,36347,53920,10968,87065,24717,80137,53338,72880,87086,53012,96771,98193,99235,61871,81384,88736,42192,98449,93729,45452,22231,30853,46168,12956,33550,85102,93356,96949,91277,45793,53294,92818,18638,38149,84541,17310,79614,88734,11586,56358,91451,88849,10482,88456,71864,74087,58093,37333,70767,88555,61022,66792,40174,24566,52344,60299,13819,40196,78206,96540,86419,53893,67225,33487,62769,54430,47907,26944,18558,54377,13495,46321,21839,10730,40337,74114,84553,32450,68187,60626,60653,55672,55616,74669,24511,67113,83244,56962,50808,30036,93551,43188,45860,71011,88812,33620,95364,95684,62954,73724,98991,17653,85456,66065,22980,94835,15390,62362,31424,52870,40376,33560,41070,69317,73579,83905,55693,35797,27215,91005,89900,93685,26400,15906,53112,41651,82214,41490,40960,13231,26542,19987,20283,51903,62590,27456,55641,22828,66369,57138,53895,14859,78879,85787,71167,33192,26652,47660,28290,31310,44585,94800,61466,11123,18867,16677,64422,24140,27064,42943,89325,75775,44755,77027,39048,71456,73498,98972,35978,72536,31762,93770,37261,65975,70715,73367,33943,66584,85720,44493,36253,82669,48956,22364,32912,93854,18171,58176,79828,62737,33980,98192,94943,97801,38306,26839,29097,61150,61546,81371,82838,50951,43122,75116,59778,43893,34113,13694,17454,80499,80961,68513,23535,58127,48829,95076,71448,88035,11715,48545,29454,90653,18740,85695,39003,33172,21046,66381,29526,33553,99633,11658,45507,51542,16775,79245,72275,62088,84883,72308,56753,86040,78003,83196,82518,73162,73033,98497,29092,14482,48575,66418,19029,36092,96120,63725,41108,43356,33584,40522,36974,12228,18242,25845,86105,66332,60798,31236,26175,82458,65057,78112,84422,68452,20743,17211,93848,35908,24581,40123,95839,47587,61351,20761,34028,97419,71113,92848,63146,34183,25785,83659,55540,72993,52117,67766,45808,79518,72735,46423,26741,25697,27358,13245,65761,63677,40637,16353,47135,22411,30766,14152,78241,53589,28787,80216,36488,53352,88977,27071,11496,19740,82323,28307,50025,58960,50005,60003,23600,91351,53363,31977,21758,61538,78477,16604,50729,61894,22439,32038,36449,83655,82029,55689,37326,59845,69621,48966,40647,91142,68647,97016,58787,42954,63267,14647,91528,80060,63641,82688,48491,58503,16637,90217,45835,41003,37868,12605,49189,44296,45253,41676,91949,11584,25038,63938,80379,95971,89313,91177,96275,41271,74758,29828,21763,74395,47638,79879,43401,99447,62209,15351,92840,29922,28598,54385,99906,95060,78516,90288,37488,33399,22366,81559,87902,89710,31418,73564,60998,80729,38004,10430,13702,62072,13509,22297,55522,65354,51875,20704,50230,45279,62260,71659,32445,63776,28058,36714,77881,16803,41306,20375,95278,66627,84118,76966,68448,56872,29983,46923,70522,14570,42501,90842,20946,80742,46788,16077,22938,91552,33649,39001,38955,17768,57968,86924,29212,90535,45283,60014,32660,49643,50521,95159,51859,61549,36246,45180,46361,55929,28718,81117,80297,48703,90543,19669,76801,91982,54716,40739,22000,44069,37041,79467,21897,22741,47832,99261,40838,57307,47365,60483,71798,28741,66005,36125,39350,68259,85257,30777,14067,63697,81286,30321,81700,19844,26892,17376,89373,33689,90134,64567,70744,45751,47156,62551,43112,94293,31817,90586,49985,34760,24961,65132,43005,57597,51813,86798,22390,18292,16253,21586,49107,36514,24832,15133,55464,16585,96028,42635,16079,76753,83453,74812,26451,85814,82357,62860,98703,68180,19656,53363,97839,35461,87831,79283,10351,71193,98807,25920,90820,25542,37532,66566,58479,76937,30939,36267,66020,58506,74043,66044,97222,14627,56295,48520,28869,11680,41474,57599,34957,18681,82435,89465,96556,29765,58294,71613,12156,40978,78057,94607,70032,74160,15472,50154,33818,91542,34598,19538,14025,40306,96902,56283,62275,18952,71109,47539,72069,60097,55848,14231,23396,31913,77508,38978,39302,43142,10318,96078,56044,54605,67990,40694,29526,82854,48083,13472,11188,44043,39895,82673,54456,49602,70965,73467,89604,18497,18630,79335,67536,40302,58805,90649,44758,42985,99365,33247,51303,83606,56858,59747,22989,69798,24302,44222,51112,70791,39129,57995,68744,31540,34877,12407,29166,60471,18965,69369,63322,24789,75322,56545,54284,47355,54879,82621,55057,71303,85013,93947,66167,44031,14865,16921,33261,29480,12996,32123,76725,76049,50518,76993,48584,23295,86631,98863,32133,17027,47303,39644,65428,37711,47355,91065,31863,43042,47028,42046,39218,97550,70697,21110,12297,80626,93773,43696,58997,61292,46585,64779,21855,17235,88577,62087,64053,73135,99951,44082,30931,50107,57797,50991,95747,33739,94847,71606,31271,64432,64832,58835,43864,60789,53660,81221,40342,95479,24562,17359,17130,51693,85342,48453,14740,61376,82633,49593,98317,87805,73077,92209,29713,71617,23511,96855,33846,79246,51942,87659,16936,81780,80047,21736,45988,87696,38357,50167,45183,85380,75819,29041,97962,90967,75055,29415,53424,76464,91901,76135,46324,22519,37425,40892,48131,50490,90533,28252,50868,52470,71039,40823,72804,61140,73979,44941,12880,41194,14541,32536,75570,19069,83969,67549,65525,79572,85078,64288,45925,59453,21361,10660,79179,34394,14987,54322,39059,26904,66613,38970,33825,38862,31790,45757,55458,18283,63947,31068,51002,15465,63505,96799,50537,56937,99562,67364,97741,67618,79563,29357,45706,74199,68837,62713,23686,24476,18037,32121,94426,77454,41240,77329,37588,87003,50455,10321,26049,54220,16107,81924,26214,26984,12105,62824,94874,24067,73753,51345,70431,68924,12965,26949,78775,54530,70206,83425,91882,27824,43378,85012,35561,13716,50392,62889,84984,58574,30294,40827,38323,55211,17617,45900,82685,88082,47562,39793,86366,46111,35035,52296,92354,12544,25265,51009,85107,93082,40952,54913,96226,77386,90956,76399,33333,91373,28853,32117,11202,21894,61892,44223,99459,90895,88417,39786,65862,35494,30235,63791,97274,61727,26107,96352,85896,73033,85094,34840,68140,21737,97986,26940,36418,15403,26604,35743,34920,69548,56812,67058,29778,89180,27968,60750,27817,11336,86034,99400,43684,74036,48061,72664,64415,92839,11087,89411,83996,33434,67946,26465,30713,54766,82598,59800,77262,16249,45022,26261,29985,66155,48635,46560,49756,63554,74727,70554,89505,29026,53421,58065,25921,42166,86049,72998,85649,66590,80803,64614,93170,68877,64204,45637,47367,62222,57054,95637,69397,20587,68028,58602,16153,20451,80965,76551,46385,64237,99873,16168,47928,47400,65059,72846,16477,51227,55563,25672,87023,74290,55428,45047,15380,39096,31174,71166,65445,41647,35621,95624,39154,28662,56653,35492,85157,25637,13294,19520,75217,88857,89593,34411,43299,89245,67974,72971,60772,43359,57930,55515,53467,27582,97891,91444,84596,21956,66957,76189,90459,92942,93978,16765,31500,67638,59223,61101,26728,56290,82334,63524,63082,35580,72238,79420,48855,96900,11222,64709,77962,82093,11862,69526,68458,72446,38189,70074,15677,78116,39950,54858,94231,19372,44826,88836,44246,86900,88940,69389,66321,72044,31322,21581,73654,45651,55746,89858,21386,44297,19896,20993,66161,67270,95964,33155,84621,34855,30974,18849,48720,11236,80841,99465,45613,38126,51810,76732,35860,61860,30676,96122,10952,61050,96396,45852,47242,23032,89694,27832,46019,98952,72490,37738,72430,58057,54874,56139,77333,24675,56928,49735,44526,31473,34686,96614,43800,22912,51047,44668,75706,71846,50152,53324,77317,77902,82153,66299,96752,13437,39662,23466,41060,91657,82025,61652,90329,10220,31580,30337,79576,51309,10875,51757,99433,14485,97461,50082,40473,71447,75338,98027,53680,39698,27374,89082,25001,54800,17974,65619,91186,46163,60122,25843,14590,70941,78054,19791,69968,97414,83015,25568,20144,86513,18754,82062,88365,89542,77168,95238,71303,80458,83058,62914,46708,20470,17188,23413,14303,15728,90502,13112,78710,85049,94041,58426,30014,51015,81536,75497,64779,35777,32645,52556,76022,16161,55961,22690,86657,47767,56395,98177,48097,32497,13091,40876,89268,41631,20932,15143,62581,67818,78050,46321,36516,58264,63632,44504,58868,60176,58835,56353,28847,75954,54914,25004,79951,24354,27582,50279,30233,85021,83666,22597,17451,99008,47575,50729,16522,39040,20968,51124,93607,55334,25132,93226,14099,29404,88454,83277,54337,29421,90382,61462,19867,53599,96375,96850,37628,49707,87159,40768,81265,18979,28994,69811,99157,49819,95088,79006,32053,35389,57705,41059,10364,63036,87305,13354,24855,44604,62061,11818,86270,88267,52780,19310,88579,78133,29644,10718,35763,93126,39110,18205,85879,10967,56239,12386,50312,38425,98811,28880,25765,38721,26076,64327,64979,48121,42484,38821,43334,94962,97622,78588,22079,67208,46635,14071,34546,58125,18145,54424,82157,16243,92835,42703,36405,28338,52389,65287,41546,56653,71779,97775,91791,59299,59557,18368,46655,78348,62054,49760,78460,44436,23710,76752,34132,49868,42917,72338,58854,18606,38848,10937,36159,22749,25431,68876,83899,12375,30419,78998,89178,59076,19897,25948,43369,28996,40540,75103,33669,77729,94653,86693,11887,73037,82632,99255,88547,10480,61029,83247,25233,53872,87527,44191,18909,61878,52409,70457,48946,92299,54262,14840,74073,44082,91895,11100,28841,39222,63658,84360,68047,60180,23912,52008,98347,87569,45935,39581,19184,44104,87949,51891,92237,85640,83443,21292,25162,32598,92570,18763,66392,57696,36857,93879,68183,98744,52787,80295,64547,19054,92014,32274,88784,81367,97352,37990,84674,82251,15573,10958,36215,80737,58275,89029,27347,52770,44351,69565,64087,44416,40360,30002,62403,58799,72741,50815,31962,63316,67963,66863,78501,19835,34807,12200,65102,31471,75424,78312,24112,22006,96693,73185,73414,27567,22022,90372,81967,19591,78992,41496,13054,31479,29151,28331,11371,20149,10917,20905,90424,46448,57411,53803,25292,41820,20176,65074,56018,61813,46023,42416,64134,32074,51219,33999,86684,86798,78274,78264,52718,20256,37541,50592,68443,95185,24785,48224,21049,79859,66369,59601,52743,15900,14263,96664,14595,67741,77991,84455,57517,76704,14876,63216,30217,85850,81845,45278,89611,23072,10702,77435,91249,58971,30486,38748,56489,29952,15142,27545,91481,97165,49639,17381,13609,27996,57060,65563,55920,37230,54294,83195,23040,60725,67491,17707,11298,77962,71458,72633,51864,21856,72499,43720,93054,51660,70309,24216,42502,55531,44873,50168,65978,65278,36809,54377,32763,35733,91457,11305,10462,78069,30705,87183,67691,78667,64609,22506,77347,38693,82489,72963,90740,50885,98527,21857,68668,50538,60544,43165,31838,14752,46587,17459,84533,72818,93649,86159,91295,37639,73158,15297,14799,95262,47173,67050,47525,15816,12820,71267,90001,52563,98899,81527,49016,37058,40807,64899,92593,16382,70724,86153,41795,26721,78509,99393,65702,73616,81764,61270,23664,11800,59108,97801,64335,94507,48256,27230,32046,50504,16525,82070,99264,72154,86384,34589,71453,85009,32136,61105,62998,29407,43994,43813,59384,67792,55451,88448,21904,60880,18868,99258,89628,30801,20119,77142,34455,10042,77973,48778,61612,59787,41108,54882,81742,54462,21525,43690,98767,89903,79538,24789,53253,19441,35144,33652,75189,51103,82427,39829,50470,85821,43367,95375,94626,96181,67950,26044,28160,71066,54458,98770,84183,45815,21255,93110,17765,70049,86791,49928,63774,51152,72032,36934,71144,25814,26133,66955,35417,61068,27766,38976,23292,46568,31765,14664,84632,83147,18600,24549,55925,39536,97767,60775,98484,27059,62731,18375,44243,84833,21309,87619,98780,57996,17172,81571,11202,22315,66595,21073,60602,61984,25016,95039,19972,30924,80669,75198,18963,18996,65595,62212,63011,80034,90078,37334,93137,47527,96386,89712,31316,18939,81812,49870,27617,16951,16201,79522,66359,29850,61114,98664,17535,92821,71292,66488,53891,42378,34804,26618,52185,84650,91511,95947,58981,87344,89720,80735,38775,86385,31619,13648,70052,16071,84892,58080,82762,81100,60054,61450,75328,48694,52767,69137,85000,82474,61878,53935,75879,58012,99145,59303,16167,87561,22645,92701,25036,51378,91506,39917,75357,34192,74586,84045,21148,91914,55282,67155,17628,85346,53557,71875,75193,42199,92730,12968,11820,80037,86298,36436,40178,88241,25250,38097,88804,17136,77339,91959,62039,16541,86905,17892,49889,40190,84684,32694,83287,53401,33071,91040,96946,34892,28937,36758,10165,53941,30976,47869,52556,74737,74644,23124,82387,75150,78231,49497,25093,19191,71131,52058,98305,98142,10855,24687,16305,45144,64109,43045,71970,52297,73577,19457,68819,33726,91455,96207,63518,88710,45254,27884,39299,55500,16252,24515,28226,59524,27750,81090,69686,85102,37348,44217,34190,99088,66974,75068,86593,52186,46568,64206,93144,29022,11037,78982,68786,25152,23230,84950,71654,32342,84635,42252,90991,39573,16229,16058,33508,25970,23565,97528,37860,33493,37756,17928,37203,15446,29144,89071,21051,57701,66717,92172,14029,36673,42438,53746,97726,67105,15033,96860,19569,53749,59354,97353,51006,46008,18514,25541,90352,91474,35766,75152,64818,67078,20402,50987,10644,59717,72165,87161,65169,75667,77589,49768,76712,79261,57666,98488,98444,21870,28074,81397,24540,21295,53149,80562,49054,58744,97039,65164,47690,26222,76951,90878,60592,90077,69661,60518,34855,11401,42463,68566,27032,32620,17087,30601,94347,10043,20092,28572,44272,99229,73580,56197,42588,40200,11766,85831,96230,27331,51234,79902,18423,69953,96140,90197,10362,99060,80001,55391,92977,80244,18661,15031,25145,40791,81835,65906,92978,33299,53847,45450,52511,70733,22492,64019,79870,47009,75027,85114,19937,20652,74039,12870,16874,78305,59884,61729,22931,89163,63264,59646,97344,16837,23928,48041,96618,44280,92727,19510,51144,97297,17134,57774,24297,89236,62686,91807,26039,30612,14030,90892,17744,63559,23332,52252,66622,85571,30535,73753,83491,59890,51958,41419,18296,83504,61850,37760,44625,23130,39188,64347,51562,11101,57842,76245,63862,78537,69764,89676,53263,27789,35545,81345,15096,39021,23658,71421,68584,22402,61827,90827,38595,81515,97637,81011,98973,73683,22506,41414,56939,25850,48201,47145,84367,17518,76527,30523,53668,37259,83996,67727,53846,66629,34206,83545,86861,71361,21667,83355,25698,18905,89772,63566,28343,68233,51935,44756,44544,95584,30272,66589,61869,32603,39657,18292,56936,97241,18526,45864,68948,51503,94760,37523,72728,71366,86994,61236,26336,63340,37484,16045,41584,74938,43050,85751,83425,15949,79334,20225,20934,70231,47188,22717,71997,93447,17404,51614,58509,43375,88222,14423,82675,26690,86278,24795,93245,12281,91620,50075,13462,90248,11961,47893,97397,36186,86133,66175,86245,10396,40253,40649,80650,89886,33687,86212,10356,95789,18955,57497,37194,14383,11152,90483,41769,43697,44376,68079,60732,56245,23869,64628,55467,35831,71900,29878,93993,65134,31627,22485,21085,91801,15653,11324,94750,11063,72452,99078,96331,46500,90450,46075,91413,32311,99817,70939,74196,18192,79406,18337,92799,77946,48847,77467,76331,66100,39116,13128,98706,27969,67465,92925,11182,82386,44707,87140,56586,73163,87065,59411,92700,60885,60428,97822,41852,46902,65057,10821,87891,36865,66588,91910,62815,15124,69637,45571,85500,99796,93884,31120,68659,14083,38534,95077,34138,25978,97280,85625,67182,10316,34898,21461,93636,82678,66926,72496,43895,30841,47655,12876,82726,99556,62738,87102,19977,80321,65622,96908,16595,27313,18551,50069,53753,22400,42022,91513,37320,31565,75998,75260,29166,74131,18599,10370,67805,97474,92356,61872,82082,25390,77694,53045,47387,98662,63974,39891,64978,37893,33726,75058,82887,71258,57109,76746,74464,45962,33855,96277,83669,58725,16073,59448,50902,64780,45202,24704,62754,99382,17216,24594,55442,66466,60050,63287,87841,67352,55702,28468,61462,90027,56751,38170,26100,11153,13076,59270,48244,44318,53770,20405,79977,38730,85798,40561,80680,73766,33460,78733,72103,26128,61102,38028,35054,87212,84597,11823,10549,81350,13166,89035,43541,72602,47299,59593,51559,35343,45148,62709,69690,80550,74206,46398,46735,46401,94659,23327,54380,54005,70768,23380,94979,43850,23737,77808,97958,39466,70089,42830,83803,48199,69337,99501,33908,24233,27865,89271,46724,71797,46577,79942,30922,99261,14733,95537,30944,29759,61111,45543,98322,98891,66547,33334,51877,65608,97876,68478,64089,37074,70714,37849,29894,40524,29500,14472,82125,76167,71037,37571,41088,19206,32924,71969,80077,53490,98920,46146,44568,66742,19178,23310,17940,92557,32648,26683,39363,13861,65921,45530,73533,87484,52135,64150,70681,11991,47783,63836,14339,91762,64947,74155,19582,50961,34844,57813,46806,57333,83217,35571,94157,28308,41796,11664,58478,47717,29107,60925,76611,60824,65636,18920,84572,89918,10992,64953,74794,87380,92362,74129,24321,24201,52626,11579,91149,44302,54026,29607,23822,47068,97145,24459,32672,80603,39981,50886,73435,10633,57461,38099,84647,87236,85882,23620,42126,18455,95372,45091,11061,23640,94127,55671,60529,78691,62403,48865,78181,64681,73417,46497,52311,45160,45546,66824,90135,95837,76839,45363,54536,73628,56840,35288,23184,42054,33609,44699,34599,47460,10898,56511,78780,39165,55156,65555,18817,64065,27789,58171,52026,12536,96031,30376,70289,24596,16688,46898,12884,51838,81406,30679,93952,75012,19621,27068,64991,60562,42030,98667,22544,91047,84035,56859,97437,21639,83966,22304,89121,72840,40273,41059,37614,19928,61349,74610,53103,99978,79866,98626,94905,10204,78205,21737,98085,56266,51442,37797,57353,70704,63564,56696,19667,90761,91392,68789,17654,67341,81371,34343,93768,60485,16851,23397,66222,17520,12231,57662,84540,12399,39957,51851,81442,85469,17243,45242,57224,47876,85067,52315,77824,55328,83089,39665,84480,66808,51097,15264,74069,91461,13455,80006,92933,32579,12553,22808,88833,78254,71440,64125,75817,67509,72214,39702,82801,74088,58775,59521,26229,98094,81817,71233,84236,41922,46885,55875,98288,81697,48626,25260,44842,67260,45584,84574,93945,64890,92016,60395,48285,33125,53415,86904,30687,46564,39762,52599,60223,47647,37650,62085,22398,54058,74589,45135,36740,65229,10157,69513,68260,72291,71960,40366,71301,65406,37880,10325,24768,65400,99270,42065,10296,18155,49888,21457,62268,54017,11041,54949,91106,60788,88870,69983,98953,58370,38018,97057,20410,72365,15664,86951,48497,51571,18750,73622,48951,86991,41964,79883,40171,52519,39043,87005,21945,76293,71606,45147,58341,87198,33417,54669,75893,48683,93954,55284,91083,91413,98847,63837,99461,84779,20416,76140,84783,25336,11609,63569,21941,74531,90350,72289,14121,16356,52006,43341,64745,66907,32933,66929,71103,95207,51652,32903,21049,33948,11917,15603,40894,22780,78133,68444,37300,93102,98211,74710,69436,62900,26361,21748,53300,60712,54115,37178,58208,53207,95425,41966,73781,32807,77969,88382,81770,95149,10173,30802,13512,58562,28153,42184,74011,43279,76673,69315,37654,15046,77232,31426,78820,28669,40116,22411,80456,12795,15373,35277,59811,81514,88237,43796,23157,44613,65709,43999,24955,26220,10028,96459,61660,26888,75217,16741,35443,69879,67931,83633,63123,88143,88592,27620,26865,66365,23442,72706,67149,21758,29806,68542,70441,85688,23567,35180,73444,65989,98555,94908,28662,16174,18730,30417,25449,69503,31373,51440,69757,76921,57307,75145,58691,41044,14300,81343,68682,46283,97925,36115,21215,68047,53757,67060,48984,41479,13050,82322,52830,99463,18045,94073,49979,52347,11018,83822,52022,79890,98641,60766,15173,84216,66380,21202,97463,71764,75649,55644,42305,36465,46897,51514,46808,55480,10807,17582,96272,68458,82290,63534,24478,28315,95820,96905,23775,88451,69518,76295,14661,85841,31422,23490,26195,98774,99901,49649,86415,65182,99948,25522,57181,10937,41965,47268,28982,88238,67865,65605,50538,62333,30694,84493,75059,57013,97286,26671,99861,92648,25614,45842,71198,65865,35214,19942,67699,85460,21799,32069,62098,20899,89618,66095,64858,97736,65353,88687,79651,43741,33823,43467,69947,90195,70955,47974,85370,73022,20658,73842,35033,69543,51932,15795,58952,96967,34209,86435,68026,60979,11797,42437,31746,86485,74971,17972,16504,38167,28788,65648,84980,56429,25616,47162,39491,13311,70029,30205,24721,81565,25321,17524,24270,21307,14832,29163,73533,73471,71006,33075,57480,65121,18208,38154,46626,86217,77665,25699,71528,59935,89317,85036,48316,17755,36557,79372,46494,33729,56301,68710,94898,88726,77916,63345,11969,98426,68398,43640,55216,32731,35775,43621,19592,95413,21808,32719,86649,38276,11744,84986,52851,84831,18259,31376,97656,83421,10875,37314,67102,64508,89457,41419,60859,40785,32648,22112,36434,46879,56021,93825,15861,43370,24337,35253,97566,29397,27599,56080,51201,17785,14334,87998,46474,96258,43969,24400,46104,35287,61254,98269,84570,80097,49051,34908,25029,64769,70253,22583,76736,85671,52110,46021,68795,29422,98822,69928,19787,84131,48233,71982,12357,69350,22553,80197,22046,89386,64483,29524,24666,80031,78695,33808,57650,34713,95143,12053,63821,64767,13940,16896,36181,39249,70824,93919,48516,66801,98050,75655,18037,67970,95640,36161,39790,39559,75924,11517,35219,85852,93928,75191,46501,31580,77181,27490,87105,76096,44021,42289,80671,50920,69954,42328,49185,99178,47364,72351,45845,67942,21392,97083,58203,29143,62011,98667,88652,71774,49872,53747,42866,85951,53135,17559,57598,16381,17068,84013,78208,42565,38531,89783,17427,89172,14616,95966,83045,92139,16340,69256,74674,76254,44351,70046,30476,28008,96143,76477,94321,88724,30656,23288,48472,74014,78935,24668,73845,16758,83623,23811,21707,14275,66226,23592,22429,58126,89766,94748,36552,89660,97824,27292,38464,90468,98451,94996,47256,38959,95989,33721,29505,73332,30539,43572,21913,37137,56404,98658,20886,80315,99697,51997,48551,91553,78554,58602,89400,63824,85027,79092,78987,37544,94594,91907,34012,12211,24930,31262,92069,44702,19142,52259,95064,45518,96635,12417,96649,87656,17847,29244,76394,23295,78592,30279,77565,92916,70348,36405,57944,74992,62901,81783,34934,90858,55213,44087,26703,58149,53440,94350,26848,73863,11494,99460,43431,68524,19782,25182,77373,43556,27469,56444,41704,51417,92533,69981,89993,66295,47767,42488,45629,15339,34466,47024,83227,84485,71524,47893,92282,72095,44487,56343,45474,70037,79934,44531,86625,37545,47750,45754,49197,71183,25789,13434,48311,44798,80180,84040,57296,57224,31093,35816,39406,83289,47834,87463,38618,79350,74420,38200,92595,63321,75182,68003,22471,90593,42362,23481,75235,48815,46991,93840,89456,75301,87260,91577,45426,59292,71004,38826,43034,49517,82002,66434,25198,25997,69559,69439,26975,41411,83599,95103,40530,31398,25132,77294,90200,80118,40952,47676,33240,36023,21058,68720,51125,43615,49795,42069,86305,34345,42191,80987,83917,56941,12809,48579,28619,76016,37006,59072,46093,63420,54401,54560,43836,92788,95196,94662,42501,54694,83213,59942,41445,23636,35796,81327,41707,67814,13831,77474,29208,28299,87106,98084,61295,32742,61195,21112,24214,31586,27920,16436,53269,42389,21525,65190,72581,58710,97966,72069,40505,63303,47924,17365,34169,63902,39988,41111,36784,55037,94835,98124,10778,65535,74886,76051,56381,72485,38346,24652,78322,17003,29475,15437,49024,13397,13813,42302,32246,25005,43102,50547,71822,13023,10938,12453,46986,82207,72394,58990,78765,81128,21144,74090,51418,55973,36631,71769,33316,44904,19550,80815,85388,11772,40253,59897,65707,16422,17437,32921,98255,60741,99405,70323,55734,71076,89706,61392,86862,82052,47635,24200,88577,27082,78305,24052,71563,58804,24232,42284,45076,47704,98242,99944,17043,14377,48519,73610,29650,17953,50955,66553,44790,36716,94845,69540,66072,19084,96069,93501,80037,72304,41443,97813,55032,78033,20397,54398,43054,29779,85658,85309,19322,54124,64602,65224,48848,48302,23043,77041,91533,78645,19485,99938,11014,83472,88106,72347,69076,16427,75591,50995,99116,51295,88613,76988,38887,86264,85562,74172,65998,85786,86298,46023,41004,22038,68792,85620,90948,36836,24936,63148,90851,77994,38133,82199,78204,17227,57941,48414,77598,27288,41803,92941,66420,56848,11263,29445,45833,58466,34459,98003,64902,82811,68862,64364,89175,47337,11711,87838,79672,90849,50384,13493,36954,71435,92921,54037,34069,52456,27383,11954,18946,42177,48932,57140,95764,80274,28537,41277,21081,98360,87181,88735,48948,65216,15407,93525,85669,12760,91928,64000,43154,77986,62400,70244,52004,12864,48029,11048,56317,90123,23625,59000,56311,46243,86222,81091,84963,34406,74090,23210,85570,74180,40608,40687,10647,48166,63436,94088,57799,57915,29378,30622,93724,81917,14800,77592,87443,29884,88237,13768,58740,67664,52693,99432,30654,98407,19634,88273,30596,46019,67226,87001,12091,79007,84562,28634,59891,34211,25573,84471,42937,60976,68840,48469,61837,55063,46373,42862,35849,93528,23325,79168,66241,92996,38517,43863,38721,13855,67410,97631,75250,64144,64705,36458,46269,55583,78924,78967,66400,98693,79617,76304,48861,91656,50215,14167,38537,30725,99506,38878,44334,27349,77261,53857,33793,20499,25362,56653,94538,40197,69940,44821,14140,63901,58177,78951,68767,44353,25553,52834,74962,33055,53354,95240,54250,49891,63409,70167,69932,30225,73846,45802,88160,51196,13852,41891,92864,87463,41106,17177,75442,94973,69305,28544,50427,38970,88248,40850,19927,46125,25583,21631,59696,42232,41167,51149,62124,64866,90250,64160,37832,59330,55009,89974,62245,48262,63968,74342,58364,97930,26839,99560,26765,83657,50270,75226,90305,59008,28199,44011,18304,16252,29733,84139,13256,85116,41862,18999,14292,79511,23257,86624,94896,51938,94449,83648,28750,55428,52130,13261,35320,98646,40727,43476,65232,99826,53137,30533,55467,11234,67077,51877,69840,20363,25117,27953,71413,58286,64405,38180,60682,85048,95554,57883,44984,53458,74473,31838,45747,55004,29287,85685,41446,29146,73636,99840,64054,21285,38548,20986,36930,95481,74938,13700,95251,44675,76436,94283,20533,15271,65696,37323,71909,42451,96916,24728,57304,55430,43691,22717,21953,25185,15223,68959,83800,52063,17013,10398,42258,31026,83862,76644,29858,80302,70184,84311,21643,19329,44338,79003,64684,89156,83618,98404,49992,98603,93171,16787,10275,87779,27772,32632,98730,48444,32001,49271,60238,18514,29361,22356,38929,34974,36249,71627,24587,49132,91561,20002,67064,50416,92139,61793,89899,52165,13492,84659,33731,30462,15110,28829,15076,53262,46620,49632,27790,36132,94211,62103,24812,12054,89098,74204,29826,56112,43840,60571,63418,96172,88829,69137,62602,35534,13707,35658,72010,72700,10335,59427,36992,24884,83836,36927,97380,71827,32009,90139,71573,15732,10866,67794,91303,52257,36445,21397,58818,14694,92543,76996,91813,67087,67724,57437,92156,21541,23308,19905,56441,68868,81653,17170,37619,35460,31481,51932,14722,98328,77243,64013,16402,47957,88133,68500,18169,75302,99257,98440,39986,98252,35932,27956,46454,18527,14489,39994,26311,70567,49163,20085,54066,49696,94675,99530,15358,90992,43484,88602,51561,62024,77825,53464,70286,55749,76969,47139,66895,68247,42421,30543,44778,75504,16797,65268,10205,34547,57533,98495,99101,95155,27174,15658,29422,42010,90044,37134,64827,52366,11412,47235,79064,91167,30764,27815,29343,30163,75974,77968,25406,92454,39865,50142,68816,79306,21800,76328,25792,86037,72037,99449,37406,79571,32459,57656,76042,36769,52252,72950,12492,56280,76039,83008,78137,84136,68096,99777,59459,24971,14579,80088,79668,74873,69115,12964,78276,10897,54741,94854,93821,85382,45189,97078,75792,75499,15694,16513,62725,51218,54088,66845,73341,75713,96382,81840,68905,81447,73134,36965,94182,10706,44399,54536,12002,12774,97878,94340,10037,13035,80878,17249,43451,79180,84723,60924,29109,84510,88912,31326,59145,88136,35014,92724,78666,44728,85022,86647,36200,16094,10122,22311,16811,12132,67094,15511,92905,18628,12778,60656,15436,68452,54806,96848,57729,14310,40903,79925,20778,74370,77399,79220,74743,69344,17188,69354,97394,86958,69049,30859,38354,81799,44408,41550,17208,23945,44463,48014,58074,76260,86280,54085,95942,49275,55932,74574,91118,39633,46594,71720,73612,71373,75227,64793,58901,76783,65242,87181,22731,23751,30240,98697,24379,48195,93976,93235,41520,74675,51682,78608,41670,60040,37075,95370,89740,82724,62166,16744,47441,40701,87421,70940,74632,90155,23443,22950,55674,20405,29661,98981,49543,46739,50321,67352,32675,70525,16938,50067,14507,87412,15151,69627,67150,81436,86802,54928,61079,37527,81621,68400,51323,16887,73458,41160,26894,72691,67885,43171,50210,30904,67095,54152,57787,31167,76316,20471,27905,42837,63925,38467,87686,12077,38645,86231,74387,15757,26787,87121,67958,27510,23077,54640,21527,98937,89405,75403,68799,57640,41413,33092,95865,68178,89400,12424,82387,96968,32345,72409,13730,76616,39599,63143,62570,64215,80334,85450,28932,55202,99464,41790,32180,93756,39518,97602,43817,17838,76239,74983,40933,37717,48273,10909,34512,27886,38109,74609,39423,21158,32393,26553,23646,25909,69488,68654,52378,53137,15468,38686,80659,69413,11777,31531,87088,84767,33305,21054,53014,70305,53943,21670,93936,75463,26494,87761,49543,24081,88789,33396,23229,65949,41770,96279,43561,95362,90539,85801,67750,57037,33490,67246,68312,32945,33132,25553,39340,37827,45057,56597,90214,84411,67598,93489,91126,45074,11434,36252,96590,23474,62492,57569,38945,64005,34727,65423,95906,12155,10208,34053,42366,14781,63406,90518,88645,79874,50457,71782,87515,35797,83596,71823,61185,44712,82275,20570,62355,36034,73518,44143,72922,10770,36890,55879,98479,79081,42078,74419,89270,27133,84850,85812,27488,48674,32597,46633,14450,61010,88895,57559,67411,23363,87045,27154,56667,86777,31447,66710,45972,90708,69481,53433,94890,42995,25360,42603,58785,51884,95260,58916,23064,13766,28237,14307,76956,73375,73898,40859,71852,35984,98619,68229,75457,53174,49187,65046,86517,33425,61856,17017,55659,81937,44163,50960,54596,88083,88639,89588,94025,33528,29796,26442,90068,93797,95375,37353,63495,96058,62073,73519,49124,61268,99177,25474,36290,97912,84100,53166,46995,18353,30642,72076,30761,59948,22095,56632,77815,27519,57955,15588,80492,58614,58171,90642,15496,92726,95625,72923,10960,47203,38256,10921,58390,63638,50991,81635,27755,90916,35335,21257,52052,58542,27985,59288,91347,93303,23500,58111,30299,85130,53014,12076,43942,49287,98669,45536,79414,93692,95813,60116,81822,67408,72087,59163,13431,72528,84865,12777,73013,45685,28692,12978,40443,24999,37298,15739,39078,78440,17401,18320,41348,70558,58749,91112,63027,18140,51955,64819,46640,38587,92243,97904,94037,94277,97045,68052,42494,37473,57308,41691,44557,87929,44583,16484,29855,14212,13673,12886,74928,30849,45486,76877,43235,74620,60774,99631,15260,24909,86044,38139,61383,69954,44979,98799,70517,25512,27370,96209,34733,91332,85176,59029,50453,11571,93624,72745,22258,76718,11475,86594,76449,97999,11307,20420,31968,25227,48653,78970,33788,77142,91803,44933,85824,26601,48124,58418,98801,86867,82371,67839,85936,35974,72235,32467,72054,10845,50276,48929,80372,28206,50514,21651,37152,29085,31034,70988,36534,74042,65365,29987,26158,70781,34421,98635,54416,26147,87240,55406,30738,81498,63834,80119,32496,72033,20027,41583,34555,59580,56671,25011,47195,14365,83297,21671,93277,62574,32786,70992,58622,91232,47212,51710,41632,45717,27337,51148,35341,89894,55018,14537,45018,33620,75498,33330,94030,79315,93240,25859,81919,43557,31727,11996,30473,50980,72954,40608,78211,58005,11811,51770,96846,22959,78323,50309,88239,91289,28539,43002,99613,66591,55845,88764,90249,11869,59211,48632,14110,49789,71427,61223,60294,96964,65475,89954,84318,79273,75395,89670,23238,76842,28076,70135,36093,20369,95091,52107,54806,83001,12832,45433,40837,99760,51650,83413,73206,13778,15788,77722,29018,67697,61061,96106,95735,61285,35358,24080,26606,49969,13626,98474,92435,99685,37273,89663,83380,88747,27652,96845,63695,52955,49772,17385,10711,47595,31470,36782,84281,85145,47227,67381,14489,73090,84978,59472,14425,68667,48927,54749,63001,87294,34226,67630,70693,30573,10010,89916,40005,57548,53083,75903,20969,35871,78170,57282,20948,65911,24331,41998,92123,44905,46416,65244,75648,14854,52493,35137,82059,95083,57795,77208,53751,42806,35748,22199,84128,87095,12495,20413,53471,23609,32564,93263,47702,66647,22502,83850,44153,71670,76053,76112,74874,44665,42248,82081,90647,69735,34074,11881,81885,42836,56622,44848,67317,69725,86796,31363,42105,12574,35951,38729,33879,93945,16478,71668,31411,45573,78049,11835,64478,22933,61450,66942,76065,93565,99808,48468,16341,74710,91617,59773,54456,62435,43066,60021,48702,18653,54020,57009,75498,20777,69550,80783,65840,30253,27811,87905,90121,70492,87087,17546,60746,86680,78504,40278,60266,12458,27782,51044,59779,57089,72456,27210,43573,36362,13487,71610,76507,85685,60235,75056,46678,91113,28628,98278,46817,92550,17656,76738,22024,57458,99333,11595,97355,85589,50571,92958,40961,34283,84232,48558,18318,31674,45270,89610,80663,66701,65192,48340,74121,74171,77136,13351,71775,12446,72545,34780,59722,78426,37374,98636,70466,96688,12291,28049,19850,60093,26392,54852,17770,70123,26192,25224,37037,42566,81047,21688,42827,25306,44016,29560,25227,57579,89801,74856,67341,83311,25498,82673,14254,97124,44760,20730,41107,14306,55338,45835,39640,32512,78482,49571,29040,42973,53680,31054,44431,92495,46625,48047,67415,68941,22391,60241,54619,90352,10781,16307,61498,29380,56654,63939,98637,74508,28632,73245,69712,19723,85485,31084,34090,22996,29215,64528,79761,60813,56410,39289,98146,45217,63257,92419,91431,54263,73076,75848,58821,22441,69079,33059,32465,11839,99254,72892,98203,83439,75665,46130,24129,70307,34892,73958,95385,71303,20776,26936,61495,38741,70937,49912,65725,58690,89866,83995,72883,19778,20788,12321,75822,75646,10330,51586,53106,35705,53493,43414,53516,35987,59859,49483,58229,72903,52297,49778,52280,33965,36717,74148,20880,82403,84161,46341,51157,61726,89484,29209,80520,10247,45591,20935,28321,11144,12330,87122,40835,90646,24508,30801,25437,33255,47128,86558,98789,66968,32238,95465,68012,26418,31237,60489,76989,75588,25636,42085,58575,73108,57993,89917,20748,72398,47780,52216,48071,44690,71675,25920,42973,65355,65811,38358,78176,61370,54732,68610,22031,89442,72817,98732,77004,77562,75379,35786,92263,78203,67804,27270,65088,97349,38539,23895,94486,63400,59933,72837,88647,21320,69453,66901,20567,34950,45555,69569,28583,70141,37341,24664,32224,36860,70409,61150,14106,46221,21932,60949,91195,89202,58224,22696,19181,32294,21431,49304,43433,53007,45183,97369,51853,40389,75892,51421,43168,13367,79766,86039,51121,61253,81437,12013,52863,16618,35563,29143,62267,80848,38881,66761,15450,58426,18952,89125,78124,18421,78772,51465,35007,33079,25076,91971,96732,78169,11004,41053,90638,44175,36353,14054,93008,99243,99900,11164,46462,69036,18754,43430,80382,19129,38675,27936,69666,72829,12911,94020,11581,77865,75866,23532,13650,42711,77432,78106,23055,59305,22946,32584,76529,68925,74203,56075,52317,13739,31428,35938,78774,92811,22416,58881,68576,28783,13356,36429,69603,36595,20512,77580,18898,92587,72356,53639,76158,80886,34134,76504,97164,56853,58654,48776,53760,20660,47699,78024,88595,59277,55580,52551,88780,34028,54069,57827,87094,61539,47652,48551,63521,14294,64307,78464,15887,49880,31389,54185,67897,90216,41805,47629,27946,57709,34471,83481,13515,27862,48648,85927,49660,58670,47978,69254,22564,30895,31750,16895,39888,84413,38873,27254,65154,95578,84919,42970,27246,43329,93006,91642,28386,56525,98405,53754,45553,66461,21525,90296,75246,89569,75542,31908,47846,15451,67818,50365,48199,34482,42021,48538,89808,43391,37713,43154,62979,93705,80132,80557,77590,33067,99709,63011,69739,89216,15671,88577,29919,26296,93823,62262,31234,93949,18130,53872,61907,65320,34215,29835,60053,56544,51291,88483,11570,94655,94463,63509,64462,12876,35162,24202,88218,49055,66734,79492,84072,67841,26402,55973,66337,11247,86514,32938,69132,35738,54713,14191,58154,30466,11824,68486,85709,26873,15005,73639,22298,89544,50084,57693,36107,76028,60335,39011,95945,40763,75985,10071,43640,23504,61190,90845,67688,61036,50699,57508,42139,14150,18469,74374,96152,83521,94704,12643,29645,35917,40880,93395,72296,29239,88062,47468,66143,53783,37004,61679,88808,24016,38291,47864,42442,10484,99216,74637,85069,33405,65843,54130,31226,17087,87992,31214,87729,35649,61213,93338,14146,68010,38281,20379,64500,87637,56698,82313,16198,36567,67906,16140,82017,84839,14090,43177,40459,80674,45543,32070,23783,32945,15193,55988,40058,93753,50041,54819,60642,12486,60401,58903,34782,63090,32692,34830,99615,27726,30026,66155,44680,50507,98795,94986,52137,83673,64476,41932,25470,94969,90418,78136,63823,48857,20748,65191,16847,85092,65170,43742,79781,19602,76440,53161,70437,67246,93569,77724,40784,50189,44477,61630,19955,21946,99520,34855,60521,70170,21438,39120,27421,45128,34552,23579,98787,64100,73922,68233,67751,67075,93681,66053,59660,54568,81762,12020,73897,70148,76866,70143,70980,89751,94756,42715,13365,78283,43493,96954,86836,86533,43642,16904,25909,91245,66003,28805,39608,17752,38569,15138,20670,34624,70000,85071,81803,20867,13407,53996,29020,10257,45233,79047,64644,17819,88177,12875,81897,16951,67006,74981,98235,47507,73764,25608,74657,62005,65739,56169,13706,68934,81093,63398,85769,93153,40751,71090,57818,87961,97793,79201,11785,46602,63408,54793,72337,45503,66400,31648,25053,72342,97362,89721,85549,30985,48774,76743,24387,65674,78918,24201,81762,57660,54412,86422,76216,84612,53652,98642,62995,27392,24169,57999,22194,96162,35113,18581,70658,91467,25524,90429,81822,79628,56110,32368,73746,96108,76897,81540,63635,87817,63975,60981,97824,93716,97569,77451,25516,11720,43432,66311,89110,19948,86791,96396,99463,24046,14924,29398,59681,81868,71669,72395,82472,22484,93891,96595,79311,94186,52054,72425,36416,48622,61842,39510,25315,31341,30790,54895,84073,76211,13711,54982,84072,25932,40929,56643,19529,24610,25646,72586,15161,68561,72181,15111,92114,21115,69178,62754,70250,53030,58330,30387,87878,84696,92063,72549,15797,32086,70717,67766,80369,92052,61843,67115,36268,16045,91715,92299,72812,63872,19123,83721,17251,51789,60494,62144,28613,40238,78790,39687,47517,65240,91953,39218,65554,30480,43726,78529,44491,60640,11455,77949,93878,20165,87969,68097,15490,79757,21032,85094,84092,39155,45825,31011,60122,69518,96918,80739,73275,40986,22503,97383,82034,24609,58484,15209,31444,66024,24685,23750,37171,72225,44032,31720,88350,99465,66675,32265,30387,84925,86737,51889,11125,18425,50429,10894,69119,32192,58978,78471,20181,65104,84661,73944,44347,62762,70411,47098,44011,35340,68576,25711,70859,94070,45732,62971,24380,72766,64541,32435,38850,70584,14173,85993,81648,87438,70732,74993,61647,27424,98032,56602,21838,92324,83404,57152,74956,78699,20099,69316,81287,97300,30205,40297,17286,51491,28530,14379,78627,83489,41035,99819,17534,77773,99412,17928,67768,94043,25816,34210,74316,46951,77650,22568,91959,13642,11335,95207,51142,66883,58072,65666,46006,28125,54013,73604,70054,94134,49404,90257,50905,93087,83061,95858,25569,62933,70872,68220,53224,41087,56577,35292,69126,59016,33617,45738,92112,34885,61062,28206,79929,96140,87022,54833,67150,35776,53911,75612,88898,44346,81133,63094,52004,18037,68490,97975,47026,93615,84426,35469,98543,63176,36550,81908,55279,99714,40000,10094,76442,33560,87297,61143,79170,63454,21892,40770,85276,36888,46014,95128,12397,40626,60519,65963,55031,43440,91617,70643,63975,36530,67726,70614,61595,53519,69703,63303,21635,46427,19161,37566,19923,37793,64351,49217,74035,21532,77945,58642,79156,52373,33419,90360,83220,23979,87076,97291,28256,32092,33274,13423,25685,82850,46477,58470,80088,54421,26616,67156,78693,88552,65768,64947,95458,30471,98923,74595,10537,35857,94141,90232,16507,72556,74464,59371,49894,19516,54653,77060,71422,60390,81374,62992,86111,14341,81805,29570,57976,15840,30230,24876,86739,72876,59158,71619,37611,34962,55562,76885,51311,60474,40514,23817,19542,64252,83107,63726,95294,30000,75755,45037,34541,61481,10235,80603,14573,18748,21945,30922,58890,76324,91361,90497,99882,81111,97453,10561,98507,80813,68611,86400,95427,66445,81711,66683,79202,75637,88803,40446,49389,84709,25190,37869,76179,24714,23945,48032,35653,24944,79218,66390,27380,43282,73891,36979,13343,27108,63424,84038,63847,65289,12541,73364,77044,58905,44176,42284,80481,85718,74212,65240,45637,58782,78917,45979,60013,68853,85434,25762,45990,13676,44256,85325,15946,25332,42892,91717,92433,68210,79985,49529,18627,20750,64923,17007,48928,87603,41645,19772,41601,21169,90857,84081,11737,98896,96824,85108,82224,61058,76180,98788,29887,34239,59249,28925,28763,18297,55118,62071,75765,14596,98366,95780,36032,75298,18019,61595,54313,66785,88104,81331,75819,46489,36821,13207,29836,65793,14421,94162,40697,75417,12883,21940,15404,33111,62989,55940,46192,63579,95934,51938,75656,97222,91462,58225,83467,77057,44169,38669,73886,12121,14125,13607,15904,22167,49738,79191,41912,74361,39912,15049,93266,97998,34798,57056,59928,75725,16185,81898,21346,67261,80109,18846,60931,97591,30179,10353,11480,19375,54949,81817,90745,69735,94714,60767,66529,43342,57157,55506,62298,38611,99114,65744,38725,15265,53055,11689,75452,58144,95008,97128,90568,98712,43582,37503,95690,58989,20486,75027,97587,23128,22935,96203,20107,33046,28534,79465,46421,18565,49421,71381,69915,79256,68485,32613,63082,72691,38739,77079,18720,82027,45395,54798,43367,81017,45548,33112,87647,57806,10455,58103,15509,14634,50845,76877,92941,71058,22084,58372,11577,98975,48834,96343,50048,95382,92517,62824,72733,60022,68629,61332,64010,89182,98134,70495,70059,29166,42020,57049,34393,97581,94074,22070,32918,44051,95929,26701,33600,49504,90318,86023,79776,45221,59591,41312,52936,81687,38371,39948,60553,11214,79209,32096,16019,27968,82559,80272,21928,22753,55871,97794,66206,86673,33199,49373,39577,32423,88887,20479,31750,62284,66978,35761,55049,90485,73628,80494,37509,56308,80801,59035,23102,54521,41414,65549,24591,82530,12401,68985,87251,89420,56312,35381,96287,46561,18487,59487,86049,20936,94178,19953,47337,85336,40595,63254,13863,56463,39758,90698,67210,32309,69280,72799,75768,50320,51093,27952,63707,15991,85350,58755,71960,37112,53073,37736,51019,18536,58138,97182,48981,80657,36569,12391,55176,44756,31053,48630,68688,90062,76627,17410,59167,35100,34812,45845,98471,47801,39877,43862,52126,22678,78379,99411,14199,21475,54891,43578,31506,27178,32831,70101,77173,51040,82792,34720,17387,79186,85089,14957,32701,38189,32540,38347,55469,27879,63453,24993,33446,59338,82547,75160,41135,63314,91888,56517,37481,95803,26268,38188,61666,31692,25773,37036,65660,85383,20961,86830,17770,73523,40919,59292,33403,48257,87705,23464,43061,49615,78930,12838,70339,69855,27109,64781,91126,99383,65546,16862,75022,93232,20797,83365,76178,37678,96403,45491,45789,16472,44670,18479,91059,15382,34468,83848,52689,28358,33485,86024,70203,40826,93225,86127,65810,66519,40878,28322,95975,78691,69469,56679,95022,22685,29139,62713,32658,72988,52010,51307,85428,83064,89645,46002,36437,29299,36474,25443,41921,24345,71645,41959,65995,50761,71553,21020,64816,30215,81095,85567,72514,77856,27850,46583,30795,51313,89265,62618,77781,27654,69221,56254,55636,32494,88632,24795,37220,99524,33477,68155,16511,63141,29247,90925,74851,62364,91297,93254,56088,29590,67555,71229,69655,29477,62463,21373,53496,48905,87885,62163,45489,93206,67956,62746,22393,67109,36685,16371,47173,46930,21003,45389,58264,58570,84625,74724,35866,94702,66870,38878,55871,36475,21378,51150,13929,33098,31740,53557,37309,32272,44527,21700,69278,33839,36356,36425,88223,30183,73979,27430,84092,78300,53604,58539,45282,58238,16463,24362,30207,74464,62872,63357,85684,38336,40775,24747,87086,85570,37886,84569,20241,76617,13279,62538,70964,16444,85586,53784,31017,84701,26166,91402,54087,15635,57565,18473,42624,43035,15749,84182,76599,67928,14686,82710,53567,79619,12061,60902,48116,30779,82348,51836,31270,98888,53425,19883,36901,73910,18604,40429,60494,38695,42904,33868,40450,17024,14643,29650,14790,31165,93757,82205,11045,80930,59872,30883,74400,31377,24828,61159,27558,38101,19044,71877,59459,72772,48438,48146,26703,24568,72444,70027,39159,85162,57481,62055,37904,47204,16859,79252,13985,70869,97180,98136,37136,99677,10199,15640,59208,23888,67419,85772,83141,82473,12282,60572,51141,29717,54728,58615,42023,90171,84258,91056,72799,25586,37901,72558,42322,21661,47990,15923,72332,68954,56477,38110,56801,15470,85029,40524,24500,68813,44145,17868,38066,49954,36723,14910,58094,18364,66000,13717,53412,52206,80684,81965,49945,56810,24617,25106,19256,92361,85768,43483,69241,98438,58569,13167,47273,23142,97412,71390,26383,13191,95440,47038,17203,57451,85443,68499,79212,15945,61924,10050,33259,40212,55087,82286,33134,59794,37359,81134,99119,98992,47636,83813,38109,29878,19485,70881,44466,62976,92514,90660,85033,55553,70510,86186,73770,77941,38582,77596,78639,16256,39647,49633,59256,94470,83666,76265,77398,24502,32378,34145,27784,65233,63276,73360,38152,69944,76438,37364,23278,26336,69686,97587,21343,85176,74157,17917,37655,42874,58098,71150,42976,34815,13556,48801,99892,86247,32035,16721,16033,69630,21346,25181,81871,14234,23402,72737,26155,46121,98194,60666,72374,11297,22363,67802,19869,18347,48632,50885,91158,79840,12116,69555,77972,73604,50733,11626,23913,89993,14434,19491,13146,49351,55097,99300,44549,42564,82170,25982,32139,48141,14637,56216,50681,47274,98842,83852,52212,29960,74347,97620,45957,14691,98229,77839,44326,88132,28342,12116,24216,65320,21890,93496,91528,12911,41202,53381,94337,74247,16839,11708,62626,55062,85817,41180,63791,18458,91627,57651,21131,11199,73374,47105,17912,84191,59427,77680,74991,76605,37365,39669,45684,39938,13521,66292,29194,80089,63448,42054,67089,38805,40332,77821,98995,63426,23388,10873,51842,36513,14569,52539,17722,74006,96245,60365,49770,96445,73592,23054,11857,86071,83101,50794,44350,23538,25753,39956,74080,61072,61272,51587,64004,61863,28469,69690,48634,38867,71152,17479,26616,97819,93963,76650,82281,36164,77946,63280,31634,61974,60190,41187,13234,59210,92340,55656,64872,95992,55080,25874,87014,25110,63754,59011,82061,74041,62185,23023,85123,83520,55961,47989,64089,67970,66114,90671,65531,31396,85337,22325,20819,49559,83452,95396,84100,19138,49178,85839,52366,92354,39153,47484,67087,23374,49973,77398,67874,64311,41135,91112,50560,10901,68038,51739,97570,27350,80523,92948,42777,25571,52374,27887,36393,27612,32641,99834,69932,55134,89663,86426,85475,52562,78086,13877,62519,93390,49334,57453,29198,29121,77572,94194,85865,21893,47576,24390,78402,94678,42825,48939,80157,91788,82107,58967,38631,54403,94383,71648,49399,44323,96832,59331,71281,81629,78179,80720,33715,32000,87533,91562,72571,63168,79735,14014,18227,82937,64400,52317,78281,69909,39635,12355,51694,27308,86859,45918,23630,87985,59042,86580,57456,75449,60554,88852,96614,22338,63044,30651,12862,18203,55464,23753,21220,97652,65983,76648,79464,53617,85753,45444,89299,30657,33689,96432,53761,37789,28449,42980,60029,32683,78481,27496,17744,63287,33850,35115,95664,19861,76729,36844,79998,72509,17653,96942,68941,35131,90960,39430,10770,52921,62076,43380,75598,83434,87563,21858,18178,36452,54216,58149,25460,76274,97667,83526,11937,15619,53863,29805,90831,89688,32215,24775,48786,56670,61944,23067,69084,41805,64464,21884,29315,49975,40366,60215,11437,69928,16769,28128,44416,68827,23519,28640,39644,48297,26679,60075,89655,64283,80669,89524,55612,21559,60199,17886,76760,47542,38742,93976,89281,51391,39922,13362,79956,93101,12198,15884,67320,79247,82098,37424,67921,72349,60223,86481,94438,62007,19401,65504,99982,18174,66997,52187,65862,63275,96813,43119,17067,57937,97711,65864,84037,30135,56309,93049,82441,93462,12353,68956,53548,82736,57900,39718,56655,18653,94953,84584,49083,22784,52008,18053,11382,63808,55505,57846,45657,37524,54117,85181,44262,85929,74962,76446,21707,10289,37638,59183,64334,80061,44838,52001,37025,16652,89862,66952,83207,21782,76011,17591,78165,75866,51999,25657,57436,60509,29961,97545,40215,81455,69708,62038,80129,24994,63454,21413,98395,92898,33403,73035,92393,56071,16764,28544,38940,22413,40758,93085,85373,30600,29575,85879,39273,74377,62792,80634,24685,11262,79966,42082,77890,25780,64403,89813,68142,58609,83232,63428,23371,63936,99212,32236,22929,49564,49991,94104,27691,95284,95363,31706,63441,28489,42630,98148,20217,82685,55217,89413,31457,71063,31309,55305,75460,83108,86453,20552,67821,51972,62009,51122,57474,96263,93867,33299,38913,69146,48604,88147,64482,19434,41715,39406,78391,61716,51595,82428,68753,21297,73289,13716,31740,11732,77656,77336,99145,33960,39511,98617,44650,12182,74199,45504,30170,13029,48045,20793,37631,76816,27835,71139,43206,73603,10433,21746,21989,44791,72247,74324,61060,69648,67247,51122,43811,49850,14214,73729,11985,53353,36454,73029,80656,59333,97028,20040,15547,63507,45268,11893,56521,87582,14845,24589,15186,95498,21076,69128,28070,71133,71112,26420,19415,58535,46389,13574,32567,10787,49590,71913,83705,76187,13288,90198,70242,67802,17552,73247,68316,42763,88759,76023,54368,99276,80225,41135,35236,18984,91751,27319,44021,83505,66334,51630,43307,98792,57823,27103,83848,99520,23157,47108,51055,22613,78528,16394,73728,70477,81094,29179,50956,61960,34342,60750,90490,14221,53417,75247,26035,81578,25493,95690,79660,78924,34187,47302,74098,13398,41426,15720,71208,23782,59796,16329,30275,50438,73629,16059,36996,97090,49535,19338,36807,26060,26524,78937,88984,20113,45821,64544,71167,83720,63482,40812,48389,39512,74168,36335,19359,63049,55072,48286,20216,39212,14096,36573,52281,92213,93167,60106,54638,11264,55359,72484,17207,15924,93485,53762,58580,73364,44243,23256,43329,50197,87502,35875,73969,81106,42527,57179,48687,35501,74638,92711,14746,33129,88481,99414,47588,39561,28208,90167,36967,68450,74622,60391,39986,86780,26045,15357,19572,43350,65356,62901,80852,34867,19171,66923,82353,72673,91123,22938,74210,72209,87469,70352,89771,76436,26368,11120,38909,79252,63724,82631,98338,30969,84783,35244,10239,68341,73026,23623,53800,99493,19709,23515,52316,73130,17213,13271,19894,42233,55698,30947,76315,94346,23146,79402,15464,65978,75638,60918,82713,81747,29825,81436,45270,31450,65374,12174,32837,16772,98144,57966,88000,53899,26683,49131,24323,32422,23981,26403,35348,15389,46605,53913,45466,33264,44914,44264,57040,50146,53021,51036,36228,33245,79355,26073,40212,41321,92231,97524,12131,32732,32333,77288,60281,28489,40124,44356,45519,61681,80823,48519,76253,15964,59056,39774,11580,60998,94482,79008,75984,27397,32891,96574,65315,66524,27400,79764,68123,95126,15633,73786,32707,78214,84017,57360,15242,46655,34965,75123,36713,91503,80125,38848,57568,73199,32900,37808,38193,93661,33991,71486,68194,74742,17009,24521,31519,61041,23260,72895,33917,71982,19321,47273,61237,57755,50392,77662,82434,41881,12813,26618,82301,57193,44402,13950,33204,95764,43873,46292,82523,11913,47020,17704,95859,44092,69300,47997,63440,43880,35488,67917,70761,83868,40222,11648,21201,33017,89266,30301,66416,78546,13401,16593,80137,89626,87246,25051,31464,93318,37474,80048,30704,64493,93877,94009,24677,58961,66288,37221,84614,73458,57761,59127,21622,78586,73893,20661,25578,57879,90688,17160,52766,93857,66493,18017,34695,46389,52551,33261,94787,64038,36373,11144,88102,52431,68368,57160,55666,99802,70825,37077,47173,26056,26379,84320,94871,89321,73257,97618,36767,71749,11337,86084,24691,88453,68049,83924,12057,71613,50112,71164,80121,46062,59138,64062,37777,62712,63588,38644,60937,97886,82952,87817,55104,48355,15555,98615,74338,84853,29091,35102,91224,73592,27801,11929,20397,10105,32321,68557,11734,94844,18203,30935,33323,88411,38146,10605,93887,38488,53390,83276,55791,25417,27898,16691,66931,16841,88734,89892,25598,41649,73257,30195,70923,41679,51435,52138,28549,97831,23191,21633,51595,73908,18756,44465,49675,12605,26281,93423,73690,97585,15386,66967,94445,60434,52098,86989,84576,28051,89606,97844,48237,47341,42979,74139,69457,39811,65600,29949,17742,13774,98338,46068,47029,15472,51785,56094,52206,98075,88645,48603,12463,95332,18527,63865,44890,35018,64217,71789,51153,47780,77947,21875,94383,72487,46251,88080,90481,48553,49994,25904,51372,99786,23266,43605,94333,37133,41569,35346,37727,33226,91758,72320,17042,93474,25959,96506,53492,30635,37236,88630,98771,96246,56280,25866,26912,55105,98252,80293,72634,52625,51963,77542,48379,52467,32079,45835,14050,26764,23040,48456,66591,45056,97631,72235,44104,83891,37848,70997,74886,66167,25006,69885,16657,15591,30594,32825,40759,60128,57754,25102,20980,77360,22171,77995,83161,24225,21798,33540,11202,85708,86820,64686,41018,33398,85760,24359,32550,56283,51804,42883,52840,53403,48288,49147,60695,18887,88984,41867,48080,19156,42276,34046,87114,54138,17488,56918,37119,50379,95078,55596,94094,50377,19632,71895,86749,85928,32110,17516,34516,96888,28473,73941,32508,21075,41441,94510,53662,97483,46973,61482,41055,89383,16899,15723,75541,13946,45842,58066,81768,32123,21609,33066,22954,91210,70445,14533,73863,36465,13160,56379,36162,60045,19205,13480,88561,34756,13708,34463,36535,19593,16010,81959,12320,95008,36079,38088,37657,41450,53001,72554,65473,67680,90764,55069,27742,75401,80419,40651,50416,60670,26735,87577,79474,61434,36199,17850,43673,64011,28214,55134,83916,35770,50261,51079,35546,52785,49058,64009,12021,69078,61699,21849,44281,49452,59592,11575,33816,46688,34068,37736,44997,69809,38626,50324,68732,46162,82620,89865,82889,20674,97777,76815,51217,26589,91840,76017,58673,17005,89105,44359,41202,21486,76504,16249,76403,31696,82297,63169,42358,64087,13702,22464,97163,74849,39892,58895,74593,68148,30294,78516,44984,97049,65195,80351,48041,36050,84100,79151,61343,40389,54949,13365,87540,21727,41887,66545,18030,41632,19065,27350,17980,16060,30202,39317,46936,47316,10116,86699,69750,42943,21627,82171,79235,10134,21530,13386,25675,52894,66194,26556,51909,79347,93681,81614,58536,30034,32258,39225,74643,89420,96590,67386,63898,99603,22909,39028,82942,55250,42307,58730,26259,91074,22358,97958,23779,28978,44370,77240,23302,45697,20994,43367,24816,24960,17605,34820,89530,81614,32802,28990,24852,59937,10981,17327,58566,21618,96329,59819,82734,88261,70997,31955,21227,16944,94174,63341,91924,62566,46650,35086,53656,94078,43014,84304,16208,43833,74097,90908,59949,56690,59343,54247,78319,31860,99225,29023,23066,30311,23999,76959,31944,14629,55713,29357,63844,15351,40025,34550,38999,55255,84444,99857,48561,14927,18534,89760,93176,79867,21984,18484,96129,60102,26887,26383,30184,77487,15696,48921,93197,85370,31355,45579,92205,80973,38620,75409,53132,97639,68032,52766,63308,12360,39185,82114,10782,13799,95445,78826,79318,28749,72641,35314,94745,60071,66996,27127,93442,62767,35393,27198,64392,81056,82156,38171,99677,75499,66686,57883,40440,49669,85340,65929,38381,51410,66791,23844,10562,63837,38188,61299,92662,53198,51171,31895,24452,21368,37238,24022,97788,85814,91857,28445,40217,18434,16967,86006,96803,68538,88620,23661,33429,29833,17606,87419,68173,80534,58374,68799,40979,56549,23462,70564,36274,60942,39864,36875,42991,39247,58068,95672,16423,90146,79431,42034,41784,63685,56575,53400,33392,63667,28363,82886,44640,24389,91114,22913,44461,37901,59010,65024,98259,84255,44240,97536,48448,85072,67061,68438,45377,13571,78298,46541,52853,52830,47216,40280,54482,31218,49564,24599,79950,76042,81549,13397,70687,34447,86677,70753,54171,21331,47321,39783,20266,37358,32130,77708,19175,60656,23128,80837,98647,13257,41305,66224,52088,40870,84406,80120,85451,11670,62180,28590,72101,56603,57064,38307,44868,93579,37267,60861,57633,94596,30424,86091,80079,17992,22140,42590,66717,55716,71566,34945,60892,94159,32031,50812,97063,56623,61819,46064,90079,26473,93705,50453,55044,68253,87752,98019,90582,78995,94622,93327,64046,11183,60688,80386,36813,67824,91450,94945,49682,92356,81558,60220,29442,83556,30187,19036,60069,13155,83337,17742,62198,44493,57275,54291,48413,69117,63668,92924,96574,91751,49150,21164,86047,19925,94304,95148,26226,31215,59191,97199,73631,62815,54572,95306,30739,15738,56764,12720,83079,45765,68033,86309,27553,34389,51871,13750,46349,35929,44063,89962,74030,98798,33219,93310,60396,86953,50417,34959,35028,45021,16237,45159,73512,13393,18530,44868,95382,18540,46674,65259,87874,56743,89035,61384,31356,33190,52810,10082,88773,37166,56308,26462,84919,33078,48549,78907,38269,65694,54110,79911,15911,31746,75904,37315,97405,82591,26698,42018,57466,58205,26557,16709,45390,36208,33953,58633,85832,92611,75295,70194,97710,94121,64473,55944,28154,85752,87629,92686,38111,19962,65023,67114,55825,56268,75111,45358,95318,52140,12289,28457,39608,66502,56635,63652,63423,74893,91438,99195,41601,51466,12692,81809,31226,74468,52008,21300,10449,79357,51343,30637,87936,52944,25461,76743,59025,45570,33139,60467,92026,60093,38997,93083,69829,20385,63918,72442,62053,85917,14187,90286,68724,55178,66977,62548,97810,10460,50918,10896,93896,32307,95682,65450,10950,99862,34881,82891,91161,88553,72582,23275,98335,45975,63133,50164,56406,12209,55961,12160,25788,13276,30218,78965,13437,27075,87649,67806,40270,69063,30489,59784,77096,27129,18157,32362,53465,31009,15666,27450,43159,24457,96618,81844,54024,42943,17112,12965,30282,25878,36605,72201,65811,68321,91189,80465,76049,41487,88637,49901,90067,51637,65787,85699,40864,53142,97802,69508,49508,84442,67204,74168,80010,74459,44077,17040,36255,41925,34563,73726,97348,96483,66200,95995,53795,68803,70999,20033,84426,37027,77384,41369,98237,16599,96379,84893,50178,78959,51665,37669,21660,74845,51022,56202,62201,22533,45491,58538,56500,70171,42766,65899,64801,18651,91170,56576,60779,71792,21670,57603,42333,84735,66504,67900,75052,64170,93727,41604,39989,35270,60771,36313,58970,54690,22348,61383,34628,64718,32474,51261,39356,81406,35510,62066,46569,31362,42226,42040,19414,88362,90205,32712,48085,62840,56066,29222,82835,84714,79581,10432,96659,70804,61841,26481,62540,16341,86453,24105,45620,15439,66800,86511,39424,47267,56806,84438,50766,71303,94356,28504,47984,93371,92215,27270,36820,53845,50832,37745,94368,19863,40505,33054,50436,49168,15501,97269,65944,39767,12401,37155,31167,16312,33982,13785,65139,60116,14174,76082,30296,76241,99469,89703,77020,28517,20843,68716,97423,54794,32134,65785,76167,32481,70823,51398,43305,76244,62413,41456,76817,89492,16486,74611,70992,58962,74628,31966,95128,94560,63415,48230,67925,15782,77770,15986,50386,34997,78347,90934,12778,53229,94282,33979,57425,40178,22669,43937,66449,15607,62600,11428,68254,82468,94446,61977,37529,65327,60475,71942,27292,83203,52223,20490,87364,32874,36896,85280,55053,35523,81950,95327,58158,41916,80190,89861,74367,52429,90745,55937,81249,30982,61503,77938,14522,41619,70511,11954,45084,15103,51710,19677,68759,33528,98552,82162,27061,71056,83077,52468,64469,70027,27580,19519,62910,48184,47867,64713,21582,88682,93571,14296,69273,11269,56003,90520,74201,80517,30080,67850,78528,78057,85443,64277,60262,41367,11759,98261,96807,93329,13250,51940,56508,92958,50293,28212,54666,71683,74550,57090,16583,73376,64917,79045,49875,82348,63944,80726,26485,97988,47875,62558,43818,15081,35722,74344,18006,76717,10737,85883,85337,63138,39541,72226,37064,14728,70132,30877,59058,98112,21286,35883,13770,93990,40811,61165,47421,79266,24381,36481,95401,17381,86508,97810,14592,13728,17811,19306,57173,83898,47094,25405,62208,76475,79957,33329,55748,51163,43083,58826,82114,73884,87901,66019,34181,19625,95103,25816,77055,88106,13768,38208,91569,16266,34995,29575,49714,93433,30191,20745,46002,57816,17926,82424,58710,13400,77468,92657,28144,96362,47887,90008,55560,49810,97689,68366,99291,42165,18613,10876,86855,81623,39976,59609,34868,29183,86718,29148,86763,58486,70485,16368,97581,23037,70688,98115,39788,71598,36568,68888,92979,85096,14225,61579,14163,89938,27626,38385,81269,64762,18915,23121,15374,79830,51852,59488,32423,56645,35328,93228,62820,79706,27707,61466,46504,19586,60720,63232,77260,99232,73352,86563,94792,18235,96804,35793,41030,61755,84971,32982,60495,73720,51025,31752,54321,57103,34478,30134,70969,86646,16985,65332,57025,46429,62006,85698,62362,76478,84369,57855,18149,23053,37705,65355,12185,63065,82422,20313,16090,18085,35096,90679,50669,71411,30013,10250,94293,58927,45835,76589,70170,76270,78598,29580,70864,74876,77327,76629,39629,47227,76184,63752,51622,89160,81584,82232,28280,87774,17990,33609,60904,13865,70427,26867,12061,56650,84756,81340,85662,90651,43388,30547,16961,25124,50125,82076,85860,36226,42068,56158,70968,61111,86480,39092,84615,44600,70460,49726,50032,62073,44888,25149,47057,80126,61661,14118,89124,59839,90199,10200,78629,14728,49118,60140,89561,74363,43868,15661,39025,72446,18254,76058,20359,51581,77729,13781,84937,73814,97440,88289,75537,60368,19717,44435,38506,78638,17087,75326,40970,66910,53259,41186,73763,25791,45432,96425,67210,91561,37828,38906,91185,15144,46419,29826,52548,45073,69617,48633,86090,66792,99020,65713,19619,46556,97909,93031,33580,31398,13311,92777,15924,33418,57025,62501,10213,71675,32053,86770,21689,35165,77433,13601,57441,68373,58381,87878,90915,32371,34242,51059,54584,99232,56321,22925,43070,42575,95543,98210,94746,22309,57528,46940,38573,62395,69938,10860,74993,55364,81044,92826,57829,23565,18895,10345,36173,94598,95537,84318,36843,97834,44994,57287,96873,80883,51225,63974,87914,99283,15147,14765,38296,94174,89027,74970,53407,75212,99429,43370,61651,16564,72053,78560,40809,52374,84465,47181,44739,66345,33264,30101,68426,64149,57191,84027,15348,48087,59302,99366,55773,17561,87162,20823,98125,74847,21589,47153,84025,99686,25175,80803,45733,98513,84872,33062,21132,54797,27784,27806,85257,72010,92510,82216,19106,43104,60068,47930,38133,22418,55748,26678,79275,40026,63973,48888,54639,60435,23948,85421,32037,94451,56111,94946,93407,28270,57111,73604,30404,87739,94174,78090,20140,41736,23270,70929,83878,54512,58765,96233,36641,83906,48895,70662,65888,66700,92159,40977,90447,78286,24026,92881,74533,34652,44271,57509,45689,53801,67148,67541,93635,59923,75534,55245,65094,42474,15558,92157,71836,47772,42250,12702,61088,63265,21942,65039,41165,96323,36253,89507,33683,83653,16170,56328,90786,29076,69338,79857,94869,92407,15804,42936,22164,36040,83974,58959,71414,22589,28172,23994,57412,30462,12924,26389,63413,19577,45894,77078,26965,26132,97606,30551,79426,21210,47336,27760,96934,32949,26381,49718,13794,87952,88224,23438,84166,25372,34201,30878,48505,56015,25827,17931,98481,60415,22241,78438,44857,97555,19394,53720,36217,14398,15184,65600,14629,57843,10167,43834,22227,63858,85780,69595,65196,43739,42205,68020,45933,77755,30899,48496,77218,16254,23094,79326,38347,45274,54277,52467,21885,98802,72122,84546,90013,66225,88703,17813,72404,37378,78419,61322,44182,68053,80286,15665,89832,65949,85817,53574,51903,58877,98126,99253,78305,67229,88456,48904,88280,71427,36780,83352,19722,31986,98121,36770,82292,18079,31084,73512,33171,66656,23722,89491,28616,98521,94713,50779,65486,52249,35619,53932,26054,27324,49310,20962,30605,72768,45347,44223,65771,12978,15749,46679,31147,10757,63127,45928,22520,78654,28147,13199,72189,65634,58187,73872,15136,84249,88722,91460,72536,59772,10053,52255,22970,80686,27712,35992,44367,89668,86493,70411,46553,22703,77995,71843,54983,21880,11029,50318,52513,49462,71039,87187,56086,77341,29351,22719,27005,98925,72732,78853,54448,89332,66767,57633,64861,58710,40577,23313,27985,84719,90466,57404,86413,37032,69035,23006,17913,30287,64658,83374,27868,59459,27541,88587,76865,96590,49961,45948,70220,84696,74672,84930,57796,21119,68410,92622,16674,49835,36653,83940,68751,84728,55303,37184,31038,48375,43873,92673,48053,11209,12294,14483,56889,14176,14959,77000,90531,76279,14338,97924,64887,67930,41454,14051,60666,22032,78148,86230,33737,51894,37868,30314,37886,39296,53395,34986,43994,83488,53595,42417,32114,34064,96878,33717,18211,26435,74523,92995,90603,61769,79999,26278,63117,45279,78894,60848,61414,21967,90486,21625,70943,85762,51450,72741,21501,12556,86152,43588,63662,72542,36632,35316,38252,80257,66112,95160,49163,77386,71319,76953,26635,32342,92468,19608,76961,20326,76763,35867,41002,52387,52644,11463,56256,58460,75074,15698,53834,99991,15312,32911,79848,89264,15451,67954,19846,78765,81238,20206,91011,33123,61572,71541,58000,24533,25771,15413,39375,20221,51822,81112,70288,56014,89824,84513,30671,38764,60781,41618,25492,88692,77103,36587,32943,19599,86485,77383,30901,36671,14420,69801,55432,26470,46504,79387,18758,25602,49764,16217,62488,11715,42459,70599,50445,98400,12185,65690,28070,47909,49069,78170,52478,18868,46536,57515,44592,40007,46684,77182,44756,65511,82272,92237,60662,41810,57463,95614,19451,88712,58646,70973,30593,10333,60334,34727,16454,21829,34862,68485,83676,56898,67850,74286,23328,18152,71068,32446,48885,31658,77753,96986,46478,50731,66724,28307,97826,71837,86787,86030,50092,99370,67293,57057,40125,50227,75310,65355,97341,83601,46745,45585,23266,14926,96368,45822,95998,97656,44374,59310,37746,70064,85200,86088,73315,62142,37156,45875,65182,71970,57281,83121,41141,62601,95739,72701,24325,76729,26891,57601,56381,13213,70489,75092,25772,30847,34224,95755,98786,38353,16786,69119,12686,54543,98733,98243,99119,66792,98370,98394,52743,84260,59165,41372,19894,84366,36474,16540,69631,23663,69000,45060,68819,24014,62026,65644,90034,76268,55219,44481,49927,91977,61785,55335,55770,61628,94662,84591,92284,56486,55725,93516,17438,21369,83070,77577,50571,56903,51060,26344,14715,77985,24502,96357,46383,45944,23296,99667,57214,14093,31677,69360,15444,85007,72126,99279,93027,51404,47047,23561,50927,94892,92775,13251,18418,43039,79343,94017,22752,46717,25028,92842,73128,43903,27290,25507,28331,18367,72992,10149,15963,14146,28398,97649,22642,52663,18489,20166,86713,18950,68074,48425,88087,22013,31268,12587,63593,26481,74567,96684,50048,36330,14833,21660,58856,84686,12208,72329,57419,69775,84676,86931,90410,10286,39332,10284,63282,64370,94747,84164,91885,61877,69659,66225,81578,64661,96396,99690,95288,45177,93067,17823,59359,71485,37914,70877,42120,30193,56003,60757,11398,67004,86885,58721,98436,88478,88166,43497,80951,19551,84020,38904,61659,81588,76501,78206,83754,21544,41348,48350,43839,21719,28694,39128,41219,88465,18441,68446,37460,56860,62191,70582,39822,33014,75005,11366,56748,47051,15236,10814,52539,42237,21137,95474,78309,52925,78397,90884,61110,31997,24712,85544,68741,46513,88109,74510,83316,97911,41462,81833,96490,47359,70595,54402,68421,34688,30547,62760,29157,14623,99833,29367,80629,12115,82932,44945,46326,51891,31932,79822,50780,66627,11150,51909,88040,11307,75638,56462,90660,81609,88366,53520,48553,71041,46015,73603,63468,30646,93803,77696,74537,99764,35059,79697,84895,86152,72726,55751,79567,10910,91824,92617,32498,64236,81605,59736,60630,17967,52507,50416,32605,30482,29082,45693,50618,56864,90638,86770,71969,94577,74922,87342,89870,83754,64235,75220,57000,46561,18024,87473,93896,38325,95986,30896,81346,87261,89016,27077,41481,38561,18919,33691,98614,88102,22019,66166,37693,42854,71031,71696,15511,99646,40653,44359,76710,18880,88030,77332,54586,31343,89443,50930,36596,56625,53042,78137,53340,66203,69852,41583,62478,53484,52607,59712,95676,10681,10079,28291,88661,15456,92404,13857,14600,33789,29524,34249,95983,64149,94871,35729,99241,38416,40996,59754,55469,50952,64422,94411,55026,79866,65490,49949,70178,22130,45429,28729,77608,37571,67098,14393,35048,69759,10002,31068,41984,51255,91362,26219,33302,83540,11354,14648,27907,44504,37282,53591,46682,69177,84039,63448,94864,68608,56803,19254,26476,95062,47059,37017,16456,87929,73223,58197,66562,28077,77674,50235,51494,40368,24580,94302,13494,84845,94252,19929,75049,49764,84584,16746,72751,99919,95136,38791,25042,78054,52696,67638,49823,57540,50467,35512,34329,93420,35000,15310,48678,27464,65928,42687,81563,48750,26286,51999,26501,22824,50751,29251,61869,35698,73975,38968,88296,56384,41092,76941,59582,20400,61102,84018,20595,46506,27689,97592,74121,75509,34667,62032,61809,22688,87025,39777,75015,97413,46487,17030,13378,66718,83733,27660,22783,26914,99998,12287,46630,11395,27946,63539,84693,67333,53338,12921,55966,32124,77557,48632,22843,66795,50770,13551,96340,33429,25380,87393,63549,12705,60655,24712,98839,67675,33736,31274,40922,97229,33015,81289,96297,87483,67476,33126,33576,26131,96044,63524,69088,78153,69381,71975,58605,89834,44107,34050,96526,11671,17347,11763,48831,93978,45234,87838,60297,17984,36786,74107,63939,37946,23763,90454,56074,63713,68804,45016,29024,29320,72932,88707,44474,29936,93248,53870,74982,97169,54103,77127,24233,21983,71940,25641,45789,65621,57228,43410,90449,41500,22957,94316,67094,87265,13714,55797,98894,45129,79161,12120,25121,30029,96852,51004,24463,89176,58566,95568,45764,69677,99231,55756,94683,41236,54822,91511,98402,13549,26768,76084,86411,79889,24722,78656,85906,10585,91933,64216,79955,97141,31614,84224,48125,44461,54497,12059,10189,12469,16893,27000,55874,24247,48768,75135,53662,32990,73323,89670,12196,39407,90816,50953,95656,93521,46417,79981,20897,68925,94267,70588,45826,64908,77735,80705,72108,27766,97258,71247,25096,24840,32455,60870,15989,66594,98354,63082,84354,63858,46685,75334,75912,40976,85082,32251,36592,83701,57410,19329,81374,47839,41657,87900,81213,16342,22908,84906,61952,64204,43753,94038,94522,71519,19145,42698,58617,79526,36405,79808,10219,58212,84738,69408,22533,25488,81724,46323,96338,52391,51196,20159,44242,85327,67744,52299,69711,58611,35460,74547,89259,93204,86122,56091,18984,51981,95567,14255,86941,14421,58268,90699,99457,43928,17018,49590,31156,97659,72599,91645,91406,33163,86046,67548,91863,76468,45960,46574,75606,23252,44238,90493,73774,64503,26030,75669,42172,40815,46018,46350,18672,53797,46895,69545,92152,41044,68765,92543,74207,46411,71448,69005,57229,34131,76068,71891,38448,99205,90964,72384,64889,66236,31144,74979,22349,35378,16452,13853,91163,69144,82793,76262,14831,43143,52683,90336,60187,84262,62930,79742,74718,24947,13874,88133,93368,28204,58486,72480,78309,41394,11970,75337,18712,44072,99000,55328,14215,57345,98141,40315,96875,41140,40913,63683,13624,79634,79870,34368,34924,29427,80309,44679,95903,25225,91153,67203,20561,12294,16283,65138,46930,25398,89987,92223,29193,73560,49981,28644,58655,70785,84016,10073,78748,27219,65322,43850,52889,49637,35181,35609,37358,92084,17591,71133,30319,90546,69368,56956,65230,24686,75221,61441,74160,75144,97724,93588,70287,19158,97187,37375,61464,38813,30549,39118,46150,93975,91399,38848,90076,23131,86831,93492,62245,27688,95519,65084,88129,67878,36662,13857,49277,99242,61113,50820,64502,77101,20669,41720,70524,31485,52664,50496,35816,38224,75497,20591,38598,79930,25757,33045,41688,21904,63879,27731,53220,66418,12878,21033,26763,31968,82833,53176,29322,56787,73621,53094,30079,24001,20547,56544,10748,59980,12911,92164,56814,70873,45687,21251,97197,27995,21651,70630,81674,27831,24422,46734,98283,81574,13730,35366,21752,36742,13842,77284,53158,47701,44202,18666,78817,92405,47112,67928,21881,11787,74703,23363,38806,44535,90618,14058,93766,63254,91739,51749,31782,26272,53758,47710,80810,53967,18109,87847,93296,82015,44905,95779,34714,97888,42210,86691,38842,54199,94782,18779,32341,42014,50224,35809,22523,31214,69994,89938,82584,13917,62139,19250,94171,27970,29731,99879,50695,14438,72715,51662,99337,61155,10058,15412,51587,35353,46244,50630,34535,84841,39650,91115,59069,60025,64326,41984,35064,18359,40173,96102,50440,99269,53114,45077,70436,72630,14109,39100,61021,64866,55477,74196,52055,33124,24374,89460,72075,92874,77368,22952,25167,12913,62931,73256,71592,63650,23911,81550,79031,53197,89927,70245,18309,80462,24535,94822,42260,37788,28681,44776,56693,31865,69813,97445,98543,84201,38039,70821,97398,47499,74520,85478,36480,61671,84925,24357,33268,46507,29417,72208,96885,10454,36672,12783,84110,55538,69705,53632,57283,62899,16513,97185,57529,98315,28736,87526,88942,33056,30459,96797,41526,84550,15190,10461,13341,22343,69521,49913,76517,72035,72982,50161,31611,38074,90730,28386,12952,40100,83977,17014,91622,17486,48570,45993,80091,57523,16080,81535,71867,39071,89227,35820,28339,76705,27345,30129,28856,30555,60043,55477,84784,29965,58626,38956,60080,70846,16261,59086,52087,29855,32700,48642,58253,99615,14897,50595,92323,67479,19769,60547,77107,45496,90592,47761,30453,63324,99241,43087,17513,76844,74136,57798,78168,87698,32966,46741,97169,27864,28369,84751,96289,43691,85500,51492,54956,28270,34796,36601,97491,50616,97291,33515,16443,28063,41768,63685,29916,21703,97405,92853,24771,12856,98123,49166,58803,88790,77837,71861,71974,80081,79841,52188,13979,49516,96714,16118,94572,64632,74483,97935,15216,51840,13050,70080,75112,32831,77126,59865,12852,28771,15223,41023,37788,88388,31345,59753,49018,44329,97658,39852,18922,17488,99747,38809,68840,63176,56328,15035,85721,13984,56047,23542,45432,83312,87333,72748,83770,32554,88685,84264,18259,28509,39362,28539,96521,63357,55293,36853,97133,96421,25753,53508,93265,76401,66778,64201,58469,10288,40692,22747,55101,82093,47088,36105,68703,64453,30781,63485,97665,17649,22778,73667,14208,27691,60791,23893,74138,23809,15246,38017,49591,89131,81985,69295,57510,19364,29445,38245,40360,19117,17007,72256,81846,35046,40653,98188,34158,12684,15734,68288,65858,75072,83372,41808,76355,55287,48521,35553,80570,96070,82444,41420,21251,33288,47852,29631,96440,58486,67936,38044,45168,97615,98124,87649,33259,37777,73519,71425,59491,59190,84880,35112,48870,80763,84904,90378,48278,31355,12992,11462,28744,84622,89906,13660,45879,40492,40821,95044,84497,40989,80958,13251,63944,82966,19987,25482,72694,16381,42381,68831,83458,60529,93477,38224,58061,11132,14582,12215,25379,15926,67237,59576,19447,49413,22372,71956,34683,70982,67073,45449,66351,16362,98250,67265,31205,89734,62625,17952,91733,55984,14492,18305,38932,87926,22063,12154,61342,67393,62953,24369,26855,38792,43801,65698,42149,92436,63158,92274,53897,29101,24970,14702,53416,10094,57007,39676,51513,47079,26675,85714,54404,47195,23996,56145,21476,51727,88087,94562,88402,27709,36907,50835,88986,74562,57875,19644,38151,91130,70541,88191,91109,60179,76822,23207,13355,80937,40324,54829,94663,31653,69510,23759,31765,47794,81589,59881,42251,40558,41368,63226,57114,38322,62888,30199,99960,84749,41220,14198,49169,78956,73038,99442,21075,97344,28270,29878,75117,32328,82210,93501,87189,32696,47083,32083,44995,34047,35956,41997,53858,27351,18401,37307,76058,96157,44089,17698,13852,42858,13931,79185,64751,54258,88859,37860,84643,28531,11499,24674,65364,60320,45258,97468,88999,89669,16345,69498,45292,61305,69811,66113,77876,40920,80981,69212,34640,52334,83639,64382,91284,89071,18921,96940,72182,47888,32820,22152,73055,50359,20893,36685,30135,31017,66027,80839,44194,11662,51297,48625,38379,97963,46962,79294,44972,14228,98032,48460,27897,45157,26212,56300,22560,15183,27518,47130,44138,16437,53301,20610,36281,25328,15111,46190,42083,43370,70354,93581,24035,20721,54013,64953,37539,10148,41425,48922,45079,70530,47411,31399,72836,43622,22020,70147,30440,55163,51241,84390,76263,20908,82981,16370,42000,47339,83842,31160,48004,71755,82961,90048,27523,98589,54081,75652,32103,58917,18396,80774,90028,67170,45403,99507,56355,82949,55654,28279,72604,68784,56916,40185,26315,31040,90972,75247,34829,52583,42374,10039,94330,59146,23203,91424,28175,65489,10786,67887,17610,78971,62386,79966,20253,93045,11019,65061,44194,63985,56975,35029,64985,92827,57270,14737,27116,75910,86017,82025,67598,82262,24273,55271,26025,87107,87241,77175,27766,35577,68690,13048,63219,14967,16627,39513,96934,46231,49911,70400,69323,58328,36614,21144,34069,10541,27997,51331,54750,11871,35455,31679,46838,78113,44129,37635,56118,92815,94864,78306,88182,86117,55875,28291,99925,45137,75844,10684,46800,89933,16085,52447,76361,13610,10532,79733,17639,91147,75776,97009,92349,96667,90769,82718,43541,76105,59427,21830,21627,63287,58148,66544,77861,95723,96408,74513,25236,92175,39143,14465,62319,13355,66381,67641,86155,50549,56049,97026,15635,53600,59097,70029,50548,58211,19908,32622,29711,23993,96163,81627,80677,67035,34009,18480,77528,17771,82835,60488,96500,10102,60483,58926,14872,80633,57975,15721,54250,63989,43537,77937,14770,88466,80910,90553,59925,96743,71689,40737,63720,58293,59009,46749,63126,22107,27479,45075,37241,39545,94925,32535,71931,12802,42751,21067,17675,95499,64587,49077,45937,54169,64542,27270,84135,65627,51495,46218,48413,48731,96847,32590,25712,49734,50439,78118,49049,88230,39315,77636,85069,72478,77250,49457,16727,92162,78920,14273,34624,98080,21266,21698,20732,60621,47203,94825,44968,66544,12585,50805,69467,50767,13151,53400,38128,56869,91712,15009,44083,47823,76720,65811,94638,93696,66619,28203,53064,89921,75125,66130,24096,90021,76322,73771,89080,90325,29847,87372,18250,90768,38114,48069,37488,78554,67526,26007,72903,64289,37033,49559,41089,19762,45900,30550,74320,12201,96725,28701,86242,85355,65253,32668,34883,99009,42207,96195,65359,79167,42891,17876,71506,48694,41833,35126,69876,87607,34436,53167,31153,64193,86544,32202,43338,73498,20367,11009,42587,21978,67149,45374,41053,62030,50137,79836,43243,89118,79876,65270,23959,35447,12779,70417,66236,78898,86124,71104,40132,53431,88660,73501,38169,82426,42507,98585,14589,49871,59878,42777,81222,97701,80324,47195,89611,69421,42586,43011,78997,92694,99922,52047,58179,56633,78446,15134,48074,20649,92488,48811,43150,46340,14777,64061,72349,14649,56699,25242,99770,62985,13993,25105,75097,49157,30561,97187,74557,88643,91057,51134,98561,88825,74307,67822,67561,55262,73265,21636,37599,61218,62978,93373,52346,43424,24030,29678,27126,84689,31042,43055,15067,58648,82445,39721,74739,79919,96316,51793,56875,88407,25286,52288,33120,79527,64403,56540,81062,48151,54045,41403,65449,17355,75616,96393,72430,82963,23460,23586,21568,88793,46931,95708,82424,55368,63749,74917,98846,61724,31734,22278,93829,56866,95279,59049,60483,16623,36085,60577,29588,69965,53819,13512,32166,29696,11131,20537,21657,17629,83387,39785,95379,86534,58861,25938,10998,69731,63665,33295,76917,17145,47940,13841,13206,54448,97855,35289,38266,95936,86720,52510,74980,45095,81287,42050,39512,10778,87128,24971,91544,35905,65869,33666,29490,58636,48284,58930,72630,40590,67668,90369,19809,35726,19219,13828,43638,71372,78373,75345,96220,78934,56064,62048,86260,28618,91118,54841,54556,16666,56706,60379,72449,43508,71841,67321,37656,72203,53236,29970,48959,77389,87573,82307,59155,13940,67982,27912,82096,26546,53970,55822,68246,58329,45160,39278,11790,28783,21920,74216,96214,28318,66597,38123,88979,85471,80850,66826,67687,56694,52514,72657,48356,34120,90559,63467,38667,51008,14705,26363,59128,77904,44530,24519,69932,92738,49788,19609,27623,83751,99903,93926,62394,18052,13514,71356,57317,39465,65656,50132,90600,76725,99904,73559,52871,34801,97847,61488,36500,70689,13600,45244,27920,61124,59365,93751,63885,97328,91833,49608,13293,88802,28338,64919,18017,55054,15944,51661,58049,53162,34590,71139,43994,96598,98967,51782,44754,87206,81345,83792,19342,57568,57349,55226,57396,86250,35547,78680,54811,38310,32165,17908,63958,81207,24655,24937,98392,63039,98555,14436,42734,97848,93548,90134,13551,34002,73157,16841,77171,13172,39585,55121,66138,93597,42131,35297,73490,69090,13142,13053,88648,42639,56177,33974,72030,81970,87219,15397,33306,37420,83078,51117,21853,77388,22848,28975,92954,47156,22146,42899,86363,32903,74902,85832,28225,18063,64980,34600,54053,91510,47331,31930,69609,90086,39407,32408,82930,82915,67433,40106,47902,56049,74164,26414,11934,17343,61774,20797,69253,81729,18184,38306,55453,86294,95514,54997,64898,28192,76380,19695,85455,17247,32839,78551,79640,87657,33375,51513,10209,60769,26099,27474,79436,79144,20265,20992,35240,16015,54078,49832,95001,59819,38253,43633,62105,10976,99801,67355,71104,37784,14608,34370,71424,81356,74778,24988,52135,35891,31551,38658,35681,21270,79442,81895,44642,24702,80478,29000,88822,43947,80515,87158,49735,34994,78040,30295,41480,71264,81113,64691,16620,42645,51859,79310,50540,26076,63379,37759,95612,30219,79487,46305,64009,22943,53024,83798,61680,46568,43742,78628,26154,91736,56484,72835,82363,93919,15236,41556,29308,87956,33275,23860,68455,21301,16163,68457,82587,45065,31469,72505,35290,16112,54163,29430,77115,41959,40254,50696,79119,67023,23929,70505,71954,45704,64573,83088,98487,11935,58103,90155,62418,47151,24963,86006,40575,84715,46714,66804,10130,50659,80761,33585,59140,76474,12946,34766,56787,53631,44522,62820,59171,15669,21039,47524,63229,38846,22088,43146,56194,72242,18557,50108,35128,14941,76887,87462,20719,75989,36845,80586,40577,73029,29560,38179,96534,51461,80689,48480,20269,37407,12421,20061,92071,92334,73048,39155,84186,69836,83415,99345,90923,27204,51489,28869,27457,29887,26779,24514,78763,10457,36721,51762,89335,55420,43349,92037,52326,74852,96679,70604,97412,33970,64622,78161,66781,12685,21809,37467,88369,36647,19298,17341,17204,46311,88685,73069,49453,63986,88096,25235,46556,17011,85404,44660,80285,55490,59007,82319,40608,57526,67984,94350,59344,38720,15412,42979,90236,28096,85338,57019,43912,18472,53998,18782,39418,98542,85746,36478,21097,38370,82653,36100,63364,78935,43595,61533,53044,25639,68926,71104,80531,36695,59288,45334,59051,44126,18798,30732,33728,80332,50476,29783,10583,29421,81870,35348,95341,51172,39571,57574,86951,56252,22868,11975,74333,97167,90882,73820,53098,75719,51293,78172,13421,58937,31118,18503,50020,62651,33005,80525,53966,32406,24860,44030,98558,46925,81231,57121,69922,71484,88530,37544,68707,58556,99437,57975,60938,41619,46418,25252,89057,43103,34905,30967,29988,64273,13699,13577,73641,10327,32239,27226,83957,97633,94130,84371,48634,50485,80016,21087,50831,23403,87220,63986,52322,50074,87751,12611,22306,46259,24140,54204,29809,52088,68753,71934,26471,42794,13379,25529,80887,32522,46664,77816,60442,46689,17332,86769,83380,24838,45685,88763,99434,95522,35523,16098,67654,65984,99307,26356,60648,78361,52770,19330,90113,36891,86339,42323,59553,87494,33075,74112,89452,85986,31801,17007,62579,79584,11673,92875,20173,30401,58740,13000,40808,16626,25569,94184,53343,54036,88283,54037,63461,93214,27569,64390,27108,61522,53745,97750,96233,25529,73707,88076,62057,85548,37952,35724,28166,58134,90985,49362,93680,10586,14275,92033,18657,69386,53241,27868,51656,41086,31456,75735,68487,65884,52914,30741,82653,77033,72053,70830,24616,65403,77982,13251,73836,26095,42760,41856,46643,64249,43069,45195,11699,18970,95699,67279,94166,52211,70291,25431,25286,12256,31992,19397,89079,44740,96462,28384,18702,38250,40563,44935,87612,58806,80919,76498,73086,59634,43610,24698,46736,20035,66406,12165,39695,18179,17256,27009,54778,10228,93019,40192,62051,55140,19540,66760,64762,31888,24217,19188,22224,54917,62274,31200,74686,33342,17587,72567,79936,84021,76568,42760,81879,45817,86277,81893,24984,72527,90300,66246,39996,30231,72985,56690,41472,41707,78809,87629,60855,20221,86532,59770,78709,73949,68634,23774,28962,72020,95204,21541,12961,49707,16018,64567,31767,83087,67886,24499,14466,26091,71826,48817,18906,54288,83899,32157,13409,51814,71441,89933,39877,67434,81827,91750,68658,67253,93427,70031,58069,63679,10401,41281,95850,31024,63584,74906,74018,75437,26196,67915,37295,71774,14008,87904,23571,10062,59674,93373,85463,45669,36740,65570,37152,28694,85020,33357,66800,18810,76898,17056,85808,87928,33441,46433,75278,12496,14431,87638,89297,90257,66427,18607,76572,33913,47869,40528,67560,32923,29003,61437,19760,55628,87711,20292,21408,18703,69520,42372,73724,21386,80679,24211,12695,69417,12783,26414,93504,55840,99699,63226,65670,59756,33720,63253,85528,55616,40563,33563,68805,71868,75149,21624,19035,63090,62643,86885,55581,84251,52903,57682,50417,28686,53395,92023,25521,20349,72805,93793,98332,99972,80010,38296,35755,97156,56944,49766,60995,77362,55461,58557,91011,28644,17330,86255,93993,81865,28698,49386,24347,78068,88433,13156,50482,38204,20686,82607,61197,67838,61006,71890,21187,47919,73196,52059,74711,77478,40686,68420,32597,53749,30967,77848,74354,38012,51423,44655,68286,53158,42258,40462,81331,28774,58199,24848,41638,25286,35453,47490,19511,54519,38803,18251,70791,40193,12808,75211,89996,68081,37768,70856,17056,55846,83680,38747,74797,95344,22747,62449,19882,42357,42115,72790,49596,86000,96817,27584,11555,79952,28901,64819,58784,60166,86874,22906,10057,98662,49446,81722,84544,52768,32597,80330,14999,87188,26291,86291,66956,55152,33308,50624,69034,35768,72601,66450,72500,43760,73098,53651,95255,18891,32361,79788,89805,94000,21569,96737,98562,85659,85740,66405,97626,69817,25161,38124,21501,31531,31295,45957,20680,73240,61147,87808,27454,82737,78197,44274,74595,95229,90998,94435,25284,34742,88092,95104,41579,26442,87020,12402,19316,68278,82737,84546,86955,79439,13968,75246,34053,41530,10528,73782,13902,62377,67839,60691,77619,28373,86359,55760,92678,37127,18163,79086,53741,76248,57381,70244,83340,83199,50766,70318,78551,52713,81800,57221,69321,71183,57161,18027,93177,30784,35655,28004,53805,77929,37527,56864,45679,31383,31383,81658,91530,94138,75305,19825,27013,64904,23099,10486,41598,62207,44066,25614,37316,98471,36494,28112,60399,13480,16875,15625,58002,49766,39177,83696,41843,87865,19923,92410,36312,82257,23385,49512,78694,60989,27050,92649,50704,29441,58295,57138,53235,11667,46576,90045,92517,90034,74609,40209,58807,32893,63578,81326,44372,38176,43533,62452,33556,25312,63427,15841,23694,70061,12785,66489,38226,11104,32348,48536,76063,78956,41051,88372,37035,94337,71945,25994,47036,21435,32334,32900,95455,31392,84642,16752,47521,36159,82473,89552,78073,28085,84526,56018,11559,91968,87344,14729,60316,65056,38337,83755,96800,83537,69473,28412,65718,76780,76324,78617,26887,96322,54554,57426,86458,15778,37775,56833,91702,49005,45761,78954,35488,92466,71809,18030,20145,86608,33027,25848,72482,59966,86368,93967,27953,10083,60705,46142,12142,50986,46063,87926,61750,37797,50929,57796,29772,87461,35033,70898,56517,16242,14048,50002,81327,95722,60932,49967,77220,85137,69450,93159,88587,92958,87200,51894,83668,22096,94754,64961,90894,78565,88040,56578,79960,87968,86458,41191,84662,11547,37246,14416,22432,65973,66419,50201,20623,32561,49860,22864,37365,25183,40037,93526,11144,42074,80317,70691,64680,98623,90451,38570,29410,13439,22240,89674,83902,88428,74001,78355,46618,43775,50656,39717,51994,91716,33432,59647,94094,52070,98882,78931,89046,68270,92543,36085,78739,97293,78776,34620,49017,72660,81070,94810,45451,95161,96317,79545,13503,51619,32216,86896,21024,79247,78344,91197,85501,83390,63630,83259,86220,40784,96505,82712,53800,72181,90575,78391,72453,69245,89999,71350,96604,35197,82578,13363,30232,43443,13744,19874,46236,45629,20378,51009,39534,93084,65632,94871,15532,24148,62345,32021,10024,69763,92379,71206,86451,51991,10868,19348,10848,27733,74632,79794,52857,20780,36241,87310,87389,80354,14742,17898,56466,91520,52134,90340,70797,32466,94345,68319,12709,64653,60560,73640,15661,25211,76207,88953,53750,96042,19513,38648,78042,25763,42563,33617,39168,93465,44850,70182,32141,85130,78616,92649,32836,26996,83623,45383,49943,37374,62182,62248,93258,37245,76540,36300,32734,61628,45458,14423,55763,65360,38542,79559,57157,29705,59481,29472,32256,19733,37024,72851,97132,98224,20146,51163,97455,54137,51350,63270,33741,55041,49170,74095,81326,29061,90937,57237,17068,94898,43406,77675,13439,56311,55608,97484,80502,37180,42745,57224,21957,66795,52522,20213,82834,27157,42081,17417,40281,14077,49749,44261,66812,56478,21194,99526,87925,44026,74399,70586,46173,72539,62084,36687,57408,80238,46103,45963,57307,72562,94543,80341,10526,73844,55520,94060,93851,90496,93794,55139,12965,34536,37993,20848,90469,55856,26939,49193,83906,75285,72063,85745,10525,82938,66634,11495,38997,68567,56423,27798,68149,69511,14486,97230,25236,22126,30243,32624,42744,38652,41720,27804,80143,69788,50296,64006,91712,26251,98294,32999,71028,91123,94066,91982,77459,61397,55624,29036,24284,21934,97821,49204,12932,42143,12442,30422,80536,94779,86688,88254,67160,41952,53457,92022,89342,16718,20825,88737,74332,57836,93464,24483,84004,36210,49273,93264,58548,23811,13023,33889,13179,77198,82856,87809,18994,34688,84902,93693,16275,31532,44233,92036,50067,65738,85472,88436,67931,98480,94311,76809,31904,85603,83598,49045,26184,58065,45992,87385,95238,11972,51465,38076,46469,41771,85647,43228,26069,43081,65337,33550,32576,91271,84470,44268,97071,83271,86835,11220,69949,98848,71915,22054,37541,83594,92008,97801,21880,29475,58983,83176,40305,53964,11922,59681,41196,91119,93307,59644,94553,72385,60806,39405,99608,53538,66728,76886,28225,41295,73241,88923,31149,51981,12371,39453,34502,74325,27363,21177,60800,45661,73474,96343,11959,88176,15945,35313,24578,34150,14775,11374,30940,64451,10320,93613,18291,43575,25975,79556,90967,98399,79115,25105,64452,46130,72735,56473,93546,79699,22383,50976,94844,63849,63030,98611,81846,80216,53377,22305,89003,30687,73903,85144,96624,96643,89452,69420,89594,68606,96543,14182,82171,75747,38605,32108,33668,71494,10128,53395,65980,64964,75005,17756,89625,58061,22480,18562,73997,22068,99057,51543,18074,59517,12155,88275,49899,21068,10137,52636,76056,16613,11201,98186,33477,68858,55480,13934,50119,68818,45443,13506,37268,67149,22037,50530,42410,64897,29483,79839,20416,94749,91959,38103,99553,90977,14997,57081,48754,65859,96082,93899,11269,14140,45969,80944,97680,62026,88171,91336,42949,64251,95027,90265,11607,62101,78484,75903,23593,17829,29680,94946,11027,57996,34846,27735,97132,51959,10594,43320,26841,58029,44325,22783,67493,12489,66436,81383,23341,72084,34709,42304,46324,66644,99186,71746,20290,39239,44015,15718,17656,84158,24954,51870,65379,39566,39678,45544,54038,17620,48709,59158,93574,61124,39226,64309,61870,56842,15580,90061,19189,98517,69849,11175,34389,65544,30111,33934,80133,20608,33814,67804,44035,38365,97059,53869,77215,69797,57565,83460,62378,45534,24313,35511,75091,62705,86064,41834,90460,58964,88714,91238,34874,39180,91637,39221,91307,23317,61642,77582,78484,77191,79900,57314,36623,94451,86303,43321,25129,20299,50009,72916,65275,18199,73357,69817,11634,61665,53620,38339,87641,33953,92032,53050,23554,44130,55376,24155,46059,20238,68248,87306,94532,32539,71306,19865,85224,75837,85182,27418,62396,90918,65197,54243,48301,77819,59346,28927,41317,16298,32597,62919,62857,63361,80893,58366,59932,10168,30529,77272,45603,99670,70820,13152,66574,12646,33569,51208,55285,15960,73348,57173,91308,28375,40456,52247,62389,15678,66278,66377,92269,43252,38258,84872,34065,49923,47563,88104,98187,55730,35665,26302,47011,99087,26514,62585,67257,57776,33521,82377,10896,82203,19123,43477,39134,89686,85677,69152,64959,50001,94623,82559,31220,76239,90593,48655,61536,87439,91520,33194,55837,94952,82899,19621,66734,69926,43947,70853,45107,84512,45840,87135,57647,28041,34902,22696,16215,75967,26587,23994,22273,54765,59608,81836,32370,19538,14892,82407,97611,96032,20512,69789,52378,29689,22156,35446,94330,76257,67202,34200,33193,45535,41414,53537,91534,41938,24430,17069,95580,63423,92869,74159,82359,39266,16846,65689,72057,16490,46074,11248,46801,21453,44116,77271,66187,86461,55260,18574,61804,17695,80553,76599,74903,59728,44141,70052,39371,51810,95474,53091,50823,40513,36719,97571,83485,18755,43655,98407,29016,62338,52472,52816,15692,79765,61724,52478,51845,97810,70396,77400,86856,47195,76820,73678,78064,43155,98034,48928,60514,37302,79345,95726,48607,78836,41816,27970,33149,18607,14572,95769,26449,88732,64841,78117,93254,89960,58004,89912,86011,82088,43163,51223,62704,75662,27594,40733,59965,69234,24526,41457,49370,47385,26159,73224,10079,81594,73267,82899,14931,66305,26605,49074,72863,32472,59591,79061,43832,17493,11182,71282,22788,33754,77198,29437,36742,85815,36563,97267,94519,45800,80985,72668,78887,69139,33886,83596,43585,83584,94451,17588,54940,53226,13444,34855,32439,59506,62253,72121,82715,27663,33224,97674,20287,70946,21211,99777,86666,96989,76223,70558,28138,48739,59771,80884,89364,95106,72115,68733,84472,86155,19134,67572,76420,45546,35994,35722,98317,64461,98932,82391,17767,82235,69188,76033,39201,38281,77715,74230,37321,50748,29853,88356,25816,60017,79750,54700,52740,28483,30772,38087,50687,92317,93777,31371,28958,62646,20547,67920,49178,20076,21206,68945,84022,30614,76203,33960,78610,22732,30383,98920,21185,35775,96466,40781,43403,67257,28587,27935,68187,34461,58963,69857,66928,33129,95700,90417,78346,22796,39399,93835,44863,81050,71356,41276,52704,78749,61842,17379,47274,41321,20935,76858,54627,78684,47811,84502,82708,12040,26143,79364,51850,48475,42504,78885,49706,90257,64143,14105,53963,62401,88215,12399,82518,98039,32028,65057,37725,44009,89016,52250,52004,61100,23166,95204,92917,80569,43893,89316,93790,74826,59223,60398,80188,61242,10968,95168,23677,42781,60216,84589,91755,50904,10192,75789,66350,71064,81554,57153,29049,83384,60482,65296,76072,80741,50374,88756,51036,81805,37493,85446,38239,89721,34122,55844,57162,16604,57633,21707,13005,95960,27659,15355,13638,75561,37550,57322,97719,38235,75421,49158,20292,84811,75227,97758,21692,37332,87459,66037,83344,62556,15861,36242,71855,10395,26621,47555,87356,83665,74994,86091,50124,80589,56155,68532,73111,70021,40207,49862,20847,30260,88525,17908,85854,59662,25025,74523,18671,70196,42735,50092,25866,33240,66025,18391,73437,26942,59286,59550,70448,68358,26850,59951,88850,96893,46974,25983,49344,80357,58260,71095,35265,98033,62728,95491,11796,43102,77041,11398,51668,34225,18124,90023,17634,49998,64017,25049,30036,88288,90007,12335,35080,41400,86855,88730,57299,56341,61525,87977,57322,35062,46423,35147,64838,81783,82525,18334,30357,25151,52714,82966,25070,17084,50393,90440,98439,89129,11125,80077,38120,67065,97961,38626,86734,63033,70295,49737,79683,26826,12956,56048,24470,82545,94126,50360,57544,67308,54774,26688,42527,19240,12074,36250,83844,55094,76467,26796,87690,60876,54499,20268,18340,89992,16954,23021,81786,70859,11391,66084,94768,51367,87956,25805,15139,19310,25045,26381,65936,76547,58041,90718,27410,63443,77168,25802,69176,92073,29085,75021,27304,94724,29575,88162,35530,51718,81291,49226,40787,63333,66753,62884,12685,38950,38858,96599,66888,19111,99113,68712,19850,58555,85736,15775,98140,99118,30857,61755,32267,26889,53673,56603,78003,54283,15467,68198,22444,60762,16922,70967,19724,28431,38879,84118,85771,43711,88626,85719,12798,59997,48006,76550,81446,85423,34029,12635,89532,87373,75887,38894,99349,53113,94813,99681,70344,77236,69070,30718,70599,48278,43814,58680,58321,66233,34718,56873,54345,65920,99019,52893,81972,37703,16912,23087,33790,86303,64206,34938,44678,34403,98680,54863,79708,43103,70488,50916,80991,34580,15265,86104,47179,69442,49210,16551,27506,97152,22257,90707,83698,78529,42894,84001,28042,26062,47249,83721,43385,32714,21797,20541,65740,45566,42453,17218,17374,54357,51794,57162,28164,41773,86273,73427,29570,59857,75830,56748,50952,53101,45542,30315,83432,15718,97390,90775,48240,92584,71515,88116,76475,28073,37735,71256,63900,55151,50342,96616,48435,51691,71815,41052,62260,92560,25663,82615,41689,90427,41677,51835,32035,49019,56052,37149,27500,20407,61000,86380,66544,80104,26770,50804,89385,76747,44709,20067,91855,81272,55467,88246,82162,83708,79263,81401,53310,84770,98578,28013,21089,45817,25723,25376,28192,67835,42357,83122,12286,25749,26027,91199,46563,55959,27903,77734,16361,83927,58507,83379,53673,73071,85151,32085,18710,58545,47129,40590,63161,49034,13140,98137,43980,29299,10058,24004,25862,75587,56095,69278,37350,32922,25822,97610,75760,26439,28430,78422,64603,65189,21539,89308,29187,22453,61201,63468,21429,47988,86566,13876,23515,75281,14110,41079,10151,88142,49801,23380,77301,63754,18409,17725,62541,49602,67498,75783,56761,16256,58033,22188,76629,81926,84436,60233,54006,59289,95825,53336,21144,20331,51309,30423,65705,85510,99156,97737,26044,72108,61793,19665,10247,99179,40260,65061,93697,95693,74616,13784,34287,88961,73753,22479,75227,63137,32308,92668,10806,72173,88264,98512,45019,45814,21771,17280,37564,78405,60185,26517,27247,24664,94084,75182,33899,56639,74757,50923,61570,91910,57027,96811,95050,69561,90712,90416,34253,55903,57524,58612,87042,89724,17939,58626,55193,67303,39910,30713,41503,81793,15506,21667,64639,87705,84753,10816,22193,24117,78010,41545,81936,81674,61635,50549,14037,64187,83018,70965,78152,45269,59726,34327,77875,91559,37278,23664,69208,81358,83980,55171,34156,29083,86492,36226,13837,12510,24433,84476,82430,65334,12863,78644,27896,47748,26449,62769,73434,60760,23375,10593,33403,63175,21131,15642,24573,71499,56144,43016,37321,24947,24276,67348,89529,84710,69292,36344,16799,44861,14282,12966,89121,51836,32481,88604,96267,29441,32970,44612,55905,43337,24553,56208,66748,37840,40822,49293,48693,49778,60996,65099,38001,43786,63818,50850,36982,58948,66064,60093,37082,37052,37115,55722,69264,49969,82459,13210,10916,60831,23942,35629,80802,28057,95490,42460,67782,66725,67515,16074,55888,27802,65990,42333,76833,29665,17953,54741,10849,79501,12465,70964,89569,65709,90985,85325,51306,59245,26995,30494,44893,82725,78353,28815,28952,35689,85461,78408,76417,14878,99187,48701,10169,54365,64549,47125,92937,20781,80962,96033,21508,43513,58094,87294,31860,43973,83940,24287,43804,39708,42950,19750,72437,74494,36462,75639,19413,81614,47084,46894,11051,35236,85837,85666,81213,67659,37082,39145,47006,78557,99917,94668,17948,69019,95371,82091,68172,71986,44909,78620,71993,25008,28355,25536,31960,39121,54834,92251,38151,48475,65226,79404,10931,36084,88499,19844,76102,55075,90918,42534,77282,87186,28604,45004,41778,81530,28519,80907,14009,89551,89681,87484,21454,71031,69170,21351,50807,30770,76246,30374,99174,82706,77020,69303,33349,25106,92596,25030,95167,48476,34997,39143,55762,29948,33423,87266,68940,18673,30164,39922,99493,35785,17762,85906,85688,96353,55748,66653,65577,33657,28656,57490,18128,53403,94660,89953,65784,25555,93951,79989,86104,73776,46179,41365,32789,17888,27234,82299,98286,18710,48898,83687,17224,30362,73226,82311,89668,52577,50043,12315,73584,46923,95000,97224,72383,15055,41941,72905,78998,52633,21145,70724,85488,83706,73447,61823,45287,54540,24668,11519,30534,68612,60125,40310,94225,53019,87986,94861,17184,66053,15392,96248,80909,73631,21520,75192,16390,72163,63148,14691,78871,15285,31824,71097,47309,72477,57159,56045,69358,77949,57234,19567,32234,52142,83540,95741,98696,11763,69251,88429,47031,71730,38693,47398,16301,89556,29045,14873,18856,56768,85506,65347,71267,29596,54613,19997,41759,42405,92493,81992,88902,35983,92915,63644,10898,90679,18807,69004,25951,94834,87454,53913,60243,21076,26362,85774,98950,64768,16650,50312,28304,30007,12498,43984,60764,41438,96806,42725,84426,11860,79404,36697,55052,60727,47229,68586,51831,54995,38680,22059,53901,87742,37684,30096,54699,56267,37985,91601,70519,51934,69713,40778,54910,84144,17574,63332,44215,71565,90979,35766,31289,38765,50864,68412,29014,62223,83594,25424,79031,73876,46732,28603,23392,35670,80100,28742,24190,36574,60512,78405,90435,85919,93710,35689,84720,63996,89218,95238,30554,78308,37263,99488,48328,31037,31769,21918,48366,73242,81605,58437,65488,62188,70086,68900,28439,49149,76595,79396,63531,30931,76316,65797,66561,73526,24889,49385,10657,16622,60899,38400,38586,16306,88189,41458,98394,20961,97918,60042,61169,41345,46019,70596,74864,14232,74193,72954,21130,69934,84672,36773,23236,58662,47087,55620,22302,11365,11914,13902,52742,74815,88941,16448,78313,39877,99956,72603,16368,46860,60604,25791,98157,63236,85480,96724,97530,95007,79936,30590,14851,68457,30837,48421,40782,85700,97895,23111,53280,89169,89457,61158,20303,27043,34202,96204,55150,54999,93794,47262,34585,32130,82423,76217,52740,29836,93059,16997,45093,75768,32839,57064,26191,60545,29965,36289,94674,62904,68076,94937,77115,28549,52684,76957,62041,18866,76540,31678,35248,13609,49519,74016,30306,11557,60062,10196,56417,19426,88691,54668,81930,32388,97943,67088,59136,71627,45681,58327,29780,97257,21366,74408,93092,34165,47890,42174,41427,97347,22422,14150,56317,38550,25063,27615,39092,23144,78515,24381,26475,41199,44746,20541,21778,16796,55427,64281,76107,15702,50127,86923,88297,51269,88990,53584,21048,73961,61468,52812,37073,85598,13450,65674,34534,89669,50238,17901,75554,76624,34291,34452,54592,19928,57167,52397,12658,21824,33220,66727,27442,50798,19224,58371,28820,69129,59067,10893,76898,21884,43841,32982,41159,49157,49950,13295,70035,40617,16051,78973,24870,91948,85303,15860,96561,60156,43957,14499,59775,99418,51425,44404,23835,63284,73655,63366,97674,78771,76706,38413,52925,54047,40991,39897,91158,91450,40853,70789,46421,14070,49827,76220,55403,57674,61152,66503,57414,33546,94527,56150,81314,41535,22146,31736,85894,96660,32064,76892,83000,84972,37825,69116,86592,51046,72559,56530,23759,55526,58622,43580,26697,77298,35409,64527,58357,84231,97478,12738,98143,31383,28594,76039,98542,29778,14161,80122,22979,83737,97760,47988,99839,27486,60213,78007,12905,68220,12442,24254,33409,77399,28766,31795,25290,86468,38849,69604,27027,61876,49484,74535,86698,26619,54736,63778,95497,71381,35417,55290,39845,68837,38674,34241,21526,43152,34237,43382,25622,80007,47734,40408,63454,62666,52482,95725,13824,28638,92265,12526,56504,55829,94862,79321,51753,60483,82289,51759,90161,70104,59757,72192,89572,43046,93928,65452,35459,49682,20976,21401,67583,74856,25365,30295,46653,85337,26049,74283,44257,41242,15246,54251,64824,40886,65091,21772,48455,16979,26067,14987,27682,79186,99172,73374,88507,68364,10015,21436,87323,91220,54786,63547,42186,77098,23671,30594,18399,16927,34859,26331,95359,64477,39585,84279,43080,51119,99805,88163,29785,86763,19701,95790,64940,90629,75627,21402,38009,60868,82259,38285,64330,55646,27056,93230,93563,79336,58586,60848,22313,41346,69645,71399,27943,66985,68377,60397,38447,24542,78803,95035,83556,58638,14016,19968,54216,58525,89078,71561,55341,15510,55944,82968,33671,97341,44869,64882,14818,90097,17638,48983,83344,30435,21650,17095,10608,39231,83260,95105,82270,94615,35376,20659,78877,87706,42552,27121,89107,70247,47605,34572,12026,85484,94929,70953,66893,93909,54624,24488,98452,77706,61715,38907,11887,44960,57076,55920,12051,11507,96434,34422,26433,85613,82467,76802,70868,97121,64871,98660,39181,95567,30509,90452,72102,83857,71906,23772,27120,41537,44841,15983,20169,27165,34160,80492,98061,41745,57560,39637,49208,26417,49638,19342,45362,30660,84025,45054,14642,73606,95184,64823,37188,22952,67870,82784,75986,43352,89928,66246,86025,46563,90051,69888,15966,53145,98463,63279,17821,62477,67936,96546,30257,72363,67534,72805,91998,63925,49069,77525,25671,34035,71375,80418,72314,47588,49904,15320,63983,17432,17001,68234,17853,93245,17730,91953,59154,27274,86263,65984,35489,92449,45623,58994,98982,45486,72371,66607,68014,83518,97482,87400,97334,44388,82252,42136,52011,52198,22396,40263,78694,16063,80544,91789,45368,29552,98334,60018,44355,97142,30078,97995,41067,22208,22208,41999,98810,10983,54538,80863,14401,66634,67172,66774,47171,66809,51375,84952,68677,68423,52315,63846,20785,21771,77186,10502,68956,86232,35135,23264,93416,93992,65635,73016,93811,76014,96036,71124,97608,98561,78669,71657,47138,23314,46008,17068,31264,10909,86751,74656,13175,82635,39538,24814,83245,61973,22650,70040,96403,58019,21665,16914,15901,96680,89355,13968,56245,36778,91736,38125,15172,98829,42487,58389,81441,62326,33133,81687,54315,76907,51677,73386,59419,65494,32394,19650,98146,86218,67459,60717,99866,74495,38751,12383,37576,60576,54669,65464,95177,99867,36727,52362,78640,11226,67327,36533,85236,90348,65541,77936,93876,22585,80235,91027,63328,81910,20023,41403,79040,36247,36359,75486,58668,56832,63814,28446,17034,57396,57003,44395,72990,39726,38258,38537,60565,50898,29033,68716,61099,23990,44527,21104,56042,50843,90926,41356,84703,58787,14029,36887,44181,77274,10631,53536,15542,21535,52867,48081,83163,84754,19665,12743,88895,30572,60351,71106,98181,55946,56979,20323,96638,34851,22200,77602,73150,65462,53845,18812,34641,67017,17186,86841,74896,20289,23089,83357,55129,32825,62443,56900,96657,87704,92793,51678,57796,46959,24825,24491,76570,88458,77639,10159,90205,75695,13772,17808,63555,63842,43584,46369,61655,26417,65387,14734,77420,39536,73448,85142,65139,73840,70967,94370,88726,63861,97416,24121,62305,12833,72100,10037,18121,20709,26058,12413,40370,62513,60609,36394,52212,43759,92928,26178,29518,14364,54590,76328,89028,85139,13024,88190,56614,66910,28800,44142,39188,96621,91205,45545,22599,16913,65106,85350,82902,59480,57807,12979,80586,84428,60133,87651,40634,70048,40175,35981,69695,14777,59651,43901,99006,91430,19757,61801,66131,22674,78547,15453,10964,28266,45330,50641,18204,50950,87714,65039,89050,11831,81733,25124,76251,15417,59921,69322,70677,95660,52318,34335,35306,73495,59366,70567,25099,18775,49408,25518,78184,42639,97723,66742,41097,57180,30690,50060,19241,64659,52007,16832,78876,46889,24317,53666,30799,34499,76869,16761,54320,28921,73307,74303,61020,36120,84153,89308,15269,31042,20400,59561,28455,41994,25080,84637,39951,13891,68457,77161,97742,85936,82065,82212,88200,51379,52577,53271,95879,48758,65069,66875,74017,36533,86610,37761,75599,48668,18421,86018,75584,85458,29491,24643,68104,86460,93721,95956,49932,83306,41374,67044,59035,92105,42389,90642,38802,66293,48804,79803,63274,80041,32521,81562,39550,21647,92320,78336,87792,79089,94398,25889,57428,57499,20534,48308,67532,36304,13632,99552,39886,27057,31491,67433,84492,80066,97043,77977,14275,51472,57891,46524,70046,34987,17967,11620,77738,22527,45722,27296,97687,86752,27760,74140,42656,26200,78165,43184,26656,79946,98932,36276,78581,13917,56986,19479,13539,70370,86666,35570,94536,30769,67986,26358,51570,58247,79033,71346,79575,90517,20567,21824,79158,10131,63338,62138,52250,87160,77057,45602,71475,51847,20560,26188,37542,57099,28428,52098,88270,39539,59847,15914,77050,23085,82974,30184,19819,19127,88327,20978,19899,23158,46332,55675,52874,40136,63327,43960,82051,18285,94194,50960,90352,57319,52581,73644,59582,28047,31833,13624,36571,96752,52919,48618,90547,35914,17654,77345,67241,89676,38516,35789,44682,48465,68009,64729,76443,89458,88005,42912,84004,24483,60364,16535,49668,44449,51058,41478,62190,64001,22100,71240,92613,53247,21629,85598,57854,80112,71552,77901,34274,11137,74882,87138,56767,60162,82216,62208,90585,23331,95381,21814,31747,23474,23624,13120,31952,21334,63904,72060,16536,10099,62308,59244,87839,90896,24150,75914,13341,92421,26939,66747,46389,81102,26525,81266,80806,43193,16830,38642,13567,83620,15215,70659,45014,88387,14626,21150,48655,72552,61889,41614,74331,37748,53088,35650,96727,95330,26886,40426,86086,55515,77242,17281,31816,43902,90472,36209,17834,95155,70196,35750,13164,14212,57428,89857,37932,48231,56896,52447,73639,78801,53112,46196,96772,89606,47287,61150,53086,29809,57327,58993,48070,69699,67249,64354,19547,10460,34906,26698,28640,68937,94152,73628,59801,85729,70145,50392,17682,64172,16826,90378,24866,39388,41603,77903,44361,73236,61272,89394,34207,24235,20346,55898,69712,74510,23340,58855,90951,57789,29691,18113,82738,33782,63264,50346,53716,82756,53678,43012,72704,81510,53221,84379,14907,92874,48264,60586,63212,13154,59595,69271,66047,35311,47141,12331,30996,51361,11301,93297,75423,18651,11657,28455,72378,59993,23009,72007,60327,89173,86836,85782,92705,43482,49203,74400,39631,76696,17352,56386,86486,90879,10218,60536,50293,28415,39997,23589,99903,59064,82379,57060,36266,96196,54308,17580,61827,56568,57809,24343,58225,69746,99648,83484,45581,65136,20334,37802,96124,44157,96732,63373,68449,14836,37260,47500,10281,47083,14915,39872,56278,24255,30482,61958,37353,61323,50119,81656,85187,50638,79563,63153,89466,97860,66507,63278,90125,98112,24786,82465,25968,79344,81330,74628,58622,42789,28984,63620,66044,69848,36316,55931,95980,58944,84726,73573,92431,46172,16341,76421,60438,77451,39001,77338,17172,90287,47041,43346,21886,53052,88997,60261,29323,51469,66260,42679,77214,79167,15946,68924,76486,67831,16567,77687,89564,47283,27054,93539,89859,31306,96538,74501,87859,93383,81847,74982,87440,34509,62303,64010,24538,94203,99504,97964,50353,16248,79845,57265,99853,58422,75856,54720,16086,45236,85457,71339,67583,91280,96896,28529,59975,42499,41792,68880,85742,86021,99223,63614,20793,82856,45531,81957,66740,81713,75860,19244,38137,96138,34918,21284,96016,32756,82452,69920,10065,17114,35387,91185,10201,29241,84838,71300,69571,49797,52567,66023,31199,25198,51626,50906,92894,85326,78088,27840,79571,72467,85014,57420,35943,43296,30594,65652,93505,16398,15878,79343,30669,22617,84031,29531,68662,23055,58915,71870,68063,66563,93441,99680,65279,84979,70859,18306,86726,88880,18193,97048,88803,72374,95060,44986,33774,86490,73031,30311,82818,18451,68145,25937,99021,61226,33167,60330,83636,25126,77767,55437,74725,73605,59266,13205,41803,49358,64218,81956,27732,84350,89174,19756,43048,60476,81417,11640,85932,43489,28231,79354,46006,76461,64978,64806,25360,58616,82091,74366,62869,13301,10535,48676,70564,77631,60457,34231,14678,77470,81027,24864,87869,46671,63693,48346,79313,98180,34444,98151,71008,57622,34368,95248,94608,72759,99958,76283,74453,20778,48914,91276,84980,75505,39786,34486,74301,71166,85770,58280,52584,46322,68057,48485,72639,98848,79782,54075,16349,96324,18199,70565,61512,48200,51716,87619,78429,47853,66712,72399,88011,24424,30285,82716,81238,99994,31880,91857,74411,72518,40044,93136,11808,38213,88962,22581,99541,60048,67807,39054,15801,40843,35614,15061,42829,34788,18884,65188,24067,14078,20321,13947,16916,55014,11509,48961,24106,10729,40091,28966,53153,18007,24316,86082,27010,29847,25403,99174,60566,80037,71396,12957,94200,23175,74340,27819,65493,23360,85124,57345,65253,83329,48726,79586,69433,72858,88592,11583,83596,17716,34593,31518,46571,18801,67344,37535,80913,58842,36799,44300,27433,67507,37897,86097,44722,15164,96131,76359,45841,28858,82413,22324,20547,51469,43672,33830,72187,20348,82075,33417,17945,88008,74478,95750,93945,62268,92954,65058,75428,56435,12721,11887,23519,78808,68286,43089,97762,69206,30793,64254,26895,97257,50269,80154,34799,31571,98870,60570,30557,24111,31844,47577,22798,75215,64629,96308,45166,64044,26731,43814,77862,89395,45001,73288,74548,93012,39361,29549,66487,52912,49562,94727,78486,52301,37845,21587,63390,41617,86409,60809,63984,85795,53046,35047,68396,57802,62855,82026,35514,49221,43878,25459,11012,32854,86578,75856,87209,35440,45287,44998,15798,34861,42331,92754,33232,89566,34524,22158,96842,90425,55121,16201,10444,17239,40500,48818,90553,79618,48169,93248,54072,13983,90753,71171,46654,66907,86985,78084,49780,22715,97922,38677,67201,65403,93094,91480,38176,13438,85645,23797,56012,77967,36402,16505,23955,11145,37989,55990,75186,98582,72000,48215,22046,57745,93877,53238,51452,47666,63979,50701,37116,46193,50448,40443,51861,92278,62738,14936,21507,56340,75401,22287,36359,86426,85360,97619,43382,54788,75332,14011,69981,11225,43258,52501,15221,58946,84785,33299,99866,93045,85248,15351,45215,39601,17851,73039,87591,96832,33428,49227,42886,80908,44878,11573,93356,15082,71128,45718,44500,29838,37219,41633,32140,76564,64376,18924,81402,25303,68816,70653,94105,73314,42818,72349,36834,53095,73677,48435,50901,35484,24265,94917,25294,15468,35460,36243,21057,66193,46913,87170,17358,23416,19269,21775,55122,21626,31100,48978,55454,65727,74853,54586,31820,77317,82220,36570,14597,91341,32928,68474,77688,64906,75721,99884,62184,85191,24450,50389,30353,13319,69304,18810,26984,63903,34566,82732,42849,79044,33938,33145,79598,51907,43316,70060,34403,37169,99113,79876,72110,17263,59167,99804,57628,73506,39316,15750,11622,91605,15597,33774,93297,74397,21565,28191,71924,47897,51492,58194,77356,20108,86424,70447,82365,76135,35488,99737,73197,41385,82730,69769,88774,49003,71602,53349,92765,44074,81809,84977,23099,10524,21017,67169,63962,66352,94134,67235,98355,30932,25799,97138,61255,53553,14991,19900,39935,75389,91368,60825,77486,26028,87472,64512,18275,72110,65383,62232,49495,54696,82630,47851,48177,53504,30410,60178,14264,75971,52690,39860,16796,43242,37713,40676,67542,52251,69257,85882,30441,89049,62897,67950,36579,19971,96565,14742,96068,43375,96348,58312,15273,37409,79182,29573,28334,72966,44612,19911,59812,88087,31433,80551,78800,94491,30315,77600,18091,25109,84923,94609,85440,70117,52815,68957,74431,68006,42809,24593,33400,57197,31284,92925,70758,33318,30383,41259,75257,47406,27775,66135,60212,41462,84744,12613,70085,34596,72888,44302,27988,41368,65987,76918,10221,72281,25763,49791,29378,60706,91767,59924,96824,41011,42222,56201,78137,69403,77096,36670,70647,53541,61602,57104,43214,76010,90199,41687,21961,15484,88904,26823,32652,46996,59703,95070,31666,57977,80655,81722,64005,24853,26558,75229,42499,12234,41177,15225,59587,46245,99734,74504,42786,83183,92273,72029,43238,28240,47180,33765,63535,40472,59919,20906,20294,40206,20802,92542,15126,50364,48405,11369,15946,84499,44229,41951,76759,98344,10377,49053,83774,73151,28519,53854,79956,58193,78101,42638,77612,75075,36017,44781,35075,52109,61603,26641,23105,82586,60838,57769,77901,49555,53328,40819,62728,53844,34653,15812,88769,72418,60422,97718,29961,47017,94782,80736,62109,23126,79687,77393,19450,76280,16331,68091,31344,73091,51195,75154,93468,50745,19195,64565,31186,31203,74422,23216,84491,30184,42215,14870,43168,40158,69661,76195,45248,87005,63017,94945,89186,34374,56261,64416,96962,95097,34773,65768,31550,25548,95745,25052,48257,59361,73837,85159,37595,12147,62021,61893,36989,23059,83809,82869,33756,17934,26977,82305,81901,98158,85813,56755,82667,16234,37720,79317,32786,27917,13138,55028,48015,49094,55113,65932,71130,66842,86349,23752,60877,59319,69868,70125,75063,23122,68352,93687,66637,34933,63579,79948,46528,23063,87643,59500,45884,62102,85224,47406,72838,75190,18935,16544,92431,50273,52024,22013,42981,65650,27212,52282,63033,33968,57241,79575,84791,48060,58150,48660,71871,90969,75020,93960,74677,21317,38236,45605,57383,54086,90674,80672,76141,53518,82186,53073,92511,56296,58470,45194,17993,67500,28007,31181,32457,74406,38486,67962,70361,62481,21813,31564,91214,62544,82160,87662,47901,82119,22585,87447,88392,18437,55929,77976,76250,93153,39592,36520,68843,33513,82187,73261,27930,42731,20706,93061,83559,55666,11026,86995,43556,68760,98808,52787,81658,33888,75693,87764,61319,12935,72389,84327,59593,86646,64104,87895,13962,93206,11933,49092,12322,53484,89596,44587,26780,74828,60273,92866,20271,10683,68429,39107,63238,44848,84985,96753,23980,97970,71881,38296,32573,39224,73556,32352,60505,43622,56654,47377,97439,17940,34816,85701,81451,17848,17337,17506,36400,79345,85806,91305,26415,61331,13257,40432,76750,95073,60357,98131,69895,70424,16832,13533,57517,46311,60777,74349,20869,29208,98614,19561,35653,43632,50763,47086,29304,12619,18522,94853,49680,30112,30175,86155,99257,61215,71150,29059,87745,84462,38146,87027,46827,35294,74639,69795,30389,40380,75492,99208,39096,11302,95568,81739,44850,26198,22997,93032,53317,15310,69317,66778,60933,99458,44741,24897,56155,65742,76313,60454,39954,25553,37687,80685,23491,24906,18854,68791,40302,15484,93826,84718,37587,48332,35572,28069,82542,40145,69592,14143,47782,21465,57789,45295,47775,15826,68385,69928,69775,68948,53974,97833,76262,31231,49868,71521,10118,21264,64616,37712,19946,96093,57742,47105,43608,78892,56217,63324,19945,40543,54703,62576,83012,97147,31697,22351,87554,97160,56790,29960,29738,33766,30687,28738,20057,92179,29303,27046,28627,43123,81356,22774,55374,74747,50617,67993,65098,13512,33466,82119,25570,54151,80605,85792,44605,21675,21822,46884,58782,96312,32372,30258,68863,90076,59681,59893,55831,36546,54274,41861,40672,22426,20469,79615,42198,52158,45610,70646,79237,33480,80335,52631,75992,26704,39366,91467,91342,29072,33339,23886,27483,15387,49351,95204,46482,73333,15270,59963,96020,72333,52565,76305,52561,83125,92029,50244,42843,79723,80843,13100,17318,59130,78805,81562,67420,38707,65277,67250,11077,95658,13606,74428,66799,80619,85978,55594,85585,65197,73563,48925,35908,28779,52318,37584,93655,22858,47914,89732,78068,81579,11720,48753,17337,30877,36998,51490,79998,89371,72343,96020,32423,95396,10375,81827,73496,74637,54840,48303,95248,26602,26519,65244,86417,44455,62467,79442,16787,80292,89532,47862,63843,57629,11624,36409,40532,86801,24923,35498,43143,15665,29819,16936,18736,67554,20989,69621,39342,88419,77348,95102,47149,69255,65397,72595,94097,55851,33359,42640,51844,69455,84522,57642,88251,98571,25755,24223,78000,22087,67794,41464,30637,59886,19802,43383,88311,62405,63977,30859,10803,66719,50848,97838,80123,90175,49845,39349,10167,28751,16817,89817,94249,87383,61602,55387,29765,14638,99516,43276,34325,13517,78327,16695,96296,76028,73433,38110,45901,23560,92004,86340,99313,35711,98788,46538,13241,83243,75347,63632,34444,49468,58002,74132,65720,97436,90262,95526,47199,96355,49257,81594,13501,30100,88280,15217,48983,79612,88108,37728,68215,53148,19137,20459,51022,50892,41157,12914,90014,19677,47609,97665,55125,29035,34186,44020,10541,97326,13991,27369,69097,43280,98055,61702,51956,17726,51766,71761,76678,77081,89791,28160,54006,74367,93743,88361,16563,45685,39704,99198,64749,77886,41466,72136,12622,28511,98131,28216,32196,33933,77530,23162,97068,42882,12491,45802,39612,21456,37584,54304,29737,37912,66460,66277,41182,49340,42437,76669,67151,69423,83020,89400,13745,55632,61661,76109,15253,67189,84233,11441,21807,45814,57243,36151,63179,91591,22339,94305,92515,55989,71490,96621,98240,86271,79108,54686,93563,88586,85980,30990,97002,17948,58313,38393,90139,22778,51728,35952,56303,95919,83541,15290,95726,21011,46553,70226,45268,64663,60320,22643,49347,19686,40293,67346,74597,78133,22135,68359,82148,42384,98587,27089,10584,97984,23524,82436,66431,91458,27434,62966,20314,47947,43820,12629,66964,71041,83383,37943,12007,13247,36990,98996,83288,82805,80626,39955,40544,22027,45108,77929,82387,86254,45438,43893,65770,37947,25800,57473,24286,99800,98279,21299,89715,47715,31459,89498,18790,44282,96041,25553,96357,49815,45420,70198,94395,92354,77716,45971,83169,60482,43009,29794,51581,26903,78300,19633,86704,27244,83090,24907,64888,38292,36847,18591,73065,29596,88559,62777,22348,77087,56137,46790,73968,54809,15957,76687,12128,58822,21273,77895,92305,64853,45541,40590,78357,12115,27193,34990,21662,62726,60215,99761,34996,88995,36264,65985,36300,58941,58933,73760,95534,45911,16597,21779,93465,11678,49330,71757,28231,31521,85829,87765,62044,77302,12681,70586,10641,49116,35107,82875,46392,30989,10967,39800,13093,12898,73601,44146,62467,57421,47951,91053,52794,36840,92072,62799,31824,58363,21589,44389,68822,65720,17490,70166,62067,56467,13698,13021,65021,16901,80065,20464,75046,79230,87341,24078,20505,68171,53385,35232,14220,58338,96179,88402,95273,50463,88168,23659,70095,88110,93267,21105,43946,46648,83510,17880,50219,55782,33735,59807,14673,21180,78858,37065,55692,31113,90874,90893,35828,78886,53171,49211,88140,82669,42116,67533,86042,99267,56817,89635,16553,29940,77572,82410,70956,31218,20974,96716,38743,52190,26931,72751,47978,79661,39411,90921,41514,33079,13107,26643,39173,97040,92711,31779,62023,71688,69676,28065,97363,14613,35740,96837,31875,54298,61271,65094,10543,15535,34223,42959,64014,54246,53841,11739,54696,34151,46983,47935,10106,21165,66466,92008,88424,77680,30774,67897,40599,23712,57732,87810,79961,94593,89477,13794,98247,11202,45372,32200,96564,60858,58027,78126,72205,97271,97197,63463,33582,91409,17053,37329,17432,85438,23990,28137,24493,47058,49739,79354,32398,84457,15924,43580,20269,12886,80929,58202,79750,92078,37666,79617,62852,75139,71334,68046,81069,47157,72265,58706,71831,76257,48858,94666,92297,20877,93453,23060,99032,44101,73471,27807,64936,37148,64979,16184,12283,89672,48099,18346,71331,65583,38173,65327,21437,34705,65229,60326,63893,40864,61251,80670,42443,84303,93944,15325,63298,16476,91128,86759,83762,39321,65520,90667,87713,17994,59939,82676,19811,98144,93185,49622,18427,94125,66941,26056,37775,21009,95023,28712,59191,58767,35685,31985,85813,22454,80290,81904,35394,54735,96168,39124,77235,58565,18348,43376,12234,26885,78998,56574,40663,13998,53321,74293,57532,27960,77056,28750,68803,93304,18385,62504,70189,56135,70017,45374,85111,81124,55481,76629,53574,38364,40999,73480,49089,50062,20081,53376,49705,49930,55251,74964,53631,51810,99080,94401,91631,44099,62190,50361,90672,69750,74893,89916,83100,71301,95285,30353,82792,24492,75489,83662,51151,72308,22583,57439,54463,11630,50050,69399,32554,75827,32653,51886,33367,20113,21959,48740,97964,69045,40482,23942,14014,29719,11594,47959,36912,30773,76345,37865,86529,16987,69310,50927,72537,45670,26317,14776,64126,10294,18020,55379,69494,56237,22133,54229,33620,24543,21780,29699,89088,33756,53833,52273,51142,43086,82971,56964,46795,73477,42265,27664,71763,37827,61000,16343,48725,10664,99021,85097,72601,72565,73203,26098,82021,69342,26445,88195,52770,99379,16176,28901,49799,14177,25664,77391,25143,77595,80759,20390,49604,36279,27541,78338,62079,92179,79582,32730,94376,45110,34444,19866,37730,21177,56300,92820,18397,91826,47625,61833,39654,49302,43339,31259,77760,36924,86444,92171,28598,42328,10766,26064,14184,37501,73624,27373,42577,18191,64941,51826,60306,15720,12971,45731,27507,74640,14099,32495,20707,96998,20134,18821,92624,52381,20108,90429,86015,49385,26277,60038,28421,48791,23568,20825,15151,89978,44493,57469,81040,30693,55012,48639,61900,48513,70643,94497,84927,40011,53396,10469,23514,98062,10845,99661,65701,90670,59994,56520,30319,82003,66665,68583,32405,16793,76241,32544,77576,26722,84736,85795,15988,23586,73406,45817,57846,84435,89507,68140,53942,97805,48601,17123,27156,14902,16319,57092,13255,64480,62478,72711,52826,74387,92105,90539,62868,92605,36868,60269,95071,55374,72274,23645,78938,52348,36267,91767,49303,30292,78006,64380,44454,80062,71302,76210,98282,73960,71102,19142,40275,94318,21141,72476,51492,85149,40219,83187,22423,65993,32146,58822,23044,76530,76523,32774,27605,69588,95392,83575,87321,81045,81460,64484,29277,51838,91434,56615,60238,21018,66409,83224,25462,43368,64320,89732,60052,85631,50531,58270,27371,67374,58723,91780,39200,26738,98013,34926,61586,14925,65450,28521,32464,25622,43356,74650,47362,51451,37744,54604,11546,59125,19603,63777,17035,58039,49208,12928,73395,80584,28773,97631,70532,66824,57230,64085,94560,83530,99408,33359,82255,36422,97269,32937,48069,26577,86306,10511,85920,43652,37393,17547,57099,22782,27330,69623,57571,99740,15968,28114,43636,93710,80040,45676,86790,49080,63229,77511,95394,35267,46040,19222,50908,61146,30892,94907,81968,57029,47748,96066,82780,64214,30243,15203,74357,88455,86406,86151,64677,92997,60618,54885,64264,32499,61055,17261,57977,52114,85534,23015,36488,11742,57161,83638,34480,69941,48366,12643,70130,48392,93150,75141,69664,10179,95658,65836,28193,58653,11674,40289,46629,63047,56858,89427,68474,78078,24618,41128,74766,10774,78242,74896,33381,69878,13870,62301,24484,46565,88115,44258,61761,32343,37092,23974,99704,45031,66311,28197,18136,71423,23542,63848,27494,72639,55527,87226,11629,50104,34684,66147,72499,64793,10763,57614,99094,40097,15768,49709,13075,73100,60918,88391,32014,83152,83688,90570,87990,45926,92141,68698,20830,81984,97389,12789,61759,17367,40983,36864,47291,68398,33557,67595,13050,55445,11281,31077,42082,31259,44513,30274,18358,62885,33292,54085,18932,54426,77857,73386,55553,60432,93020,30707,56888,29550,11534,94699,39830,29119,33069,63876,21817,53880,67905,37829,80839,31320,54980,82850,16140,56764,80701,61960,93548,43623,79788,13274,67811,31035,62755,11067,85726,61444,85027,13129,23449,10337,99783,75777,28504,56522,63044,61022,31762,18604,60988,93501,34063,60392,94519,86340,95971,45365,46634,13192,70124,54487,45305,92414,78262,38826,11023,54965,62812,13115,14123,33895,35354,26316,19214,28221,86506,42769,83713,32200,66914,86542,60041,39884,54985,93848,20257,89563,81582,62348,37545,30825,94716,32658,41772,56749,36760,82671,49543,77062,44525,48292,89044,61470,42161,21285,77267,68609,94035,32514,55248,61612,10180,57071,74817,86881,80028,79723,72704,91826,30879,91870,91711,17107,46681,66625,93308,14714,68677,93860,67476,64742,81554,73596,21826,72798,30983,67736,82661,47244,30031,54305,96841,20990,15702,55605,46484,56988,18812,29547,84537,86097,88798,13208,65952,43519,87510,74763,20742,90709,23499,10007,40556,23484,48972,63315,66453,41201,36502,90195,78381,37279,37497,24413,79618,56876,84122,30324,52319,71920,17804,99043,26372,37351,59694,58922,94934,16226,69834,47459,37707,91464,17194,45994,64498,37252,68739,75130,37972,56093,18097,50161,15359,79614,89449,48830,72728,55795,36026,54143,64149,32876,95827,96474,93579,61016,47981,67853,28907,50611,88456,24940,55760,12408,60390,39861,98088,68887,64086,54632,64260,17655,45914,81963,83427,15382,13240,13171,61160,32784,22829,11258,57454,81462,52472,82559,64359,19721,77317,31944,31169,92411,99342,37229,22072,22869,20777,56455,12018,35430,23985,10664,53392,48223,60663,67607,24835,38179,74596,67855,58784,84137,22650,33179,54794,59203,24065,32948,95218,79995,52909,19567,55201,83281,86109,36043,69460,18204,67790,62508,94125,99976,26548,64195,96505,86596,83423,95953,73441,88639,53361,37887,66066,86504,66330,35121,50756,47654,62706,60461,40599,20775,67852,95325,82987,71556,59722,74338,66872,95962,24122,43431,13715,63834,29988,32271,45537,19731,56590,99121,59962,56278,30678,55333,43127,69335,60681,43926,16882,34032,85878,31554,87087,70228,26576,86959,66862,86866,21889,45451,30769,92573,29125,35884,51632,19607,33730,19369,58600,59916,78074,19414,16184,26750,67883,57403,96340,61834,80773,40827,50674,89376,23479,16576,23339,23220,94327,93595,34126,77766,17473,17290,16237,76509,89728,48642,64503,75938,74255,86731,88285,96906,14096,21753,16279,39671,15208,82038,23029,83568,49584,68671,75323,93844,39808,35748,87419,87877,37703,95407,97762,77334,28529,43268,82493,27938,48727,14371,41782,27983,30364,28712,24321,65414,23452,85783,25299,54771,43581,76613,18255,90745,98294,64927,14182,37621,75718,11913,99732,46854,17026,37759,56606,93515,10649,83995,46434,73957,24268,77837,55538,35859,26427,24350,99023,44312,70240,52846,54407,37887,39894,62793,90232,44670,13542,51098,92023,41876,40392,64199,32032,33267,28734,51473,22217,59681,55810,51153,70758,75842,89182,51771,99499,50146,31510,90179,23380,39341,72321,83793,51414,69755,10599,87437,63879,24379,35171,60471,16274,30172,11982,49947,13588,25230,43617,10001,30670,47578,67379,47273,36792,57155,76621,38776,81430,58365,55586,55824,39887,94815,24823,12830,67867,64055,35883,47512,77445,89572,61454,53384,49636,95826,65869,95771,20965,33972,47104,95392,36471,42531,43991,80399,99178,26030,70863,60111,25408,41267,34051,53634,30677,43982,70267,30535,27871,22032,60393,77279,20986,34847,96231,94860,55531,49660,71701,22833,31649,92014,90045,54242,90947,69184,12608,20813,26626,74316,28374,57739,77881,72775,90621,37274,69267,65459,96946,39883,78375,72886,34629,91145,31937,72046,85387,45412,21973,49428,18709,42508,62067,54563,77414,51064,72925,23104,40453,30081,72811,74533,56806,91874,58996,94912,77535,38765,42735,17433,19784,65985,23275,15471,15860,49249,26575,43562,52438,22537,13884,53422,74471,35239,41822,63239,25698,37454,86153,68706,84976,68880,48205,99426,99543,73216,63782,73177,70714,24493,15297,38289,54216,51486,74502,67300,97988,53374,88437,50430,65872,35125,91098,34544,20634,31890,74756,41410,77425,66493,86652,31217,80144,26446,92310,32492,68266,91935,90417,47865,85350,87037,17112,55860,53348,51028,46247,31365,93211,87651,47061,46811,33336,34426,80348,82574,42673,63047,52427,45857,20502,32118,47282,89148,50118,48221,48895,78890,77905,20924,25253,48838,70940,35737,97880,51385,49762,74815,37884,74109,25637,35099,93403,18302,17150,14606,73605,66027,27309,79363,22064,69535,55788,53034,28624,75667,78351,15422,59624,20774,64554,13003,68099,91785,62374,14559,69774,38055,52384,97413,76162,70277,13899,21929,38855,58359,25479,99399,34644,42700,31381,55580,60970,47957,19294,42033,22588,71544,22823,74481,94072,35039,65720,47217,40781,15310,61568,59421,68587,85403,18700,60345,88797,48561,18959,49581,97266,98996,44471,68488,91926,98815,80242,28789,96298,85608,51335,69537,50495,85864,45359,68991,96098,15182,93431,47773,94103,12561,37217,51452,61457,42300,41942,95771,89655,57085,99967,92187,10215,35868,10528,10598,44185,93495,44453,78298,64956,26831,47455,22911,20508,59899,89088,46537,21515,76855,74246,19790,63885,14584,37269,64937,95657,52212,13690,52985,83673,36050,98913,85156,62073,98235,20422,48391,59984,78488,90067,73838,71572,78810,18522,12901,41800,69780,59292,81052,90975,32337,66582,21212,77189,49885,12365,21929,99081,78548,65601,79020,33822,19823,30854,46673,60430,87746,75445,35392,60953,67707,24076,75933,44817,82064,92918,30535,32989,74002,27934,40001,49952,37346,54962,28341,95933,69924,25643,25109,86331,80949,60367,65375,37740,13404,84909,82180,26846,58342,23173,38524,42753,58492,68388,90359,56366,33004,54441,91725,58126,12311,69071,28621,91081,24672,96679,27233,21706,86053,87365,10212,82671,15054,98597,14697,50166,52815,79903,79344,20849,89358,10226,74297,12050,68586,80728,96345,56251,62599,82484,66277,87982,61517,16614,65033,37497,16382,43796,53331,50453,37470,21871,78513,79219,80965,21471,30723,47178,94291,28503,41955,11438,37877,66437,31708,81988,30928,54004,35899,50026,54805,10314,58882,72380,29685,47071,57306,17356,31845,58937,47949,49818,55697,64516,80679,94988,77293,77718,78556,73355,44855,67794,11117,29656,47441,80238,77015,30512,15743,28312,19996,18996,83029,24703,92582,39475,11565,58592,50963,60480,43598,94669,29324,18527,17261,49522,22046,93387,59135,90812,33599,86681,22465,83694,33975,12762,25676,84308,58793,53127,57659,91097,92483,78970,48553,92950,35886,46450,21939,77322,23393,90091,81227,42766,56507,33756,14877,90248,42034,78912,36261,88627,99556,74635,25581,43243,72678,95720,59479,93613,15290,77520,59726,41036,45167,37342,53981,79796,30415,16101,79931,72864,43277,61294,48694,74138,33378,85657,15066,89651,52376,83781,63131,43956,47641,62288,33808,57613,50648,33404,32923,15273,41916,20754,89547,94038,55200,14330,10722,96209,92546,33284,46450,38632,92292,34984,25897,44569,27728,82111,93197,29928,37943,73173,42327,16788,24335,29418,91056,33568,29918,19329,16780,70895,55914,96077,60406,82445,69546,27066,43166,85656,48909,26937,60020,64675,24716,18864,49261,62140,23651,53427,60813,74152,98017,72026,50719,75822,32402,27435,78691,11153,55298,84621,71066,53695,68073,17070,79795,35329,82927,87097,24699,28685,57020,14335,75803,43484,97065,43899,69176,24392,78952,20474,27704,20922,62400,47393,29998,21733,77761,15779,29754,57967,96018,27419,46410,47941,18658,20458,91890,37626,85197,51214,70376,32525,31799,74544,56499,33686,98970,75512,87679,36884,81650,60626,24190,83072,95625,33643,15282,38180,31341,45859,41905,18116,60125,68356,24500,62054,48610,49947,17615,87063,75823,83042,34643,28622,68734,49101,92737,31336,31651,59087,80534,57764,48751,11788,84356,40319,64631,79171,12137,36541,40166,53134,77159,38425,61532,30169,56855,35193,74016,78709,17519,59653,84430,41777,76756,10868,38040,14389,53071,71501,64606,79791,57254,51157,27098,84759,67397,42979,69626,34540,82742,54170,60131,95104,63749,91792,14865,70777,79526,80307,34190,82344,86969,64105,97752,60764,15520,72173,96052,39958,53859,32902,56377,89050,36868,69241,18477,41492,59311,64881,93655,79272,18031,79833,42810,11079,74607,67737,21517,56923,93782,24214,63776,78203,24135,26438,81073,76415,20749,44603,22765,52585,84676,93028,62742,49869,33763,50170,80379,74171,19095,28386,74926,86623,33498,52422,99145,85364,84721,97898,93903,82100,88567,80795,85469,69987,31161,29638,67934,59669,90449,83302,76051,27881,18258,17296,52347,72748,54157,61458,98284,77200,63539,30528,95994,10330,65737,74029,75391,86709,33895,24292,28600,93482,85511,89821,70896,15617,71796,64160,53133,61688,22865,14165,68509,36730,65583,29753,27664,85159,30495,51436,18708,66854,46954,64333,89940,36903,72131,73884,54268,63617,34136,10547,34094,86414,44802,99521,89175,37659,68781,55528,91997,25749,84455,66512,46308,15944,31072,63600,31973,14744,60386,65496,29071,39739,38682,76199,95751,39518,80461,58560,53417,98921,63128,72001,43959,30731,32899,27334,27395,68511,74326,67305,32573,81820,54977,82073,79555,46117,33485,53470,14770,48645,40606,94029,84219,90806,40198,11050,75460,45554,53425,21284,39141,98309,85818,53221,29050,88220,21612,43398,32432,90540,94316,39184,96323,28035,26888,66331,57398,47457,85277,66613,46313,25664,56789,85365,39413,64555,16640,20376,51688,80234,32087,15552,40961,53850,41501,96531,33089,45971,63945,34468,73461,43363,82411,62587,82202,47914,45975,97480,65615,61914,55381,89382,18683,67680,11348,55372,37432,11214,70760,26402,10748,12013,78016,20260,27510,37130,49542,44801,58286,25693,76735,52551,84091,50699,28878,94091,81007,55678,61248,17019,32910,37443,83451,95265,92456,46066,75132,79243,30371,25499,53412,39116,49003,45024,64530,20502,69493,22767,40443,98368,70525,60763,77821,34922,72481,58191,95167,59812,94205,62700,23943,90089,19089,24581,87144,79852,23790,17186,88283,18546,63300,96392,61461,59425,61864,11068,69686,72353,71069,77855,18208,43621,38030,97964,50678,28407,30057,39713,42858,77221,73577,69533,98257,23248,73318,91221,28084,32994,64399,31363,44463,95079,47706,82258,95873,95336,93232,44850,83622,18289,34422,91839,58624,39445,25488,80390,38809,37265,28682,20899,29269,43478,27007,79942,24898,63820,31146,37215,98558,18651,57554,41069,75297,28085,23216,61871,96638,56363,46842,69266,31521,86680,98895,54027,81626,52195,63363,60110,71579,57500,69935,27511,49345,32247,63016,35856,88982,20324,41143,85700,93282,93216,75123,16478,90614,30210,22813,85824,85312,23020,82685,14968,55950,36941,79674,95075,63351,25289,21655,63251,94549,90634,38891,55884,26867,52961,61888,65967,59051,41256,41681,62314,71745,46043,83589,53280,32823,38705,33244,15559,51525,65362,79236,98710,84451,58638,32179,31049,10781,71910,91486,61833,45805,63283,49765,31281,19748,40278,81567,78866,38549,45484,66535,48093,38760,78152,28552,11567,80848,47558,54011,19027,29441,98101,41497,14650,21540,69299,28907,97008,51481,40183,49132,62534,83333,18291,19572,91980,70720,33237,87212,90429,12619,72165,94173,28729,81505,94774,38823,87564,83815,91133,28716,18290,61570,67175,53586,97589,11063,41327,26507,68380,68184,75438,86546,18093,31762,47669,91631,85263,98060,94342,26102,24913,72659,32582,54067,79106,20855,18808,28615,75034,34922,97808,72563,14653,34810,94490,44899,92225,33078,94712,19152,72137,38851,32471,40944,59618,78937,88757,75282,41332,39606,71506,56763,71380,60803,49832,14358,82469,49481,35536,63376,70374,75544,45323,21918,87025,56942,73213,29912,25368,18871,94645,90373,92767,98625,87333,15370,17024,14111,84112,61195,39038,98904,46585,27959,34173,34540,21186,69884,16868,29765,50947,94220,63199,52023,84213,82515,28518,47800,45320,99203,77811,19036,32115,60045,96299,15293,29179,27412,58552,41357,39483,93804,68198,92151,24068,51358,85399,11730,44719,92158,11908,88228,56148,88484,91150,84626,18130,19792,45868,21486,13597,46646,58437,70380,93883,82957,95747,18980,56031,55007,71164,27078,12243,67519,60110,62149,40231,93002,13558,78784,65153,34233,62702,53719,15246,30948,59825,12187,51124,93487,79377,21846,22197,47054,65899,19714,91080,69771,55839,58872,83923,79613,13532,99865,69973,94197,74146,74563,21018,49442,25854,89480,13838,16201,42084,37202,14069,10675,87939,29962,88886,86902,49431,82435,75891,81676,74455,95626,59087,41527,91573,64140,81866,44235,21525,73086,79922,56081,28272,84583,45758,57505,74162,83977,86897,72626,59705,50316,89375,54745,82440,31418,79259,78055,51264,28987,79268,60152,18956,77132,46743,16048,18136,20507,59363,69171,84390,55884,10264,61275,74930,95856,23909,48249,27216,37812,71873,10074,22817,92711,86357,32388,63403,51183,57653,25402,27568,38944,21263,31313,85389,41582,93950,74459,14233,46563,54330,63327,79325,65862,22275,94288,25659,10379,21555,63769,71807,31615,39344,26543,94196,42614,44808,54985,51005,13987,42943,53163,18424,21013,53456,97472,18933,32900,52810,29508,25730,96641,21820,82371,20968,25382,88862,74558,59114,71209,93981,48525,32309,13214,31321,46660,10984,69725,80330,53007,29865,58694,87960,78087,79124,62404,42293,25696,26509,88757,23360,65555,97971,89335,38596,53415,78066,97967,41376,46407,21475,38770,29600,98444,27643,71619,56713,69219,46763,81297,86587,58083,37751,21154,94331,59277,98362,15937,88642,14527,41354,29062,52889,28177,25797,80977,41256,37864,17327,42855,37063,85776,56319,62896,66043,64936,12398,89012,26984,53400,68435,63943,48572,53426,24384,93617,32147,35265,69789,77997,43081,93199,10389,77279,10996,61539,18661,42171,81181,62536,63700,77448,17378,27059,79651,99317,84702,49862,81671,87072,37417,27837,14452,23152,55989,78012,26705,56767,65336,49222,40023,35351,82962,94392,72683,42468,17160,30727,52701,65283,95930,62997,84914,30006,30033,14407,87878,95132,96426,49487,85009,22888,76156,55459,51630,62866,91173,67012,62156,63379,12068,66367,52377,16018,64219,74677,95071,97249,22129,19100,13122,15708,75498,70619,18316,51446,77059,74227,64976,23050,67752,63660,46612,37969,94660,32221,80600,41447,42587,37997,53170,57286,79349,77562,82039,43174,78843,47624,68072,68984,21647,81161,51158,23749,12369,85522,51183,64232,18733,55735,77007,21837,70595,96891,28914,68397,93911,83525,88422,77677,47929,99249,99291,94438,87439,81779,15911,57052,86654,64510,22768,24407,87851,10206,95367,39497,84018,65933,98755,95344,37434,67136,33504,21063,17184,34055,82942,10689,92252,42449,30537,21110,66152,96321,98836,20086,70718,21904,68634,59650,56684,11926,18129,40980,37999,12836,33855,35365,85010,17889,56949,50862,49419,63285,38245,57886,50004,70256,42489,96264,75128,11447,55920,93460,62282,14874,48653,72685,31605,45256,72848,83456,33447,30720,71509,71531,23380,68769,75534,25546,90376,48105,56267,56277,25932,60928,19245,10777,91078,70716,50440,27069,16876,14607,57851,43997,18430,47812,94224,97112,44935,56369,12098,79934,11746,69199,57554,39685,26971,19354,33418,27847,37346,33728,60597,94490,75950,78915,24888,48213,85786,44780,38175,55423,74583,13561,35973,32982,45447,20909,66637,17049,48140,15335,18984,31435,94201,26443,49458,92407,24648,80820,26594,93718,48631,24159,78368,12759,65312,75887,32748,93022,62431,21534,90256,97751,66934,48218,64832,74816,39584,49777,31204,77802,57577,79598,72697,60513,85171,50305,85313,25837,68841,19141,70408,77549,92578,88796,73909,95526,37726,81363,85542,41510,13857,47343,86518,36327,26598,45291,79621,44135,98943,31556,81144,78748,62991,66329,60249,82958,43548,14284,47732,59223,49052,59815,35532,60587,39854,79427,82096,94417,20601,28192,70986,43102,19529,16431,14731,65347,71726,95190,18893,62739,65683,41672,60168,11224,58296,78326,16881,39319,51835,32879,92008,55618,92821,17144,61863,21560,20612,87987,75907,30024,15683,95558,33405,71004,82086,43787,76982,46618,13148,34122,46748,85675,47092,81013,25260,25504,88904,54236,31961,27140,69442,69896,50924,56554,82784,11141,40432,94032,25340,48679,80357,40900,87421,75419,17911,47323,95225,56612,69524,28262,64922,37134,32008,18214,95331,19936,26691,15949,93855,27121,37914,37109,96646,39956,49182,89626,25815,27403,33728,91166,35882,72998,18066,62688,57414,64488,85409,28191,30401,76249,86882,63016,91638,64404,71682,27098,87495,87743,65320,96834,32372,64059,88512,23507,26510,98308,53761,12623,18916,68763,82271,16444,90441,18295,42615,81811,48238,43378,72410,74345,80560,14951,67342,35658,95136,93349,12954,48017,34710,15546,89921,74669,86788,29296,74284,17185,20746,32399,28822,88171,96605,11768,32099,56668,32920,52710,18863,72213,58235,28519,95937,29326,33036,69943,83235,35415,74739,40382,30751,23063,25536,96183,37328,82600,57712,53787,63253,40204,32244,36569,90026,83860,73802,40858,22165,18506,20173,44784,62390,58837,22861,23581,81266,17855,28655,41580,22432,44343,46696,12425,81624,96813,82139,62690,33964,47006,57666,30289,78150,76790,36714,78791,51561,18402,30828,51109,29844,47873,85258,50972,76760,20929,39083,43347,95252,43416,40387,17141,11778,34732,73503,87167,43841,67754,78440,64198,16405,69741,88460,46280,30795,24925,68238,34618,68661,88308,21786,28203,85147,25362,54446,75560,38964,71895,51630,90724,47784,52352,86787,75616,20660,47571,65414,37200,68885,47479,12796,90240,42285,92049,98854,37159,90068,87444,64515,97404,44091,16054,27519,81426,22046,99943,37497,37050,62443,85767,51960,74132,62043,30998,75271,57850,47250,78344,59047,23888,42220,65495,25882,52532,41622,62419,12897,36362,45488,88275,86268,58579,38118,71010,42894,25071,75721,66956,30196,63401,21972,48626,25372,78504,77281,85085,11046,86743,54447,66668,36594,35728,61855,37705,18836,51529,72618,67617,10165,82845,69835,83179,64913,62573,81123,48409,55547,13309,62071,88460,93896,72717,24006,74450,46981,58152,23250,44610,95632,49752,31950,44487,19781,94713,53148,12400,21411,10208,12335,14923,21053,87921,72159,58908,26025,54339,50979,20991,35114,37321,36266,97289,45078,26760,95296,97004,94687,16596,20152,74713,57665,96396,70059,64904,20901,89196,87823,86816,41931,30766,45747,27233,30280,32832,39591,86135,70325,52269,52853,81614,12769,41318,60275,27286,65128,11865,11878,73999,56046,74487,50332,42012,86932,86340,70720,82210,68202,66825,57311,45409,33950,62333,86416,33776,22812,50211,75048,11390,66482,20108,17222,21139,64529,80911,43045,10045,61363,82339,90601,88736,92619,68715,63515,44130,75866,61668,58791,92651,25879,27903,21806,26923,34118,32224,92452,21131,53902,17544,84044,87235,61372,23172,99621,62066,36581,71443,97183,80784,20973,55525,54121,13672,67915,59885,21619,94612,75732,48804,39873,16563,53145,71587,28272,33681,61981,59314,82459,62959,58842,78835,32288,18449,77682,25310,22055,87376,29767,19417,90199,18935,17228,85746,20812,20380,94195,96097,72856,18546,95296,84180,97113,96132,91903,46307,66855,79329,19608,93685,23166,75995,25248,17097,21296,87586,45363,76942,98770,83325,43048,69628,29821,26358,66199,21031,86354,84168,15577,77768,95556,52735,88736,25159,61724,75336,27476,73120,22089,27977,76662,10012,23796,85346,40523,36292,84077,33756,57371,43059,99580,83146,89528,23868,40146,86840,45349,16909,19996,48892,74168,55544,87969,97312,79371,91832,72014,29855,91702,27986,20472,48673,83659,23039,35477,98874,59895,80873,44360,36482,77183,60579,34040,12723,15586,41299,65267,41841,57188,62876,56746,78029,32007,66290,61490,52430,29819,72506,89893,23908,64297,12838,79547,81415,96539,70231,96931,64384,93207,30756,92643,88304,82958,92918,59029,61628,43711,18304,17610,71640,63192,59748,45472,51699,18230,26951,27773,86016,51924,49475,85930,63936,74022,64841,47037,49142,50493,37143,38169,78879,72810,10051,32037,46663,78107,48618,65630,98264,33447,57364,40802,25305,90303,18546,58088,31341,60124,16847,29541,82985,41513,70211,66730,15525,12091,43269,55041,17490,75320,32456,36882,10472,15145,64318,70496,45376,95550,60174,57905,36317,36334,89191,70399,68958,86953,89120,44105,41744,50580,68309,54684,33337,72916,86609,57145,25205,46815,99968,73670,25021,12157,66983,43403,61047,25030,93093,20296,66051,56222,19539,21505,82205,23660,58744,75346,77449,41527,75037,73510,91341,48249,81769,23366,92065,21599,24640,70880,47764,51861,21792,88886,18442,40323,43505,90717,73365,12957,97113,65947,25195,37431,33509,62611,69487,86811,32252,64261,37874,33002,44863,33692,13318,54636,17724,48823,89817,13041,73692,85095,59573,68063,68738,77051,75919,30142,90294,59763,97706,88093,70711,58584,97934,89471,51917,25093,52797,31726,20148,39450,65403,27409,57520,60095,33078,50892,13361,88960,57283,15182,28375,15987,21103,50369,26101,77545,94976,16046,84830,99516,50602,58199,28604,16365,21295,30075,66161,89314,61582,98585,20396,56587,53521,96915,48089,87484,21216,84645,15157,68086,47250,58182,32307,55583,32587,77840,80266,33503,10188,25355,66797,62369,47480,12725,87663,80054,66333,38984,53664,53634,66142,84105,95824,44648,14056,77835,10628,38868,28604,77315,34943,73383,43817,24775,25606,18524,85044,65607,96524,73199,70719,32212,47438,75795,94803,88671,23560,25957,59866,33679,31144,42511,25784,56370,87125,14009,40668,49817,26098,10977,78989,40359,61431,51352,57245,12256,76083,91726,17047,49398,18048,77617,35796,27382,69941,77315,31337,87285,93187,16556,73026,67251,91826,43572,48275,26220,13039,32214,26872,89563,52505,54229,63761,15228,19767,96824,58248,91513,40035,64594,71456,92519,14862,56290,76664,82874,20133,56227,45894,93778,50271,18489,69558,33876,48739,41335,78853,48636,80856,20503,89930,51838,21882,64634,68253,14560,52472,16572,19896,33987,59416,92910,78977,29752,95498,15498,54769,24737,15186,22193,17599,82438,79702,28109,57934,61937,22352,90096,77077,29219,28314,59553,23568,79061,54032,64817,20001,16738,35808,73907,60332,39503,64792,33175,38253,49176,33538,70011,39871,74295,51919,32942,77098,50578,39295,85230,75757,19899,99171,86076,76870,37112,70962,34366,52460,82914,96299,83206,98039,68450,23980,12967,10097,86016,52706,68342,39461,92817,84976,45575,26534,23609,33651,65449,88054,76872,37408,78551,61208,43979,76311,62400,13789,82029,65151,84360,61504,35388,70107,50992,59862,16142,69088,54392,93093,57952,55908,60935,12813,29048,85676,69074,61964,71617,27415,46587,79528,94492,84031,13867,50119,20328,57939,76396,19224,28083,28978,62414,10140,55224,80372,49679,55940,78786,93673,63325,91529,99464,48232,25477,64008,81439,33451,69808,80621,86643,52078,31382,63145,98183,19873,29973,27815,47553,31357,37318,79302,85902,30139,11182,44061,43275,10251,17337,87162,69117,28138,50506,68927,71060,72093,63461,41920,64134,88539,33604,42229,40900,96916,25964,89760,35569,10569,84414,22422,70186,13441,70705,36880,46444,80074,84597,11349,47349,51513,16086,48796,56869,80104,90501,92182,60399,93825,21879,25709,55859,77394,68981,30070,44164,28737,42936,11083,86137,46302,41460,79194,54576,12186,35831,17909,13353,97752,14700,64212,56166,95970,32806,99505,86006,69331,96117,59920,93275,60533,22471,82627,17023,39507,78458,49524,82422,76939,35723,48976,23431,74300,54456,41618,97040,39204,75714,93738,31110,82345,18007,54377,81530,48231,50930,79112,40331,94191,49052,14668,27732,42640,21982,76256,46588,43902,95685,36128,33578,29438,40564,66455,50841,35953,10965,12265,79716,17392,90204,23997,93497,36594,62923,42702,58495,14139,32979,78075,87109,11338,45539,14645,64543,70247,49993,18522,97609,97368,22775,81846,92296,13558,14428,76756,68226,74152,44131,69003,91100,73889,81540,47665,72414,81418,25854,70024,35360,81658,80385,34512,23547,38882,52082,35591,60100,40579,91283,97288,75178,11279,63566,44712,94560,97733,33035,55558,56808,85628,26823,19863,23016,68812,66640,32713,78923,64562,64121,90964,48447,48979,83310,67974,26218,44816,48805,40923,97909,86239,90123,14388,11231,64094,81966,67573,62165,89852,98125,42957,20580,90625,77955,40941,83476,41579,95285,74554,90744,71222,88546,17831,75734,93763,79623,17269,86191,75220,43520,41028,81385,72109,10833,10225,74583,41661,57391,66102,31832,32623,13146,45108,59972,61741,92150,41866,93045,26005,56026,50685,84444,21885,28035,34620,39906,90204,61517,92298,57068,33109,49488,20912,88483,84218,56363,37153,33363,92338,20084,57669,76461,25675,26786,91116,64347,56508,69306,74486,29779,39760,27621,41406,39765,92367,15169,40251,33290,41401,61015,79907,90284,30006,52191,31716,52450,11943,41522,64572,30241,82387,48395,41501,25592,96349,11644,34083,94120,75993,35826,67458,64552,50397,55122,56944,15488,11265,97090,82339,78226,37125,95103,99319,17808,28909,12698,96247,69978,58139,64713,94858,36216,96199,82909,61613,49163,10259,51663,76638,13762,68282,26684,58625,69637,57273,60544,68974,90421,49512,17017,38980,14068,72989,57851,20188,95451,13136,46068,67097,77762,52022,54988,30793,14319,69559,94011,22754,10822,81414,49661,84824,59566,60887,14166,60174,88377,36956,30055,18842,76295,15202,80610,75522,22057,96210,60499,61499,66851,58750,71059,77591,12857,69012,75371,41222,52546,33974,85580,71331,11004,49688,27383,34404,63063,40568,77522,22280,78299,17635,11970,41695,69358,48590,54129,17419,74196,83991,32750,75471,90610,55896,44269,87606,80087,17986,64269,16216,17347,96786,64333,96173,53076,28670,89732,87943,32872,56281,68236,25867,98908,37889,97160,42316,52152,64581,49907,23980,26008,96338,18256,50817,73207,50570,90547,34454,29309,69933,13572,64432,67355,52183,13484,66647,62797,34789,69385,15570,83436,22529,82648,96526,64393,58075,26365,36468,38799,14080,48430,31006,84857,18349,54452,29674,66346,78637,66559,97019,38495,83022,14068,71480,16520,59824,46836,55468,38895,86346,63261,40233,45996,73272,81064,56056,60479,56368,40235,51721,75460,42074,64745,83291,73422,25713,49624,89030,66823,24732,73430,93861,93140,86264,54032,86313,27924,53200,14352,30253,62402,58812,99830,61321,57969,15215,99634,76851,94333,23662,72925,27186,43561,31776,41157,62206,47805,28843,12092,91273,25617,63373,66531,42507,18620,18309,97370,32810,38095,36411,50755,63518,59290,70276,73566,96170,86628,64463,72142,21918,86793,81349,37099,78651,35114,54416,12417,79236,22918,21477,64961,14405,69840,52612,27037,19461,25997,88609,42157,28723,86790,29524,57152,42301,82474,84649,23904,97680,21068,54930,11809,96869,72818,34854,26150,20612,57322,49736,98042,52839,61259,84215,22523,26846,74368,96893,15259,97342,58856,40232,84546,41747,37984,74129,42298,36329,94260,99605,61346,65272,81693,69187,80640,76559,77987,20691,45572,33825,35945,51772,61104,54233,14683,12039,81872,29643,87627,67250,96691,20655,12380,32959,97704,52405,89494,93965,80908,99922,72801,40582,59466,34125,49748,89704,34719,59213,62632,74508,52298,53216,26533,81508,69972,55682,60639,79714,93615,36868,30679,58222,36559,58931,74663,68577,64435,17047,25699,64978,80195,31387,66187,75127,73091,54456,57094,63603,23461,46651,52737,54558,24811,94947,42322,84308,36925,90212,93276,18547,87949,69951,30944,33685,38550,20832,33718,53164,10901,22550,95126,18830,51972,81216,19581,55892,46972,34160,92957,97349,16750,58255,26984,78794,42533,52407,90894,60556,80787,77100,25617,45907,35747,33680,79406,17859,43849,26884,17188,80590,62514,53508,14363,92248,59611,37789,78018,47023,73372,77012,31790,61466,78799,59199,81822,17507,10158,70366,81265,28563,72064,21081,17473,28844,43157,33691,12691,42771,47713,82004,12294,91137,93858,34010,20940,37365,88951,22732,45501,70284,98134,31448,17267,46210,20653,26283,98555,81119,49806,42361,63131,86723,42346,25730,83005,25193,98350,30355,73382,38564,15279,81544,80897,31088,14132,17015,77101,96052,64292,37755,19807,44437,38396,50878,68641,32030,79424,26484,60583,96653,38384,68105,83549,31124,30261,67693,25490,36762,10088,53923,44468,89000,50777,20875,60134,27705,52383,44705,72111,77897,47624,60538,32836,53098,41607,93331,92906,19341,91216,51609,96560,33328,91672,92402,55993,85911,76221,94100,19986,61400,50456,56853,41715,94219,34719,63004,98531,80883,14246,65405,40758,54403,98089,40843,90413,60051,32403,84099,96164,16092,81293,66043,98420,78980,92155,15545,82054,42808,22999,20674,77213,38650,58152,45158,77267,58837,55192,70223,68214,86988,94974,43469,63480,18054,35343,74792,32209,27144,40456,75058,59682,86898,89095,12772,13277,64604,12959,98521,89114,35334,57555,80671,26503,53929,59383,11589,72559,65701,30683,35926,15643,49988,46104,58606,89921,78780,73438,77043,98853,88051,57813,49069,87184,47721,79391,73347,92252,16439,15397,37000,73049,52470,68789,45744,84434,15240,30745,26054,11399,46066,64456,53567,45454,78467,34727,46804,53368,32687,92187,14533,17725,15164,93382,48039,38008,45843,19103,88076,47631,97517,41515,71899,60170,77230,96198,39707,57782,38594,38733,97915,60780,22016,83538,93697,41238,18059,42687,58972,23813,30390,33021,16408,63079,71544,17054,58110,75511,53507,80129,36883,65784,38066,44103,30689,61323,64112,23021,68944,70612,36145,99195,21855,29896,59627,10182,84187,66286,47015,43829,78968,88188,57933,71367,31554,28916,63532,98830,71731,31199,95026,14329,86755,91748,12309,82600,38038,87252,12527,47327,57347,64195,33529,55032,26145,72235,90581,55163,75713,92312,89848,35169,57719,50072,41459,69536,34080,54172,23125,39811,15636,20025,64872,90849,49125,76412,95712,24049,20843,76699,69972,89102,56358,66783,11430,36612,67259,41454,58533,80128,22097,20568,92786,46357,36523,80627,17186,13665,87180,35042,70778,93533,56370,87804,11081,58137,69955,54429,61134,35915,45980,46786,94025,74095,42910,68201,69428,46259,22166,88216,36785,66876,96723,92397,11425,89459,54513,23227,70831,30818,68472,24247,41695,59915,83791,86782,18450,91495,42436,18551,83888,93705,99914,71002,91930,58029,21026,50212,90881,30187,78617,30905,54357,21213,32438,72207,27570,45460,49317,53055,50251,97281,56203,38895,59174,80292,54137,33904,88252,61535,91453,82425,16498,20335,12255,99430,52823,50818,84555,83103,84856,75878,21329,10466,27282,34135,13208,69909,50371,49039,96858,75493,57494,45386,96067,75534,93242,73875,65974,65904,38360,91128,68995,20507,78199,11253,51082,89921,95107,61310,68814,75326,97159,87320,28422,58064,77962,77713,95913,54856,70570,24401,67368,88449,64931,27406,51666,88994,42026,45121,35563,95651,78018,83911,48254,14181,38420,42805,26090,20917,74469,68406,94876,62798,82683,60312,72134,47184,80790,50473,48885,56743,96866,14907,66217,99776,89802,97724,27789,98044,12707,17606,69146,87735,13073,79275,54925,63443,25558,37116,69395,60760,35629,60301,74549,65551,76450,21563,35014,95600,70031,64848,82317,15487,61860,29562,93533,87939,59152,81634,81285,99554,79254,12018,24798,77213,25511,52115,15852,22735,58476,35332,25946,43983,14898,83146,66191,61402,42274,71509,95000,85573,47266,46821,77793,40202,29813,12411,95057,97164,98485,24693,77734,62240,43997,58679,29716,32568,67232,12156,98402,29299,30347,76044,78663,77456,40567,91624,35173,39303,49310,15037,46706,29172,47953,62850,98081,72144,88079,31763,23723,56953,55230,56120,18536,28777,85808,63381,44179,69049,90415,84026,73191,84786,67045,42986,31204,63525,67321,77468,73709,21920,73498,98603,55832,40276,92097,21271,49655,27926,40001,37430,89795,42911,84096,25936,30740,48614,81685,76206,23576,11174,18414,71230,74666,86380,37620,57062,81719,34640,78122,73172,85371,83276,67715,29798,59426,12797,86340,18908,54853,88212,29318,26322,97372,34198,25697,28591,83951,43253,46789,77317,34085,88633,35407,39990,25079,83242,59172,80957,49180,63695,42975,98291,64755,97109,31151,26987,50162,62009,50331,46197,86719,89903,76272,42915,28695,49227,54402,26395,11464,10290,57516,69945,73589,92137,77839,21739,41844,65542,55052,38410,82375,11658,88906,67866,66852,39644,24436,51745,11256,84631,96129,59292,22657,44289,99033,15497,34158,74497,86774,48265,79141,84130,55268,10688,68369,15571,15572,47833,16632,44334,75163,98744,42265,86014,10540,62871,59880,74914,44095,33854,36056,40482,70052,43157,40737,14892,90213,47997,10618,74991,53156,76224,16237,70682,24734,46594,70652,64977,12583,42132,57381,26169,24681,38535,16271,56958,13042,72266,14276,57520,30085,34807,99478,55642,28622,83109,34422,94794,50253,29254,80898,48605,18762,28188,47501,28617,82001,49565,37048,95555,73186,58332,76018,17201,21225,34449,18301,99746,23221,65430,44941,55998,15885,47606,58344,10947,49607,35343,15190,19359,41735,72181,68739,39919,34319,55653,21535,36478,50964,91001,80438,35456,50019,21742,14166,53523,77074,73471,24573,82495,55345,80153,58832,34135,15530,34490,38892,45177,22821,55639,30298,66108,31169,88146,60010,98267,94284,40755,37050,62043,23842,95372,36434,59860,65672,76913,12579,66432,91287,78332,92904,97089,68219,73750,64680,56931,46654,51754,10955,95237,59955,14170,67112,87091,90241,94130,40375,42013,46312,42325,36574,28263,90177,42254,35209,25384,50090,69019,96189,24132,78361,50813,19234,90949,90855,38367,53690,52043,77992,82370,46621,48489,92064,65032,61962,23139,66554,48967,62602,21757,64119,28908,51264,65112,88231,46384,49467,92927,86467,58614,96140,95433,61954,64698,40881,28118,24748,87077,82413,98447,78413,84916,28540,52227,81141,45918,57585,29350,75573,90598,51291,74573,61081,81731,27363,45768,97065,39661,41250,86624,85887,58973,27055,77195,30617,10253,72895,77735,45360,72265,97433,66220,76228,39518,57635,22469,23251,14576,28810,88434,11821,24076,91530,24695,61966,19135,72602,81578,40583,82279,34173,95682,66215,40210,21308,70918,93519,10172,50065,60723,46507,43891,32454,97005,84772,70292,20834,48550,72904,46963,10162,55034,31982,11734,16431,92836,34969,13184,59929,59067,56329,60911,49282,54455,80861,93075,12886,36445,36284,65579,32318,76730,36464,18378,90529,14799,65300,69545,58047,45188,73896,39711,70077,41937,87425,51381,30931,92260,74127,36694,55960,74727,11716,88828,58282,39557,99503,60982,74561,89509,36456,65874,96895,87794,73016,17848,42612,78221,99087,31983,46761,18771,93673,59719,99513,74874,16195,21946,63661,41087,82396,44862,40843,40004,42124,69125,75722,12247,82922,97120,46206,39307,12948,73466,60475,52007,68989,25340,21796,33754,25286,98304,36144,17029,36094,44324,60109,94315,23053,49328,64950,21233,84368,59878,31320,28417,28124,22679,94053,73878,70116,21967,55380,85003,29645,73376,23737,90830,41112,33080,53384,42789,18631,64442,79250,63361,17925,97114,38745,69366,11833,13343,57877,11884,96230,31889,28188,91562,60837,50183,46440,72861,68523,83312,16144,14368,95389,46573,15036,27667,53451,97558,35253,53897,32811,66509,74698,97784,73872,85926,92178,71379,81713,41272,14929,12103,59681,71455,89165,82800,22718,23129,45669,84205,77763,33459,95752,99719,78504,85057,26649,70362,72756,59548,23583,21024,75143,23127,93113,80274,54136,47345,17260,35230,99242,19663,19448,56207,55584,75900,64799,15889,98584,32491,27207,10501,50929,93246,69037,35373,92441,16442,19283,35741,47089,16527,56692,58881,20016,74688,69101,69972,68036,67604,49800,93761,32029,58547,86205,20663,59412,41427,36796,67733,64397,55480,32988,20292,39494,59928,48868,25861,72696,25138,54104,69054,61925,12799,20520,76765,25942,74004,66453,21550,18266,54890,43493,14829,96414,54051,85781,36178,87630,34720,19177,27914,52222,70870,85118,51534,63707,73189,21210,81341,62452,75088,49782,88335,38790,83397,39698,23848,95873,31315,54677,65898,82435,54355,47336,39879,49848,52195,15794,60067,58099,22592,93431,20789,86962,77722,94074,18772,72902,13280,39776,97746,30182,46138,46682,39974,85786,40973,17715,49559,33211,47230,59110,92523,63310,46639,84398,49514,37720,54269,98668,30931,64494,38310,42590,15754,47083,14794,43259,50326,34903,63372,87761,62171,57463,12989,50184,78733,38474,84521,87632,18091,26565,67656,80292,33682,80404,49029,34328,24122,74675,77481,51623,87262,54388,48155,28027,57143,23864,51072,64424,69349,81799,27154,53979,60259,99622,17065,44292,53564,42166,11602,54086,14001,12079,77865,66096,56369,48955,13181,96596,20385,23575,93675,25902,19255,85789,59843,33446,65856,86690,34256,31267,30396,64372,22909,60714,53462,15130,48618,70607,87887,47032,51030,75615,26431,95409,99642,41263,26341,97170,15474,64736,82398,94738,46643,12234,10735,55355,64609,71856,59780,81942,28833,17471,14839,62170,47005,84803,97015,63918,60425,24464,93950,72217,51222,95093,31701,27408,24369,92937,47107,51980,19786,54486,71865,52923,53399,22515,30976,76838,36121,11205,54667,31096,60888,62695,94123,63798,53246,53962,75763,91279,60506,14219,70232,52952,73292,73396,95525,87411,31549,92578,25852,34519,34471,82228,50103,42254,58551,61937,31363,81746,62221,96221,75920,50885,22092,27511,66752,74056,53072,16156,90119,93838,12353,54439,72189,68649,89376,78112,42132,64607,41919,15797,43198,88429,93382,78115,43413,22985,59430,53577,47959,34650,67178,40248,99910,69061,90984,53030,23406,40977,41875,23601,60975,34385,15099,45840,95858,63257,61088,56376,54170,87799,85471,78986,47387,87747,29317,71184,90245,27760,27776,31975,13924,98029,32453,98796,43147,19491,43671,54276,67849,47212,48933,94062,53486,17613,44257,65775,36707,34771,27616,30134,97563,99435,60428,93881,52521,59960,27899,29728,18144,60367,61986,88717,26889,75660,47717,11658,28154,84704,82272,93670,46226,80210,94605,99953,18222,90093,76271,76494,15504,28717,35419,25221,73387,76511,66722,45433,54864,55975,32414,33544,24104,33842,48179,80769,21301,18775,10695,34211,97993,90069,89795,94278,54334,25896,92562,66987,51309,69854,21788,86182,83617,33788,88574,41167,77039,96426,76970,45453,59749,69868,15647,94879,10068,86753,16396,69191,72196,69844,52104,55417,14294,93325,67323,49660,72378,17410,65900,24431,52868,98571,91878,21943,86431,57145,52319,46188,21362,93233,44163,37157,43371,20811,95977,92042,41332,39552,48565,48486,12722,51986,21119,64952,41288,19741,18810,41170,46475,51941,34863,45689,66549,60094,97729,33377,64941,28431,28924,12207,85044,62250,44984,20840,70230,84972,69787,33162,14263,71879,41854,31379,61619,17856,23069,19595,10219,71543,90464,80929,87233,21986,35784,87621,29659,96005,23503,96454,25361,65610,89191,91696,83310,22463,98790,64606,62451,41845,72072,63965,41646,47963,84207,14910,88973,63096,57863,23948,36695,40370,65530,24184,77674,60933,14750,69986,99558,66717,17116,53040,82407,19303,77351,47701,63242,35278,53028,92697,61288,65487,75492,15950,97831,53282,41030,69041,99041,68715,76282,57340,30315,47935,81510,24237,89172,19238,57750,57092,14113,13155,70403,91271,81541,31483,84711,41858,14294,86499,71811,42867,86289,34093,40354,69897,89284,81082,61545,20378,93917,15395,30868,78046,49569,25591,20541,23024,74258,84645,12776,77696,98053,11555,89848,33609,21287,32484,70605,12581,37201,74897,32954,90081,75786,62440,62072,13198,22512,90529,40996,22138,42068,34487,24046,70154,63047,31249,28721,31126,29152,33087,71358,39126,56825,54847,87568,57111,21047,64745,90352,61097,84766,39431,78415,51622,61667,53492,24927,93829,83395,74248,14350,21262,43937,77786,43042,44000,72558,53952,11947,59359,83590,40887,79816,29715,24841,81520,55343,61294,18016,44790,96425,90685,76216,33957,82146,92435,52587,40086,30298,74554,42696,43707,67326,33353,32768,68765,12930,79758,78405,89992,93142,71802,11291,25550,52148,54189,87539,65978,21147,78719,82715,26168,11647,19995,41498,23645,85050,31582,33526,78300,91856,71393,25295,59313,48201,66818,42426,71471,84845,58727,50033,42706,21461,53363,65345,99568,28621,38194,51036,97809,90085,62941,62522,80915,46434,47069,88648,24941,90190,35716,32630,36746,30901,29189,83528,11563,92745,44668,19134,32743,73591,64782,64723,65367,83445,52324,35476,52862,60680,66150,89143,19871,27889,44692,76957,34887,27907,75642,97089,58448,61740,95307,68776,23459,75445,74218,66814,85484,16922,39776,77489,27870,28376,77077,64489,31621,15865,87174,86580,23825,76752,42133,71866,70981,14166,90078,12772,45472,65971,70403,94007,23858,35584,27751,48577,49459,72491,19297,75030,27379,84767,37498,93940,36803,15629,88413,31978,66496,41270,42664,18985,25757,89584,31435,22132,35986,43258,51761,76818,45834,97671,99577,29859,87280,48426,81621,93655,40228,23984,28780,48702,38411,42000,68730,43517,47421,92883,90360,39524,21784,58225,21624,31842,70450,69723,43125,85577,13776,87908,78474,57800,42615,98001,93786,55332,28556,69512,65915,70182,89075,53382,34933,39082,14037,73960,79252,81860,73546,70614,82123,52167,68161,82238,79884,13755,27010,82248,64315,92318,74194,42763,28039,94377,42266,17196,68743,24839,38065,72618,13135,54386,88671,81841,60092,68289,74941,14294,99995,97474,43167,24449,98660,97522,59638,68106,85954,69799,54305,26951,83496,39477,59604,60031,71608,78467,30007,19587,68342,54433,89653,66402,71989,52891,53557,93834,73067,62886,47482,26381,27068,81586,79160,36381,27825,36449,58936,42160,35688,10727,30082,91116,51803,77819,96549,95752,58043,73334,78711,10233,42557,59467,89287,48282,34857,24829,59068,41770,16505,46939,69548,11402,66619,26671,88920,37933,24866,38580,54020,87316,12329,87632,96066,67497,29987,80037,32606,84727,79451,49617,23921,12737,34587,40763,93655,45581,28244,37254,91288,20084,68185,29150,51237,34505,48586,53052,24042,15165,52334,80526,13049,24710,75365,86642,66981,21774,29490,67863,43797,86296,12961,75994,95795,33969,91838,98253,28717,93234,52237,13128,84147,14079,20553,59781,28014,47043,36532,15978,44635,63831,28241,54828,25087,46312,79603,83303,22715,48965,79719,45074,29266,56959,31142,84718,51965,75769,23377,28971,68246,62735,52039,58813,85873,41337,83735,90258,42754,53383,42327,51955,13240,75923,17556,61541,86534,68705,17627,18364,90000,30120,68174,81436,46588,89837,40395,96291,45783,88397,18375,99343,97703,31659,98267,12236,17098,62572,99942,19135,88335,77867,74912,58709,20515,91252,25557,93352,83408,18496,51151,69897,15147,38539,25384,71852,97766,40451,91464,47804,35121,11528,19400,97876,30025,71952,89591,60924,51478,77666,64793,82224,13389,14047,54037,22456,69336,53561,36364,35419,50367,90252,10804,46956,56226,78330,67227,62033,94460,96367,29384,66469,45898,11435,15569,62416,32752,16680,11693,67986,87947,66614,24452,20235,13148,56042,84371,88343,31405,48071,71130,59176,83482,89861,78174,11758,75891,78838,73457,16280,17456,88592,98382,27968,49447,73040,97425,57727,25237,38044,99384,24840,92667,96913,46932,45596,85847,68485,41899,98704,76026,19388,48515,94029,83853,39602,91052,44253,56398,91713,44843,94500,36524,63606,86056,16021,50113,15226,11425,18512,66742,13276,60970,79408,41729,50255,36137,64272,18524,49921,49089,44962,43757,98727,20501,47858,24134,55053,63631,34769,26610,37047,10842,81585,34024,72591,83338,58459,49512,25290,59299,31156,16804,60263,64269,97128,98351,26764,72430,45142,50752,29961,96592,36693,35459,21532,65676,14430,63042,39957,77576,48316,20909,69926,35837,33934,64006,77851,65116,80743,59183,87637,69155,22149,67979,77772,82560,53001,36442,67617,28011,43772,87749,50820,62437,11242,96542,49710,31423,14427,29110,66796,79578,65096,65930,21533,73209,93000,71631,82120,33211,55217,68660,26900,16526,19376,89269,81564,58655,48337,27336,77418,37700,82211,30422,64871,36534,22429,96671,33582,50161,99635,83951,89240,80837,40250,97703,59440,70023,45234,64507,84719,62733,70904,15974,85524,52562,59485,52528,59016,61656,87475,27242,84312,65758,35438,23492,34143,91778,20067,11547,79753,37861,84108,88614,44999,64549,36678,98829,12917,36143,91464,99251,78330,12124,34019,60275,32308,81447,48367,30271,90625,53734,97031,74223,69118,71697,70597,70136,68439,25964,61726,67796,44583,60074,39512,43705,77515,95225,42300,15663,38462,20817,54172,35615,85017,62173,87767,73208,77125,82347,61687,39340,88907,71697,27789,43939,10381,35221,65629,46658,61480,57725,54237,28718,30090,42084,41849,71327,70495,73504,77734,53986,58803,82082,79357,50771,18938,36673,28565,71857,37845,12632,26200,92072,24972,93083,11087,76724,66558,62492,35406,65881,45671,51584,16526,70337,35320,64138,38398,71258,74116,37334,69395,89090,91479,99242,73209,83908,62146,44016,91268,88190,37753,81039,78456,88030,93328,98452,30687,82266,72638,81866,42603,77879,40928,36519,97023,50494,24901,50823,83273,18621,70192,45549,59482,47287,70342,59650,89099,57362,10196,38646,12874,14924,20300,38157,72281,60612,25162,46902,81031,32872,22778,75851,59237,85377,53442,42069,28568,48382,25393,26009,65149,49312,71299,61712,10329,19044,88525,43501,58932,32547,72131,62158,61881,50971,73367,29651,16402,25859,86523,29173,30508,29313,93943,61149,34068,73136,67094,29966,40921,13983,66720,44076,97454,70725,94011,39692,17835,69551,95512,29936,28536,35468,92759,24768,60192,63469,82595,16656,53658,39219,78839,30223,81194,83106,46410,74114,92449,84220,67218,58961,36354,34981,63321,61185,15017,15333,12331,67786,18996,14115,32710,64827,58994,60657,83004,58556,94498,95499,49581,84702,87471,56716,59874,56297,87949,32851,34794,66573,60902,25957,38743,72394,41407,10039,40571,52057,25293,24395,74136,24472,49152,87501,88635,24632,67045,75276,74530,86761,88003,86852,92719,91000,80272,81636,55358,11864,79495,14991,13710,68940,68531,47548,91613,33140,84148,46217,11186,17994,49571,98404,56153,97256,22307,48627,32315,41142,75102,24158,38588,70499,95713,65730,71308,39076,58930,36028,85925,94101,68836,58667,61647,70457,88937,10096,36581,44188,98039,63600,56310,27942,85647,37252,95993,49154,32906,95342,20774,13872,24742,38739,13065,89667,61314,94310,78643,86147,42214,10080,86281,99083,56701,69528,10074,61548,94439,88679,36074,69080,17354,92530,87960,58559,73892,44385,44153,13984,18440,68285,49902,84874,54277,61106,28618,94298,41780,54784,37105,78047,42393,96650,10724,66641,82841,16710,11962,40733,75172,94085,50480,70418,11895,90830,58902,71159,94477,64666,65087,64266,37383,17580,87841,64247,25332,37722,49431,72454,29589,26249,80590,41131,22197,58456,48011,99470,78970,44962,50423,34567,70452,21025,22186,67632,26979,78822,44275,72382,84670,75323,94468,28282,95825,20945,47904,78698,33586,18449,73252,72647,14544,90735,14423,52192,10270,64380,66566,43017,87420,75730,18953,86863,64226,64555,90170,70596,61032,42752,12837,83120,24003,87597,86091,44862,86977,28665,56589,72512,67803,22449,93961,38372,13863,53042,12264,32652,60592,41123,29384,28096,63465,97598,31868,85130,69315,68245,26464,34040,25456,90210,28758,49427,90114,86422,16119,18214,40552,11517,48248,24442,85102,74298,12490,22918,59510,65913,67751,45133,87925,25263,20396,42998,20894,81490,16287,92256,59155,51633,24763,27428,36657,78643,18428,78801,36874,60287,13273,26944,94707,79546,98307,21451,99089,79986,21640,76374,21715,23674,58805,10153,11929,59969,77888,63015,91324,59604,23761,68257,65124,40154,43200,49958,70886,96311,43209,53019,86785,24205,49739,22377,45636,91309,11698,27926,70894,15313,80717,85920,66564,77882,36040,29326,99255,30009,41503,90942,56925,46112,46133,90955,19421,23840,34922,98456,50783,85907,34854,91718,30213,24194,34109,50739,12456,91422,42287,71959,76314,56099,50809,24248,22361,82967,10005,88249,73268,13656,52224,26348,48226,37972,10530,59362,13567,38203,41727,66344,31847,94703,56393,35601,99701,51357,62667,69576,70620,83873,10887,57005,35400,80937,35099,71065,26731,14037,24976,85363,50661,20219,40129,43224,96519,81969,95352,71994,44729,17674,36877,67000,75024,86605,36963,79900,53909,86749,23817,67295,35868,98907,33234,93070,82316,77527,85742,11472,93002,60337,76407,60836,30064,91536,28285,50796,30746,72539,56531,15661,64207,16020,65592,91604,87470,16094,40191,64968,46846,68791,80725,74559,72840,16390,75784,28857,28948,45782,31591,81556,55241,60413,35041,98893,68065,71684,93773,15751,44117,29161,46199,96580,78076,50439,93512,46470,63288,43763,77646,35978,52085,68948,46790,57031,15179,36464,86041,11105,26232,88116,90841,80751,40522,76103,81462,59948,57513,54349,36928,68271,60086,39601,57496,15540,96049,45169,24203,34548,21108,95828,41598,67624,62649,72798,39857,29372,70999,40428,36344,59315,76239,65559,41115,93399,46440,52924,84442,75626,12511,32755,97319,39604,29161,51791,80561,46344,13100,23141,17986,41525,88208,73115,24940,83764,36445,80936,93767,40229,91193,41833,56203,86304,34576,42677,33596,58969,34555,93352,81699,57973,39670,43402,63985,23443,17586,55709,99789,72337,69208,63433,62315,20160,31040,49444,92136,86900,56009,12811,27839,50601,11100,69620,75469,24679,96900,39685,78485,69336,99365,67530,64738,74016,96627,90941,71028,44749,69103,42915,50748,10788,16429,42491,87763,38236,85260,97441,95429,16831,49774,55778,53244,83080,50491,41915,55965,37316,56683,78152,89928,65511,74950,35968,77127,48613,94433,22850,74337,84671,63603,65995,80208,94664,85694,58075,39831,82078,81927,84873,56601,35275,11795,84224,99405,12104,69882,26246,17253,17652,73299,83421,61469,43603,67683,85797,57517,41607,16380,11451,54237,59406,34485,30559,53601,13324,95673,76478,70224,20884,98240,37579,66939,81844,21367,55488,46687,64640,13694,45230,21414,39006,43709,44084,89063,25843,10859,57319,20210,93434,51760,17380,71534,13880,97639,83933,85580,17986,32838,80045,11701,84203,81792,71735,61748,17847,34184,30470,83934,62788,98855,36544,20729,75931,65902,89005,56966,27193,47119,82250,81993,36033,62683,63105,98390,26340,93875,69366,43975,66373,71436,38985,45652,99116,24303,85400,74668,84495,47555,61846,25514,77234,83633,91733,14493,33298,36354,38167,56319,28499,61862,92575,99230,96695,59272,71751,44535,53629,17402,46941,75173,67553,76917,13361,61633,11282,42139,48949,26401,51898,72782,51285,56292,91090,53468,91840,94337,27948,38017,47638,13682,96752,25357,60188,93173,23413,60686,41268,61069,89687,27087,16586,68125,60516,72903,48655,87764,45827,17433,61033,34017,55387,37167,57567,70433,39129,45126,91715,32894,79693,70109,61137,34183,37617,27343,13007,62872,51852,62143,44001,41800,74459,67341,93686,13389,59785,89315,28446,76475,77268,13030,50782,45069,11435,14031,99267,87463,96987,93087,76450,72260,20438,54663,28240,71454,63321,13882,72124,70293,31352,54425,87992,64952,67136,66177,92084,91934,71986,90345,39226,66633,96572,90970,21403,73484,90998,83517,85269,16000,69684,51032,70982,52194,70732,89783,35371,17431,58256,98845,69776,79279,60183,24567,13153,66773,42603,32603,50114,86200,21912,98609,31718,45579,84204,88804,90831,25387,71731,19115,19992,17390,67285,64480,83169,16732,56218,93484,60938,64414,39133,80249,83129,67843,52904,69204,65081,17897,27912,36784,69393,35614,58367,11148,58635,46675,50478,83388,31535,10567,12884,55006,29289,85434,65206,35612,87958,44305,96928,64907,80205,56511,84932,29212,93683,29588,58142,95486,74712,26508,16157,68483,72874,51205,32203,15091,45597,71958,88334,73667,58065,84337,87342,57378,26568,84433,78874,97528,73118,69955,78930,97816,19847,12822,63632,56173,39619,40119,20903,94418,34264,54591,45415,73336,68132,30005,67913,60226,36044,65440,22304,44712,58875,78574,75773,11956,83447,14321,83790,78115,76658,29435,87485,85451,68129,16099,53682,17485,28462,49142,48526,54854,83971,77247,64421,59548,27678,67702,50280,73626,15148,94158,92539,19139,71314,99494,26583,48975,17763,87617,55485,44192,85738,12570,57054,69086,19466,44064,25076,45842,62928,33138,14789,83424,21983,23489,51349,37095,12515,68668,45190,23621,43539,88336,78734,67333,41173,62929,99135,34326,32797,94821,14182,75769,38922,43895,37022,93380,89352,44797,32701,69020,55087,34449,20175,54338,92547,86778,70689,80060,89513,93014,13374,83461,77173,84212,36263,50169,70218,57807,83345,96281,46906,86444,26476,66838,53672,65927,89914,10998,70420,14696,55908,48088,58760,75981,14710,28331,37412,88475,85396,16870,11398,15141,39656,59396,49496,70626,75390,70813,34559,76627,60521,87524,38460,40478,54662,45242,10353,94409,53463,93859,28362,29067,10622,50375,50549,70103,62514,85787,87119,77725,23667,48152,38416,74704,37845,31519,46956,51041,17014,46579,53143,59938,76517,47400,73292,43121,48825,79219,14489,44686,25808,76877,76753,85120,19624,36354,69678,63953,95827,80123,11153,88526,87257,13197,61867,41408,28400,93334,87391,17152,61510,51031,85794,69656,48955,58816,83987,13040,56977,75961,63146,24827,50117,40506,22063,57316,70378,66108,88801,90006,80077,13142,41168,16877,55625,67905,51651,72370,77154,70174,31148,87781,64008,89187,99024,81490,89809,33400,26793,43579,98985,88296,10503,38569,42299,17651,88040,63710,59619,51975,12329,83732,80626,57933,18850,88425,28348,18053,80984,96081,65456,80100,94661,53739,12566,79062,56805,97311,57532,21797,90398,72708,73421,25740,91425,36371,85250,98798,49224,98903,91993,29284,10717,74732,75087,93180,39239,79270,30517,31516,39479,77081,60600,36966,50527,71630,61436,29951,80739,21028,84749,95196,13562,42084,10507,72993,34032,61545,93633,28264,38424,47565,60715,83093,41928,81153,39596,19544,85437,34177,59125,23801,76424,80977,47827,85875,87988,12364,79680,39586,23734,51305,82512,18253,91302,28209,45807,46124,79315,98226,39417,42280,88465,73719,87740,90587,83486,46203,40283,75623,25304,19950,26315,36405,59514,88731,24663,45792,67761,43168,20106,76843,43169,39999,79389,96833,64206,72659,29484,37329,81226,55672,71079,28284,14873,67445,43129,83375,54071,44278,15262,90767,29095,29393,98080,38946,54427,83357,15648,87265,74908,33845,12156,31552,80905,37812,79474,36065,18955,93408,20239,61176,85487,75373,75754,14843,61638,15897,72859,74041,72738,53188,10995,61288,19313,91462,14121,66725,60880,62823,18270,12448,22103,81969,34532,76625,78212,77718,83857,58165,59253,86104,79516,67547,51447,49430,26291,89835,30878,74210,15519,54302,34115,32302,42382,97056,77675,36648,12186,23936,67877,91634,60756,46562,51984,70381,81316,22503,89859,80616,45358,31240,85031,66323,52362,68682,17905,31698,45316,59943,52763,90855,76869,61310,20498,70566,18234,57793,98832,80391,73478,43734,79470,44931,64718,87285,57427,13937,21241,69402,41285,68181,18568,77143,58369,86537,41354,80965,82313,57059,58638,68342,23232,59409,22559,64504,49699,31502,55160,20970,95148,85765,70691,88062,37510,97939,76815,54403,82115,85743,25695,34683,23087,34936,76160,43293,17769,49679,50851,26506,27659,61902,28005,88386,40370,30188,35912,50140,27620,72117,21543,20752,25305,68862,33720,29952,18958,21841,96830,14417,46544,26431,99527,43763,93254,34085,75313,82173,59627,17168,38861,76772,31174,94665,82358,94860,55466,84085,93885,41521,11564,25688,16225,56341,18883,79708,20787,99617,72101,54023,76347,41461,57386,23192,93513,43142,66854,75549,48791,64732,41796,70578,95790,45544,69969,96735,21313,97496,53248,84707,61407,31356,49951,38701,83778,73453,40191,33735,96853,78474,27033,44972,92037,62264,15941,21290,28095,81120,81723,44321,18831,58810,69007,25817,33336,18069,51529,25155,51418,83723,97662,54500,59071,50796,26980,44319,92510,31944,40606,58166,70770,18838,52788,44814,30227,36345,71161,92410,18384,11664,79237,28976,75870,84535,60306,38247,56797,71316,92050,48492,46588,56805,10878,84953,22904,66753,58743,48851,82975,54742,94009,93431,60204,32040,75438,37478,16093,83497,23479,50720,52303,51269,83852,67098,69421,65124,88550,10189,97237,67749,12744,30722,80322,73977,56029,83246,64090,66538,80982,55338,55301,92693,40334,81318,35729,90237,82912,36474,68614,48040,76652,65861,79105,98311,48694,92820,73758,59402,48680,88145,68671,18577,30966,50405,67129,49247,11390,45907,30521,20636,99401,42697,63954,16322,35124,84759,90229,19339,77001,87676,71313,48843,86732,29701,66924,13707,16993,33491,37458,83008,54854,20499,81529,26912,12484,96859,89471,75079,70030,67762,53421,52214,77942,31178,52447,39685,61765,65671,49748,43358,11136,42999,75720,91618,69724,31188,59273,89936,12825,27602,80060,99145,60036,16435,51936,24465,31809,11913,57880,94764,78425,82989,89348,67226,66458,60739,85557,21202,97954,94269,63492,45585,62593,86639,83130,88233,87423,14524,55575,47925,91603,19489,75529,68309,25623,81583,93371,76955,86146,70576,23725,73726,74679,30561,39550,96387,71959,86753,38179,27244,90918,86441,13425,27770,42966,72910,61064,58015,39555,51998,67191,87539,38169,34324,86394,61528,81978,48841,10167,87541,11394,29360,81701,20070,49048,18668,44681,74457,75254,99800,70156,41201,52247,51377,28142,42069,27130,24572,49210,32500,92087,31193,85524,45072,26086,14087,60072,32467,80462,26744,95912,94475,22227,59491,55726,33297,71918,18990,43983,91367,87469,57360,61059,86008,53225,84955,83879,90401,53308,88417,97548,23552,44994,14990,97715,63442,96134,20036,54042,94986,75030,47646,51804,99793,88399,19887,70673,17556,71402,12134,72936,50826,47494,50887,60608,25125,25705,35121,99561,96754,35868,84076,88259,50900,74399,63715,32309,70817,49936,59932,45037,53894,29045,82338,59828,63906,41733,53990,43137,28266,71632,28207,21584,74857,60885,99680,11526,27578,35430,40139,55938,88821,45441,14239,77487,48830,78815,57635,45179,13440,40725,11603,22048,83639,86348,24812,85792,55325,78422,19645,67710,74559,52632,14914,12903,75089,52918,10815,52861,86853,96920,99215,39818,68249,50390,69452,26593,16503,17810,85503,90239,96397,78963,37261,24004,79838,79927,68169,44907,81117,22392,89077,19198,81358,88955,10880,59956,49273,86224,44452,17824,66549,31527,28984,91402,77877,26718,70416,95320,48818,15472,30918,44734,39428,32063,74765,82479,36839,60331,25820,17563,19616,72185,45414,83707,47635,25397,56721,38781,22692,63914,86587,20609,76363,34499,39666,12995,18673,85815,62938,45882,59033,10444,30074,82219,97080,66834,87158,48529,10811,23217,38549,25935,93597,19060,58044,64850,32127,95569,76170,58731,47446,73275,85627,72860,27897,84794,28320,57285,86996,89683,42058,96048,38541,68622,77767,29073,41625,33266,49619,16464,84888,62201,67367,86609,18390,98718,66656,36433,65964,90857,23842,39525,49711,63808,82007,18459,22614,62711,46891,34656,10017,80489,10352,84229,88911,76144,33607,29987,84969,28218,65866,55654,18255,82781,23598,84469,19049,93378,64057,60480,47529,53303,52504,14572,79541,34808,88681,82405,78713,50207,54875,86550,41186,53340,55765,58190,71208,45686,10932,65578,80461,23845,95371,47822,47569,61680,14636,85993,42016,13910,30053,20616,43605,15076,55440,45471,17155,21865,47114,23192,11753,62649,72969,71540,62758,47832,65173,78795,86561,64144,23004,68669,62290,60623,99798,10692,53718,31739,43804,52155,32680,94482,24180,70945,93698,41945,28624,26503,81175,90900,19348,59149,12852,53592,68987,71322,41060,29755,14612,82665,86616,99407,48387,92394,79309,56153,97042,26143,10362,81895,63308,75111,30442,27151,97987,74507,45948,26148,83179,34669,48104,66329,38482,23153,80751,46433,27935,63371,94348,59574,47759,48587,37534,46708,73174,40342,33412,42642,32196,12845,68876,27187,21268,23189,78734,15856,47491,26605,18217,39151,68378,31714,94853,94125,68772,36675,75301,83532,62052,54550,55219,35029,34139,10833,34884,89392,16525,18038,55189,51171,17160,85285,30579,38505,89937,15234,89818,19364,63867,53651,77186,80017,11326,54926,83871,36516,27656,69126,77615,33290,99790,83007,57159,93187,67183,72901,77364,40113,37419,61703,23606,24926,84415,52040,71112,87700,46490,10032,96772,11285,64513,25710,67162,45558,61785,17371,28344,15950,13370,46783,93792,37717,49216,87015,41546,85235,13754,81814,28840,67020,11217,55732,73037,36045,22756,43104,31287,77934,36759,20040,84719,53101,55887,81852,79072,52299,69678,77417,24770,60878,50675,83113,89724,15147,27638,23805,26140,67436,30938,62372,94648,36475,90837,90622,28812,71709,74061,85343,53051,33846,19626,50186,46186,85111,26775,55124,51026,57305,42592,59178,12738,21035,90730,56054,36228,87025,95411,25897,91024,72564,67255,27536,99029,22834,65028,95921,94269,64283,10666,57225,69915,32478,49028,83855,83302,92682,72151,71504,54238,60092,46219,17541,20241,44707,55911,78664,72379,18324,39356,85095,99989,39306,69364,92413,79153,94205,77437,83670,84953,39273,88045,92793,86130,37789,39033,95248,15069,76713,92731,50028,29479,64750,48430,96637,26093,72843,29133,32698,42537,77887,95435,70614,46737,31634,53911,27832,58998,59922,40061,99088,57079,63393,23700,60018,32708,92208,11880,74333,88143,75434,69899,94230,97717,32820,34880,49789,14795,25586,63429,95648,48203,86952,44291,94293,48509,26916,46858,28792,13251,56154,62827,96778,52034,85906,92586,77770,17651,89133,25067,24757,68886,96578,41273,40981,75472,53923,92613,96853,77540,57735,48703,78668,76600,57560,16868,24175,22476,80456,62962,59461,99572,85368,32581,69990,80415,90329,55033,20531,21728,17925,51577,55834,11610,74646,97124,99502,80579,27404,24593,79882,29053,77052,75558,87797,71135,18683,92757,98047,87376,86549,52143,11405,60740,31829,77132,78694,94579,36576,55650,90976,15605,73369,82703,94380,13860,88552,70586,24015,78964,71784,62618,81825,86846,44609,12984,56579,28092,94645,11725,29719,96462,63549,45097,80472,92151,31052,41340,49616,25279,75180,15819,64571,15690,90519,55481,25697,30649,76481,56707,55580,41633,31209,45565,44605,44647,36585,84361,12474,91248,25653,85584,65837,65516,25717,31309,43948,57078,35000,61429,45718,55102,89510,78839,35891,40644,72306,66195,78713,90981,30298,34612,23706,52315,38285,23473,11505,14063,68732,57092,94166,81059,56863,46800,97317,83012,21163,65963,59106,96274,90554,23790,46263,40570,89110,59643,18225,82274,47640,35038,49169,84436,73363,48835,23124,20609,37469,90488,97328,19849,72549,54562,52407,81686,32406,54817,53264,49175,80958,11522,16415,36846,82714,10120,63935,87682,27899,45511,81151,30775,30549,90198,77423,59706,81642,53621,60494,53669,90486,53726,20467,23108,54740,84675,97415,96752,92694,45871,97503,49557,16142,23480,46458,20662,47272,99005,61448,89587,55396,69809,81709,49231,15855,30866,50212,84128,50081,22364,47401,45284,44498,69967,20895,47794,93081,79089,13744,22629,31904,91323,99686,49712,40634,90867,54595,40972,32194,32228,43279,87782,49844,19982,44036,95480,11148,18267,57636,16797,91353,48459,78426,92356,10818,11689,23868,15792,73865,83166,28554,75249,95392,63079,85170,35794,10585,95654,65622,65715,69027,46187,30141,70130,17246,16666,18108,41398,69130,12211,95619,40357,83474,67356,26697,25642,76112,40071,31075,30822,63071,28662,44750,94267,70880,75282,97502,70574,62057,65255,38144,66101,13995,98695,86087,69450,64898,16096,24484,41541,84992,26443,79228,41828,70782,31235,68324,85126,90031,42215,15637,90082,82523,60837,89462,67365,29607,35409,86753,58191,66521,37730,41667,14087,41271,88192,48232,56466,10051,69363,33737,73711,90900,43920,85144,45805,77936,51498,25354,29578,13002,63625,53263,32387,75596,68990,33172,82973,59073,63866,42924,54759,95178,65334,73275,63432,80106,99328,46930,21857,66921,39928,59552,58814,76526,84262,88990,12386,10816,54271,49340,96793,10088,93414,22113,38619,98642,14351,78790,87332,12290,29504,84141,69612,71640,99578,64313,92961,29064,64528,72279,89121,25196,21924,19666,21792,83639,46457,26108,20164,10096,92332,90243,91033,35866,92713,14627,89030,82304,70415,98702,38648,74551,33110,29865,41281,34444,24748,96515,52015,55861,23654,39219,63285,19105,74948,35173,48086,76306,72626,61113,45129,18946,53932,81928,14722,10095,97280,36188,29934,11972,59506,78294,64445,52071,20480,58688,20407,40443,32953,33586,12988,32761,86068,17765,77566,21125,24056,74199,70002,80522,94480,64857,80545,69327,68042,55578,30342,51798,69414,25372,88984,64110,12047,48967,78642,65830,13698,86069,39810,47996,12911,97647,21483,80655,47202,27335,76346,34297,78317,94979,24211,47067,35695,56037,51518,12720,25656,14524,92694,21928,65685,50055,97644,95572,42414,13955,77590,90597,33022,94818,62742,13782,46445,29261,21888,86666,31653,62754,94750,29549,74227,66817,39045,45591,97747,20079,91107,44115,32918,43067,36305,42781,65369,42888,20491,95941,51643,60897,39611,82994,21550,65088,98116,44861,87696,49808,58320,46641,47094,91863,37266,17000,36641,97701,10759,32248,91750,18637,69746,72579,79313,78579,94295,21577,28553,56483,91245,74443,86004,18633,62409,43200,82344,61216,68489,65461,48652,26706,30076,60667,68810,87439,99693,65313,43071,31607,40195,37125,22773,23044,97243,50746,99702,37499,54668,40803,53846,54385,10308,16515,55652,81966,85598,59730,87740,43713,26952,39385,27067,62642,19907,24498,93278,36170,54668,19070,31297,45241,19121,57925,32020,64153,53211,93252,57127,50393,14471,30730,74691,85671,14020,31551,81945,11516,36160,81211,94208,10074,32869,64038,74397,31646,66080,52092,70867,25828,31603,60893,50516,74762,41995,36163,49860,48357,97485,69126,26067,73414,28538,36287,87016,57110,34389,48057,95119,35238,59988,51707,71917,31611,94872,79525,34108,37409,28421,67525,48195,15414,95705,69432,16095,24234,73726,91157,54992,45206,90519,40349,23869,48827,32133,26363,87478,64152,89391,40401,81217,42285,70554,96738,16053,66170,32132,70356,94076,77950,73055,77598,87376,76405,10146,63135,81096,33020,15570,27169,65861,25881,54703,52171,97029,53914,88151,94294,56926,68467,78496,67473,30885,81151,21589,35525,16195,29744,52852,50946,92051,73922,69162,16408,33575,47972,99925,86764,97336,88917,81947,35865,54514,62454,71094,85365,71041,14601,91514,60803,34359,13994,43590,55579,80128,37589,71342,34016,70428,64460,59417,19954,31368,44393,78514,20792,41055,51669,91798,57732,67123,33422,43495,72755,76902,30498,14366,17292,22267,39143,98279,12430,52684,95996,52816,73091,32575,34656,29736,70745,79263,72265,77727,39576,49436,17431,47730,90151,24251,28348,70191,31912,27718,27889,81869,78721,52766,10297,44617,55721,47511,33147,46111,33388,94996,29852,72443,23351,29017,85436,11207,53101,61536,40516,67298,48967,68579,12940,84063,75492,20195,55756,47062,92148,59904,17089,21140,47154,36227,32624,83528,16787,17383,45766,94467,70868,63698,52827,77615,14179,50127,44282,65110,25967,81067,22040,42585,96969,34326,71223,76356,97396,63108,75573,73720,41703,17350,30983,97083,73392,47075,92319,44311,82257,30376,35881,12118,18712,19933,58503,17626,33247,44150,82577,87591,18435,24815,62207,61258,39991,62851,26096,49851,11350,46381,97471,48316,65062,62647,32246,44855,93961,14268,37573,72559,36234,52784,47156,84172,90073,41062,68780,83994,14791,55450,57363,98560,14703,31030,64039,60643,40821,34490,48272,97477,58870,87110,24612,99425,96281,22893,96467,77894,94642,25609,41548,19735,84995,33674,89433,77965,26688,88807,89611,38688,84232,51321,71122,71017,20889,84000,53147,84319,24218,70850,29131,81367,11697,10502,28827,98060,44759,77666,30443,33514,85057,11656,33385,11485,48255,41011,63034,47383,89121,37383,66833,36469,60813,90865,59657,93954,96162,93152,47521,93468,13027,47564,67298,45116,57693,64472,88331,15456,77015,50575,35726,40806,69665,80551,39838,49584,74809,17157,77357,63873,36099,20085,57495,17670,72759,29549,75281,39553,52343,57801,25249,48779,46242,47950,84258,29887,53289,27358,61010,49332,99678,58022,34831,29316,78617,25781,61937,15782,31927,74082,35781,25229,36996,13035,85364,47774,69300,85688,97884,91041,13415,41816,13800,76311,45120,11247,17455,39092,53858,63645,14845,45091,18445,44248,13877,36838,76962,23807,98541,64367,68450,11177,39148,79624,51661,84334,52341,62757,43148,81680,30606,12679,24461,65218,63876,40063,73857,57993,11534,57401,29556,13279,76763,71590,56615,97145,59811,49072,87821,63617,24998,62400,76305,32038,67357,98127,29732,80888,68468,75489,58706,84484,45696,44003,66881,23861,86173,11481,71120,28195,54182,18040,97804,29517,65568,57081,67119,99916,70764,60229,33119,53836,29933,95361,84230,66059,64388,35157,66094,12610,44239,76023,46887,20745,25783,25067,22874,94760,18778,33875,12259,32608,42900,12433,22149,69495,71517,95448,45756,19296,38212,44634,45006,54836,53541,10481,72089,36608,68099,84710,39935,95749,88904,63476,98632,47836,90226,90051,42449,70329,61273,58434,88153,57427,55560,25001,92494,35653,20546,69927,19519,21533,27233,55461,69430,92323,79115,40569,79002,57000,58776,52218,70181,62990,28454,60689,95450,61534,75876,12519,59660,54191,56066,95173,38183,23902,46169,77174,66862,83441,55790,92915,46012,37718,51251,39404,50880,71705,47802,41711,28997,87331,17768,78551,24404,94696,36820,35197,60860,98265,75618,94061,52831,58068,71194,87390,18925,27240,50592,60866,17813,67560,74798,17931,79005,12449,49928,23361,60602,79892,33813,86970,86104,68543,16846,49350,12144,96731,97891,45454,18133,16036,79228,92402,43542,74553,45194,14439,86276,59818,75306,22659,74612,95505,95494,74443,42574,63453,43721,52389,68515,79365,42532,49913,76379,37938,98415,50014,44154,62692,60112,50773,51477,79250,94508,14037,88160,63881,93570,85451,16630,50710,77159,72342,46107,70093,63462,31310,81784,71672,63795,14475,13977,14081,40498,90716,13424,39658,45813,61066,32821,52724,81473,46331,36514,11303,70922,99411,66491,26629,81128,44099,21457,31222,27781,33070,67919,76652,73312,30374,10304,79406,93030,93190,68602,96779,45657,49535,54793,99969,62902,23009,34805,68073,42344,20416,16576,24005,25339,36649,29228,22824,44272,90716,74905,40297,28489,72148,14029,20088,98665,54279,62216,85287,57364,55249,70665,16637,86366,94243,20363,31771,31714,60229,12532,49722,65153,28953,44085,82662,18874,51726,66632,52159,85999,14706,94501,79824,65043,78096,65963,58847,82288,54513,13822,22448,90764,57676,55712,29247,75190,39918,66229,80258,85069,59635,50052,24955,75059,53019,76863,44690,36585,42490,68903,13361,14673,87126,78503,11247,50690,21114,72518,25181,99128,15256,70608,63766,88112,36732,65891,15646,70175,86289,36081,52381,40643,13695,82136,77919,15476,26708,82457,92373,80913,17844,34355,10418,69892,90514,25810,11932,84711,44239,41017,21012,52801,54267,28873,71947,40720,13752,21944,78475,66752,36306,24530,27464,45375,26985,57969,59738,50567,40757,11400,44250,58947,50062,87845,30619,45871,58709,71737,45755,47588,59682,93889,73493,80225,26859,92865,25842,13111,77741,24096,47009,54994,98553,37356,46354,82338,71694,36284,68702,27422,31524,78703,77811,64179,30640,46665,39588,10786,55659,52705,26218,24992,69926,38668,37533,23564,88777,69821,32594,23258,24802,95538,42002,77606,87855,76034,20731,18562,64886,45884,84663,46198,66289,91136,60264,76774,42952,26697,47492,59436,58652,95196,37211,20429,16873,28534,62883,29272,80609,59019,10747,83097,88878,65137,27858,79253,32440,97652,36773,92669,29777,37335,10968,72652,96827,21901,10308,71014,77037,94199,56518,73934,44867,43822,10921,61593,44392,94921,26563,16243,29256,69518,71158,16573,43679,39215,17122,82889,19054,77066,17328,70335,69807,31186,29359,64273,59551,73517,92274,57174,40238,72601,89292,77600,43119,23687,12968,30230,81068,40005,31612,78494,98483,30263,99652,63911,62949,35601,77223,24105,23385,43344,38943,94743,51521,11905,58415,41197,17381,71313,92723,31770,11027,97335,86670,37866,20861,87941,97686,81795,82222,26601,70927,48279,91271,62021,95696,79677,49158,76268,39584,22939,17242,84828,42699,62028,95075,47719,48835,64271,64534,75687,36453,83550,36594,56501,50378,61933,26104,94889,26020,40551,91384,12087,81990,20130,16039,83888,13348,40397,50596,89132,36917,85665,27453,20184,83347,37445,88948,90775,16999,36098,42430,73522,62832,81740,26481,10356,48234,84162,76661,19470,35317,33784,81913,72837,96923,36160,77912,54431,92792,62683,95768,63438,91084,29642,66207,91128,34247,62279,80759,97368,44622,83275,86677,79926,35076,81656,30250,80596,34328,48909,59144,88763,21862,77735,80553,44963,20273,51965,80624,29167,51754,46398,71888,98524,51437,80994,47424,28662,44735,17910,77378,30458,72133,52199,28515,53582,11298,69273,73260,39660,32951,36572,90367,84038,20602,69069,19938,87341,48133,48257,37985,15290,38667,64623,33806,29447,12958,66173,48357,36971,25739,64888,32653,79904,74668,73956,39736,13963,65801,78621,14349,63530,49209,29590,21498,83517,62980,90361,83179,47941,77164,88777,63128,82319,26304,66647,89258,91712,31933,52223,38896,34782,29238,91085,95347,76641,52748,94331,70595,26848,74175,63771,88179,68599,32243,13940,50790,86370,24659,67187,45769,90314,54043,17850,47764,67654,12384,11738,16647,66540,35409,93629,92829,51462,62894,39961,16296,47649,23001,42448,11862,57841,31888,97059,92098,68874,50716,91956,42531,18796,73182,58067,49268,49652,70122,28734,47784,18970,38719,29699,54753,75744,89515,28577,24747,10414,70390,18870,37408,21785,57740,57420,78270,45967,25022,67787,53739,15007,99699,23099,49449,65563,20010,86886,88172,92606,46039,55367,32010,54253,77165,20413,95625,90769,84190,23480,78991,39377,21737,77284,51246,21361,68327,16427,22667,86484,74337,53355,16493,42951,67280,14077,43034,70121,71968,12381,12506,72680,62260,37110,67916,22191,20583,41430,61907,52402,59100,23203,51851,64990,60947,61099,89883,10571,78612,98060,37957,46379,99313,56691,18500,13416,52237,49800,40279,49913,32975,40590,80138,99279,69354,39151,49932,52187,76349,97593,18208,55513,91276,73846,10839,79167,87225,68089,75623,60266,76192,15000,87723,32938,16840,39017,55069,64995,36304,45163,15249,56344,88270,95061,66132,69233,12956,42102,87142,53578,81878,51869,76391,55865,18795,29533,28157,28500,82688,76607,57431,94627,74367,61259,79284,97300,97408,19716,63971,62680,31925,79046,21366,83097,51916,45020,59522,30820,89103,78939,69794,25897,84792,70255,50727,55201,27712,18578,89439,95333,38908,34285,34760,54152,33329,38181,69670,72761,78009,85779,27964,93752,33796,37869,27184,11893,82023,90745,55048,81272,69178,10573,14570,37761,33806,91791,79854,20397,15481,45372,42341,60279,91750,75273,12946,27160,24362,23787,26408,14129,56695,56979,64288,92224,32717,92581,84412,74033,32374,52609,92813,82521,78051,76996,31690,66139,91396,69600,59415,41235,13941,69948,81669,44478,97360,12164,78158,56502,86942,82745,27118,37783,78380,12624,62411,38206,34496,34965,58858,38120,75767,57434,26496,82082,59975,53341,52350,12437,93934,33673,37060,91607,94950,10847,33159,69910,95089,64207,43592,23589,24219,16165,87540,83710,39573,18215,25802,59478,71075,74702,55734,17790,79885,52966,42382,50264,37746,39868,56084,98185,64672,38199,11311,22592,13611,49059,50288,89344,47391,70633,96934,28991,46764,19022,54733,79451,81629,79920,35028,57849,74012,44242,76327,24377,89737,14802,34790,63632,28090,57442,45662,41626,25207,95090,85677,43702,55890,53970,39683,92714,15914,46235,30590,37772,74140,68897,11128,21529,97793,59329,73143,54215,10454,39521,58276,74524,44485,21147,46451,72711,89696,60279,89883,90161,91815,98651,29622,34104,52288,44516,82752,39083,83133,90039,87920,70289,85557,42874,20569,92424,50926,17628,18743,57339,45159,75558,71303,30472,39779,55150,20987,50242,41431,92472,69049,13228,11426,48702,33463,53859,64947,91825,75140,69122,45004,12824,24632,33472,56896,64582,49433,16330,22539,68998,46509,55769,88454,20726,92564,32417,48552,87964,66336,34817,21829,95387,76290,34670,15860,81108,70320,63828,48415,13413,49443,34067,92535,58222,56530,22653,69507,78283,14713,40510,44573,53227,10962,12131,61285,37278,17141,72643,78315,59103,94199,48067,47291,67564,40813,33457,58939,30663,81615,29407,96475,24185,83075,37546,30614,61377,29434,64552,62130,61845,16503,41124,19587,12384,93419,57409,30243,48296,37105,70406,59602,79876,56921,39256,45967,88018,34211,42976,38938,40567,34142,24926,50003,49233,39812,79810,30285,28554,94365,49729,90144,32628,95330,46248,47052,57493,22780,56186,82045,49627,69154,70220,77800,35112,90285,99615,75672,24119,54040,60916,51091,20368,76956,36415,94351,24354,84657,31674,62722,54448,90581,65036,66899,12157,42153,15486,26658,14085,57718,65234,42027,55546,84802,95355,88642,25119,90052,53381,85207,23857,76532,46122,82690,91827,21699,53811,80453,55435,14463,71601,27257,73387,25985,42946,82418,87898,95361,85381,10301,19473,58754,63381,11622,84694,25430,93065,17572,78773,59270,45039,91282,98876,45812,95649,45584,26134,78582,47224,73145,22399,53123,16336,57961,44653,53099,73888,55450,14960,41527,69581,13183,55758,66496,88351,32507,17716,74237,43477,15729,53392,76406,68819,81126,57415,68344,45115,10298,19701,94047,20952,26272,43154,40145,93883,48985,66786,66097,38122,74256,48539,11548,22809,12637,35205,31799,82293,62734,30030,88816,45782,86115,32732,79750,72212,34425,65328,49606,40494,19987,87417,53098,38554,66970,76842,86269,68049,67896,75886,28211,18777,73878,58724,16156,36703,85398,13584,67646,70357,30578,97896,86515,52511,83241,86108,40121,80662,34370,72094,64105,59356,53184,75384,30349,68305,40522,52161,38274,24752,81397,51013,97080,46033,89673,98688,70062,82667,31669,95541,89857,41827,91874,18607,73571,93747,75922,87748,59567,65546,73307,10827,39946,91245,27429,98306,15021,77500,90471,42645,27484,39144,78486,25720,48401,31770,50968,76012,41641,88698,52573,71392,28184,73079,19961,31283,30822,44086,33466,82454,62097,27408,79848,60876,36604,39918,57233,54650,80316,10898,64455,27232,39428,26306,73762,60158,62693,61406,28178,22822,98891,88953,41080,79109,47642,26710,74869,38439,14103,55182,54532,32348,49299,90987,95896,17686,70009,83868,25276,23262,93809,86184,85521,52726,27933,67921,61073,18612,25824,20926,85967,28797,15021,71293,58603,99211,55802,10664,39545,57337,96664,84731,90931,16136,31707,12081,25616,28810,17501,10213,44698,36581,79289,31403,96989,50134,71045,60291,28578,62818,65044,27598,57812,38027,13340,95930,94484,81805,37276,44650,30787,64632,16199,64623,13985,11172,15868,41993,76774,53972,19693,72546,75719,12824,99654,34203,86124,38831,77410,19970,83260,63317,56900,50857,32662,33093,89166,27262,52072,55896,31906,52356,79666,61793,67980,25209,21838,75493,17445,62864,53541,53948,64145,95848,26944,77366,47500,88398,89635,47777,96218,72029,89874,95558,59413,57970,82758,14617,84105,18649,18957,94950,95031,40243,12169,10771,28911,34531,63392,14668,71600,74435,28117,90960,69834,15450,25103,70770,69065,50542,47016,25138,93764,23124,32925,99073,56483,83018,33090,32416,31645,49099,41383,71335,86691,68347,54989,80594,64086,37763,97130,61156,44490,27933,49486,51343,48440,87001,22069,98716,81676,91522,26654,81743,99437,93513,59078,41911,80472,21076,92471,31061,27004,88784,88988,17983,73073,68548,13949,11305,14097,12653,14824,61971,47405,66050,73266,54921,66803,56523,62820,44105,71210,55918,62942,36855,45143,37317,66255,99370,91274,55454,32160,92593,11076,73431,37542,38332,74914,59289,94152,72461,75576,22342,33899,55113,26269,13928,30124,34734,50789,27629,83192,47034,18374,84307,16303,70550,33403,44884,31579,51006,54352,51019,78897,82368,11554,39017,25893,31900,90545,65867,10413,25164,25709,10199,39156,71959,52761,41073,94541,44834,23415,48302,15875,68638,37252,35323,65493,19438,16650,96016,13324,13372,62799,28779,71969,96565,32093,88529,98629,37928,53094,82013,23746,73971,95943,65492,77878,92945,26112,62056,44088,57486,24822,40169,71833,47869,27677,19459,72223,31760,36659,59843,32395,47003,96646,54651,21712,21605,86607,74373,39355,56327,78083,11387,63168,29655,49177,71992,57014,49446,82794,68817,82873,78646,89134,63041,46252,88480,64455,33267,42832,83234,56231,94593,55978,46372,93818,21710,78415,30086,52431,83442,26404,52612,14981,41613,85715,39439,56162,48634,51976,10693,66127,33968,61584,76816,44890,30436,78970,21164,36252,50184,31623,78649,18773,88405,39348,60386,37242,13845,82432,71195,70940,32624,94066,31110,60858,80870,29631,35072,89602,49063,30636,28850,12117,55362,23644,96922,74859,32856,23914,10942,93118,99130,63815,44667,46549,41108,96739,88847,47772,84725,81520,45490,46905,55445,58110,55312,88695,59911,35806,13600,66941,54040,26478,82376,35952,47037,42052,31213,85829,32976,12576,72793,88317,65822,95617,65723,93563,30358,70514,16352,18116,18338,69812,30443,29238,19485,99380,59416,80123,90007,19916,95793,11941,82366,98039,97523,85774,74504,38469,42804,33120,15622,71447,37004,76736,64544,46646,97447,21775,17875,84001,14566,52828,44227,17609,22807,94415,76533,19826,78417,47001,95952,80547,10691,10271,45282,82942,61447,84429,60545,31225,88673,12291,48410,90712,22337,70243,35447,32533,41285,94436,78219,34567,65326,89434,71737,87591,57034,52351,34435,90192,62239,58092,27523,18212,77726,41919,70862,41844,25801,50490,54198,83629,38875,62588,66162,74873,19264,63726,53185,64010,99855,97028,92323,78800,59109,49982,31530,65235,30484,20021,30813,37919,42064,10801,86682,37705,95009,71335,54917,82034,23213,68987,98854,88770,38759,76003,46528,41260,49195,91733,18088,80287,89103,85437,31952,72170,15945,43971,92619,50499,67899,48456,81176,84929,40244,92168,86893,90440,71645,21209,20302,92791,77300,96134,49852,66052,73409,37683,80609,42558,35926,44941,81573,71073,80739,36777,19373,18192,75333,87591,89049,63183,39360,99636,42755,19902,52163,59231,45368,61023,94865,15319,12417,42229,87730,83172,33683,94599,23955,73479,50832,61048,75348,46145,72765,74383,44141,42695,72470,30382,18314,69048,86444,53677,60462,40817,13351,65919,68706,53484,75598,49158,26277,20989,92677,73301,72547,59356,81916,92944,75199,72644,72566,82038,89009,12908,81341,93074,29264,77036,35715,70307,63426,62556,90859,23060,24731,87582,52143,91508,76723,46550,67422,97689,84331,31445,53914,10454,71251,18481,42619,76004,66488,55889,92506,23648,86243,99581,70633,99753,54906,74144,31699,23947,32581,45466,19354,65868,10241,89584,22831,49420,82723,92486,49354,78889,25030,51125,13076,77201,37100,43855,85278,43817,78124,31916,91579,98962,25661,56669,45793,81498,56042,16026,16567,29094,75728,16643,37432,11707,93116,59616,71452,74459,17548,92520,15040,18471,55662,22364,85594,25397,39773,40562,10089,38183,58499,21354,55316,52502,74001,54572,78022,80053,48716,31787,10966,82446,46964,19432,58935,28617,28993,91125,92618,15847,55237,46153,67395,68689,82686,11875,87664,23437,87022,93726,67563,34713,26616,40215,44634,19557,10356,80257,85163,20617,65977,93974,59937,43605,56154,30611,59771,14140,21498,79200,43795,42236,45505,61138,64010,62969,73803,97764,53308,68052,15592,61971,83587,64611,65196,86579,84606,31054,29749,35361,62744,43973,75110,67628,41679,52713,59816,33465,74315,90900,80000,47444,28328,75131,50456,62325,28191,27197,57601,75319,13040,99357,34582,39577,38272,32618,84356,85596,80434,39742,58952,87419,26891,97738,41715,61762,76077,73097,13412,83682,37775,65802,52652,64240,76959,78337,45915,90894,66559,65541,36891,13135,98712,30385,52351,98807,34451,66141,59228,52845,31471,37207,89421,79060,96951,90785,13935,89450,18713,49506,31662,81865,59772,30562,14734,87794,89411,52309,52374,26466,95508,80857,80798,22097,97767,59074,64153,96353,55599,58579,72593,97141,75579,92731,18658,45293,66702,84826,65501,73208,63757,74919,32900,39769,22514,83691,10021,82940,81713,98742,42222,97200,63495,25484,65254,54510,69529,40511,26599,37456,16961,90542,10899,31201,36738,93704,81832,75492,71671,33071,40228,76662,91552,97397,12167,30096,15111,13859,44793,46933,68978,44174,57106,18377,74594,41261,88944,29926,13892,29448,74731,25219,80132,23729,10391,87298,58034,98376,62040,66533,19582,12682,33539,94225,52129,42264,69396,25703,91779,38572,78239,70488,27180,99071,83446,64355,58824,61465,11888,97793,13878,10306,77531,75322,69334,19729,91531,20108,17321,82754,61397,23103,65809,60178,16336,19456,67678,51466,47074,88880,91973,29239,29300,82716,31034,42185,55184,92012,57932,37360,56631,25961,20247,52055,61513,90249,53092,94239,31091,71908,64296,34726,43478,36685,17465,69420,43698,13135,75001,40469,42674,36066,90420,58270,62017,22168,24375,85810,94799,57894,94329,58569,68142,79303,24041,56465,41478,70524,39887,63709,28096,48919,48889,52526,75105,23961,53602,95602,76656,13850,97506,45135,49084,35766,90099,79963,14675,11532,23878,68063,10898,50747,43404,51175,73381,13058,47917,98135,14334,13532,65626,34073,29330,20738,28206,74543,74051,68614,94068,63042,10692,69190,10662,72810,75803,60656,14863,51134,42975,94349,32699,13259,64972,50263,87161,91149,64496,13260,78799,65511,77578,33961,37232,51124,78268,41518,90513,32044,11743,83487,52022,30671,40719,39218,53245,68660,54359,73167,80037,93005,54164,27576,35199,66632,74606,82164,89081,98980,60263,45683,29741,36252,71048,18883,36527,41177,11810,45680,92359,49147,46926,24381,51371,80250,72814,88759,69347,22719,42531,15344,52423,64480,71885,46948,58324,81042,13275,85428,90060,13068,59406,62342,32404,14478,24027,57527,94735,31079,96762,86337,21237,93767,73980,75440,98536,41163,59039,87889,38984,74645,34388,93757,35316,20374,64073,50083,16640,44914,99724,22989,96258,48396,37492,32380,41321,79232,50315,47688,36423,20684,51459,65339,62410,83387,51902,26434,21305,86278,95758,29388,57066,68979,87703,57265,50561,18291,15801,78216,98645,21360,49452,59400,67795,82030,65160,37303,26663,50976,20263,10699,66081,44646,96043,55536,87808,14765,17347,23181,93406,99793,35938,47647,42425,64507,86350,97466,43057,67069,42018,29876,92152,75683,44232,30536,89345,81230,16064,52255,95347,66301,61391,41939,75353,22966,70440,33497,71724,54939,23263,93689,39835,86016,81654,83483,95909,33858,89112,18345,60479,70451,35893,91001,39513,89829,78691,12977,94968,46065,40572,19129,20399,17353,13917,12603,63678,45699,90736,93891,85904,69871,96886,46504,38286,47433,33046,87007,16018,14527,86422,27408,31145,30617,59599,95058,21761,40192,46061,76303,13578,26778,66782,32726,12836,87233,46101,35170,25386,57199,20530,29541,44896,12175,81181,90730,75123,33319,47544,67436,98943,39758,63663,90587,32762,31678,12008,11613,52427,27042,20974,96881,99526,92006,49470,64281,28197,59184,58027,76196,12685,14819,13457,78017,51306,22586,40687,46317,68305,82785,84925,27279,47832,39579,89096,63897,10056,43289,81566,43218,61819,73784,37451,15135,53500,26775,91246,61539,67007,28412,40671,92773,68359,59891,59941,38510,83017,12061,79300,85960,97250,56021,90386,74406,77958,99322,98214,74285,87765,81429,99893,74997,77683,48920,61693,52119,15530,77575,60294,36280,83991,42298,95106,62715,34372,61859,19983,83215,40866,52682,67479,58379,42717,26046,96902,44111,21224,31399,18856,48130,43127,54080,47322,17475,19987,75069,95131,41355,71607,24435,34429,97945,85248,27709,54481,35454,17694,93734,84700,85517,83708,93470,29587,34642,64939,69974,66844,92542,21190,35573,28974,85106,97497,77156,55149,13934,42132,21808,20865,19574,70883,54842,23457,66138,58786,10351,20176,47472,69721,94781,26853,73555,48860,26118,15349,96785,71643,42925,77055,58732,18832,95229,95509,25831,64995,35506,73464,57996,37862,65645,62065,43244,34157,44065,59231,77373,25227,81249,29445,28311,35145,73587,11149,66705,84864,71858,58246,35112,73024,52439,24837,91628,55106,61797,29677,33800,46765,45593,38041,41955,33785,30903,20405,86545,26251,34819,17996,78744,22214,15621,54976,24173,53321,88389,67312,53106,98951,43120,11354,76141,99273,28261,85227,56451,74841,48264,78543,79270,50899,87834,82731,36853,94264,24243,35642,30798,38995,76252,57048,86974,20737,85394,16877,99753,65770,12477,28898,93066,38982,24413,83867,83003,80699,30723,97775,66206,57061,26701,51074,73141,95354,69532,33589,87560,79439,96844,35541,53659,90559,60729,84459,95378,98519,45259,30331,35411,64226,48739,51414,34123,80978,79334,87289,99424,13967,66044,21598,87088,35356,60429,97432,12667,51298,89021,88288,33554,68442,12933,24559,59522,59364,54631,33781,95626,72219,60306,57011,53890,81932,74226,55005,59075,53723,62526,89761,78809,32701,66390,73369,82779,66716,11393,19811,17280,51672,72213,14582,38370,76654,40425,98385,21483,82119,99886,39328,68864,28062,81044,80982,51602,73309,98293,30850,75042,59212,30541,77829,43250,85427,26931,85656,54989,91418,62449,53776,86496,85562,83359,74426,61656,97834,50248,95160,71286,17292,99215,22389,93858,13019,77297,17074,70121,26993,51285,13402,74316,89341,30819,89668,79328,31467,88660,56578,78698,51258,16918,87999,66831,25928,72310,98435,45263,91590,34095,19368,32057,78555,44881,35567,44254,38780,61292,66513,79540,48518,54522,48617,85463,58189,10950,75028,38316,79724,37903,41952,77345,83225,21086,40111,68804,88372,95764,88308,23003,97879,87868,50047,76017,55274,23924,18969,82428,66117,72749,73765,86844,95802,95606,38286,95928,52830,67184,38269,23233,64172,13789,52511,44869,35460,80342,48890,46235,79121,89950,76964,51073,79048,43937,95360,37047,94168,17789,25475,91065,33196,88531,96209,20871,10292,48968,71122,78142,12578,95291,79000,58025,78007,85950,48407,33395,55363,79666,64649,24552,74461,83214,48322,89341,94774,21400,47854,72792,28902,21389,64320,92559,55465,53409,99000,94319,90436,97360,29367,44135,15373,39162,27136,67919,24337,48796,32146,53233,56423,24110,16833,95329,79780,10641,62819,25695,92172,14780,34901,66528,41080,75981,84600,83008,71105,67672,11466,53822,65327,19851,45794,16403,79055,35204,12957,50203,20807,36180,49327,53715,98164,22086,51614,71027,66796,39405,79464,58923,16639,74400,66782,39899,16383,45534,72769,68847,59588,80213,43915,30158,47267,11786,54104,45326,37544,29289,82963,67461,78739,81367,16992,45029,24612,30309,96052,92797,91692,42589,27481,33043,76113,87402,76638,64521,25628,77415,14599,35816,89009,34999,23768,45417,53661,52899,14198,12770,48829,67536,19228,57372,82205,98752,43375,59238,11722,69307,16525,10015,38788,36920,73665,78822,78102,15750,96694,93646,35786,42191,97283,47884,86865,34570,94458,86113,68921,28957,17535,91191,15032,10714,93989,89931,66796,54303,89499,63738,34010,87228,92832,76734,81858,93298,55547,31251,23016,46265,59303,14707,41902,14648,79004,26053,69988,41197,55076,69396,40038,66111,39805,26290,66087,60971,91445,40212,25827,88178,47905,97941,76732,63764,52125,50738,79394,39721,64404,33185,38496,10988,82703,20868,19382,69680,35289,92811,89134,60854,50566,50295,32068,43218,10587,44745,97051,38171,82273,87090,46614,95443,42506,29793,90582,33320,73912,89425,20977,80995,30534,69040,77250,40413,15227,10500,21546,89903,13500,92069,69427,19640,42139,92007,80983,44372,80273,20173,55654,82767,35545,45872,38803,36695,18076,61411,55826,19162,59769,30457,61026,84174,58791,63204,34136,95789,31533,12154,91365,60607,77253,87099,83086,69445,29182,36601,22990,22440,11971,96391,24760,61407,11488,88372,52620,29608,33052,31997,46448,89689,22810,96725,27838,15185,42756,35547,78191,14275,21063,17327,70361,24768,98753,44468,81186,79771,45933,30927,41560,83404,19432,89799,73280,77951,90535,80701,99945,55657,58939,35001,11385,56795,69993,81048,37498,74385,49557,87325,44958,46542,77183,47641,40250,14023,37032,53185,40481,13915,92988,11249,41147,84717,77578,26471,15213,28824,65265,20026,41009,17350,71820,87628,59464,27013,47112,53645,31086,28277,37689,94593,41091,27707,27513,41368,58322,68654,51781,89137,37877,34639,56574,82539,94236,65170,15660,30503,79157,73301,61466,86710,49845,67685,17250,14200,44040,27287,40830,62261,59614,97035,77030,84128,78978,81872,47565,24147,66858,80400,24787,33080,36153,11135,83700,45068,79943,28658,40297,69649,45013,17173,25955,42342,16437,10151,70011,64395,92376,77342,61359,62997,34134,52833,43033,33334,48143,97901,40194,10527,55578,27775,49901,87416,14489,64462,94897,50444,92311,23112,36959,86625,88420,33272,33845,57184,21631,93272,27151,26198,55940,76307,76907,91018,50166,83120,50186,19805,99502,56068,55163,88865,91958,86834,40560,47519,36578,93125,80189,71476,64665,57790,37608,90394,18350,55418,56089,18572,36246,89577,52421,57903,40168,20990,55850,11190,21196,80581,71798,78348,33562,39039,75706,40022,36472,53472,18336,89898,47955,62484,83817,62688,36627,78603,83857,87773,81116,66023,84459,74355,97446,52965,96240,71212,55388,86688,84879,57955,90404,94077,65870,52961,24779,62399,55286,83354,43823,38886,80318,67769,43179,37984,78596,35902,89364,56728,92906,56554,54903,51366,76823,83816,98069,44872,91799,50401,83518,63748,11650,18697,89328,29118,82010,12462,57786,26368,90659,20063,98605,45641,43678,93090,23731,76007,77790,48234,71027,61882,53526,15338,23492,99819,75715,46640,16060,51274,66716,74079,42660,26844,65010,21898,95673,27064,94145,35542,96449,36951,24440,78162,35092,94184,99480,64663,17379,41843,50800,45283,22092,77221,36814,80705,55724,19311,64778,33829,14521,28101,83640,79151,98296,21403,89065,28752,43409,90071,65712,28352,25975,53690,65994,75656,27581,41793,43974,40092,20255,62151,22823,96889,81069,71990,86658,72363,63700,94530,49966,64745,83772,32577,39524,40576,21806,27872,92403,31895,36004,84140,95015,73643,25710,47936,73752,90768,54733,79455,74358,22443,51348,54827,51567,72559,68602,82513,65767,11459,68316,16015,38416,49512,23063,47812,63345,43608,45638,54556,68346,69751,39772,86746,96304,16522,58022,18961,39373,77278,42548,41618,20013,27599,56112,66681,48407,65817,19220,66610,35345,26783,69360,67232,74439,48753,20362,29763,88045,32022,27780,92123,34795,16605,23259,65036,48383,10661,34125,11354,91326,11946,59355,62011,85177,59788,31166,61117,80291,67469,28827,79574,41121,18422,51531,41453,62573,51496,43067,27467,45255,64158,36568,47240,89750,90289,10095,81028,62508,27411,14245,41430,37326,35709,17201,52718,99892,60334,93514,50906,68909,45853,56063,78071,28574,55878,96681,17818,27089,45080,22235,23826,92472,62011,38158,87984,23323,42241,67888,96686,28889,59376,19137,37742,30397,84961,68102,13708,76277,86078,18471,16033,59398,10635,82455,50236,87694,76148,98667,13006,65462,11471,83669,14924,66077,92039,38058,61853,31979,21757,42961,16465,92747,84069,49696,98907,43359,10165,74193,18117,60696,73547,97210,43117,39908,20782,70103,66699,82128,23363,57384,97507,79399,34006,10262,59770,81548,49942,18416,94870,92642,95921,17394,11454,31169,75764,72668,36315,94166,76288,76129,55901,34135,89704,17856,76099,19783,29466,24592,61740,18590,46948,81894,20336,76661,44579,71081,91815,80859,54324,34720,72649,53931,79157,19042,42846,91380,27682,43349,81594,82390,59522,23962,47577,94127,77088,19683,78451,64149,72218,58578,76816,62363,97847,40299,96056,84932,99132,76456,52702,25021,97397,46040,20184,73566,91122,74537,67867,35306,82997,54302,65554,70100,55909,85623,34227,10113,84212,61749,25923,66369,39073,67863,45452,18838,89640,35139,28817,52560,80130,60650,91333,87258,54196,13240,84830,17400,55687,71606,85409,43538,11424,91454,28913,28119,74833,82661,67868,54689,57003,56393,22665,55370,24751,79462,61040,66762,99576,43104,95792,70191,39502,11809,64879,32802,45360,92923,96512,46790,12038,81464,14405,35850,86061,81322,93453,70553,30688,99841,16501,18702,67653,99601,94719,92965,82720,49609,24162,83143,58726,29495,39582,34087,61434,84200,16162,37429,78648,31580,44780,70428,18012,56075,24438,91619,79482,40806,38733,43073,66423,35227,84570,23522,31550,75958,58911,16453,42952,27162,39672,76530,58582,67640,73744,54900,20813,48061,38317,68582,84227,66499,24865,45317,90340,30940,92989,64828,19869,37376,77469,67343,77014,23264,81257,56220,30606,98577,36769,58583,26684,90637,72306,84044,60242,92979,59746,69088,36224,87817,41256,23727,89929,47644,54142,31783,75782,33851,20093,94823,26290,71387,31345,64691,65604,53166,29302,43166,89158,20527,24009,89158,76380,23616,29100,44583,72712,57570,51250,67120,40588,52892,61426,35483,49517,19317,69955,24737,60196,87136,44823,25200,28912,41790,91413,38278,30649,68322,87762,79090,47853,61571,16852,93130,71845,59409,27014,83499,96026,68956,83066,21376,51681,99399,54278,32141,79441,81843,52394,75603,64092,61960,38229,16655,31588,40437,78362,98794,90991,70493,25262,19269,53999,22582,19865,90279,25983,77354,62854,36270,74480,24062,68295,12977,40531,37368,81716,13990,93160,78498,49625,73912,24775,60513,78683,90414,66213,95110,61684,49144,58279,84215,24290,46091,82119,70392,81007,61268,32767,96203,26377,26739,55776,64373,52385,52185,37673,95551,79673,70792,59011,21048,46057,97230,33056,64236,33180,33647,69716,14128,64398,62555,73949,92513,54705,18076,94891,20661,38690,25015,40695,94947,61232,49149,53071,93723,21292,77008,61891,50720,11607,24527,33127,28996,57978,73348,20143,28188,58967,56587,17754,66443,85006,98368,30287,28825,29842,83685,82126,64741,15516,54278,27407,97273,44758,57193,39237,15146,66141,44870,42123,49756,84656,86174,78972,56991,18116,73586,81810,94462,81940,40185,72510,15311,32787,93178,59437,11000,91740,18816,28083,25485,41530,55163,82581,52278,91504,92499,42680,71209,64263,94684,11763,12798,87883,76323,18852,17778,48107,73768,98862,36213,70281,34878,93919,34656,31480,17671,62506,16098,62131,55081,72193,75665,84422,70029,70497,56753,84474,21867,39478,42036,98202,24989,46397,82773,73223,17733,47940,11517,93191,17570,47792,58938,76811,78749,87190,62595,15667,48012,17952,14612,88733,47792,41741,22561,48265,34772,29356,90801,55461,52407,29018,87992,85035,82953,71995,74116,79067,18564,12566,45391,32477,86523,86249,43385,74851,54732,90664,97394,53979,22500,27742,32489,10954,50878,46687,45599,75580,19754,20484,74496,85451,76894,61435,17232,50619,27198,92372,97529,96294,26010,41731,36424,98556,17340,73654,26808,65387,26217,68326,50555,16903,62347,52913,26323,46233,50260,82696,99435,76232,24012,51153,26835,36936,14211,25093,59680,35293,81164,96967,67617,29160,76569,39210,13761,83246,85534,74108,78530,79483,42718,46097,61023,67352,96355,32780,91728,49805,62328,90209,67113,53977,46772,24580,99094,22112,81771,89142,25545,86275,68397,84452,63500,25227,17433,12119,52332,31207,58425,14482,58516,30792,41383,81371,91344,22324,20150,64733,55556,73428,75631,41715,33148,66147,20059,95036,77556,22299,96260,41640,59543,94060,43501,81176,99889,22335,53164,22346,72711,45321,25580,31976,53474,66031,43036,70548,68923,47609,65997,89520,20180,55182,83774,42313,71077,79249,23096,67646,33206,11554,31186,10818,21165,82035,87985,27952,57537,36694,10124,23251,70383,20518,20179,50664,89766,19384,49948,16859,39216,76127,17414,26619,86772,46955,34099,18005,48751,69743,22165,76994,71893,42179,97314,62786,68621,35089,34326,87584,28757,48773,73029,65253,29648,93751,19409,23374,71687,84108,28024,80997,66619,91650,97215,59441,53401,10112,56369,17958,37771,97682,72745,81564,57388,52989,22940,54802,90862,42948,55182,81967,89041,90205,22635,24099,10836,31865,66859,62387,19872,40821,91765,56544,52910,44132,20470,76346,77230,55230,54469,62098,90569,75086,24545,20934,36286,56935,18865,34475,74602,81524,52055,50536,38760,13242,50961,42871,76646,72318,51950,63101,64226,98450,16590,55224,63931,24601,88564,99919,23801,17181,17172,62749,83959,53336,37603,99824,67010,60268,26462,92666,55139,25801,98764,55001,61445,66236,29750,77467,92820,79135,33140,16176,30803,24978,80207,87226,33849,62069,85016,73135,63234,42316,26968,30134,28698,73678,87492,21741,72312,41094,94615,13925,89721,73646,43573,58173,68204,32193,76406,28374,42291,29037,40315,29557,80625,49510,31684,88245,75269,57727,60924,15306,34147,11919,83909,95265,10288,21575,75613,11794,24092,69419,48780,97199,46990,82773,75090,68581,61888,86309,10286,39975,45732,84356,63359,67686,10842,64329,67147,49804,63459,21042,26504,79700,13987,19943,20230,24260,60883,94563,47970,99503,56364,44569,44160,69484,41484,43193,13718,81041,53294,14083,68848,21682,50954,22271,28521,97688,32216,73904,16130,65298,56015,26658,30612,47921,13477,77722,10388,43110,18301,93717,30635,62433,51924,16132,27120,16641,99530,29706,48775,63777,98006,35492,21739,68066,43715,46026,68063,72161,43891,57830,79124,94900,96211,36791,62913,79214,14615,73193,10140,37725,84238,50232,19549,14480,82964,56239,78127,64630,89562,39829,27195,78305,83339,20870,47745,48361,29898,88099,67532,33236,94294,87947,49683,54893,53991,62453,87600,78514,33109,92865,21434,90331,65738,41173,88370,58374,14678,92385,13223,62983,53969,41847,15175,15249,14367,56697,75574,71728,71889,80795,85522,47979,91718,27376,65212,72796,60118,64656,57655,48841,24897,32293,80031,10865,84200,95688,78424,37166,40520,88403,34636,38342,97788,36383,62562,66084,57321,28989,79053,57546,78563,14428,57980,50467,98901,12099,49633,20298,88694,18554,34952,12684,32466,16992,80849,57850,22523,22901,71998,78195,49467,28317,74278,77785,24402,20563,60117,80426,97772,31561,12040,92001,76156,95690,32090,47460,56226,50050,76794,67443,88032,99770,22277,66318,14247,27379,81176,61072,41142,47728,99398,45941,16615,23127,31294,43476,46684,32791,69414,93699,45586,77710,70303,23536,57312,61296,13442,16960,22838,82297,72433,91634,59769,61182,35334,46141,83846,77853,86352,16068,89416,57372,52329,91547,96922,34906,54452,68415,86817,77794,89540,41342,39920,80317,97562,92081,71409,17308,66297,17520,55885,84473,51665,85730,46803,29510,75520,16572,22285,39735,94355,41328,41949,14892,65599,98476,43309,97367,32798,20467,84359,13891,38638,46687,72445,98407,56611,19161,36936,43733,89771,62753,27785,31668,90354,97073,95299,78744,74859,35433,34125,27085,36347,29460,50856,30551,81471,66467,67156,37896,39291,24221,82190,12341,28019,62787,31658,41344,43380,21157,41539,83167,85180,19236,13530,45301,10925,63714,25587,38670,98611,11463,49096,97409,26870,91069,20755,12157,24248,19417,28190,17492,41690,86001,65547,35384,26676,99620,70087,44896,25950,58195,35239,94428,67774,87832,23288,71315,40412,99044,29515,56904,64325,71621,31326,90641,37900,51274,19387,18169,41571,86662,54326,22187,71758,49775,22097,83201,36165,17398,80426,50059,39212,71235,30565,41930,23191,61612,62193,34337,24169,62278,94697,61180,28885,65416,10113,55885,30127,55441,79122,34136,41740,58497,27653,48634,23374,68354,42162,59003,77434,13059,77240,22724,31996,70448,73593,84436,70511,29154,74630,76404,15406,69258,42992,55704,52278,16428,54384,57516,60395,50283,57384,96592,24678,93284,94327,37358,74272,67164,27937,18219,77664,14556,90556,89086,71560,22745,57886,22790,24654,82854,30780,94393,26251,37085,62670,54918,55411,39076,25907,84524,83058,83504,86745,34288,41702,19891,47126,88166,53774,31912,43977,79762,93839,68974,37046,50006,91579,11399,16735,60887,15389,26145,39882,66278,60456,51813,87748,34002,48167,25620,88468,51734,22181,97637,30997,84381,94141,51377,28267,81581,38953,51246,51719,26847,37494,62852,56802,97213,55370,77903,52645,64171,91364,61074,69263,19225,27666,33741,61934,28867,89474,81845,50526,85534,20923,23679,39590,31806,12368,54928,52904,74095,51166,28403,46756,14407,29055,17162,91406,68641,47256,45906,58592,74929,65071,94809,81866,43039,22448,73279,52893,99037,34475,37149,35067,66472,10172,98157,69776,88478,29233,78507,96306,57660,50207,64381,11167,99003,58238,14017,11368,41489,48533,13581,27266,95576,81476,56007,93799,73609,92097,52850,99897,76266,15030,25576,94263,83113,56689,79116,48644,39726,54800,50132,50219,63352,22264,72703,54015,20766,20882,32516,27381,62056,21941,77958,26113,91693,63790,89127,12454,70956,57271,64008,49306,99416,46731,66026,88548,49416,75438,12613,87733,97005,22468,11449,10941,35703,20963,42188,55563,83779,86426,22105,83817,77858,45241,97729,91178,72256,18537,44868,66185,45462,54858,46453,73843,93029,66678,35262,44117,16384,15746,34457,96595,88913,67798,49333,93760,22681,58492,93525,52822,79616,64790,78355,61108,81502,43081,49655,18046,80418,46594,26132,25060,38924,51985,62685,75434,96646,13351,14168,14403,33979,58229,41153,25599,10470,51806,65237,53469,71611,42202,44965,59566,51998,27144,73289,68551,34845,57691,79326,45631,95369,87709,30109,76449,20752,64150,43843,46743,73456,75005,75362,98488,87709,49356,31895,15412,76503,76007,35129,27250,93672,42465,67098,47388,12016,69377,69085,27464,34370,58906,84707,58278,98969,62210,50762,54568,54182,58421,31408,48695,45685,43847,47184,65394,11897,29421,21634,27445,92171,21091,46191,98969,85758,89074,83342,58031,63491,42467,38075,68951,37606,28447,30112,83636,41373,95400,33028,82802,77476,71315,15716,80653,24974,64421,59582,18787,97409,45264,27754,41450,86735,68863,64181,71742,67791,48033,67514,72439,64331,23081,86588,57919,92468,74152,43050,48465,24257,33040,26726,56838,44998,63623,21179,64562,63119,57004,54492,75840,90195,55892,20923,77792,67781,38923,46551,37471,42555,37838,24569,43594,50720,70801,66865,74949,66958,38301,25529,59907,74082,81154,74817,89308,91392,90096,56717,18893,57842,67546,61478,32944,41214,53082,77026,81992,68161,28238,29665,46502,43423,95042,32679,74469,25431,53099,33289,28976,56835,73069,32728,49421,59768,91091,13305,39389,68149,86252,30738,57103,57311,52511,24645,54667,97223,93262,62729,35069,78954,81762,68740,13932,54611,56127,57382,14651,84183,53459,33695,77141,77920,28029,43205,96907,78079,29912,45159,21532,41939,54712,32270,85558,82190,61739,80789,70187,16790,93535,83207,48295,27743,68848,58520,35741,33321,49255,16071,94722,88369,11697,87723,27815,18737,36410,86175,57270,26326,94860,53546,68874,63585,61928,20511,64031,45647,18876,57596,16166,68399,21846,87635,22298,84754,13437,33767,47075,28895,87880,13803,15744,39207,77056,46750,79310,62441,86122,69271,31108,36826,16388,15509,40103,15531,53297,68034,39297,88968,91098,44184,86303,19939,24603,12256,67460,98799,28479,90698,77339,24590,43432,66417,26661,85868,84762,42958,46731,97579,15747,19483,11877,73138,24091,18050,45631,57176,38684,54266,70042,81329,87199,64128,44266,65774,63414,42705,81869,83411,20887,21700,43190,82088,49787,89662,63310,41927,15498,95017,10067,46079,33733,52097,10851,37602,36291,47088,89157,46059,52252,38292,18911,91302,21601,93937,40018,98489,10410,50652,19713,90842,95950,77816,67875,66349,93525,81763,95535,63512,90920,67932,94443,67493,82428,79742,80252,91964,61371,15232,88799,46819,81286,95401,40378,62463,37841,29602,86479,30500,40004,41853,76300,70231,59237,93171,69571,34867,58094,50368,48774,72330,10749,87138,58697,85729,59885,82036,13968,86710,28512,71540,84357,84134,15943,12169,28900,61480,89871,96551,93355,88077,89260,87974,34146,66914,62646,45421,64229,34727,24174,78154,80413,26039,65601,29799,30006,23871,84432,96693,40796,92619,19234,63523,98268,45858,10394,56699,51256,62059,58510,87192,73270,75511,49421,68709,35928,87442,27920,65797,56472,64272,18197,51318,99196,10146,87510,29987,49264,60540,20958,84019,53478,46062,88217,27756,78419,28303,81635,71476,87007,89107,77583,16573,59848,47091,80120,96843,31349,28048,44306,75850,14951,13282,16424,67376,18651,43995,60673,70249,27980,40767,98275,73979,92729,92305,18099,18222,21582,15885,67422,60765,40388,35666,35418,47144,24815,97035,81206,96364,87763,88705,37544,26563,89357,13193,15021,54363,73772,98491,99450,19307,26604,49514,25552,48999,25774,66915,91277,94153,27646,88771,80595,28207,12668,47943,82686,84664,89476,87394,83535,98311,26886,77048,58102,62942,14908,16733,73828,20705,79346,63109,84200,88565,74202,30642,71613,54487,48070,84553,76445,60983,87525,98334,30078,43035,81856,90017,52300,11856,92606,74643,62959,80811,73832,74609,75315,89828,28031,84047,38683,11960,51210,15654,17669,83291,76387,66429,25949,32988,61140,61473,27224,47819,48694,24411,98284,59308,52225,29692,68095,64568,63025,26127,36853,12585,39068,48388,29495,46110,83793,42592,19443,30614,51750,57445,21319,19937,74046,92118,36545,35341,36082,31830,20239,31791,23475,74984,29265,57507,23587,23340,35264,41338,38614,33278,94340,40574,77971,42832,11338,69561,36622,86501,28758,41137,36746,22654,42675,63360,69838,32642,66423,43589,67233,42280,62458,99691,24324,78760,37422,61275,26582,71825,91726,46588,17898,29773,16694,87929,32337,49383,71254,71644,85864,75963,13973,82766,60856,70276,54841,89954,25025,69286,45003,33294,93125,34857,59625,40695,53998,12664,12700,84118,23215,19292,88745,13891,58800,19400,31356,70914,39558,18504,58198,65933,42332,65173,82077,56249,85012,25325,54838,52440,90305,44519,48801,22486,21524,53813,99257,47802,28348,98067,12497,68687,46702,77680,49469,42318,10981,80342,71235,44289,81658,31193,85354,64822,47645,44944,68978,40957,36216,28983,97985,91067,41085,69963,53264,83230,95946,33028,16172,13055,42414,59405,17152,16572,82982,87498,36298,96940,18734,60701,84864,49661,43386,94516,56754,98085,23039,18292,30803,45432,24935,74967,11495,45828,45110,88263,33326,25345,10790,59461,34568,87902,50997,71862,68847,43512,88768,59765,86055,79125,85711,63119,95572,41475,13152,79237,89484,14987,21628,24958,90164,43747,74167,11465,76657,56802,54501,68853,62332,36805,49733,75551,89749,40794,28101,78773,65629,84974,95958,34779,56127,44714,80488,59362,62218,60683,21189,36756,95619,37394,87594,54330,29950,11538,55404,33794,93155,68915,54574,80654,98472,10126,46540,46848,25592,43847,12293,66561,32500,17389,29887,85586,79829,76198,33197,58221,60025,26813,42541,84754,96757,73641,64205,50037,95363,68634,88192,66594,53531,59822,32054,89961,36847,11484,28107,48208,36679,96517,43228,96076,43609,68852,20242,60858,59213,91794,55590,88887,75966,68989,80567,61605,49896,93632,51102,56974,86472,20492,13112,88168,73971,20357,93350,18876,34980,89302,33661,52358,12402,19199,96098,58954,66447,82621,33547,21516,68094,41184,19578,89894,19035,33427,68172,48419,27252,68019,56759,23239,80765,65196,37376,82644,10503,49741,14165,57177,44603,25804,36770,76970,97081,24098,24871,49745,19663,66991,86924,36286,23390,22907,20862,98053,35562,86447,74433,77702,55244,88825,28110,41538,14737,32551,99823,56962,41061,75953,55528,84433,21615,17548,77659,51171,47028,96765,69772,64457,40970,62943,54079,57110,82709,54130,24380,74228,69886,25329,75780,33093,74097,34016,81866,45978,17970,68429,87482,43232,63371,67483,93574,33748,44509,20841,35575,12588,65358,29755,67044,47213,64893,76924,29159,96853,63912,87894,66127,77955,95930,82027,45705,22943,81794,83572,30895,86119,33536,24395,12451,96389,27045,61052,33652,11132,90471,69495,32670,57900,15415,42812,33075,30388,24158,63659,13680,69664,29870,48325,62473,50250,83358,90935,41449,18912,74172,96990,70557,32004,69109,80042,66703,12781,68059,80770,23263,53054,36174,33944,92200,84415,38546,88533,51371,26333,49295,88537,57776,99716,53963,96570,46180,69701,74018,38490,75721,86385,10781,58776,73088,77497,37266,68181,83722,46469,51502,26480,74348,34492,81104,52687,34975,62191,72148,17345,61062,38013,57422,25748,40631,44162,50512,52791,78598,73223,33746,10025,58217,46758,20844,68823,46451,96452,17672,88335,52718,86076,87845,48276,65634,51038,74960,51932,10935,78915,76002,39954,36042,62904,75913,49129,13371,45735,30870,14021,44184,59636,67992,93232,45067,36680,45850,18857,67270,92141,68177,80573,33324,63765,32432,60753,15058,52448,99746,50470,36711,80600,74643,83947,23687,56230,57695,27392,75783,73770,57750,55240,88980,19308,59207,29845,58055,63450,66665,68410,98835,27932,64672,24280,29751,84919,15177,16999,24262,90216,41799,80724,94395,76503,41805,86723,97724,43246,88352,18319,44405,83929,11271,11012,47969,11754,78817,16277,68003,21181,30128,73839,82233,32824,68050,83847,54157,96257,29365,61573,99071,45197,46092,25583,49293,40837,74790,79064,51211,27316,67953,10816,82375,56551,21008,46950,72000,12655,28414,48630,51298,65538,12734,30166,38922,55505,67015,19874,85977,62073,58554,42007,62775,51277,52855,90336,29188,35831,20566,63113,64281,90343,34655,71721,41259,85792,78541,62020,40469,76877,59282,93692,15779,72729,52481,95155,82450,30200,17641,97625,11437,10623,35478,65840,78141,71243,21133,45876,20769,79162,20967,85506,82926,81112,68180,15760,49759,69450,97608,12999,86602,69927,11702,55683,59113,64976,68812,23709,97246,59616,85165,48051,59432,97900,16707,47532,18888,22033,72026,83231,23096,51219,54444,27184,20523,92954,67183,18428,37284,90593,72542,71446,63841,83754,80080,35858,99845,61797,93798,45822,51925,49380,35657,82838,33958,24281,37449,76533,81511,94178,83067,70913,70580,31449,41102,91713,38252,87485,55344,24582,24440,97895,15893,84589,45061,38856,21645,27674,19953,17583,35172,39386,93381,36241,30379,99383,39070,28051,12803,32930,35400,10287,36273,62594,25225,95635,52449,15160,90746,65648,67668,15063,58833,14244,92787,85750,43299,76800,88191,14158,20392,38132,49642,54091,16428,87923,77638,85923,40036,42080,22043,73575,60508,89183,75465,87108,50757,55549,73701,34476,32361,46971,69885,97709,98179,88532,25237,54726,20475,95068,56771,17140,44469,96809,69286,56545,58967,35582,49495,11167,17301,75755,49262,88857,48427,47497,68172,24438,34992,83052,34270,94667,98855,98793,41471,79335,92429,86187,59561,93161,11198,24297,47111,54909,63721,29331,28384,85352,29543,99771,55271,24546,29455,31700,46957,77724,79678,33260,60430,19011,85336,22041,22114,46921,56006,36005,99805,53653,64065,47574,70578,43254,59606,41217,94294,47222,63304,38686,43430,98037,66494,89467,42550,69275,28021,40271,76813,91625,87433,55241,12092,15557,14993,58857,55247,69362,24599,56721,51153,92768,55118,91910,96933,61606,95268,65437,99066,67739,72083,73757,69606,39205,57829,97179,22027,80937,39281,78230,97926,33027,86490,13474,61939,73720,72058,37309,72864,51090,75388,80211,80610,64713,84019,36874,87498,72142,62854,52552,15427,61106,63029,89373,92920,34602,27016,87160,68734,42461,80065,85949,11994,38269,65164,49058,93497,23545,84400,87104,79358,35548,48239,81917,84786,13685,18706,86380,18850,58027,64901,93232,51132,43594,95713,92328,82924,78627,30404,83422,43061,51056,66677,84152,45814,22706,50745,28029,90656,32724,86207,45760,47450,96566,85855,23096,28025,77086,96550,68271,76965,55719,41356,86293,40828,47073,98027,42757,87704,89528,50779,27992,55059,81945,99498,29388,59796,58467,61223,91498,84599,27198,85859,64088,31614,35125,31717,61543,15347,20088,47902,99123,59385,33479,98607,34773,46068,51732,51553,91490,61506,52311,53215,87593,83444,38588,70231,22757,19866,44335,84146,40608,45278,88587,44356,72945,63080,75251,54770,85951,69908,69505,14556,14832,28225,92152,51248,56284,70603,48335,91076,36393,58059,51835,18004,74838,24828,78975,38283,74007,78262,44936,67337,25947,89114,17647,51670,27019,73364,62981,72871,97997,79617,83383,35259,46114,77631,19520,49758,62074,24726,40971,14044,68720,62976,45975,24425,65573,51236,66318,41342,62098,97335,35531,15818,86569,72925,34429,34797,65775,36301,69253,35942,52083,66352,93877,94524,63238,23292,67241,89308,83816,53862,97518,54769,33540,57500,69603,64627,44146,64401,26796,54058,28024,28048,85081,20244,52511,51861,44140,79809,50883,73517,96262,30023,95053,45616,57214,53729,45141,69643,45921,17985,48672,22127,69066,57821,11831,81993,99810,70977,34758,63000,40442,56166,61631,96538,10731,22945,73375,63199,45706,25985,82456,72574,89272,83956,21143,36935,50406,45786,38376,94178,56950,20789,11657,77989,98530,38965,49571,28192,24208,59232,24906,28268,79492,69330,98557,38613,89862,63509,25792,81572,62541,63266,98303,31150,89484,32374,16121,36456,52853,64146,17015,33211,73368,75086,71945,48334,93468,99648,67131,90079,12888,93034,32187,67740,79944,61728,68806,94222,51383,24093,79434,99960,65925,99665,60698,91924,88616,12436,54166,92276,23050,15200,87286,66785,40342,46589,48330,98465,17045,86112,96653,82877,18790,50459,72334,31667,43191,59603,96542,97715,20098,70701,61156,76458,54203,50619,52709,40893,99751,89080,61486,74501,91941,95159,72693,53300,36577,96423,72336,52620,19805,85165,44568,14220,22727,27192,59766,10544,26143,24834,32866,23351,19500,10106,16159,84725,96903,98845,30893,83371,56000,22670,41177,90958,42959,50663,23155,24528,95945,57787,58842,70729,87552,75353,80098,96203,47897,58005,85686,61446,64507,82921,42799,89718,36813,72339,18075,72944,33680,87257,64047,52146,28485,25185,75389,51041,45111,50752,79047,61280,20018,70918,89998,85279,68637,84626,14635,18938,82091,31895,97805,32271,61472,48551,55495,91372,72822,75293,28167,76086,51114,90091,45668,82565,29556,35233,14807,38260,22672,46371,24183,13952,40050,35928,69469,99977,60220,70538,15005,15366,54952,43103,84750,35872,63690,72552,35325,46664,86907,82006,45615,70031,36781,54909,49014,77639,68627,83434,22432,57798,78454,44645,46238,71275,50709,94020,41642,81361,25268,54395,96381,20180,98651,81422,62971,33044,63092,24644,72494,31146,80841,74426,89939,51277,53734,98494,17054,63760,16605,26311,45568,55919,81943,77420,97119,38929,58376,23801,90809,93725,80203,66093,24157,48307,44277,12017,17701,53794,29203,84536,61615,54597,70934,64632,87702,48311,18269,94159,22409,78477,54681,50388,41698,73307,47280,22098,56144,45147,52725,69436,46319,13997,41494,68362,75684,60957,62557,34340,94388,98587,18713,37429,33165,25082,86847,39012,37708,78184,85529,10047,48339,44522,57661,80080,87104,15429,82096,13225,63149,35496,54348,46698,98075,74483,38324,24828,32595,84278,76061,58925,82318,11424,66113,44558,26655,36117,84782,74861,49950,28248,58792,60692,60513,99182,40332,17135,73984,16847,54540,13842,13349,90135,33919,37989,92077,33788,34820,53117,88727,19538,14374,76473,95192,36282,71086,31558,74541,95916,41737,65853,12026,81685,25693,95184,59660,85230,95614,13896,58658,47144,19396,63190,13092,16354,66576,31680,54109,81161,82476,38974,47113,14214,85320,87179,82380,97825,67722,44796,51636,97570,47897,67432,18353,86121,61796,87138,45168,97645,82004,51693,72882,74587,50207,12862,78013,86918,86185,17466,54300,40265,58566,17527,70823,82078,53005,95847,48526,10995,70238,94661,82422,51504,12120,53387,47665,93090,55786,12034,75043,11152,34959,38159,18768,44729,31668,54731,13696,53332,98135,48702,50590,82735,14829,72389,59404,77028,11907,78802,19796,53432,42775,30628,58026,59336,24714,30984,72902,72061,14617,91698,88336,15184,81078,78893,23091,44284,22631,79913,48895,21870,55512,87113,42129,15091,89350,29427,99694,46348,38111,39616,31493,95235,37158,26778,82171,22408,77199,26950,49459,98551,69795,98422,31166,13095,95111,28493,94589,28765,39858,88254,35455,88756,48328,52904,40430,28661,95275,57087,70910,63867,67035,50157,94620,62852,79060,53833,25108,51639,95659,53227,36011,90393,23980,42533,67830,46044,45452,36777,80192,85424,31933,29769,68130,90332,38153,38613,43754,43671,74667,87140,84375,40912,29071,55908,88009,21261,55665,81656,42045,51991,43836,74700,52317,85453,30888,47352,28593,79875,58742,91211,87349,55255,95164,78410,28114,77768,52007,78379,87542,81059,77441,47989,77242,39139,32552,75339,62927,53576,65817,12127,26125,49223,30017,34092,84684,40762,84627,48125,76979,48875,44319,99800,42566,74973,32221,43549,58591,52030,26095,63684,75051,16839,48386,71327,70686,96490,75688,90483,75772,79450,38574,27574,31243,39737,34902,57127,80094,19999,28628,55738,42777,66924,88916,94884,66156,23978,54680,83611,94033,10900,82906,61206,35597,93695,66767,76969,76786,41551,76897,36164,50289,30798,97008,58109,81956,29584,97712,22086,48015,61186,26921,77053,78629,51817,10562,30813,59269,38102,27398,65376,10430,90115,17366,46876,34712,66098,24246,67334,15619,67837,37566,30019,47158,61046,52174,46680,79278,62531,23054,38371,34067,21525,67617,92194,92378,24743,44809,44796,93939,36459,47663,76389,13000,80779,25232,60665,79946,20489,93860,73292,68939,86234,93336,47416,45051,16406,59567,94774,71633,96998,18712,47602,65039,43095,75788,33036,37382,12282,54119,31395,37863,63140,22192,87488,27047,47079,40595,87925,15225,14911,52922,75801,15514,19546,27585,66681,19600,52501,12683,95343,42897,66188,14619,93785,47564,28739,54832,56108,95410,68920,57052,30128,59428,47846,48324,34261,67740,89229,40086,54037,19628,41088,31081,84242,78390,46528,96367,18494,39027,86098,22483,41879,63013,41505,73179,18090,67032,86762,33058,12204,43440,88581,63073,49286,97280,93820,42846,30533,28854,61865,58109,89351,33682,77991,25133,64273,33326,47767,34253,26744,28432,36383,58835,68573,74768,17676,46435,96199,22681,28553,53129,15783,43469,52239,51265,68794,66199,68776,46491,80443,56930,23495,96212,61048,38420,20992,15465,51845,83675,75789,77499,71576,15717,87419,11304,47715,43458,31805,15578,74750,50819,39056,48020,88225,85454,47507,54352,85294,11541,22597,90557,18115,30700,12522,82298,40821,92178,45507,28840,24170,22440,89582,94336,34679,18087,64142,37720,27671,58035,79769,57457,27808,80729,52571,86549,61084,95916,95514,96355,60655,61962,64965,78690,42700,52622,13815,66335,50154,15873,23578,59651,73127,53977,79580,73558,17698,27743,68581,52246,65017,42284,64384,64977,49292,51315,79536,53896,38214,44024,39312,50064,41616,87604,10311,83505,48152,90475,73837,94612,43355,49522,69666,29839,85542,18432,46924,39374,13462,12074,77702,48687,74316,75135,26365,67943,70437,63656,37119,36288,64424,44488,83932,42122,57443,45853,33698,89801,68159,12115,56510,21831,84725,25161,86634,92105,99854,45895,93700,95278,11455,35627,71715,76901,74052,85059,51720,48538,66935,23423,23266,98376,57566,27584,81075,98866,40860,95720,62955,55453,73001,50212,34243,94384,11389,49023,19348,72634,11707,76670,95851,67496,37640,23313,13378,29194,59456,56821,89144,99326,43184,25232,84958,74761,44939,60900,52331,50306,85693,51800,47790,39017,41283,61207,70731,37635,90609,22397,70949,34639,16023,92623,39572,59679,83963,13682,34141,24654,92699,36543,73047,25219,15154,57721,87342,50513,59523,59949,70464,40375,56184,73702,42308,88263,42906,27583,64912,55923,62272,84035,99651,95849,87599,24301,35932,57785,70790,30018,48551,52564,56984,55041,50535,61283,14769,67433,40684,62084,44959,86203,79381,89093,93133,42041,76284,61497,82859,78012,59443,27800,32501,82342,11342,79599,34957,10453,22782,91469,39949,21197,15399,43236,38246,15138,58325,27490,76113,31595,15603,85519,57574,27079,79275,40122,15249,22488,29513,39405,74169,92849,99443,33742,37957,49661,94550,24894,88161,67549,42045,87910,12858,58077,87110,36054,61231,75176,75063,48290,54110,55954,91210,58712,23885,51408,62537,32838,91623,80525,28837,46941,73395,97506,13863,18105,65526,89069,80364,70928,39905,58619,60764,47474,26845,77370,60916,54786,77630,84933,97551,73259,99014,15189,80702,79548,91950,31366,62470,47984,52805,89318,30780,61056,99401,46917,88889,98602,61455,90692,29951,38473,21752,98044,34192,18853,74023,22362,84457,70937,31304,89134,42680,68953,74841,20671,28005,57731,96829,55165,89311,64504,75515,63731,99836,61566,32521,68621,32370,95851,72802,28363,26940,20925,79439,68339,52320,48755,43834,93266,27698,32511,87264,74320,44240,36023,96523,87346,97325,10633,13931,39883,51286,69784,72481,88370,51102,97589,47320,57739,54540,55978,64208,65705,90528,38532,22225,50206,94050,94679,18933,34484,42404,36529,86905,63467,88054,27414,46715,71855,53882,57464,34043,83120,80425,68233,18791,34813,59134,23484,30877,24480,35075,20943,49264,48011,31766,92725,51523,83395,25263,96683,31904,94755,93376,79377,28170,56934,90608,17106,17538,49698,54005,29379,36995,17759,13333,54543,43172,58344,16637,95116,71623,13663,33864,47775,95242,26785,98992,64544,30784,49520,61699,99461,37353,65195,18603,49109,84979,32596,26210,86078,74250,92645,35261,25068,17487,33203,50833,48049,85774,77128,46125,87209,71364,89878,15574,91968,89319,96468,85652,26851,44099,98149,35250,89612,89305,23695,62766,16934,42870,28437,91433,88962,69370,39107,73371,81063,88398,49735,92791,96583,22131,58022,98904,63357,41234,29362,54992,35791,62298,69737,88580,24626,32078,46526,16939,19738,28671,88723,43881,27614,86976,77775,67915,21613,75028,27469,71983,70289,89580,89698,33209,20877,15470,20659,55585,51681,58703,98402,95226,37864,44516,52918,46791,56743,64571,86084,14149,90009,21030,61698,84171,85235,62724,29724,91094,61218,21168,94917,52536,53450,94922,77641,77483,29030,64213,69422,38555,34593,33007,72606,46337,26953,63228,35734,47474,20309,53604,33981,13561,69380,82162,79704,99871,93062,15306,52436,35770,40710,80766,64604,34519,21435,99489,71297,77639,90376,94063,97866,44608,41755,78360,71307,52043,23812,40790,55491,27785,96588,64621,88030,86648,95392,83679,55298,92522,63664,42258,29147,53415,97718,59745,30373,43061,94195,78679,51029,11531,48361,29973,86538,62872,48257,66032,25698,92139,49872,81494,71508,87872,82997,92020,39022,87505,99577,47996,18253,22786,37041,73825,86423,24025,37959,44808,67288,67066,83751,54449,41599,70951,42087,88205,85981,33191,51408,21290,50956,23742,78474,59518,65436,50810,92769,33902,37687,71287,74765,53812,37238,83265,31472,82454,43198,45594,25279,87308,60366,97349,10542,22532,28810,30857,74434,95478,82182,26136,70221,68921,57750,83764,79267,38850,63041,36508,90184,41978,42268,45011,76362,93065,88488,47426,52033,50864,21409,16915,79128,48006,82623,88523,55535,63156,23430,73864,49892,77776,80266,86732,91967,91771,10092,29539,20563,60351,47324,96289,32945,64830,80323,58824,34546,12046,91664,84768,43220,83756,84217,28199,46262,97952,76641,26230,21097,83476,10241,79782,44181,29348,77507,19981,48241,45250,56570,70026,97628,57494,12609,72056,66583,21707,62692,69365,65667,66880,84370,29024,72924,30643,81662,88298,43435,64724,12542,45675,34810,90838,29810,76832,12681,25973,99630,95373,74920,62852,35006,43251,52552,71585,81989,24360,22746,44322,90286,75778,38431,38929,11755,85540,67819,58044,42521,80047,40429,89452,58585,91674,54624,70792,87168,92470,36103,91972,35764,62063,92528,73410,56903,27314,33012,41375,97761,83709,84376,48533,55285,88095,80084,25288,62833,36097,65948,60200,62783,22486,38290,91832,68494,94067,93028,24875,13239,86701,62370,31854,76682,86491,92516,95925,53758,75497,65408,72678,58621,69713,21258,36465,10072,23473,64244,80854,59884,57577,81381,42777,62131,68744,45995,69029,51690,63183,58504,50699,33977,22885,50559,10903,43038,24252,36320,57339,50094,48983,70458,61168,70402,83874,91012,76900,51555,38003,13671,36156,34415,68752,20591,91706,18192,20489,95139,90208,74622,45889,89791,50980,91299,43361,78190,97823,14829,97327,92825,14646,25184,35181,41193,13921,39265,40898,72323,95808,43581,55151,12233,18990,91907,86386,51899,99152,23474,60926,16231,21653,19985,12780,37875,92890,65577,19124,45033,34089,90865,56627,28675,76296,34060,67699,11355,36883,89851,33715,95937,38086,72199,57032,61275,64952,73022,66687,43593,56640,74779,64952,81552,89426,75889,51752,73452,99328,24881,38093,88411,87058,40960,51859,56457,31110,44643,25909,89745,28879,73306,16239,41221,70027,31804,81087,18978,12028,77630,89873,20910,13505,17044,21288,16476,91536,87399,43001,75424,74773,49046,54985,38651,30602,91034,27422,10635,92081,45900,29425,64753,80683,53464,96949,51334,78504,90250,52129,17052,75798,33562,58017,53260,11939,11925,67731,21230,80437,29645,55565,73101,19877,85573,50662,31657,28909,55604,28371,66821,10915,74511,56669,88632,58257,37165,24760,11202,99261,12129,75265,13336,95804,82732,42417,57708,36926,79919,12461,71081,13519,14177,42441,96969,13077,34607,56500,70456,67139,48589,26723,22993,44057,63286,24130,28317,70557,51868,65828,19612,42056,84219,90849,52997,85292,28602,33402,48348,58777,81604,91010,64161,23382,37114,22062,21682,46859,17874,30830,97124,58100,68021,57011,99270,89966,74943,41876,26187,32145,99633,96750,19736,47136,15113,59611,55413,54034,76079,58150,27036,93087,92568,19992,93198,43050,77675,69783,11964,53138,63579,48683,55410,17874,83021,92832,59576,89151,55281,24285,44745,66088,14497,27524,85554,46936,89766,56763,91880,69643,35529,41581,55979,78151,13941,55094,67215,85910,32872,33460,43122,45581,35907,36189,50428,77688,21107,66428,38496,23397,80771,90761,68907,54986,37964,44417,94535,60863,99152,73819,67345,67209,35662,43310,53430,58481,65853,92834,59858,65386,50657,93427,24783,33055,63732,96321,88465,41101,11719,41839,24577,24338,43861,33829,45713,71281,12959,66869,54287,73504,85710,57937,11225,55760,13342,17289,41969,90437,70591,72464,56866,23275,96091,48759,69399,68252,49919,17597,18088,13860,34517,73059,67398,24068,55464,68692,54986,86853,57507,47265,31988,22700,35545,71814,38540,58554,25176,93935,95370,29027,30276,82857,62840,42726,76936,81623,77367,79100,70573,56986,48419,38388,41556,11778,64188,76728,47573,94821,46052,79555,64233,88272,44101,18435,77148,61961,93688,12383,81461,28716,69027,43126,46668,21284,92729,10486,60868,71264,69421,87695,77865,66211,62088,60452,25536,88357,79789,86425,67637,56537,82089,24867,21368,29622,88333,20585,78256,57802,59259,96958,16744,88421,50949,92206,61370,70446,37194,16799,89463,55811,85651,13355,16818,24801,13750,38613,51279,74247,34648,31331,48941,62776,18648,70682,45008,84086,69543,87975,43460,94173,80640,92620,21524,47622,79790,69712,19287,87045,37366,92146,34541,55998,38763,77263,87408,59055,14393,28997,88867,83391,64878,46137,71483,71504,77705,35503,16393,92106,14881,35796,19555,68261,27424,37458,94605,76467,22931,74393,71270,75718,46146,84853,64639,53985,87747,73862,39370,81357,30780,62436,97193,41619,34605,98673,29514,73297,33888,14008,77652,68103,22347,76999,74317,15747,66361,12002,87037,13511,27205,97743,81728,57115,15487,74643,65077,86952,15892,25344,85688,70443,99528,17840,24277,75364,85383,96404,79056,32319,68593,47099,31813,12329,23255,45052,25880,77985,47706,90984,86595,91995,74635,90925,62931,49392,19879,50240,33001,27063,14009,94060,17193,13495,25714,93127,42660,16465,43646,69648,70196,85115,35838,96089,21659,37300,80711,90683,60014,60231,89003,19621,21443,44093,86733,43262,37979,22642,20940,17726,47006,23347,55545,93165,78853,60747,95404,90500,52758,47098,40480,23998,40315,32056,72452,50482,19519,81130,55677,39642,80652,23707,67113,83331,99215,15556,99628,84630,44940,65474,56857,96842,54968,36942,48726,91602,92925,17320,88106,73687,69846,50441,18087,14823,12916,29921,46096,74931,79913,16084,95359,70409,53829,16305,22168,58777,91448,10965,82159,89078,31959,76198,73906,74950,23553,56388,63406,89549,82009,99393,68569,86434,64478,29761,15325,29794,51578,76551,77956,58050,59720,86009,87915,72224,15100,90271,14802,30594,64904,86418,10397,23189,18908,53757,76170,93563,29745,94589,79687,73448,74011,55550,75558,45479,48930,14602,39982,49596,55234,48445,22239,50391,78009,75764,42675,86560,27784,22373,90768,30452,70107,46372,55701,47009,63836,28924,54705,45820,54448,64756,69640,74042,88158,44099,27580,34928,40946,81220,71252,42619,54562,13530,57220,32821,57421,26932,11777,62276,27515,28846,97365,58331,42519,89697,38787,87689,66715,73441,54515,51146,84878,63127,73422,56719,46127,24524,62352,57069,79153,97143,62083,43699,41502,73459,31570,59049,52845,61575,80043,28835,79249,37933,24147,67420,95770,60895,56967,75655,83564,63665,42405,69267,26228,12161,15563,31429,99831,88868,49070,38987,55534,95315,78202,25608,60715,20303,27838,45433,20107,19423,67626,55324,27030,34486,59012,89117,56157,47605,10343,78133,36084,42121,43718,70175,99528,98620,73176,65784,31618,67390,59234,22236,57483,62597,43090,22272,38978,60781,10803,31857,49112,67644,51344,85911,83861,45882,87266,80757,96858,55270,47123,19440,71354,46333,77421,63119,20043,92077,77194,22693,76812,93774,39250,10665,85041,54375,82041,17893,20404,27783,73387,18295,59917,17576,73923,76808,24650,47571,64793,33806,97287,73797,19551,87069,84666,12155,61326,75026,18283,50220,50082,46289,25525,97861,99257,17383,36473,25133,19189,53881,22657,77180,66134,66702,78795,18560,83182,27002,65584,30370,16005,76936,23014,82307,87364,78588,79476,36944,47940,92375,55075,35495,50086,69133,19662,98402,16635,15972,84037,98954,27635,99066,72645,11554,49737,34035,72606,64309,98102,64331,48896,81930,61063,82781,80213,24927,88970,19846,95626,31438,72634,94885,69186,29388,22258,10525,36512,96561,84713,50442,11228,29173,61491,90690,41427,83626,91036,59243,65234,54901,39483,44917,76084,46992,63428,40258,54511,36609,94397,48346,95399,78982,22969,91546,68456,58345,42129,27923,58858,85428,30255,66801,37159,19189,45193,26607,26377,49514,40727,69163,39941,54604,14929,73936,45633,62123,91025,10388,14915,29483,23151,40913,60013,31606,40614,33824,80446,39539,86969,78422,98879,24993,35910,56580,71374,41328,77168,71490,87357,37689,91074,74440,24356,61639,59733,37938,29866,33384,77907,65934,90483,47713,23813,18163,45832,78103,59722,50647,44313,64278,22732,44435,47431,29191,96021,79273,38042,69400,57994,74672,11678,56403,98838,11578,62461,75953,69388,76406,10668,72837,64352,44323,90421,91245,26979,71516,43070,16996,70120,78001,72690,29515,54482,65711,86653,63084,27627,82106,96011,80626,42960,70350,37447,24738,16823,58510,54618,53092,99409,20440,32139,60059,30861,60184,46529,63194,57125,88089,60679,91074,76395,33392,58007,10114,97751,94240,75925,15699,41217,83975,19130,20545,67347,86317,62209,96583,14259,78570,74069,45462,76497,64859,47120,23777,76100,75609,17781,97365,85677,48013,58548,80494,86995,83250,61637,73739,91890,65702,46026,12659,68755,26023,60349,53522,93490,62582,61745,24279,39343,62470,78881,21268,57041,17992,21456,71277,56885,17756,46664,11782,51061,66806,68083,59850,73782,66382,38345,44745,36176,82652,32957,20174,49179,79107,81578,41442,30103,34154,86249,63659,25396,60700,56519,25139,18155,90165,69034,49384,54769,22670,74846,62415,39814,75492,22042,74749,86523,32033,98508,68058,30644,97311,14977,53793,75142,31719,43013,83713,85135,41119,36760,30967,22721,36938,80364,11149,75767,48483,95896,82943,35646,73505,40798,87969,50387,51323,11923,83514,67462,13799,76432,87398,14341,91663,76226,88141,14859,69003,64423,26001,39918,36765,40196,29183,92737,46305,16354,91049,71449,67291,88737,10092,84521,22057,46016,25364,45167,67225,66868,53212,68720,35398,67075,69488,86405,89631,44216,36526,83674,15755,64363,57203,76143,73386,66032,52029,13072,87694,80450,62471,61777,43775,67507,20577,21907,80652,81885,25116,16796,49024,28595,67667,68141,89716,24453,46872,68040,35046,10427,89890,40880,41607,35550,50268,41912,92955,17225,13689,52693,45546,60347,27491,21377,90792,82543,75833,24914,38563,87916,72586,33494,79304,21274,22818,65243,29753,95968,75741,78474,78486,13154,57585,35078,96369,53143,36369,59222,14071,70574,34434,50511,54926,39148,62107,95729,96243,88435,10722,12991,79000,43634,77818,41071,56536,64282,32634,52937,32955,29299,32917,23043,55784,96785,53677,54155,68601,47560,98536,67966,97466,62484,69765,22676,29823,15940,92337,26539,42759,12151,85721,62375,94077,23543,92927,83034,43575,56144,83951,14574,65847,75579,52072,30002,55441,68226,18445,13714,83382,46300,61285,49222,94187,98641,51380,33474,69264,28711,63891,61863,56332,46201,36754,28256,76911,70922,45860,44403,81839,79897,26010,49359,76521,67459,36266,76282,98972,70334,11160,88326,16881,29064,53789,96071,80133,38803,59757,94189,18201,81226,70693,91071,39580,85938,36536,87713,23253,58803,44673,76062,51077,66452,80377,57106,57836,77645,26810,54488,24131,19963,93972,89664,76046,11869,11780,39303,67221,66602,30778,69912,65979,82199,11660,20246,72411,21725,39476,20742,17609,13036,76277,19798,31986,18721,70172,14912,38027,75574,17320,84703,80875,12581,16504,36410,19482,83557,87037,60921,15187,44145,97415,68666,53300,68257,82352,64255,46779,53516,27997,97179,52644,38648,37606,16438,14017,79783,37693,15941,43397,28766,59422,55859,56497,59290,87663,80225,12394,79596,94937,83292,47449,61034,55942,19597,41801,73238,73631,98324,81093,35983,64898,94185,98623,26024,12729,35380,47426,85975,25666,61196,97884,73455,34760,81575,37954,12739,86051,16699,46685,36140,22088,17304,25737,59111,76603,43369,13771,31027,15673,45180,55412,21356,65602,68586,26206,25999,52632,54483,20638,39708,37331,23354,21759,47410,60925,52088,54395,84892,26235,10158,99283,19089,70296,71019,11094,17788,62813,21118,63347,86261,16817,79365,61421,38496,29312,91957,84124,46128,46733,42987,43455,99645,99505,40825,82279,31572,37733,38371,76343,95000,52883,71867,33156,50968,31904,93416,32260,58567,85199,86760,83147,45713,30111,13689,68858,42064,27238,42374,65659,34479,83596,22387,18885,68405,19092,45724,93758,82341,52926,37066,72415,54545,71175,40458,52760,45573,33793,73760,56012,97285,29506,56803,64141,37394,99086,87283,35410,97486,14244,32051,59315,92143,66503,36925,59466,76126,84621,33401,76022,61361,94611,23470,54017,58748,24329,66805,77620,88446,80278,15540,59880,75661,15261,27550,53438,18257,48008,60095,89021,15103,61956,86757,80685,73147,97373,39555,52898,69792,25683,44262,73431,69619,66274,43302,20145,50948,99671,14040,96088,63955,32501,90606,95853,40330,41018,31629,69878,99261,19471,38363,45781,32247,22277,96751,53566,85625,90348,40615,21075,40558,12794,52941,52697,32736,64379,75768,60753,44609,72420,98550,67926,68772,76219,23657,85482,27269,52759,64318,74251,42351,59782,44605,43543,72256,42670,76671,33193,15525,68260,93833,42330,78007,33426,42166,66057,20568,19488,49238,11771,93908,74974,94711,94767,39156,49307,26278,58919,33876,11975,94394,72334,75700,18254,55626,87313,49477,38960,58188,53935,41471,72659,42553,10378,81299,34006,65294,11413,79153,89664,46347,72639,55008,65085,74652,13482,57679,38152,14231,86685,46904,57569,93876,61805,99813,90136,92341,75569,76095,99385,66596,24037,61788,24705,42011,27460,43626,24158,89406,33250,71633,10298,56575,95945,42134,85436,96990,99682,38444,57446,36091,93786,52187,56777,26422,79449,22542,32495,25640,11056,40648,68844,50988,44548,32428,91267,87596,78510,23623,27678,79615,72407,88002,12614,87391,50148,89146,32634,81387,62277,85717,54658,95273,70329,32982,73036,68280,38188,76926,73034,40294,25183,49803,12068,63571,14214,40241,31770,54691,19405,57344,98932,31297,11464,11062,29640,51663,63814,15314,48298,63740,76680,20807,16366,64215,24627,46013,32012,10752,65528,47268,37132,86527,55552,87803,78036,44106,96378,39262,58056,61500,96783,78281,39854,38189,48933,99792,93880,76638,99898,26462,10908,48526,39032,80211,34491,20364,23660,15319,49370,65093,55948,25220,97991,89339,10688,17558,55499,55814,36875,74344,58982,58839,62309,16603,70466,35910,22579,42716,92336,43093,75591,18203,37491,19229,91236,74120,70438,91357,53063,68755,83178,50641,52014,94123,39312,95176,11197,58218,53998,68330,35471,74718,82138,97619,93473,94608,61131,49330,74950,52192,62990,48097,79326,80868,98623,93460,21664,69207,67293,88268,57563,88494,76235,59706,87055,76127,40409,98764,14818,46459,47868,20072,21322,78071,29457,92887,92595,84370,70278,65367,61284,41853,63456,10265,49100,11916,82905,94070,47587,28940,47585,37697,74705,72114,67893,76957,86748,97961,54742,39978,76541,25820,61827,57826,77057,28461,98762,12417,23582,63521,76207,18601,37649,86898,98707,66268,90786,39169,34194,79100,30130,53722,89848,95551,39609,80847,29721,98939,59369,74017,55023,16573,39593,88539,80768,96728,13815,18811,44133,47583,35068,52328,12400,35733,19616,13327,54988,54048,62973,27287,39354,18973,46632,91016,67389,93271,43603,14944,42820,93255,67268,64602,58892,31824,94649,96680,26686,81396,55873,32770,51652,22013,21673,85692,40615,27419,19416,33117,15559,43772,68383,35574,36901,70796,31558,32953,10810,13491,96537,44563,26063,81709,85820,20361,21438,59214,76188,80681,26623,94759,32933,12013,21564,24800,86120,95211,93807,50763,12393,98738,20737,57941,41515,98151,84580,61227,50804,62281,79889,42371,20740,33329,10723,63900,42693,82244,45561,93015,79412,19762,55317,76309,85908,22198,58780,42053,35864,40833,93545,23896,43880,94963,80797,42589,13017,20316,86849,34643,74119,18418,85254,31904,20361,18808,67204,45942,95648,31071,55325,70565,73103,66639,32559,49487,23348,22534,30060,84944,76918,52845,58720,64075,49965,42705,69736,17325,41380,34923,81121,85439,99659,67728,57360,22703,78128,79278,26710,85511,70374,79254,55291,79717,81509,34565,47092,94370,60903,51030,44121,94182,92476,97232,89450,81038,23531,11529,66314,11254,51060,57198,56949,59733,73742,51032,39244,44625,47879,78710,17358,45960,99119,79605,54983,88800,80942,12168,50214,59772,62471,54583,76088,73646,87486,78550,43990,94741,27510,93586,69850,90225,39557,72100,89187,99679,36919,90642,15039,64809,43781,35348,26571,96978,34989,52283,16447,15386,50381,90303,50565,54373,95321,77194,52674,59742,78414,48773,56100,98418,43588,27406,81036,30970,57123,90083,44002,62882,49084,54015,18672,82777,72011,97221,27355,55730,55735,31275,92301,27452,53689,50991,17919,49669,50391,27773,25393,79308,25196,85048,66501,35783,10465,20770,89805,60382,48033,93903,62168,44112,82844,22718,56308,22271,82053,40460,46857,58095,52276,40687,83196,98541,93854,14850,21632,84578,43425,27807,95444,80301,80789,71437,39194,39450,62077,18242,62561,63913,24571,86032,18033,60406,44816,54299,59908,65731,18386,29975,52027,20854,80415,76180,44620,65494,29997,98472,43751,24716,43818,94444,92418,85779,62936,12502,97394,87039,91086,11959,26507,76988,94884,80299,27668,28059,26566,59052,77626,29575,50759,78028,27438,31214,36112,85377,28941,72198,40018,81530,35966,94023,36606,29946,44090,12703,69735,73982,47721,36230,28619,38560,79956,62865,33308,84444,51110,80143,66608,73724,70651,20406,36762,66532,79549,76393,98818,66585,31074,37959,99258,52999,25875,79620,56334,61745,17519,81068,46139,11998,82741,75726,52930,16213,72207,86244,97632,54712,45465,19320,39613,63628,68189,56089,91584,32297,47148,49538,27252,91529,51363,26350,35024,73999,86311,52981,90422,39515,39609,78799,66691,14219,52203,74279,99420,69326,69495,82086,16031,17256,16138,15027,35955,88856,14408,64654,12216,36462,86268,74375,19007,69174,66852,57052,12763,66346,76000,93096,91362,99891,49047,85372,34922,33562,55489,95188,11060,72510,48596,24908,29885,67099,44367,60066,54866,38051,82751,25818,48176,91030,70524,63028,77296,26777,20482,55796,49824,95604,85924,27490,37124,73113,96959,62953,42823,49308,99774,47203,62884,95142,80081,16219,82028,90779,51724,86298,68328,71974,79787,73736,46176,97439,20844,17936,73193,28134,55519,23113,41053,83415,83969,66237,36788,39241,77192,63453,36203,81185,54027,52630,25331,95318,19321,98933,21934,94848,89265,31791,61600,28274,31696,60199,27146,48701,77812,37844,71440,77682,79096,21907,10971,67094,85090,95568,84495,56176,59120,92549,46566,24581,81313,72401,63912,69793,86676,31687,14856,26657,41745,58595,39905,85177,15220,74533,64197,86315,21303,32118,62301,52777,51147,49382,75693,47125,35532,98468,97539,79903,27090,81760,16414,81222,62359,13876,39093,60605,30209,14829,44560,55700,38769,14810,78935,42172,71829,52901,12935,29044,17175,70707,95526,59027,90846,45251,43356,82683,93335,97345,72235,24743,31107,34980,10087,84948,53149,61737,20202,39115,91679,81874,36186,10258,32126,58922,80400,47942,76701,88956,80340,83450,55067,84405,24158,92394,98267,29508,10478,67582,85982,52278,27396,74321,30811,89587,99606,32432,41399,77656,89231,54661,50793,39650,73651,65112,97907,37243,88168,59613,40194,99124,43639,42012,46421,81540,43404,49950,69034,45236,86150,57281,74129,90472,87629,46951,20657,96517,94625,12748,79049,60624,50874,79154,74510,85398,18280,90870,40294,99937,36265,64820,79874,63468,89551,40568,40695,90165,59157,14616,70388,27616,44962,61025,98403,61670,49324,56877,64245,62723,58556,30147,38198,38218,94905,41558,41171,45087,49474,89228,45248,46511,38731,25986,44143,54934,17303,51164,53030,94813,22860,12378,31928,58976,94984,86785,57559,60275,27875,28296,20866,15397,48661,66558,44031,52887,54655,53722,12609,26449,14806,94297,89125,80993,10239,59247,31071,15694,57037,60176,73703,29289,51149,54227,10543,90443,80348,51109,66507,31241,82129,31507,51388,73679,66727,37302,82382,52148,84847,23683,26949,90832,36883,41659,52769,37063,33386,63829,35160,67844,47023,96034,64420,99671,41053,16930,50113,72556,20067,65668,69967,46748,44976,53946,55895,10486,98244,70999,83690,91315,61173,22346,72057,85472,97838,79079,25229,99509,63858,53672,67933,19984,93995,54798,36670,98594,30883,38502,40065,10280,84600,79082,10509,31639,64673,65953,44244,60736,81745,10099,99608,76584,76907,67223,58499,53143,97304,20687,84880,64732,36039,86508,69741,93728,42767,67718,83062,52785,73260,18297,36256,15780,21284,21769,21038,47602,63080,68784,93378,42860,56187,74463,71064,62688,96845,31277,53316,14921,84183,24362,30121,10306,55415,52744,19440,66214,33659,88626,57678,44366,82614,92648,94380,66929,22948,88940,98970,61425,86225,90388,66684,69145,20789,25823,49173,42119,59144,80272,25030,12181,65256,76205,35419,18830,85036,47625,45742,99907,29180,61771,22968,58465,49882,88617,80107,56209,14450,61089,37561,40635,20109,31555,84816,94270,25582,50879,19584,85965,21310,40209,20849,72034,15820,94326,94715,96085,39932,53341,57827,82214,72716,83745,19656,19548,97285,84947,46266,56497,24319,93081,40706,60525,47770,97797,56817,27984,23008,98498,27561,92921,26333,44569,40717,79242,55811,68054,38481,69459,36698,83962,62569,57543,73101,15546,55995,85949,63596,77387,44263,50800,76928,44310,37435,42620,63199,77595,55161,17680,15400,12624,65909,52869,57121,77907,92524,47018,59570,25855,14073,64219,41602,94025,46480,16539,76782,61181,75883,80162,81914,62128,60316,51168,14560,67221,41962,76416,14392,39745,44739,46435,23596,21226,22127,77126,94607,83143,86117,45790,26215,64311,96553,95415,75698,95755,58115,15878,92733,49854,18219,49997,81789,89087,29584,46832,90793,17310,27014,59397,18259,87480,21467,75850,60972,60669,63905,98627,76727,16522,64419,47467,92493,29051,62286,68134,92690,57300,86569,88037,50101,73629,15728,42990,90485,19059,71056,70816,74136,36261,89129,55003,14057,92974,66724,26514,78217,71388,31115,33192,53800,59904,28403,96911,67055,89693,30001,13029,22470,21858,11443,20090,40360,32831,47419,29615,12024,15972,83962,51335,10210,50634,62041,78905,50862,44516,60659,65766,53337,92457,74297,20962,61598,94084,11129,21332,24615,80415,31578,80620,85291,30287,31790,61853,38546,24209,94544,20426,83005,28813,30302,34540,77767,93151,51940,99915,90218,59261,63943,98108,53598,36147,53197,68868,51711,74368,13398,70459,69854,44321,29849,42152,19788,66583,47469,44437,53626,62907,74812,75296,79420,16421,11192,74445,67150,89065,83566,84715,66966,17235,61458,88960,77040,88268,56779,66427,32656,72378,79957,21596,13187,66169,88382,35298,78742,72740,81991,61684,55750,69092,92723,89790,20684,58853,12000,57238,98127,25129,38134,37869,10166,98195,25152,69071,18040,62376,32557,81338,16760,14435,98066,90421,37534,96516,86987,69744,38947,85310,86723,13440,30234,29416,19072,53719,13181,37549,77527,80070,40500,65387,59929,44718,24814,60214,74520,19038,24297,74363,72850,51694,13940,67978,77746,27950,65823,27926,64893,28885,39662,22089,31001,99952,46652,29092,36279,52333,46093,59364,22179,90237,76358,56410,63491,40885,92996,45477,51099,86433,68308,68720,88242,33326,55024,48940,83900,57226,13060,58412,42124,13385,70024,36286,22311,38239,14389,77582,76698,32739,16889,27648,53544,56357,89247,55248,48196,97450,88379,60959,31002,99498,30615,84070,36026,63178,42859,78402,80704,29670,34674,17315,30533,45494,70506,18799,66603,84395,90001,62424,88121,85719,65992,57215,55786,46664,68111,51205,60766,90540,44601,12446,61622,56604,80118,21198,23334,13339,50719,79905,57660,40940,87523,14185,80987,50907,78650,13659,37298,43779,23601,93554,52659,72367,97521,22198,95800,11929,74553,83794,63942,53537,87840,32714,97590,34130,20979,73980,22171,95483,73994,62474,88209,93835,88856,72324,14765,99883,88863,10913,15423,57822,19015,86417,32009,90255,49046,64195,38294,16805,93517,78100,74999,46071,43894,80105,76069,59664,87635,67726,94005,97105,43776,79975,89441,92843,15731,15610,66446,40701,39552,47903,66407,96873,40976,86302,98963,58902,24344,67365,76102,11676,65217,77000,87895,94724,18998,76947,46923,18051,60324,76204,81839,39501,39484,67845,24071,16490,63521,81388,89617,97662,25079,46378,65764,68221,87836,68840,93167,76129,36038,24900,35721,27724,77483,74775,91111,75813,57002,87807,45537,37076,62149,40734,92450,20633,93539,14349,72208,25311,14630,47002,74463,98509,20086,60404,18386,88924,53349,17633,34661,56890,64116,98455,27919,75545,34096,71628,67697,29535,35124,37159,78197,41405,56728,75858,10895,58868,44045,27493,16597,75770,19956,34433,68570,60908,43587,23983,29487,79083,88900,46925,14355,54774,64550,73874,37549,34153,82929,82933,84075,98582,58161,11853,76013,52820,34639,77622,82673,50300,21288,43535,22847,68198,93637,96012,87885,57658,76022,19683,27764,86772,15038,46044,88284,82822,90574,61257,44568,49632,13141,26878,90700,63989,62402,46892,85320,73675,54429,30220,51564,13329,53724,87357,51402,48258,96630,73059,82485,25150,59385,74685,31732,85262,76206,77007,48257,15903,99682,17842,92910,98582,33689,34670,56502,37341,62925,81143,21928,68419,57816,30664,45425,89642,45554,80195,12960,65033,87179,54723,90684,74269,77102,93152,16703,33239,51876,90530,54898,66768,23272,95369,11840,33606,53899,61537,37773,82056,88480,40981,47837,53513,34893,10453,36724,66391,77237,57041,10214,50429,65385,91747,20803,78871,86975,29140,22282,49549,18396,12252,73460,69196,41921,79554,15425,29078,99074,50574,60787,34474,80221,77783,56052,25746,71246,28896,47363,26612,26457,35851,20156,91004,74798,91909,75178,47607,78059,56719,68786,79165,88111,96009,67276,54723,18331,13801,67127,68437,30070,94888,67774,74062,68163,35683,84809,54802,74913,13973,53834,81521,39507,18599,56696,99365,46222,92905,65739,28849,90683,86793,89497,37668,31708,48926,56570,81541,47592,69605,22110,58466,51864,80514,88945,49162,94819,49299,25039,98034,38638,64577,53639,83702,99719,16512,24795,17601,50294,38114,52930,56050,21950,43776,38928,22972,42083,79858,71068,26722,42764,55346,41250,47524,20388,59410,74365,82621,66363,60252,95522,18874,42922,18680,52934,68302,34497,16881,56105,72517,96588,61841,64100,99987,26733,53241,24114,46089,87093,12054,98012,74008,17161,56035,15352,52158,77937,70274,53073,82693,47895,50862,80291,62320,57842,88041,60301,92984,52502,10514,37607,70433,68022,25283,41443,40136,27864,61488,24943,81555,27130,35198,62660,76126,76491,27994,89211,41942,21030,22804,99455,40592,24123,10149,97904,63129,28220,78801,75531,94122,58124,73771,34047,44745,85919,99261,28279,72435,41995,74196,75624,36442,12713,94411,44539,19549,78532,18880,74390,87371,21357,12797,83811,69444,29022,39391,96633,12949,69773,14572,39450,56635,99503,70257,60516,26583,89551,52383,94466,37638,26744,25908,63827,80072,14021,24470,42456,46995,36549,75237,24980,64908,42417,51644,23919,50649,59924,57638,51671,38263,45536,63445,44950,51865,72260,74470,83790,97060,42958,64865,41550,88532,76276,17966,67794,23459,49534,66278,47497,68133,32894,85597,26824,21034,63786,68211,67873,93731,94721,47250,66859,27873,54306,98076,37488,82601,57514,95520,49779,64017,10095,18094,65903,47649,25729,99593,72291,29995,47429,65897,35834,76023,30508,68342,82482,56967,88410,77265,11606,37979,10984,59458,19940,60065,39967,90098,70034,73146,29392,49572,29320,28367,64725,94920,65535,28604,31296,60431,75451,67025,88145,72299,82268,80689,53695,99594,79567,39550,12096,69726,74199,47367,77667,75365,88636,32355,72032,27122,37967,57166,32244,33380,12918,60928,44131,76086,85637,98720,47096,83716,10456,14958,76256,63653,60654,84976,64502,35056,95404,69658,99582,56069,61455,96138,62443,98482,84693,60661,97823,90439,40295,15145,25143,70799,93550,27627,83998,12834,44424,34065,98721,97901,62893,65993,44368,81805,94266,25196,61459,57824,14139,76729,51150,58406,82592,32953,60742,82037,91060,12355,64754,16901,50920,25506,90824,26200,55743,16281,75917,55757,61033,41030,10152,70677,93057,79769,92565,65480,76467,82561,56514,65629,22033,75451,36994,92986,19953,75706,51356,40956,41430,18533,49649,44834,48621,61847,84586,44849,99221,77456,19660,96769,48919,36892,65250,89658,42870,62820,84397,40997,80898,12015,50163,24416,94300,72259,79959,76932,38628,67659,16765,28136,36543,47998,21779,92246,74477,90267,22674,85002,84064,76108,27874,74642,37917,57488,29747,25504,50244,77194,83082,97711,60474,73822,81306,62978,87944,10171,30165,58750,33944,38361,69223,57789,65032,89414,16844,85523,55491,15148,35702,64703,67959,81231,66619,90689,80923,47814,30343,12681,55521,30646,95351,94098,68376,47317,21471,67027,72509,59019,97961,62636,33012,92825,74524,18913,37157,72286,73868,59625,79776,73473,25872,93626,47340,13803,46100,47773,32037,33458,37118,96546,70649,50557,31060,10845,85566,46536,46325,55523,88138,35826,81114,42675,17803,94635,63995,50833,26320,78825,95970,57561,57686,79656,12063,60767,21551,68520,57210,29146,24997,61138,48038,29370,29546,99792,54485,70826,88224,22029,75515,19378,11542,38046,41509,31019,63894,65699,20260,21182,54471,67301,30325,43844,37181,75729,28526,14031,63384,18709,62077,22032,88026,28763,33662,31097,54856,89154,59849,48296,91224,89083,15575,27541,75454,24236,65708,48470,37162,61163,45197,16457,78018,50517,87830,30169,92158,48618,75990,55010,91962,47320,83937,37089,38554,96725,66312,94696,83171,37732,35400,33789,78031,31584,99180,17182,25020,44651,41729,80343,78126,87840,88997,70632,57545,60646,27935,99073,94556,25274,66904,56974,35098,49925,70832,84356,28740,33378,52413,43743,80671,46227,92800,59627,12996,67255,87223,14013,41765,52110,30327,77330,14992,95133,35255,64948,25363,13731,19875,67247,79058,96687,11431,70821,96696,34325,43055,21360,99991,32395,84814,65745,98936,19951,42724,70278,80633,56230,15812,79431,94476,76367,61707,78814,83418,22430,42033,53522,68303,52067,39138,11769,66542,75191,62595,28517,64874,61389,65313,70719,80058,54801,86099,84776,35652,67177,25771,50533,37827,80905,18223,80187,43890,96726,42959,26940,83351,30280,43901,94385,80135,56074,26125,45318,90490,59563,92353,84687,20952,73004,33314,46020,14072,88491,94574,82789,90449,30094,27930,41948,33133,97473,28648,19852,68086,50363,94564,48195,60163,34978,67801,37407,56707,94890,60687,69063,66685,79286,34147,46913,20498,54961,60594,92037,98812,65823,46742,36133,85568,79378,20289,63641,55460,57660,61198,30309,10280,21525,44034,89008,82812,21939,44061,31911,66333,19154,32692,85038,16798,73204,39547,75089,24844,68805,17744,27655,68596,12488,16482,21042,81411,52981,60655,29309,90781,18461,59517,30690,47997,50159,67213,65936,48918,40877,24032,55261,29768,82705,49962,35541,23886,55964,38720,18212,70974,20803,38774,81048,39097,10818,61497,40976,59187,76578,53141,79689,15996,59080,43919,82062,19795,37257,69358,15004,57806,87298,32306,31621,69448,68146,12864,66061,46924,89323,23798,19589,29168,94498,68097,59444,68578,40254,72256,19194,30250,28332,60737,13706,51636,53612,35241,89677,27613,29290,53957,19303,50765,42319,20718,98432,39300,59465,69328,69894,22171,52078,28721,29612,43366,64154,64957,96824,79414,26146,77570,54148,82682,59912,16526,26364,34397,65650,51640,85210,50908,84104,83613,41180,76862,68143,23047,57725,82854,46604,67587,81587,44454,27048,57052,35419,92224,87000,63941,84880,21545,89542,13298,55724,55487,30451,41795,24659,59468,78106,18956,82557,71116,34740,89931,89235,15035,91181,48569,26169,59450,47940,11933,36602,15690,42460,29151,84927,82034,93624,64770,54400,24137,93505,56286,71418,49941,62693,23940,82828,53550,87220,40387,77614,21720,75770,78675,36270,96094,77791,90288,46522,20457,23833,36013,14464,97446,86447,51525,42452,22485,61382,80363,62399,95326,90990,53844,23590,51131,25480,22965,92737,75024,76556,19994,99450,27088,15657,33376,34937,38654,40116,65701,98689,21008,17010,51196,97340,28185,66570,78100,92507,86515,31873,93141,10188,26041,85496,59089,11378,91869,91353,35693,44590,31449,37906,70701,64808,85047,93657,14002,97940,23518,12487,97589,29292,14409,64797,35313,76297,70162,63445,16216,25705,40555,66226,13380,34748,17553,39478,11842,34439,33925,94613,61048,75872,56294,67641,47328,76652,99088,46994,19820,79348,79734,99434,87831,94310,79032,21097,84766,19612,66274,40893,51152,98642,38273,79026,55422,99059,52495,59502,89971,76435,26092,54960,65240,86979,47741,56036,76021,18982,69291,11126,87256,74323,81836,49057,30339,71716,40823,66003,27244,39811,78499,79043,30272,60272,47240,17377,95604,82693,27143,69906,69608,19455,75722,25315,16876,79485,51042,49958,90560,65392,16136,24925,72383,54289,25404,20137,26950,37954,43137,26118,54339,25983,60975,10113,81826,60685,16219,26947,92148,15591,55351,92882,50608,32774,52113,60617,17911,18311,36462,99292,99018,82170,17079,64297,52259,25820,30667,93707,87709,13955,97818,97777,73348,67558,67322,38851,24476,93974,86619,56885,16676,74274,41280,75482,28307,81462,79129,78051,27781,83037,90546,32703,89348,65508,92139,43558,81219,57051,30051,48425,96348,91745,12553,42561,73535,24830,17340,78738,74239,10813,95066,40212,57549,61337,83134,82588,53190,30394,24324,55571,97515,46304,26208,85701,63402,70357,96562,31716,93753,89221,66927,18690,58477,90904,94144,45112,63792,51508,41355,33587,95789,11895,72997,10864,96444,31246,49365,81326,76935,96336,72701,51484,98566,54158,62504,52767,24148,80505,44073,26514,75094,75063,87851,64865,23031,22461,72941,83402,66381,52007,91755,53348,35228,12235,43970,89700,10063,46629,92125,18822,46003,36671,13932,49723,16276,52215,91368,96430,19057,37789,47242,36552,82289,88692,22906,87488,86767,87991,17995,77119,22127,47022,47250,37668,26201,27019,58720,49923,97175,82897,80476,89668,75523,87019,18324,33541,84018,21476,29347,16889,52628,92131,19021,38949,15358,20107,79830,48516,23136,96065,69688,52900,85375,10535,10830,39580,40893,67054,31991,50471,80400,76546,73298,48328,31087,75213,65903,10578,36396,98345,33835,78592,60475,77845,20391,14076,90119,14892,91952,65501,52492,84290,94460,87027,33626,28357,92494,93332,43838,46129,98758,59376,93192,12586,11524,40208,78544,75374,71287,59991,52180,29109,88208,86893,66362,13649,63023,61296,86886,27697,91629,83095,73979,33155,54627,47003,17412,26754,42482,99573,46079,45395,93308,75562,26190,48929,55489,50260,54058,35174,14240,39075,73306,70015,58363,59880,24980,78826,89809,33200,31562,56766,69494,50121,71998,23753,33308,74826,43768,20942,14597,25836,16206,75277,91058,47606,24122,15352,68828,79116,32181,83553,61333,30883,86951,32418,72200,13579,86358,85405,51043,44294,61104,57665,59401,63523,49890,65925,36734,46181,72716,66868,49150,26426,84038,49094,22651,68833,29718,95815,78765,55989,30959,73321,90482,52422,63808,68989,76455,79403,40771,50131,77130,33624,84422,52559,25325,67232,39903,38037,99049,66458,71524,61090,57323,19301,61165,60817,69449,49854,20249,20611,51203,60437,84557,44955,45397,55254,74738,58382,92393,39857,33107,44712,96251,30717,24182,33450,94906,99917,42402,97193,21286,77101,85257,93453,44702,13862,23879,31676,86989,34310,89992,62731,68471,38875,97107,29266,21693,10622,63592,85714,45920,62840,12389,79817,81292,56176,71882,33478,34718,27903,14766,36541,15606,32877,19142,28752,11875,88209,97111,10359,78123,22471,15886,61583,88938,20321,68237,54070,85114,86939,33818,63372,29567,41526,47724,68283,20317,77219,82801,86055,90545,24222,55491,66944,46781,51815,55207,75251,40283,37786,60708,95400,49139,16197,26853,28402,74524,13232,73345,47198,32292,30700,25594,20870,81524,60686,16485,13961,90866,32573,58121,59389,89174,33023,22887,51304,74312,33741,62529,62237,46986,16973,95785,69396,14094,48436,81277,64955,59333,35712,24783,93395,56469,41028,60138,78703,34479,15379,64064,27113,74300,34037,94553,59631,39440,96881,70994,10510,61147,80455,18095,42432,24210,52322,35898,26972,97147,84413,71296,32012,39464,54779,25909,68084,20217,73237,62429,69380,18161,41389,53266,95625,29230,77808,51132,38908,98317,92358,44184,99620,13755,54529,64631,16218,88456,65605,82598,62071,49665,58032,51718,33007,60818,46227,88796,88788,61310,22235,70617,18798,17333,81180,74058,41699,73064,86591,64463,45617,21634,23815,83276,89715,79596,33868,96035,49327,96600,47834,17495,23337,87995,64884,67326,41320,96093,94876,34709,89302,77811,90777,82010,16829,45487,31826,20709,35673,27721,10850,99827,87065,42824,30101,15872,11346,23014,24427,86567,93886,22476,95971,44358,15250,89659,61915,97973,95642,82100,18755,50735,53695,20335,83473,78588,71970,81980,28285,66075,10499,29233,76727,75839,57014,72110,78843,72150,58304,53667,86907,79835,13806,86359,93136,64242,87135,37399,57456,83340,28135,42902,25738,21851,41484,64908,39572,18766,94756,95616,43451,93353,19093,67590,73699,55607,24971,47544,75533,91432,98330,64619,85360,59009,44581,77385,11639,22438,14048,97979,98374,45642,62766,61721,29667,75557,44153,48702,58395,56891,40409,51158,84820,62018,15408,15675,82345,54927,56322,75313,68580,39700,78917,90539,95468,63098,15745,92040,34170,55546,11359,63688,53215,11086,34583,48099,65700,62547,51110,17225,64683,51068,40208,59540,50775,81876,24641,48868,86581,79689,63417,96868,55384,57025,79758,63893,29159,74222,93284,52401,31015,33153,66313,54013,72421,52772,49911,35275,61535,55568,73358,13115,46485,92077,37491,22635,89719,72308,34969,51184,81480,12188,78882,63411,45525,63588,73034,28654,68615,97159,28372,89376,84687,70005,28605,64111,53699,68249,74045,96651,62647,29156,80439,97687,23916,35107,10587,76612,55967,36521,83562,15322,59916,59268,35157,38852,35787,22203,53777,95491,30518,52154,65003,97664,92919,46847,15238,50435,63848,49279,28682,50847,34309,48189,53294,68971,15688,15294,80443,39709,75163,11969,51353,25480,54288,11671,70298,43957,46184,69170,74949,85394,13875,39947,49314,49928,25472,46867,79601,28941,44460,24864,10587,97612,19324,14147,65998,63536,46744,18829,46941,35484,52431,43137,96814,39095,16558,70103,34196,20744,41748,11058,32748,80257,12806,38877,34971,78800,13046,10004,50226,69320,87652,89585,45896,87882,34190,69159,25867,71422,40758,97781,73743,15271,85960,63739,75797,90788,71013,55568,86430,60602,39942,41111,34428,67506,60198,45421,89946,63074,37725,47330,80480,88838,50291,90841,44690,88695,31640,28773,74868,79096,47849,34213,60091,84633,49526,12610,77356,39195,65501,34344,35263,41915,63480,16069,32716,22241,55077,31628,11805,31284,58773,46422,81680,46543,99011,51642,53625,55562,41367,90742,18911,44787,47734,98498,39999,85818,75890,62540,10588,62701,74146,37414,77252,60757,99106,35554,94561,16328,93093,92400,75205,78095,82371,59334,56123,87051,11528,29184,98658,16350,37564,57851,78539,72158,56335,12873,95210,79537,48626,87236,11954,66634,36296,49149,67900,64839,19676,79807,62891,99845,24713,43072,41733,25122,72463,28789,28366,24024,47865,66434,80338,20311,95499,80365,99380,53771,68440,74138,37236,68645,67250,16151,88749,24483,84570,50027,86021,21694,10193,49398,39631,46996,84918,28174,62821,29388,26168,70373,23948,99362,97537,63445,72332,74177,44860,16305,25701,87034,29840,37284,79343,42810,30080,80289,87906,48146,26449,88518,38849,88606,65771,12984,96383,31077,81029,96308,43798,82135,25432,85836,11703,43395,94053,15494,14020,56697,84485,97500,47407,92655,17235,56902,24605,40700,44280,94537,41862,65577,41897,95255,80133,99337,47276,79753,33825,96583,10210,70301,38097,44041,37181,89731,93656,76641,96583,74660,61624,56297,29966,31839,15266,90173,16709,27207,29404,14266,81506,33166,91487,42883,66918,34368,54766,55553,73640,84332,65099,72463,50272,45502,97514,31684,91822,16631,50399,83406,25622,68287,37586,67412,44418,72842,31827,98739,34619,68484,37258,90158,13378,19859,43288,19798,83913,60116,56369,11354,91183,36406,32712,78715,94596,14525,53255,24075,64082,74952,93527,84267,98360,21290,99811,76144,12478,33361,48980,27916,38060,88161,98470,98500,74857,36327,98691,15659,61382,34314,80747,34876,69595,19435,56453,20425,78098,71287,61597,87197,71597,72768,63906,21825,88298,23276,26110,93825,13534,80288,73185,96695,22556,85970,72699,84788,83945,35421,85636,29516,88546,88769,84184,31035,42066,76076,13411,10153,83205,36376,81986,58705,27246,84655,43804,46897,26419,91710,14507,47137,92917,49904,17776,29811,63853,66935,84794,78961,80694,94136,63871,95468,54588,47803,80967,16585,91093,12233,44500,80228,38607,20947,35152,47791,30053,94763,36723,68754,13608,79665,56659,53278,32187,29658,55953,44416,34089,84299,63090,69357,94828,61312,15179,64214,34442,96036,41822,18324,65343,91399,36393,63490,98631,72904,87799,48057,14501,99821,64433,81012,11968,89338,64057,22907,66072,35053,72532,41704,97465,56683,77758,78814,56212,11799,42552,60691,77407,43237,91350,64630,66463,39051,85619,41031,12594,61557,38559,83281,40136,17941,62541,84593,89525,68102,32608,20596,12925,27659,62477,57700,84445,56109,19058,15556,53831,92099,38012,28251,63042,12343,66232,52154,28100,92276,24855,15631,39221,49779,99810,51831,81693,30653,33251,75766,68047,45791,18207,14833,79541,65706,10365,54002,71218,51992,22451,42580,22819,69501,65830,41642,98674,69185,38892,66951,93949,22423,76328,87521,92095,45496,34100,43314,69649,36811,87326,15356,76640,60520,53322,94203,80942,93591,81967,81777,99190,28729,50667,73589,14359,41679,33426,70341,73959,20573,28988,68069,46559,82154,59269,47739,78301,15671,86155,33539,31691,12437,45998,90341,50977,18506,83353,54027,13868,43674,97364,46643,45111,57236,10844,94857,85314,31578,78263,63439,48350,25030,76459,91457,85832,19899,24303,25146,12725,58462,26784,13026,31765,23329,41802,67736,10729,23443,28322,25513,89850,20563,78932,52113,31383,13894,78579,26430,95314,17097,77459,67610,19230,40103,55439,46997,66760,15174,83777,16002,15117,44564,50579,61910,12994,39657,50534,36515,73516,61144,18210,49337,40634,26448,37377,41108,75501,73659,49108,60304,48936,79417,23523,59261,94999,19544,33511,72677,52611,40722,94851,83947,23222,75706,18571,66824,66659,28734,68536,36267,65441,45303,29901,83253,67003,75013,67143,34173,61352,17531,85088,31540,75143,94970,60091,30326,12241,94442,60277,35127,31824,26442,15059,30240,29942,45003,72661,65599,43799,45683,91665,85987,23079,51433,87200,58922,81182,69588,64866,81408,36214,91635,56448,54645,70928,26440,12836,35876,76178,56817,97537,52524,74320,62696,19989,69132,62396,22563,52756,93538,21653,15682,50774,90289,96984,52601,27504,44997,93085,58899,34010,99223,91576,41609,99784,33374,65948,37231,49720,43961,54475,27245,15841,18101,17134,20973,11075,88533,79414,93401,95109,45289,63703,50348,66141,79377,64081,85228,57937,94626,93978,35828,37102,86230,10558,77009,41888,28964,99752,70562,21721,60579,79458,71124,77380,88142,87516,22239,65638,53927,98827,55919,13184,39879,30948,24047,76130,62226,71270,27713,96857,11807,30892,49137,26941,87840,85253,18800,34165,68232,54151,25514,78810,84943,98470,87481,43244,85988,62202,22667,70959,29931,52043,86200,35108,66981,18463,94177,30702,85245,17578,88087,45672,33049,40520,18276,65765,86139,29311,14958,81054,77717,98547,41658,80517,63418,67217,52859,77382,47486,98949,85569,24198,86206,14262,94517,96866,95266,88848,15433,77595,73573,72534,35338,29993,87787,34334,46513,88853,91858,13503,94516,36595,66520,97701,75846,48324,48442,98484,34423,34521,63213,53535,45597,94403,55407,90014,34936,35673,13210,95495,11864,96593,59632,14698,48238,11735,52049,71339,83365,92162,70915,88175,72660,29055,28608,87901,15977,41904,36840,41200,37049,14362,91553,66443,51854,52964,37417,12923,80369,26838,82947,58253,17732,49538,16374,85016,79508,33357,89027,18794,54846,99661,95909,33924,38732,35326,35655,85046,53680,24325,62652,11375,12913,85362,81874,64791,52166,39346,60666,60814,47260,20471,72796,47416,57581,63234,37274,55540,72663,54779,33554,65166,10711,61869,69571,64496,46479,83000,47639,15721,69594,25371,38236,98697,13979,14990,61308,98938,71290,85521,37609,89149,48810,37177,18576,99592,75265,48734,88153,29056,10897,51454,47876,78174,13728,18587,83713,46940,82491,85062,89068,34585,66640,32059,33689,55444,20033,13955,51321,40318,67432,55926,44600,10932,44874,24528,15914,53177,56921,39096,30499,75212,95652,51623,37672,46407,22583,95139,56976,83019,61886,27933,59193,52488,46427,66987,20885,57313,66982,45708,69221,64972,69405,14295,14753,91045,84202,50994,38310,58435,76554,80134,46229,97089,58616,70110,82184,59180,22334,91420,11424,77667,61305,38859,20323,88623,57386,95421,86321,35789,20672,33530,34454,42170,27405,44928,20224,94974,57050,25610,76161,30636,59265,42026,39655,73037,93586,42714,85996,53134,73200,14233,40184,58737,91215,82584,50087,34804,38371,76392,23523,54854,96380,30907,23907,31862,97779,56870,66229,96095,84158,60517,75198,16940,65519,46010,12451,68508,30955,89592,96953,83062,50119,64544,28773,74665,95723,44586,86675,72500,16584,80940,59187,34501,59625,98975,85497,67718,78711,12389,47234,42172,82744,59114,48014,89066,88823,74843,85978,37800,26911,29145,13303,23643,42255,82230,41946,23131,26088,94304,27786,85568,91157,14472,89847,77437,21761,51085,82887,90344,79424,69583,20548,23379,87288,35007,84370,57781,48733,11338,60805,33632,17249,13226,44483,34471,98590,17737,46283,81433,89020,51847,81097,13462,70625,95814,73617,42344,11545,15610,77622,38221,26359,81442,80039,91588,57544,68894,70318,54058,25428,44978,10993,29340,94420,52108,97282,11112,17757,89827,88599,98003,63566,92606,48065,60285,37764,16579,18228,19622,26798,92321,94978,30182,29996,12312,61865,31240,68507,10431,51068,75132,75702,89821,77737,80633,72641,98219,13001,41590,21148,71814,75902,73409,37247,64933,33514,35753,63341,50016,46413,15691,57676,83368,83820,44606,38762,37591,32831,87480,99789,67254,77718,37690,98265,42278,18961,29040,56663,10087,43084,47925,68601,82891,82187,60760,32119,27563,92902,73671,14250,40605,49839,32534,40333,41138,63022,67987,67519,31652,13560,65979,71267,53957,56817,16692,91925,20290,48007,14127,24699,16439,99392,40552,15696,40206,65731,22777,94384,83943,15567,40918,47796,17997,61714,37278,28863,47458,39807,36275,20850,36789,16823,60238,11384,68560,87271,22187,48216,50429,98228,80901,12414,87059,88956,87736,44279,52221,54326,57593,88746,22564,27456,40221,91649,53346,70738,56023,23052,34495,52066,22168,16374,56737,41860,89576,28085,17022,67470,48027,21985,17433,49210,55938,44507,22716,83393,26402,78847,92004,38746,64367,21336,70707,79995,95625,14266,21335,29594,52414,97102,58702,63246,63709,64158,85107,59387,79366,80232,83188,62231,72085,97323,15317,23543,88980,97375,84989,89621,72817,86692,96458,87454,88927,50925,70082,23609,74407,88488,77038,96777,13887,47331,44606,96493,59004,53117,39792,94224,89311,53883,59337,53653,94788,19748,23717,65949,32578,75523,90271,96969,96772,72179,48751,54132,84378,32210,98873,25066,18540,57323,65955,65327,92515,81802,18918,80428,19732,45065,89568,93923,85626,60145,65543,86004,24231,49896,31534,44642,70323,87437,51782,33613,69803,28279,36300,69220,18970,95418,53569,29934,61494,91837,63246,19875,57856,15946,67598,19722,30167,61506,58147,63041,57427,45997,30997,10499,62168,98622,91406,91268,11718,83436,96046,53641,61344,24268,48347,64521,46971,70148,19690,13824,87439,97354,93299,89082,81683,69138,40122,91122,44718,45852,76472,77703,55890,51828,10577,72418,52644,56180,97569,81784,57361,37731,40696,92265,31492,59990,59921,83229,47111,74732,22811,85999,19647,86490,20130,58431,87917,14124,54235,69355,44357,10711,15873,56945,19975,64531,43071,88243,57258,83437,88994,83878,51809,31555,87854,79152,57594,82675,81730,86883,55388,79785,60660,75138,59743,19584,14117,75180,50920,40826,98916,98577,73739,35226,69378,55130,45661,63971,70552,44479,85385,57209,27792,77599,15923,83916,57746,46294,16220,32557,54509,24626,52215,55200,35646,98100,43521,23994,80453,38147,65376,25936,72017,46114,97924,94713,82950,46647,95511,35572,71177,73868,81606,80664,76374,53904,30052,34312,41300,65367,25104,43025,55926,33128,45383,94942,53939,64053,19603,16000,19646,23067,79484,23441,44311,98800,45501,73120,82399,98244,95814,47735,17220,30899,27298,56927,22253,81839,49209,36326,55395,99970,59163,21412,55582,71296,43198,87100,81952,97252,80871,82210,63374,85298,56522,73030,35928,68512,15191,81547,92170,28976,56522,61181,89496,59984,62669,26711,13236,22796,27702,26265,91361,27938,40211,64746,63567,23262,10687,10501,49593,36056,26534,88995,92111,77357,29556,49583,59560,47211,96600,80588,70439,68800,79739,59342,72076,88301,85167,24522,27966,14372,65518,99885,83238,72395,44524,17873,60101,28543,37445,78959,16262,37124,83264,47230,84572,76962,11655,91743,73995,40757,33282,86590,45144,79909,10486,44273,71851,26135,53418,79756,30723,43405,56530,64203,27289,15430,72346,55683,85961,68180,14214,42394,85989,12163,75719,64358,36340,43085,67039,35982,13955,51755,82971,42335,47696,70771,40009,40631,42616,16021,17643,90606,47220,79415,29186,22143,20483,52504,94433,33798,46413,91160,29298,17770,28690,75673,49487,54087,50280,57603,57308,68852,87906,81316,53871,23956,57918,24189,49257,85688,16924,63036,73413,64012,67364,51753,24441,52184,49790,38563,66453,94456,73264,64534,41586,16326,60867,68698,60991,24053,27666,15779,22561,90307,64579,89830,73429,52632,21677,28099,88551,99633,83604,54739,55444,39607,64000,43012,17305,89807,77957,88812,45271,72558,18653,47314,36209,30861,76192,58434,37113,79991,49806,16299,82144,65943,62792,61385,36372,30415,49443,62427,81670,63827,55159,88230,25636,16706,12579,74416,23655,19366,22935,72201,85699,83925,98961,53221,77441,34954,27813,67775,97069,12830,73756,29324,40576,47230,72190,14737,55038,40925,95795,97544,54236,36079,21343,55810,75663,99109,54366,23751,71665,57077,66784,21148,43565,80357,58759,49835,12281,63486,58174,21320,44627,22779,99229,18376,11682,70455,14965,21402,40407,13159,46643,18099,39578,28580,83752,11835,45793,66135,84495,24718,42808,49872,94030,79727,39703,45135,21551,74448,84989,22936,77521,89747,95147,66927,39946,50393,13796,13344,90718,32328,13602,29971,60006,25704,25858,35775,77360,67042,29814,93934,56190,15502,65735,11143,71920,40682,66809,51797,24982,35614,33432,14742,28898,17759,56864,54884,25884,55060,34646,62477,97104,51764,96521,89806,37592,65804,62236,99888,41618,16640,11194,32561,24505,94516,45054,44597,55336,77963,64691,51754,42703,61723,87305,62544,74784,86699,87194,88422,23142,74168,89892,11663,83870,61202,89854,94407,84768,16823,30601,62389,94459,93302,90394,74397,45423,31964,60720,71439,26135,41492,19300,79176,55268,39845,13674,24388,30658,48371,31144,27582,57049,32954,93312,52979,52485,68197,53966,22428,84181,60535,23938,53148,17782,66365,77989,55246,87310,72049,83378,88221,67112,30062,29285,83951,90712,48561,26908,25282,97289,67014,99354,34140,68197,62936,12450,42415,35652,38004,46902,87946,44175,44978,79647,88527,94331,90596,46704,35508,55962,33161,36298,11115,63852,62914,60067,51282,55097,90316,80406,46143,16554,67713,86886,43952,70368,15528,22863,53582,54545,93898,57842,44478,78615,73917,93360,99730,33494,23811,37719,36737,95032,75395,85787,87982,12881,96020,26089,67773,71734,67320,66742,44154,63424,83752,38003,58338,75439,15366,64549,92575,95272,63117,10493,61620,63051,14199,24959,25250,75164,97839,67769,32146,24993,93907,59618,15927,31416,13122,49184,40440,89187,10726,81411,81590,79499,81973,36885,57894,30661,98941,93427,89811,86896,53551,58658,60596,22823,14593,48032,90305,48446,44325,48872,68951,14352,73498,55851,59852,49420,76302,82636,23036,58633,62610,66909,32882,12723,28871,61124,23307,84948,33440,40988,23224,22828,38899,75245,57089,14237,41592,30632,85034,11963,17067,81828,94325,56998,33048,30747,48182,61062,64357,44359,93015,30558,23003,52957,64092,31976,51650,50408,50254,11024,91060,16464,73646,75807,53168,37519,38686,81623,94330,45524,67253,63191,43802,53845,17731,71840,96268,32384,19273,82217,25341,94872,76357,45136,20698,54490,55366,82644,98300,15954,12252,73364,25541,64385,10689,36340,81180,71591,67789,16848,46165,49447,90909,53733,29986,65401,66265,55419,66022,93492,10298,53099,38827,19788,87553,39335,32710,78805,31476,20199,44492,80715,47193,82394,44454,78842,61357,11729,71058,50785,52061,27097,23761,56377,61740,89045,10930,28357,51324,60149,53882,98760,37170,55563,65929,77997,46537,88908,53964,42896,17014,89406,13086,60153,49725,37855,65491,82049,98802,37610,58155,72632,35515,78962,33969,26676,64441,50926,64389,31452,18487,48060,95078,59995,27319,79020,91332,60685,16262,42816,65952,77479,13130,39394,83374,28428,57612,34578,83506,42292,75590,21849,46948,12367,16035,10934,75193,63064,98636,95517,98937,10428,63176,46690,26772,84182,52986,89467,18809,55373,55000,90915,68719,10821,70555,52768,15248,47952,35784,48930,83092,88282,98080,12586,61425,73946,49924,77190,56415,64333,42290,66895,39275,85582,41784,59909,67625,59574,57914,74106,43150,94835,98924,69990,61719,58359,86009,89204,50284,14008,91817,10614,69722,35733,10413,35012,91490,19616,80277,22814,48097,97183,17245,82077,93877,36159,52751,65774,59704,35943,43749,83996,17315,98523,92921,76713,28571,70230,23684,99371,42069,36087,77344,42746,49897,20597,26809,85163,17250,96165,72756,27270,88441,44718,98787,28003,75148,41339,16101,25755,11456,85232,58659,72727,53068,53450,53099,55647,30339,11754,85090,85173,80824,13203,43152,83145,14242,72321,65716,45893,56373,34947,31747,21941,35676,90873,98234,43900,25010,67792,58987,67635,53587,95015,21566,45485,43844,38985,40571,62842,71318,38394,95213,74064,27192,67564,83583,35519,69233,32675,67497,61157,24728,27439,67099,66010,37680,20263,77739,30280,54964,92803,40116,14481,34914,42960,39389,89176,77350,88274,70642,41329,93306,96299,72782,84737,24600,83648,11522,17527,64715,53972,92854,79039,25769,19316,55718,92447,12173,81602,67097,74634,98281,19986,12969,68574,24868,10472,28067,69593,36263,40927,18880,49194,82475,76728,38236,65054,19202,31221,64184,85262,37197,16912,15292,84522,12960,77963,61866,53713,38648,60225,42345,61120,32254,82040,71539,69364,55462,10408,12798,20289,79691,50083,42989,27865,92017,45637,29721,44163,68003,36959,71471,53371,16050,27962,85161,76627,12997,17347,40089,81831,43465,17821,62940,80778,97985,34702,68242,86438,45001,50061,57940,16245,44639,57511,36691,60505,37729,11470,39275,71829,36663,30713,40451,53575,43098,34508,91537,18426,71565,66244,96706,61480,75680,63575,50922,36780,30476,39885,59885,24400,22003,81080,29766,84187,85103,96299,69158,53407,69621,30230,73701,30342,49222,43002,65455,56356,38739,56076,66066,15310,56585,60859,57668,94992,20175,69723,89530,32142,22771,23300,83489,26919,37695,73440,35289,25319,10970,36328,49845,48961,16032,64430,96366,93601,76694,83630,59401,18858,48575,73974,10236,89115,31873,29825,76406,57759,90266,13536,53734,78745,81179,68704,34030,25685,47616,15016,65272,46508,24284,91031,65059,72610,47069,97604,18403,81754,86273,25538,52876,61759,12756,18863,32302,11619,85597,58969,69008,89458,49698,67160,73989,25372,65528,79932,61860,88776,61146,41202,98479,69899,71763,85785,21669,26865,54189,18747,30280,55876,44736,65368,43654,37677,32107,52134,25519,40124,45060,87214,86081,69708,27836,87070,16676,64560,13928,39625,41768,78685,27764,70468,25786,17558,29627,62784,80916,36523,30651,72641,37554,11455,90087,82152,73944,54066,68581,53558,77824,19028,21970,75060,58439,47547,26121,91219,11239,58897,38353,79054,42154,11477,90016,29930,80898,38506,75408,35674,27526,30708,58564,21295,66274,12219,85528,36851,37286,40845,88248,91251,56945,19731,32696,54708,83527,69842,18835,43272,15957,72794,19087,89689,54456,97446,30165,10789,84376,66213,41735,95043,64920,30790,90320,85298,18577,55279,26103,67436,84566,83419,57340,73719,44602,84101,38577,75272,18699,15083,21851,53715,39366,72928,81332,24096,78480,71627,74217,11930,58987,36715,53453,52938,96752,62548,27247,43743,24390,70478,50892,98058,77394,84849,23839,32638,82501,23585,60410,75735,63315,33395,16349,86846,73124,21421,86963,80233,14031,21613,64673,21487,14734,71116,36405,26365,33941,83995,38148,83631,29415,26021,48896,77433,56620,32462,74980,93512,22980,92554,25214,63040,92660,23912,22962,63487,71244,15199,66318,99644,55852,43686,33800,66665,32991,87746,81784,61731,97640,96992,16071,94357,84500,48934,49496,57203,54174,90794,78642,97294,63207,70947,11104,42908,62688,38876,92601,80663,99954,43377,25595,15517,80107,24750,38172,95194,62745,81126,67458,40057,78019,82007,50502,56985,19371,44319,92941,98824,26970,50384,41009,52734,60320,93383,65985,75316,71924,61206,64140,54232,13785,57723,89398,33063,34016,44177,73325,13354,42098,20713,74930,97358,99788,40478,40511,88130,47363,43897,80570,14487,29467,75144,16645,70773,53786,63509,86619,92898,72359,53631,89596,27701,60298,41514,80618,38520,56759,52418,67488,43438,35032,36973,56465,16324,29843,79718,89198,35248,75525,41282,18963,84889,40652,19947,82030,91556,63152,54201,89071,55525,53847,25089,24928,50774,81636,88790,30615,80966,49448,36635,99683,64381,47652,75692,17607,69731,45771,16585,62776,23748,25819,96056,12727,47354,28662,51380,25553,48508,35737,62469,65089,96685,87510,56310,21332,69393,44059,38762,30856,98706,12236,25216,97460,40032,66966,10939,26997,44931,42343,26517,91211,14896,37988,73532,55825,22734,52787,23492,93673,37818,26232,55062,24976,69752,77317,77871,13274,53648,50370,44228,32430,41927,23036,67405,67350,65330,54059,62794,49931,57716,70510,22832,12500,25700,61169,70095,55010,63063,36963,66224,80664,89309,33696,39572,88907,75669,88419,59908,71741,19271,42926,62179,76026,34761,48944,25089,48120,28932,28640,37356,51484,13628,70674,43602,41712,13634,74312,98653,69834,48885,50376,13369,78881,38406,95974,43029,26764,36607,32534,79476,34475,69427,77260,27319,92037,54596,50879,69895,43730,90173,77736,66101,93423,59732,52683,33459,17066,33235,61913,79933,44498,58412,75389,77712,79914,49787,27577,34626,82013,54483,82242,89372,45961,85930,27353,29559,30859,44292,84533,17455,84767,16061,54590,14726,21323,42831,64842,74853,52742,68175,27134,34824,47871,36746,29001,68382,67438,60256,93863,64378,52756,14016,90477,15907,29953,82946,82915,28868,47156,35398,24574,85323,42388,64235,69255,93674,53942,82313,74204,76904,25206,57369,73635,32570,50205,87697,37472,92533,70061,83352,50069,14396,62168,82329,26833,29375,64222,67197,96980,99388,76232,23703,83379,99006,74341,49405,14180,99551,99308,63137,70520,92829,84946,75658,27492,30690,13727,51625,62995,43431,76921,18763,44950,69097,29065,76231,50342,20500,94029,90224,28290,38804,93975,37316,99652,76014,45139,69521,21479,54586,95286,85929,32264,34542,17020,90996,75602,32450,16030,72199,50613,46091,30807,50484,34954,54546,77943,54343,69463,29794,15498,59554,56935,81082,96757,33297,42267,29231,10484,70452,41662,62427,90850,18892,59228,32810,28257,38777,68620,57399,97083,22616,35174,70677,66293,50100,39144,87809,25262,83955,83668,20399,72603,70665,99860,37924,74135,85930,84854,66962,53068,21201,75526,67755,61017,58016,66933,43009,81497,58054,13725,85968,66009,55592,42400,88999,83733,24362,52533,52186,76443,56759,23333,11989,62382,70516,20879,99583,26051,69046,10988,34244,35299,59830,54502,69012,97124,10226,45797,10220,54974,96174,69286,88447,17941,45964,28389,90798,40986,75368,29838,73647,85686,70666,90141,44022,60219,66207,18139,88509,54755,91325,90396,15732,97251,93223,98434,70950,24086,70977,76852,46468,48282,76211,35542,19178,45437,40384,87420,60414,66664,90879,13603,59299,29200,96830,67625,35086,63423,32825,41670,52391,38850,69048,83669,97114,99126,16367,86414,57371,96846,60876,21719,70969,14309,70594,96970,79512,80822,15432,60759,93664,54972,86566,60205,20200,84605,74514,70699,63714,19916,85595,75640,75493,99720,87035,78544,36006,99475,32298,77451,84398,38980,81693,19443,91251,43262,97214,12947,66831,22506,89074,60539,37663,24214,22860,37264,11188,36406,42998,73827,80249,49067,55601,55872,78705,83892,68277,68616,80328,51481,91478,73121,35099,37442,38040,66888,72053,27612,11740,58633,68199,82876,62296,50877,91685,62891,97792,50225,37254,93342,33304,97334,58760,36004,64014,20573,59958,92658,18290,82206,75107,79949,73269,16868,94524,86111,97303,50054,45220,74835,70682,97394,94968,71842,50553,90028,48372,52127,14887,25904,63960,94334,34528,40335,85590,75487,55843,18940,73122,88483,54844,78862,27849,54896,83666,33064,36199,30891,87201,93657,43680,17326,10343,81632,84569,17481,85548,33860,82039,73597,83057,72354,74263,62114,28982,69698,86146,33004,55637,16323,27544,64056,41749,80312,77535,23903,11892,91921,72784,94974,38896,62612,85117,46369,39514,41633,33142,15113,93252,13730,78429,55442,80560,92535,24562,80822,24703,14950,47401,12038,29484,47694,60621,56256,12427,21529,50021,98447,84190,13133,45789,70763,46488,88397,88022,84785,73875,39893,80014,22046,96975,49866,12445,19577,23779,31650,78435,35207,45509,29204,37043,55098,74019,78833,64286,79421,84963,27526,98940,56150,64252,46909,97558,64337,60628,60744,60887,73722,15039,46800,43703,39529,70775,96664,53207,96147,47710,56802,91518,16507,94306,76254,53195,17178,60363,89297,40209,10814,10080,33734,62803,38043,95082,73240,61642,70502,93981,68536,44279,65940,98247,59040,46566,69753,33953,76231,26294,77005,22353,90655,10942,34509,98312,12818,86003,32250,31789,49018,80926,75658,91511,48487,35278,45095,68251,80709,65278,52940,27010,98936,67802,97128,68615,57024,90024,20304,81637,60962,21156,52907,22333,93743,90818,10768,65166,13215,34146,24756,95035,62644,64674,60808,32795,79013,92695,27344,77129,10674,35439,58048,69348,26647,94277,51213,30412,15321,27145,88182,33417,78826,75970,16468,49008,80164,50664,26176,31279,37328,16046,87210,93614,94003,65974,98923,16868,82138,78479,81660,30583,52113,62384,42495,41965,45068,51927,99056,31548,93305,39181,61786,53261,74053,79012,96364,30606,14534,79427,50196,96966,47006,56454,99902,80241,54330,45140,49757,37841,37651,30295,35255,55146,95424,96745,25539,60605,93502,72589,19409,41446,56437,66866,25305,77804,16049,88913,43583,13224,58742,50458,82240,91676,64385,72074,24672,91977,17242,97168,54510,16960,43681,63139,45479,25043,39038,73904,74382,30513,40005,61343,18489,62038,51709,81363,22665,70673,90709,25527,28012,83305,65888,52857,35045,48280,95200,71142,72350,96653,24402,88841,44641,77183,80575,33833,52495,59120,66579,10519,46455,41436,64668,97332,76137,15227,12308,72511,51151,40688,35306,48393,37876,82219,55851,11131,47798,30393,45748,58339,54373,77846,22649,71020,70140,84562,56215,50522,10089,71854,85630,40143,59544,40671,37662,41577,40614,59080,21751,74095,28584,77395,27363,58588,39700,24549,44768,86615,12113,29932,53668,20234,40554,11982,23975,37840,52598,21749,94817,73074,84990,64966,75724,82717,85746,44574,20043,65060,55304,78449,10851,88292,89962,85287,59719,10134,85828,68679,50735,26087,34564,41290,19836,19214,16086,23310,97477,56646,52876,70884,75690,36309,48230,72532,70795,76300,47880,66852,13150,33623,48320,81266,14284,83446,41723,30362,48044,17233,63673,22818,58196,14674,22764,36360,76162,72986,71210,42651,45324,56410,66497,70088,17425,76741,49170,36637,41439,70544,10838,41257,53608,12811,75750,96722,72155,43091,70231,54668,70410,83042,16638,37884,16591,66208,32930,43385,59120,52927,36359,51071,77767,96032,98000,50845,97990,71962,57502,39165,39325,87732,60193,30955,15104,88201,52538,26356,33453,53741,76801,37294,19505,50710,25032,67336,85407,95309,63033,12392,34924,29077,91341,47534,69995,23756,96825,76492,31304,31057,83882,61397,70758,39446,79040,61511,69807,73907,75681,22319,34504,28325,61114,63816,83313,66360,65648,68108,41161,22811,46178,66439,45921,75228,66828,88621,73063,69407,76920,36924,35275,38817,68340,92007,32765,28006,49358,41052,56824,76663,29873,29501,24017,33885,44750,46001,90047,25656,77847,20569,47730,53482,78457,50949,72974,28901,25660,38189,26221,14995,52864,92990,42354,43900,57681,34878,81743,67418,28640,67383,96155,66036,16760,37117,19091,37535,17308,30808,81805,73585,20379,25668,87430,71837,98499,97235,54541,83198,75655,80947,14623,21856,29913,11752,76065,83365,30694,11606,75908,68205,65059,99500,37061,10101,61669,65920,70256,53903,38362,63653,74868,83754,94773,35974,56984,92778,13951,22403,80992,23830,40228,70290,27674,24243,27389,94438,78297,97759,79330,37614,10605,94916,67713,60357,85686,50829,20169,73555,98881,77702,86630,88052,21116,48995,12143,59051,68361,21186,83429,50491,29549,78320,52535,55720,77055,22528,75202,90278,20678,18286,28759,75510,39389,68076,18318,33641,43444,16857,25316,97826,44744,23164,83391,12099,91672,85132,95099,92821,74992,99800,66494,56650,11493,54255,90541,30634,15126,62684,86846,93819,21049,60934,69471,54762,45867,47577,89598,15551,97624,92979,15957,81952,27680,84629,83731,31960,48975,52202,91328,47702,75661,79292,90674,95119,75908,15356,51007,72605,64837,37170,39761,79437,43134,69280,29572,50933,60730,56468,62840,93413,62415,14430,47597,40179,25896,32102,78122,40831,33159,50928,40176,40608,18346,36403,76056,16336,88291,26157,31972,90918,68160,25996,66361,39310,32028,68387,24945,23777,28347,65559,65985,52390,82916,43319,21625,90333,71963,67353,81131,17838,85846,90423,21424,49330,41086,18056,89932,98242,34966,50743,73690,58013,46427,17862,36042,96813,67792,55968,77804,65411,55388,47682,43512,45473,61063,52855,99198,95597,81911,14722,69956,65799,96945,45885,98525,61020,66547,67778,68999,38224,92469,23795,32234,82024,65892,68137,29455,13085,13370,37484,29478,38599,32964,21601,54981,27730,57019,43887,88419,33136,77808,87335,23672,88008,30412,14433,18068,48712,66964,42285,19688,91915,47151,67941,59718,14348,54736,46515,65554,11095,37740,81049,56780,44076,38207,21885,64882,63946,61830,60664,28080,94810,63761,62081,22575,26918,80382,24402,22918,31589,72634,49558,52909,38298,74139,87710,90042,54565,36616,34687,92775,54857,26807,28252,79193,87146,24226,54398,41344,35977,39675,24696,52222,93644,18484,83372,45434,43924,44175,83084,41721,81345,32516,12081,24116,54237,14501,71484,77379,21571,58797,41891,15426,38498,32436,61632,18348,35084,97900,32966,66117,13260,37013,82082,41185,73324,50042,76781,78173,17209,89111,67146,64525,20473,99486,94464,43246,83057,61990,12260,48468,13904,73262,57142,71307,89369,64169,32777,90957,19506,45815,68213,61006,53392,15524,34958,50557,35706,65343,67591,91059,82417,92374,58953,66009,70945,93702,43968,54912,12363,67441,83096,49194,46869,70000,98977,57412,97807,66895,76456,84682,62167,92942,16056,68806,35964,40084,49870,14165,67053,52291,80969,55948,71047,96201,84803,69180,94271,89957,11405,88598,42572,88044,29579,53686,99977,59154,50064,17472,14579,75803,82930,86628,87920,98348,48735,37235,63428,41418,53719,31936,11819,80893,93586,42205,41668,72967,91938,13886,40210,11461,67806,39119,49088,94679,65879,21609,58770,36112,16553,79909,85714,40080,59439,57899,91166,17468,53086,33401,51280,51840,99563,21664,42474,97694,67487,47563,88572,83719,73058,47796,14628,45984,93982,60092,10608,65266,15528,38315,75552,84733,83658,84384,65091,94208,99701,17906,47937,28202,22776,13408,23260,71000,72450,70209,85855,61779,83937,37983,42329,97325,30476,90126,59649,29391,52252,76555,17295,32867,74474,84667,43836,13239,28008,42751,59340,41812,89703,64544,92530,41690,45583,44644,24534,24444,32696,44691,59410,59388,35506,18786,92395,16819,72104,50161,40966,41209,63468,28475,43007,15381,49320,59096,78053,12115,16185,55930,43782,54742,25259,43528,84224,73828,45258,66650,27584,79710,24029,12001,29145,52216,50191,34608,88809,67220,70475,93823,23274,18286,95208,65560,90550,69644,45094,26343,59713,98408,42289,41697,60126,40110,22563,24585,87220,52207,52873,52920,21668,14380,73153,86221,63293,66225,86979,71759,43018,31206,61968,69575,59678,13141,30666,31635,39485,63455,86127,96261,77853,18246,34452,37014,98379,14458,81818,17562,81191,44858,46325,72137,23280,55569,20079,90782,38385,90930,87976,62001,15482,54206,15444,45539,49524,34344,27932,69512,96752,28892,30161,97852,73089,11679,80215,66490,15965,89886,72484,46713,24954,31107,34223,70406,31411,19207,26603,25069,88819,18891,49879,22638,53594,61907,49051,30943,69434,82818,54727,72897,48753,85346,26174,26238,46347,59604,53709,48667,30753,40489,86830,47837,93035,89170,91990,73498,69633,75581,92996,18272,44052,39101,42189,38284,21111,14823,12401,43576,32430,88220,93680,43907,98123,49761,90372,51890,64318,62637,66965,96061,84313,91773,78392,33935,69267,82062,39675,43404,82147,54721,90240,31662,56312,33088,90002,50514,54371,95247,93509,92766,67393,38240,22946,75421,54347,14657,55239,61905,93996,34785,67354,48521,35309,79532,99674,25794,49035,40172,74988,11329,43026,15503,31986,47140,33119,59769,64525,21493,63054,33378,40303,50190,96046,49602,70486,92352,44759,67401,79236,83236,45120,68472,39204,30410,58896,42516,29519,68169,61834,83087,75495,17613,90820,28275,48598,40408,73796,56741,93390,49486,48904,75280,92508,36332,69168,49896,74692,71086,14986,57827,48974,64530,18949,34181,52360,60410,11423,58611,72973,17628,13716,42491,30489,50128,21977,19334,32111,76816,89094,47825,30672,24704,88421,85331,45278,33725,44253,96448,66745,34190,82347,54768,55311,21517,75622,43017,82105,45959,16129,68833,13442,78055,91040,89851,97725,32114,53217,80571,31735,51748,95823,76968,87564,55603,63107,28175,57490,72149,48226,58050,49520,36192,23216,74060,48510,67787,10203,66228,28378,87002,55913,53603,72185,36891,24629,48407,44883,77512,90704,34508,18367,57045,20875,36773,99230,49287,18536,34436,67683,88420,28474,51950,97786,70841,30451,91851,58972,78367,50339,92049,12547,63617,61345,18750,91290,33265,71511,80517,90954,64928,74664,28563,67054,44262,69960,89587,75715,20543,13351,23097,79867,58949,54757,51283,22814,92150,40161,99897,44913,59772,57958,98426,20918,57162,88566,44817,44775,18356,51096,84319,37676,70954,28506,80317,67791,52124,91349,71745,46044,90550,70529,24153,13174,87501,37098,52849,91662,17660,64406,55562,25674,46594,86123,17865,79698,40953,11742,79771,41943,30046,99183,38096,33724,72339,61362,88731,41390,20571,58154,14281,58998,53305,13987,18817,34139,38805,24168,47076,42671,90754,73372,97295,66265,87619,40421,62923,94315,77959,66955,43583,50543,55698,62982,87435,96847,28306,28297,31199,80721,46455,50961,88598,89489,44159,19999,12050,26675,62278,54960,70113,55974,70956,11355,50177,10857,83359,26975,47736,61871,87096,87485,76923,47432,21510,28639,34349,94398,42473,47675,44767,10465,58581,59584,30514,13404,53334,47576,40917,83887,45383,14931,39068,58756,20877,93344,24643,82905,31331,63730,43014,24444,50200,14435,85348,30432,22492,10695,62832,64678,47196,93113,86700,49425,40081,19341,55898,55975,29372,15856,63847,29832,58284,99340,11627,96794,93554,60350,77339,68451,83040,79041,70145,91615,64413,64613,33935,33134,63921,88029,41780,54599,31908,88271,73841,72506,25741,42000,34522,79423,76010,51327,63668,32876,54627,86379,71893,42602,76448,39886,74501,52659,39905,61432,16142,39434,65730,19874,95560,67837,85457,11159,62220,45276,92690,70200,91373,11809,39605,64138,85537,25960,93379,72446,69219,28076,81320,39419,79000,34951,10926,50205,19250,57217,24587,26552,60942,61865,44953,63304,73247,68382,21931,28385,71466,60188,84139,72935,80798,37597,24583,46570,20100,53834,70752,67487,32248,81075,31682,86627,93743,85400,74458,79630,31964,79441,60564,33262,28001,15845,42297,22005,34813,94864,60036,38498,43992,86466,88115,25800,20265,40589,14309,82348,45625,58025,81315,38987,46380,22968,29514,52583,31593,99430,44069,42722,92551,99478,36480,99971,38717,63688,40975,87612,94482,51744,11021,20810,20658,25373,83503,29060,79143,65703,79389,67944,19294,32167,74624,78038,23032,64659,53704,56819,29973,28816,63689,87766,12555,14198,47059,90493,55071,26508,59374,89890,26878,71061,70545,34618,20727,27906,59264,56874,65707,14003,22985,71886,46757,20919,69873,99447,96228,15521,83566,86622,12085,32654,71971,89194,24093,76496,61267,72789,66482,65044,16662,43062,55392,79535,11003,30445,64725,26808,51059,64131,75077,73853,78615,58132,29534,50167,40796,75388,33177,52067,28449,67150,86266,72487,19084,49978,68877,93641,29579,31489,13983,33156,85824,14687,44933,49171,51914,12578,32972,45114,21206,50050,44269,28311,42671,27658,10866,77170,33726,95603,88872,17808,97856,25996,10029,38400,24171,73711,93852,15262,53013,38780,71991,82799,93161,77814,44593,53586,82119,10791,19717,33008,52908,45836,75848,66297,39126,83779,18166,38439,29483,40388,56941,43345,66554,14338,91113,23994,42764,66073,42471,84825,47931,73523,34452,28306,20809,49001,27495,29464,51013,88272,93658,95363,35814,12239,49455,85280,17640,97927,68920,16711,63418,21011,81917,24321,57551,17889,17702,84775,19806,87793,60484,91152,34015,84018,27918,37915,80459,95133,82961,16918,13269,44209,62596,62554,85705,49979,63191,55370,77725,94266,89670,44522,66893,92978,37252,59824,70958,70613,44575,86201,68553,57826,14732,99301,59358,33678,93788,87830,18110,24443,70880,37584,52439,73280,89465,61336,41000,44573,29087,76868,38924,18480,77685,77420,21721,12286,40830,34020,72423,74468,59834,58216,33668,12773,23782,16840,61445,58842,54675,71485,55472,79539,54364,41388,49195,20185,16854,94463,47943,64998,51132,90209,87214,42165,87160,15257,76343,22528,38178,53068,39495,79116,12619,83024,88019,21793,59632,39709,40414,26382,82816,12162,67082,89987,45134,64985,23818,18595,23431,20792,74002,28193,71447,85251,12792,22165,70242,26257,80165,18850,70174,99301,87262,51416,44918,43532,43229,31412,85964,38954,29248,40412,64515,68529,63790,62288,34427,59378,71531,58463,20538,28908,29883,14023,48895,70664,88855,16243,17580,83850,45318,32646,10343,47580,58328,67771,40262,47952,55370,30437,81909,89727,49525,67852,49546,51906,15942,94689,26856,44230,63370,49628,72479,97728,94603,54742,80821,87468,70497,59497,20885,13699,45183,17551,68589,13400,66604,56332,67929,65836,95578,68915,23507,77549,56364,68992,87524,68008,67814,95219,98914,93792,11430,65725,19678,85879,82626,17759,11603,91558,44749,71950,69554,76195,43491,32790,57330,92711,63996,19034,79853,74054,67764,18810,31010,35835,69347,32100,76396,19424,45168,41470,52966,91915,55920,84187,94094,75327,68101,25855,11707,99032,96883,17888,41542,73987,84188,13152,41851,12471,92438,76588,94000,88492,89683,67349,70789,68324,79256,93018,27264,68714,59345,39841,43363,36083,98051,29732,11992,63192,10674,73797,99026,42914,45672,66877,63341,70077,20965,59339,33702,94507,45520,31929,93240,76260,44583,74777,53721,86652,54206,36279,19504,44673,49248,18942,73682,69256,69117,77138,59250,23736,19087,17913,51169,78550,26435,12473,86158,85843,89726,19388,39321,33956,14787,28028,81217,48372,64686,43026,56875,17610,22106,11038,70770,37036,34558,86797,88035,91821,77864,36056,64802,40843,31880,44369,89627,10835,86331,11783,40555,47629,64012,83870,97006,50334,86170,24171,46482,93710,23530,79609,38367,59174,83338,62929,26772,41949,31859,33629,76776,29315,40397,51997,21028,10379,86469,96057,94813,25320,85703,66074,50322,64592,68813,76837,28375,38320,56976,82628,37167,59877,12300,62284,44342,59801,41194,92975,75404,61489,12797,20140,17161,79292,57520,70343,25665,86259,80418,37596,20725,56116,99137,71748,63394,43896,63908,85772,25325,52647,47799,51516,57276,27361,70178,71371,36916,17126,76752,94039,41637,53241,19958,40556,40319,24266,46333,52622,84178,49774,88153,16289,69535,97702,28509,47994,96953,94112,50463,80336,42067,77756,62668,77895,19739,88565,26409,49928,47895,89334,93001,88371,98435,31638,99105,63792,30715,87614,61801,39565,48402,48419,93577,88481,83348,16837,21934,34421,79665,32497,92482,31322,57405,36329,51672,98013,31769,29172,63121,15704,93892,66325,69157,21307,80201,77306,16041,69363,54453,86102,10050,22611,10761,36464,37320,59709,70788,18788,47950,92195,53312,72268,58932,52457,35535,99029,11037,19084,50057,10781,20782,41144,53112,15015,99393,52759,14605,71214,80378,21135,45547,49606,87125,19382,61815,36547,30446,33888,39543,76500,60289,24429,78799,17209,15228,91584,47471,75630,20569,85465,72028,96843,59808,65039,98932,88151,43541,75353,56520,15901,26342,99920,63423,61637,37479,12845,30820,18210,60014,42287,99037,15406,49816,25854,10755,71392,30055,55292,31785,53129,59147,14592,86691,31091,47607,37178,30450,89621,89637,38162,16710,70150,24852,93431,25437,76521,10989,28490,91049,77918,55946,66029,62545,41504,82517,52067,12400,65024,23776,21245,52215,85709,90702,23124,61678,72178,23503,39182,10846,32497,94312,73980,72133,92215,96422,38205,49696,74577,72467,42832,25689,69529,15787,76099,78828,93648,38873,32323,55090,57822,38119,26162,43684,97358,63898,31923,16220,63794,15722,34738,41627,74509,54528,84612,96335,41589,65876,15265,24759,50021,46932,47034,98101,64869,81658,32206,14799,94712,33515,72616,82669,17215,90584,62431,36520,84893,98681,64946,39785,40128,43452,74741,68347,20022,11669,24046,96859,37343,24286,77586,58311,32831,24023,85011,23739,47708,49250,11043,29787,26874,63872,11386,80113,45895,69910,41420,68322,43714,32627,41069,26241,78940,10847,34497,18452,12452,65731,37475,35298,23190,10153,92391,92848,68503,42330,56985,30412,25184,48434,60297,64906,13378,20277,45023,50523,27393,25235,68163,36940,43407,90533,22531,75514,73325,79908,93959,93675,11659,13962,64741,97065,94577,35677,51512,50950,85849,85899,19875,82500,37030,38945,93432,40090,51153,52094,31173,16215,28484,21283,91291,95931,42259,98492,65050,91903,27348,17475,94908,30434,35439,31245,77939,24252,44733,32930,22252,83281,77046,21260,83819,78186,11881,52677,40323,21789,67057,98432,99101,23073,42999,26140,54309,43760,61409,89898,70645,39417,34041,52665,89141,72579,19854,27005,84734,36897,92627,48429,60133,70625,48904,22629,38653,96407,63960,73871,16974,30930,96772,73092,66374,88457,82936,33851,92739,59769,28724,61467,86629,44314,35957,20119,84733,65352,11571,86645,54695,69417,34706,93902,32613,28491,71083,31269,40542,96794,11223,73447,96809,72626,36355,47815,17588,42273,60925,22797,13657,52110,27458,85321,47058,59367,17092,55066,93736,44417,12762,49806,33607,52741,89520,12175,54044,36136,12876,79776,31492,90724,59683,35165,48369,83000,31388,58338,17431,62520,66790,80123,46005,64215,93098,36515,59264,96927,44009,51795,88649,96828,79696,55534,26534,30282,62065,17101,37819,65751,90947,91264,77861,21391,80411,57985,13280,72257,29895,15586,43909,39134,45103,12670,68517,44778,96001,18471,14378,44327,70693,25007,34287,13825,64161,84061,91610,82382,71423,34107,69945,45303,23129,13049,53125,28140,66026,75645,44207,35442,65107,43308,20717,12156,57925,55649,39235,80730,88432,54228,59366,92577,97618,33798,22427,35868,99126,62397,66007,39888,87971,32233,27840,23934,40827,66915,43884,68742,62029,12651,37883,98163,24598,74220,73554,43649,85161,18003,74541,17563,52121,68843,48702,29781,52524,32379,75408,80273,11642,73250,11991,91804,74851,95064,21619,45597,94838,61575,70577,95792,21605,25782,63910,22300,56082,96727,16937,74841,76452,74601,14738,69705,38813,36716,61318,82423,99370,26802,47471,52112,43179,42077,27145,80232,88242,30586,49641,94057,16734,45287,61333,25069,45549,60501,70906,81974,95997,46044,55242,61340,20477,52171,37392,23960,94745,77208,79653,12284,70186,43897,18871,24212,16652,77500,93324,29470,11287,70823,28011,77684,74508,75526,36462,12587,85149,57829,64320,20052,22087,24537,32247,35843,27788,59799,38491,30095,49065,23911,58783,42838,80256,63672,20597,72503,42686,53071,94481,36661,32632,61898,61951,53040,59036,74947,63329,19663,39968,70866,13551,81111,77784,11013,93456,53646,25456,10120,47369,16953,70796,24282,15605,77318,94838,45974,21941,71848,45539,75220,37494,83009,34173,91302,73197,94525,44930,99660,14496,22129,93429,97529,14094,21902,56739,22857,90582,64451,16632,36281,60632,18874,48690,86566,96319,31173,25839,13853,94005,85640,63065,53498,45506,88095,51925,74035,27102,19024,76110,61791,83677,52704,32380,12798,78649,90427,85468,78726,60082,80589,92666,65153,26854,31956,19806,10189,99225,65237,89975,30669,40641,37581,52527,66601,70666,31385,28323,32840,73964,33261,36394,52245,77221,37331,58783,71785,36522,97613,33940,88387,30576,93966,82685,88548,28235,23266,13820,51538,16757,82381,72718,87724,91061,12611,66337,68417,38973,40193,79945,62304,85847,37541,48626,70345,75549,78516,37625,89224,69788,88548,42454,34386,68507,25098,85862,68517,38335,21865,74549,91866,29458,64481,24980,11547,49721,78638,53657,42272,48431,81235,12252,95505,62865,56111,91331,84822,26213,95925,38778,63957,44250,38705,35731,48790,29143,81074,16035,27998,72222,96633,18696,11549,97889,96983,91743,29636,61443,77924,21648,79020,93987,17218,37339,54743,73343,46942,66246,84832,38305,16889,98642,56898,90958,75595,45460,28457,53085,27411,71896,66292,16542,13604,77915,57242,62400,45097,26335,84378,11451,61729,18448,30626,77135,58749,61739,82362,23530,83029,95507,26503,27541,57347,96047,30574,90694,78330,71395,83978,12196,22416,38618,47437,96021,23487,24290,31279,97086,53677,20852,15572,29263,23339,50684,23245,26786,53924,41902,10464,43584,17388,64323,39483,16748,19307,69107,77359,81017,20445,54733,14665,50353,57033,83338,12702,23491,90446,34944,18223,62530,16096,41918,65433,88754,26560,12097,99657,24939,18823,86816,25988,94557,57332,80252,61737,41051,60889,12826,28065,85618,80937,61258,66008,80076,12240,16020,22551,40706,59378,73155,84806,39634,78580,22286,88139,31050,15311,55371,33057,34598,31345,78979,67081,41086,85923,63828,89120,72802,82320,13422,93644,23923,98079,38427,14241,40154,56981,60750,80587,59061,92043,46772,91506,10722,41142,73805,85999,85194,97471,16838,79483,62929,70294,24881,53702,48670,28117,39326,41517,74703,78208,74066,20005,63874,65633,18421,38897,26860,98749,37585,51148,20767,69112,44865,80891,75008,89707,21406,20369,61545,11640,52427,55115,65386,28100,64879,71426,86409,19055,87800,84703,58504,41220,10602,44139,82396,88538,47535,54760,83234,40490,80382,54503,82396,87689,23834,59513,69382,63174,22148,48241,16555,31735,48498,89623,68390,52373,30306,79889,80422,71974,30979,24223,24241,43530,24842,35435,91390,70709,33733,81810,89533,95384,96321,96247,41367,55220,69973,63392,97789,28375,28872,70095,81883,63791,90231,16364,97156,57892,38383,47661,41413,12947,70234,69736,88489,38754,71045,95521,98364,87417,65918,41128,46742,36573,17843,33473,23240,74451,82938,66600,39750,49078,12259,38035,31472,67086,69313,81365,10522,80361,23140,85690,11726,36438,56638,79150,82821,30461,54492,13072,67542,26462,59373,66593,86142,98760,90555,22686,43725,57450,41864,26749,51098,21942,18558,47655,93263,59561,18400,89662,43389,23964,93893,20653,85864,57083,80261,30616,20204,98363,10083,79073,93390,43326,64196,12904,40776,81210,67653,52398,58669,62959,39044,16204,42396,44799,63572,30608,88078,10122,76379,69813,37350,22944,79044,50197,67028,96614,40918,28411,51387,62274,28805,94286,19588,99289,84781,79715,98785,44187,54352,79198,87566,87578,51591,64851,82041,68749,73842,17157,18176,69216,43391,91360,48197,28525,72912,93789,80949,10735,29395,26742,57698,55030,13986,32072,65118,89962,10363,42132,25427,31810,76687,84468,58337,52497,47594,41908,37086,31574,33407,94338,58080,86404,97189,25817,60051,30297,18244,45110,63564,63659,88835,22218,97181,75129,86730,61646,99673,57706,34438,20929,99755,25795,87540,88355,56637,94734,74011,90887,66958,26265,23446,99397,43378,59348,43184,47182,82441,71112,72436,93254,40439,36448,79519,65934,17374,14868,53174,49356,69022,44004,89451,55805,18299,77908,29769,82673,84760,77386,22145,16246,75214,18542,45291,69028,15456,55065,75574,98568,33685,79633,88586,13231,25322,99558,33729,35082,66160,33504,34328,38434,93709,63482,61229,46207,68145,10486,58204,66231,49186,30660,37752,76526,55185,61845,27268,49472,88692,78246,89779,90161,71370,21862,41443,97757,99283,29292,91261,58923,48387,57188,41051,73148,67835,29812,17229,26436,74195,33901,49811,95424,17257,44194,39841,13906,20387,70657,98280,54024,18956,38618,37849,30270,80551,14300,75755,96291,84858,73092,50576,56284,64562,45921,14537,34403,49191,96417,56861,69359,35934,46061,12710,11015,20039,80924,52718,43772,88810,94162,74316,35910,99741,40348,30468,16091,11644,14160,27281,41921,11902,54298,57217,35968,97414,50830,16626,79835,55877,10282,82079,68710,96931,13536,31903,68484,86248,11896,78768,56338,53109,99945,19405,12386,56476,48418,21191,58829,16651,53055,90358,15520,35910,99737,90287,41173,51059,37434,31237,64999,26909,48376,31890,67835,22868,90071,47957,14478,74904,56192,41820,26686,54826,61126,14808,96273,21801,87326,25415,50353,97948,60490,99272,56906,94516,24734,62766,12511,57244,16481,56732,25601,79944,79061,90546,18076,93192,14866,68770,85630,74450,70207,99099,26528,91040,27930,16244,13655,80316,85639,44562,60617,15968,64595,19661,88942,63446,78032,67203,35096,23139,95629,27802,60734,75842,15168,21331,86866,88256,16218,34410,82566,49701,76830,70233,14515,19718,29198,77159,51204,95631,66138,64748,73766,70198,57273,45491,16381,24451,35295,67012,90077,16209,81454,15596,45617,67275,72352,89518,81120,47751,33902,91355,91288,19088,34443,32481,96799,25469,14593,13834,47246,64976,27300,78863,92114,43609,47074,36338,88607,95896,54007,86323,31618,85767,88582,31681,21212,49545,58583,47626,12430,13974,15971,34400,73349,28494,22251,25183,59014,68331,57516,95955,22349,28501,18469,53367,36969,31439,57022,98286,74594,31100,50918,85805,24526,49298,29013,25072,19215,17768,70954,41794,40079,87662,49981,59282,77302,94655,22374,86281,20975,53442,19699,24284,48047,98170,38004,78179,76781,57381,71112,85382,26159,92540,64244,42742,87967,34449,50364,87411,75755,73738,38062,43759,52948,32370,94969,93451,28331,87577,50111,29410,11307,76838,48202,98198,38745,95212,98842,95857,21936,87921,20181,40278,31615,47874,80341,38576,22549,67730,10342,12218,49366,54717,92959,49930,65834,11594,29042,11514,88108,93734,78334,44576,44011,97486,75590,54504,68360,33582,40709,28730,27098,22781,11269,90766,36288,48933,92526,64970,16589,30289,34700,55349,26721,38916,79816,94125,39318,44487,17849,72811,84787,15936,89444,53778,37126,66044,68560,83265,90187,94989,78173,65650,44735,19665,96162,72012,59293,52024,94699,25752,39213,44758,19371,25285,77348,59685,14219,80155,39747,53320,15472,67688,22838,51782,80136,29550,47791,10907,99839,96178,89640,36615,44847,66514,77244,94003,16760,78368,71729,58960,65778,73089,84425,28244,74121,67420,11258,52278,94933,62842,60083,50170,81709,28227,56036,10956,22148,55851,60602,87098,88739,72938,56558,27108,19143,16164,43148,65771,64948,22873,96095,10096,51770,36486,85175,64478,56507,13657,93352,62978,57030,75901,73751,40617,37080,86602,78567,49318,52827,87155,91537,18806,95900,68543,80922,38336,58915,60716,19935,97167,31992,89057,55000,84411,59639,80042,52324,66376,81411,66652,49626,16519,79615,39162,93186,20888,51160,19073,26437,78674,54984,79818,24577,90265,36088,17108,10188,52379,18083,94134,60859,45123,33708,29519,85730,17982,52283,84903,28761,51053,31774,17695,90552,36377,12713,75940,74179,60736,75285,59333,82652,30004,17702,43869,99114,24705,31140,15743,39214,92504,16721,82138,37911,90504,79168,83192,38554,46617,49896,96771,61058,92723,85568,54545,28053,48031,28552,57104,62095,99884,94657,77838,42336,36217,70624,60110,10639,97172,91272,17660,81431,77371,13515,86848,80165,60063,98216,40776,56693,41754,76072,67853,77570,67808,86569,15259,36139,64129,96757,88005,33222,34381,90046,83109,49098,31177,54585,84202,71967,90106,71713,15839,38447,72028,64483,16862,77037,51851,70570,67185,56620,96399,91187,34243,30694,83793,80774,36576,42974,38009,87035,82737,57096,33342,19620,87817,97194,98656,55620,93757,96018,61254,10423,55374,12256,76819,75959,31313,59975,76413,24167,48082,60176,29261,22332,88605,43864,44076,30023,17389,94614,16951,25253,72548,63065,45627,41083,14765,77871,28133,56851,54576,65341,95022,76202,97756,31907,80254,35067,83998,32861,15768,89500,23836,90622,99873,33037,49852,26236,21351,31846,25356,41251,14945,13893,88841,90055,57376,15924,43449,98688,70710,21847,37399,26274,34689,24761,81622,65512,52078,88038,61016,49694,42707,10522,62664,14047,61104,34269,61034,55505,67551,73660,86167,24959,46672,76309,55034,84315,48868,58287,41944,56889,47559,71300,60868,47424,86625,61654,13725,78036,33150,66354,35078,86491,10763,47062,14518,40219,62855,94143,41485,90729,22389,42645,67884,52555,94940,25135,84333,29478,18084,71543,29039,77229,79384,11321,28895,83285,58767,32426,23047,73114,85483,59990,24608,14116,93020,89890,72561,30124,33347,59251,22882,98091,56450,53569,56843,55159,67993,82737,24912,46165,96058,36646,85563,15541,99156,49569,90081,17450,49087,32454,92194,19386,96405,89390,79248,12278,61539,89718,27865,16068,82051,19986,12011,51634,69059,15805,68413,77966,89035,84400,23305,33756,67098,20659,56682,67763,84046,98964,39948,87816,71969,25089,45454,99511,89289,58494,64652,82668,55764,11490,41754,72993,73279,82261,87189,12536,49473,32205,15886,97221,85922,22411,36359,78068,91947,20827,11831,44925,67340,75472,79082,15099,54802,41555,79743,45417,63983,61386,15677,60396,90599,73354,38756,45377,80968,99874,64045,76803,98024,34122,67710,21036,18776,91252,51672,70438,74183,52168,32679,77546,80876,46839,58182,89466,68690,85200,58873,86352,34587,19447,78073,27384,19468,56880,92929,18973,67696,86603,16591,82636,76471,20453,29619,40875,44439,18840,54637,76865,19629,41493,75344,62721,72511,86870,82739,58498,23403,84022,55059,46082,14336,13798,47595,10412,94528,54240,24829,31861,72901,45505,77239,10845,26790,77981,31200,83873,81101,58808,17339,25064,73240,78324,24370,26203,98367,73989,96605,40621,59477,70173,81029,19587,67021,19844,75326,92631,26057,77021,13858,20418,11268,29781,29815,67312,92798,60258,88671,15656,77724,99385,86313,49357,10381,82937,60124,22363,19121,21527,47920,18648,46991,20463,50621,39750,21625,86727,18361,37934,83881,35243,45045,51347,63327,47609,68667,30414,23214,47950,81281,12630,60233,35798,59861,62025,94550,10798,20287,97728,24787,14741,78276,60962,20542,35444,97533,13094,16601,12914,82943,51472,90946,15132,44586,27729,18997,68627,43060,95139,45960,24889,92271,97052,58141,29872,63786,54145,86453,34853,17342,94905,43122,51818,85506,53977,52262,46227,58645,42437,23583,33287,55940,37162,63268,13447,75428,48839,44645,83183,18464,90090,54977,37395,63888,99032,58517,93671,66955,84599,85687,36282,22586,32592,42422,52191,68791,79279,77266,99454,77191,12889,21760,42525,95300,16493,48614,23324,61639,59930,89723,18310,28000,21248,58935,96696,53947,72434,51772,64224,50072,97424,72669,60010,78816,70739,67122,55323,87343,48325,72299,70931,26805,30837,89949,24157,49647,84390,44352,61472,23767,84950,52482,90889,53710,11511,48939,42476,16734,17243,95051,47315,83378,20399,56921,19720,84237,51421,60293,18232,90836,83845,69307,15927,29706,44382,94022,10417,38282,88253,19524,58151,47781,94565,56115,25686,66008,10166,18232,36606,93842,42333,96920,32110,73948,39116,67933,75596,98705,91577,32046,53445,64295,91693,22712,81309,47160,21859,93298,80310,90710,59348,62603,16606,87627,33814,10279,12840,77612,55708,79264,90651,30247,24751,32223,88286,85139,36699,11997,25451,11075,77341,20683,56389,44905,25821,36258,41724,18363,69130,34925,86020,26298,55695,66416,47220,74827,48942,59749,61681,26683,26660,25748,67061,91954,46311,54462,59755,65534,50001,56331,44528,17099,68074,30397,98820,91898,45873,27459,37000,76287,38346,59703,61653,82613,54978,88355,56104,68990,23642,20896,69959,55593,50269,53044,76898,51708,73879,79019,50753,53699,13678,63194,18717,47862,96520,24584,52448,85614,56968,38541,71607,90309,43168,74912,48244,31415,34329,77024,58019,26625,76978,76505,87525,40327,11694,52899,19983,22487,46831,54211,83338,66816,74455,44385,10259,28293,53874,67681,73002,24248,89580,25238,78787,10078,22765,69757,59537,44211,24870,39918,52107,88743,93691,51468,88247,13855,32510,99736,47932,48079,75181,17147,28000,76605,28094,78397,99260,93239,19403,86837,83474,16799,81145,57919,87090,15610,52749,86570,25655,48201,65383,55296,35922,28618,34442,23957,26433,65587,92683,80634,86091,66832,19537,30862,68763,21592,71602,44145,78900,57642,31050,13364,27071,36187,26343,18266,46411,20216,51829,30606,10170,93641,11362,47922,45434,81688,98765,52869,76008,28244,55928,54221,78377,90068,99684,61795,58887,41664,25725,73696,71836,37068,39198,27109,80414,20361,16201,14275,18363,53957,29825,12568,42300,75207,72217,77888,46615,82946,26706,69816,98979,34640,98304,74155,67013,29932,12579,98436,47172,78437,40562,73592,10267,86447,76165,80139,76380,79585,67482,82135,22081,16439,38726,39887,46296,11368,28587,95356,10408,73287,33811,17494,82996,22422,34389,32475,43820,76879,25587,56990,86226,32650,49103,15746,18188,35668,79955,52998,65458,63258,98325,32638,78531,84699,98588,99470,49532,27016,90469,36258,46932,69947,23643,73088,87153,61520,24200,47368,54362,23561,81785,64806,83300,25915,25940,27347,14369,81998,22265,24628,29348,94368,61442,88759,66029,47840,53935,52596,80112,31502,36231,92394,47006,43153,10990,55037,91889,37680,96355,33202,10191,53418,48425,49546,79091,83345,55349,75629,34003,68437,96290,34730,72803,92629,40723,21404,85294,56650,42760,68160,88288,70662,29660,83147,89546,84478,57038,13100,73197,97592,93393,87189,74435,46376,64054,75698,23835,25209,31179,61203,27265,61474,96422,75289,65495,68240,70510,57484,93095,39317,69724,30716,53049,53825,89026,81675,69580,72190,49310,95899,15432,79924,48105,12954,52883,95801,87203,70245,43618,34005,19470,72032,48806,67528,23463,40065,82517,16733,60650,75505,67144,73461,85556,90995,36411,51630,83666,47769,81379,86683,96371,54883,62574,72979,63205,62584,51738,31396,77142,92059,90868,38111,48647,63210,94453,95854,20052,84419,28010,10953,18077,79086,64738,72070,46841,60675,90812,41208,41701,47539,87735,99671,56285,10211,68160,86834,97813,82718,24032,73267,68915,61729,10321,83352,51620,77438,70001,16750,63178,35172,96750,91568,38996,55610,48901,97128,74867,95977,16851,51019,82678,14660,35730,10095,72627,46881,68767,84108,43940,83658,35268,50834,14743,26628,42069,63901,54104,88076,34904,30622,52269,51713,22869,76959,39932,88321,85665,98745,74438,70778,57924,57379,84199,31941,90884,45294,80441,38231,16916,84449,75631,23355,35636,60237,46693,79296,77730,24892,10058,39041,57579,98585,82012,89934,85079,73608,69894,98157,80545,49916,52454,40593,77822,81868,58239,49425,77108,71049,21900,70703,10033,58117,73501,38871,91471,67688,14612,64505,35574,22025,40283,72149,30924,29820,64303,25481,18177,26795,53496,88334,14806,70101,96968,24009,60404,93297,48749,95487,27128,30786,33094,46592,52480,53978,59402,34053,47246,56213,29999,11188,48776,54738,88460,90845,96979,64982,68808,89430,29938,82333,23008,25192,88963,22926,22361,66001,37255,30410,54332,40232,20191,77578,55326,55614,31400,71526,56775,59241,84086,33079,70025,51446,34983,44204,99940,57496,97577,33066,49441,66506,26634,60266,95041,10364,29970,71251,35033,73288,45610,44459,33128,59286,51064,55740,26483,19947,96179,43007,13348,95577,86268,22667,46112,94888,50146,51487,90691,48427,65328,38137,89449,65108,32221,25613,11315,28634,62428,90570,30532,58457,16040,41543,68202,32553,75929,75778,76647,82600,33715,35371,21833,27938,48050,12914,84243,13810,47061,25860,82631,70499,63840,92499,29617,25507,89357,52806,63042,42882,88745,81522,90008,25447,58727,79107,46804,98689,27301,79987,35564,26541,61827,74721,81895,92760,67830,11363,50979,47654,73920,47380,94007,14207,82175,23534,90973,99521,91512,76864,22328,15881,15710,14444,12729,84742,33126,19462,46949,63946,26837,39962,79752,25759,49156,75047,34910,45167,63597,64105,78169,73232,58411,29917,23314,19983,34304,34733,43891,74693,84634,33384,69237,24943,45198,47010,38686,73114,64507,60994,40735,72400,67543,28248,84896,32894,74238,41380,14576,52645,54851,87974,73459,71463,58638,76826,55392,81313,27462,20714,38991,66647,60456,16543,44174,93174,65365,24266,95144,45876,35446,60282,94734,45456,13650,83953,44456,34978,32656,71390,45571,94666,58466,88768,20945,59563,88382,21336,17065,56859,37259,58469,76217,16539,43309,71299,50509,67093,26347,11702,20966,72732,37889,17364,39856,17358,34603,48435,44064,41856,86598,67979,79460,60339,68540,59411,77860,92666,91294,25352,49563,90639,95011,92356,52751,87694,38373,24137,38970,29588,65474,24656,13401,11145,78213,20111,95719,50316,41445,75578,56199,90182,99396,17171,27343,40793,58564,31981,54509,69504,52493,22939,53632,66089,47409,93055,62424,71760,11218,91371,28432,30273,14727,56906,37593,47435,91126,87119,39459,18637,56555,90732,15020,40480,18313,67067,47880,50380,33755,21079,71268,79512,53799,82822,42470,95667,21172,95292,24990,62727,62318,25778,10739,82490,85063,15722,30490,52405,88240,68541,56476,12419,95011,87581,22754,76966,80703,83565,77992,17868,19235,24090,31355,71538,62423,21180,39298,57157,47818,43566,83872,77646,58712,48527,57048,31670,36249,52532,73373,50642,62321,99680,71388,70503,55055,65328,76958,51275,86051,27638,61063,69519,30454,31331,68138,77687,24484,52186,27048,18663,52428,60739,86837,66137,45045,70354,42797,39203,84437,92921,65448,28123,23160,91684,69892,39896,92123,33330,78161,48711,53739,77163,69109,14342,91024,69142,85599,71453,38027,63169,98536,92676,95938,85633,21174,85676,13987,87463,16259,11022,24541,31145,72658,28897,90130,14798,45577,40287,26821,26676,93675,67698,93854,76926,53947,73785,60364,33743,93567,69888,98260,86650,10688,16037,32796,14257,69196,75179,19731,70410,57186,72820,57484,45645,73400,54843,43067,26616,76856,77670,26155,12387,49868,85869,60175,66188,20849,95670,11307,94639,34101,41387,86561,65570,36308,10246,91943,50253,84576,74232,21732,96286,28233,68937,46961,22125,66857,50023,66738,38615,25659,28360,88830,65743,21832,88321,70106,57252,95503,99427,89494,30549,65496,33903,13295,82848,43772,64305,43346,84165,73283,95263,66395,45481,18844,13830,24023,28461,70547,55879,93570,49636,69799,62259,15750,28399,71530,67914,96462,63125,18574,17433,80474,99721,74249,20519,17714,40698,83614,69961,84888,69624,77098,67904,32341,96405,47912,28360,95365,62136,31397,96152,23710,48281,68992,72083,19815,81234,53039,28926,20620,32294,82211,22543,11177,58358,14035,11917,31694,88089,13642,93754,25948,98617,50646,37531,87334,31682,56072,38839,70646,55374,17514,85095,89539,90424,19315,21621,37267,84443,47663,98135,80228,26403,59115,50273,76938,89245,85419,67301,45437,72421,49071,59753,36705,70655,98879,43430,32404,99083,88240,39653,19938,68633,69043,87021,39309,86768,85271,85612,33742,49246,44434,39163,51726,84471,89566,66575,30607,48971,93401,71006,74242,61497,59624,24313,64153,78431,35503,31874,84352,65917,73900,33484,28821,40010,64854,16918,31782,42078,39446,47749,82529,80277,57997,51658,32061,51320,87099,91444,89829,79337,99651,72189,36871,35526,34390,19083,62637,14729,69260,65675,81217,55333,18366,23267,24337,68376,88985,25975,79682,73735,13499,16794,41694,69572,32757,18430,63984,68200,65949,85147,36908,41913,66979,19282,21605,91243,97322,62184,32708,46375,66935,27941,46009,71089,13671,72976,83645,79644,22584,70411,69763,69156,40856,19574,78137,13774,53843,41673,86547,78380,51958,60223,76737,74653,25573,15742,12294,53702,34364,27209,66707,22070,46114,13018,32170,78512,21360,13785,62262,92959,61118,48233,16758,13999,13495,37889,96364,89611,64235,12082,13157,71197,20158,27073,70568,18299,12461,91986,33354,91369,10740,90527,20199,89717,92516,89803,27306,10451,49097,52685,29799,68890,14945,57088,56655,89044,13232,33813,16016,54973,32991,23091,41562,12428,96367,36196,28345,53209,13437,60027,59619,71824,82227,77455,35989,16639,77278,10249,60164,92576,17673,66412,10870,92177,14663,20066,46537,16713,88783,61609,99760,34666,59087,45589,35431,15899,66798,99375,97618,73749,15250,92322,28689,72602,33602,73945,86811,62789,78533,76703,87860,84994,63853,75374,28116,48452,32971,54578,54313,13624,92700,81470,53494,40850,60196,27194,42237,34231,23456,78790,58958,51302,79675,69037,59517,87543,76409,36111,23771,33571,68946,95902,62803,60409,51446,22217,19671,37109,63527,76627,78998,49698,40478,54974,41421,94126,58356,28261,17514,14310,37582,46067,98112,87617,94640,60652,82250,60602,17512,55471,75271,22046,73139,46675,89599,95603,96281,80067,42065,93325,63870,38185,25694,56342,83583,15669,12669,84981,43165,79944,99975,14726,70633,46466,92342,24826,79080,55179,40790,16791,69599,28106,89286,54744,84838,30623,75414,31656,37299,82057,56051,32528,94090,27932,24690,75521,33225,61520,66358,15884,27247,10952,55426,95438,85911,52609,47027,20719,43950,21110,85575,39960,49634,63572,54308,84914,43842,47736,50188,50197,80344,10715,28320,78213,92860,74029,17257,61788,31105,76822,31813,62032,37619,52032,60902,42883,50545,72943,25926,91401,59524,84083,89719,67547,27604,68894,84573,60086,14402,74371,96111,31209,12296,79481,60360,51860,68427,64817,84823,99046,49294,43840,38865,41728,12495,77722,92701,39008,85396,17668,60289,71565,57738,95722,85767,58545,72731,61724,75500,11326,66744,75415,15798,83942,65953,60702,35191,90542,38978,95116,11256,93801,40962,32065,11610,72223,12835,66470,55540,55789,26277,54882,69203,61741,83994,96658,92445,92391,94812,11750,27891,41772,42785,23345,54797,78959,97761,79441,58181,88932,24336,32539,94211,47066,27250,98517,22772,51819,22896,20187,86520,15207,56310,79142,11876,12050,81725,69379,67354,78043,46638,61659,72727,13547,97496,73205,77632,59815,87808,54402,79274,78660,13903,82248,99816,58477,90841,39958,79465,82835,65701,43029,39812,87201,47609,89815,34410,45006,38973,79837,32326,77751,25818,74483,82675,11456,26267,83216,76209,26472,42316,86729,70855,94267,49655,91407,88917,65780,45112,99260,33993,73093,72118,17998,36778,61198,11843,17436,42881,53301,71671,76710,93969,17090,97434,81632,63307,34936,74884,24598,68786,82545,86522,50918,56873,34744,73475,64229,14280,70446,70922,27483,41423,89337,97006,54178,95129,94342,67311,54635,97869,73354,71261,37919,13433,52959,86954,62636,39612,26336,35441,58922,67399,47826,28673,41339,77573,58379,25855,12155,72198,84595,14721,97767,51951,26972,80909,58532,75493,56889,86280,62935,57271,37784,43744,35743,70741,17885,97619,90556,75258,35873,62336,36110,21462,88496,86273,92131,25167,91008,32875,67446,58639,46086,33099,62584,86153,14072,72069,10091,62101,97046,36618,38975,93382,22831,38591,50060,12373,48694,96079,30199,16618,51674,13278,76935,40514,46568,31597,69308,45039,71389,29801,51172,19579,17262,21060,88401,60941,70274,12163,60883,26190,30972,70849,74793,58490,20854,33361,18653,10714,74955,41633,88059,32366,14533,45959,85128,54201,13606,73694,81265,52446,31732,18440,97588,42376,96774,75793,34116,59277,12420,53421,88015,33058,12835,61922,46168,94878,87248,65679,55900,79965,69551,37616,50343,90269,47256,28232,22852,41202,61497,35139,63551,99688,81635,82336,27875,10522,26617,63343,68104,62429,94318,20708,52922,73258,82632,45722,43470,97062,83254,28530,93073,68274,80152,61953,52371,15825,53551,75516,99767,58774,16125,81756,40365,31326,43123,51516,89512,97542,64479,58970,39399,53718,12872,54521,30770,34951,98580,28256,48989,87961,76580,83823,39428,67907,98078,72962,75798,95233,63994,64676,90343,75580,42352,85474,58803,57296,12132,24736,14937,27398,65226,69570,86703,34024,27188,24668,68410,16899,43390,97973,93108,80341,67056,61872,59957,42328,32336,53126,30055,34204,18925,25198,24002,10135,99789,78418,66862,31502,95162,95560,27250,57861,83751,19456,87203,75369,35562,63707,60930,80222,99908,58850,51568,84262,42691,28276,63403,92398,28102,43244,22578,92648,69401,46061,65378,72636,22806,52695,63062,34659,52957,97735,12645,79202,23527,69856,95225,36621,85940,90597,78564,53454,32262,41396,90076,96088,19136,10731,87943,53183,23806,96612,32714,83231,14894,15756,78547,25056,28179,30804,44635,32985,54577,74915,22713,77563,83469,86393,29355,72196,78626,86487,53400,76257,79455,50621,30455,95153,17877,19039,26948,50351,33240,87402,48270,32775,53896,10799,94683,18666,75638,42631,52556,44304,92396,41144,27275,91476,57054,30710,40433,25800,22532,92249,51149,26708,70455,55202,91890,19016,74952,44340,31461,34698,15326,39967,74429,66765,73396,63654,10092,52835,62754,55992,38963,53969,11685,58935,60816,70740,84894,71024,12848,42121,73002,79028,17993,32063,72858,67972,82315,25276,99894,31680,69421,20894,56000,90184,48765,92257,49116,78457,11123,38139,57110,70739,69644,34975,67327,52907,26351,37050,51986,50525,44851,20492,70625,34899,73702,32872,39963,97880,67312,92651,51207,22398,54918,10814,71814,58335,45916,73919,19844,16294,92713,52298,30559,68916,27197,47168,19523,80103,83999,62387,57560,38274,65900,98455,79835,61374,11590,18854,83924,30460,43259,48721,94159,33195,84280,72777,77382,49000,85191,88355,34559,90370,84496,18085,58729,72835,43760,87805,23522,76312,49887,77927,55400,10555,12943,66299,50922,53922,15813,78086,21843,16317,90321,82250,60049,88247,45186,11259,67816,96380,96507,95563,85414,14229,72184,20139,74169,75696,80127,13191,68807,23271,47498,65914,90657,44721,49014,31334,60330,24127,33756,48284,28130,75870,75734,37879,85737,82943,44521,49624,88439,58796,14722,37381,79804,80249,52305,17470,85571,25219,38747,34283,21082,90101,75621,13475,34673,73107,47401,11622,24220,25345,58501,88622,14249,70081,34933,93675,27718,24169,54769,36541,23488,23557,90076,87927,90016,27897,99585,21528,78673,47676,49837,53436,49518,11131,58249,63750,74452,11653,13058,56084,91487,23132,61853,50545,21567,98757,57726,66498,24710,22666,91596,73966,48557,50177,41799,15604,83119,58554,13037,69195,51012,60576,47834,59237,85331,87665,41083,59259,86649,60173,53198,97999,67156,66286,68167,45971,56655,33793,82604,11289,87919,96399,61157,74740,89103,54384,66655,36791,33917,23950,98295,84497,67835,99371,36642,22810,60184,95109,23581,70197,29113,59055,15528,69993,59475,69350,60555,75014,85853,54739,57523,54434,63487,63097,73586,16843,30809,15844,61206,40037,49957,70851,74429,27175,71430,96466,83398,29658,48122,56113,85128,88170,28583,23370,45674,82452,34446,33062,92269,46002,85736,27514,52876,59722,45992,49748,33326,96484,36200,38187,85566,29013,69984,18316,62936,54377,64806,54774,61769,35623,31814,15826,78478,56762,20961,81185,27044,38955,77158,74272,49154,55508,31648,16222,15538,82186,82148,63229,35039,81665,15259,29534,81907,39066,28656,10912,54695,66584,21190,53732,26639,69141,64211,76373,58369,86877,27829,81368,68536,14173,23656,72239,12118,68665,28073,52293,49702,40637,45862,89262,47844,95409,33194,82003,99387,43248,31961,50985,53423,58241,58140,17420,32352,56053,95719,98760,74791,84840,39912,59775,35011,75795,17190,61213,33112,62646,33630,94106,92833,26560,87403,99490,74883,48278,98949,50759,88564,53592,24597,36283,49271,49620,80322,69143,64271,38563,47349,17470,36804,82053,42094,91580,77242,89645,11585,48808,59003,21610,88717,44703,77998,76399,84866,23914,29645,64740,80705,35140,79849,89621,53244,78940,56902,42321,12679,96527,48762,52690,40977,19480,45303,31368,40969,34093,12450,41877,82583,34305,47448,34419,11652,97759,73796,17598,37747,12021,62601,95549,20854,74886,95372,25521,32249,92855,53625,89892,44343,61566,98406,10603,43512,45983,89564,84689,66524,64283,22314,57750,60209,35723,55423,32540,56367,39329,56201,52471,69147,14892,86393,98026,70843,75439,19352,27412,66957,27902,51374,57497,27014,50892,84114,58816,21065,81139,43182,37452,84408,71326,34687,86723,25914,14879,37172,44891,21479,73847,59034,30396,36924,67174,42627,79945,66397,25504,68944,94499,95689,73760,67149,50593,89909,80353,40143,14756,10232,86327,96399,93785,90341,75521,22217,91611,69321,16321,15139,25717,61553,22107,64591,40445,91994,46805,13422,17384,59607,79351,60668,19448,90792,44292,51388,74620,24139,60628,87897,62295,85433,90193,68431,29000,69467,33107,97187,47351,87482,42478,44328,77478,15522,92093,51177,13298,68882,89841,66403,53678,75856,65502,70236,36451,79181,19647,96067,43136,20994,37622,67220,72855,80050,67912,65822,65167,62967,34487,73096,81361,19968,66831,94917,55083,99371,99606,52283,24593,75192,20851,33236,75233,35999,19099,42569,29570,50251,81882,62073,55225,93397,10537,88974,47703,48201,16698,10645,11362,56165,72516,70075,38137,46793,54308,98325,63780,97439,57022,99018,50480,26371,26259,23018,52341,53923,92549,10143,94155,19613,90794,60494,38772,18990,47358,69938,78740,33811,56278,54350,22549,44903,97246,28914,49231,26503,63546,97071,38686,51697,81789,24442,94443,99535,74682,40751,30100,76367,60710,21067,48252,45949,59841,72647,81333,17083,77042,94082,39766,42071,50218,15716,29143,56909,57954,11785,46678,57882,24447,85754,20395,70842,64916,60244,54823,55526,91660,89835,12389,10174,12705,91643,63207,22007,97867,54162,77581,93528,77729,19274,52538,35724,43573,53153,87699,78094,40810,60108,63566,24142,58601,73597,59656,47595,55922,27690,15964,30899,31359,15837,85053,48466,46854,98621,84058,53125,25027,18825,35340,33745,11521,14530,39937,16349,78926,11732,37726,61957,79742,92821,18731,24224,40790,21945,33001,72099,13107,95795,74035,68805,62652,56043,37457,75883,40572,96497,82598,56972,21761,62663,96861,53725,26490,94868,81017,43822,25826,57153,95310,19443,72851,92996,57878,76738,61605,76641,64728,84318,68528,40356,54831,68402,13152,25445,67095,74507,73090,45773,55116,24222,67136,25877,83953,16140,20873,93445,27240,88863,71759,85530,39649,93626,14328,82780,67569,77854,75884,21323,41258,80516,89961,99003,77773,30443,31279,11216,17177,45968,61480,68197,48911,19706,54777,49078,93899,18918,68872,44497,50048,55773,84622,76110,44145,98700,46904,56380,49939,60514,64842,27406,81190,35425,27498,64952,53499,18483,59755,74200,41646,44212,76478,36160,46692,48225,10574,17920,89804,57840,96746,87893,33525,69465,94806,96591,11162,52063,76591,47366,71760,97931,67503,38819,18431,46650,78434,25985,59947,18307,80835,87054,82281,96753,78125,69479,73574,26399,48588,73603,34308,76207,34625,67590,62108,78817,22685,58383,36188,71380,30691,67581,29423,44273,96083,71056,15988,50199,98329,17140,59312,35656,72556,93427,93071,71699,54771,68903,66750,48581,46119,35979,71834,32449,23669,81896,65705,49182,64856,14293,18084,68394,54064,84076,38030,56031,53184,95675,46318,68078,54657,76093,78927,26769,35773,82173,19553,29879,34848,49594,50978,68488,94604,19373,83699,87921,70517,15302,55465,12480,84623,91062,88305,40470,76979,40337,15796,85478,64843,75632,64166,29688,65281,15518,70427,65295,63497,21828,72453,46440,77113,32067,89359,75435,88289,28173,33235,96140,34941,54977,68073,15561,24954,77740,81583,19660,47659,38332,97687,55753,53702,21415,78427,64071,16675,52685,60973,50823,99228,61706,57962,74067,74565,45805,18156,47130,36741,15775,58593,35313,31505,17827,96744,96139,21583,66998,42353,46246,68962,78738,86837,21764,29144,52357,20353,88033,41531,21233,65721,73523,51900,51307,96258,46617,16973,37497,64834,17957,87353,83201,84054,13054,44954,65299,68015,16679,78212,18928,65465,80752,35529,89343,57785,47723,47758,23684,44086,93796,52726,20136,80653,10297,19126,83800,68775,65163,75738,49988,44012,75678,63749,35952,20050,66109,11678,19936,59044,83157,35486,19074,61471,16158,90774,13483,65913,27459,50091,33755,57221,79391,37158,90749,41035,36350,53140,27723,90379,73972,33201,33648,34826,13983,12874,32359,17081,19359,27715,72292,86677,80798,77922,39659,79496,41194,49791,21001,99957,56403,35173,84883,24585,57663,94415,15620,69054,23207,96697,68887,17543,81661,40541,45342,92250,65485,24189,31642,17344,81960,11349,92888,91539,81638,54661,42945,32051,85403,53452,66466,98266,75132,73899,89665,48509,44720,48944,63563,55260,91588,65267,27300,92982,67388,93397,82712,94973,81234,97477,90368,85085,77749,31961,38223,34043,35015,48072,59342,99174,39991,82267,72142,57931,40570,99532,70915,14176,93899,27346,19819,73537,58659,75430,55244,90138,67370,37074,59111,29711,11766,33340,86596,41987,98243,24764,47746,85804,47062,95653,58408,50186,57809,44241,29743,65506,97649,47011,97942,33025,64336,42900,63023,10227,45721,20160,39207,50629,53146,10088,59057,16259,82818,79703,19074,27439,46135,83236,79519,81919,82406,71315,19531,52559,70714,22012,43070,45194,12565,94105,59015,87406,57508,28585,83141,61514,64314,22517,76013,46056,62805,30283,47510,23813,43328,91575,61784,63936,62719,54291,74590,67788,84338,35845,56126,60565,66577,31900,71253,86092,77058,39237,48753,68877,38831,46238,73131,36220,25145,75196,79111,46657,59860,86277,35802,53126,14131,19418,59456,22547,89008,60130,32718,32999,39253,54550,93735,96687,15773,86592,12641,15459,92154,73597,49633,67999,27988,29866,83451,86676,54750,16081,99006,37108,41270,27555,32856,31918,40440,70469,32156,34765,88224,51638,29473,42927,65866,24817,64227,34365,32609,59778,38761,42835,70732,14501,47854,77708,75363,63087,40594,78360,90491,25713,33196,85448,30880,27792,84336,68798,55855,46386,20226,63967,14692,22716,27662,83204,91967,21227,37075,34521,10687,99782,50960,77456,42531,21032,71259,37936,90709,32094,11226,27522,62342,39497,65266,20309,86783,66427,72558,60049,31879,87525,59060,60402,84030,40491,55367,30728,72367,72705,14311,15737,11192,48290,70869,46756,11868,37090,55008,45317,73965,94568,78870,62653,14461,49663,92668,33525,22179,67290,83927,92446,32772,95464,40457,86546,52179,72112,28633,17360,38156,61650,91205,57329,29483,61238,51287,31990,71225,20365,85678,12736,81301,54333,58026,56141,15637,98361,52934,44821,34445,70921,76689,89819,96622,37633,52385,75091,72788,26495,39020,98931,61006,34482,37149,45844,37152,24545,40077,31641,40691,37364,88795,12898,35293,58216,14239,16659,17787,82597,29172,14354,36698,31606,81016,34674,69690,30025,36754,75559,97904,39774,25250,56692,94952,10642,67139,62744,32203,86497,19777,90311,81883,98593,40813,89524,52837,71523,50163,68271,91810,32969,17303,39661,78840,87956,75521,94887,58264,90917,24112,33031,76782,25226,13087,38376,63254,32986,37210,36935,53830,22877,33783,31888,70124,21749,94786,45378,44316,61634,59014,88542,35490,47740,37856,75588,10431,93723,41276,30560,36692,33720,21447,71547,77184,35013,89130,45466,50238,37408,57017,90700,22215,88409,34649,84992,63969,85422,31894,13575,13854,35301,11269,50813,13546,83323,65861,54959,50410,72560,51916,74790,20327,27813,18128,67114,66161,50401,76083,72716,36133,58235,86407,60819,53103,81001,97682,14824,42002,53655,99490,75555,58208,39769,37204,65128,58039,82341,48721,51969,46377,79355,66324,81632,98512,75466,17796,40078,26316,34579,75597,71547,67789,69625,67984,97406,36231,11500,79368,10640,15424,87265,20111,49172,18413,88071,54823,37903,80727,63933,75288,70206,67897,41340,92696,74277,90696,66074,67683,21186,41437,34142,37097,85869,10872,34642,66943,20313,66620,29881,20526,34929,89968,34471,71321,39116,19895,93349,83162,49381,54506,71642,19204,78218,59952,17003,71765,73224,47697,36035,74508,74961,46889,97067,26137,88241,30348,70723,38900,57009,22031,45060,26785,85167,31439,54456,44271,82237,13511,29895,65403,10958,42922,10464,97187,47393,84014,14993,24154,25299,52470,10427,50434,27874,92260,23391,26877,10243,20018,13992,89412,90443,48949,22133,86812,29401,74424,46221,25292,19047,78706,30349,61581,65633,10124,43909,83129,86885,10942,36884,28290,51248,42019,94385,26204,30875,12502,90442,19335,36640,83788,55013,34951,55167,56644,97065,37877,17904,99869,25210,48506,81414,59389,82378,85264,43146,91447,84219,38174,41873,37515,83093,77161,32904,34232,68952,88773,12884,95826,51347,54556,49714,85339,20537,55509,99319,15792,11406,62712,68922,13638,93738,97132,15871,46065,63069,87080,51405,10192,28797,48130,56690,76270,92959,30925,72744,66070,17004,48191,47113,28044,35419,21886,49168,82916,53766,61627,21036,67836,90866,96162,24183,56601,56268,67936,16127,47865,35139,34800,55703,13573,93554,57424,48938,79176,99418,48396,96182,88021,77405,24561,27576,37626,29730,74085,73645,64338,72853,32299,28757,44077,60355,30707,84356,72906,14579,28553,69933,36992,42887,26612,92874,28352,69493,20742,33476,46586,32513,65308,95180,57505,76614,69777,47291,91081,71264,26126,70691,58999,25164,74668,30668,66693,42688,97178,49046,83015,84057,81482,28574,57977,67497,58505,61532,59166,95513,28126,28834,18430,28519,21107,48338,15266,20029,22677,84857,43614,58992,94161,94821,29330,55788,30547,98173,93438,42845,78120,90374,25357,32631,31353,85214,31049,21165,58275,34850,79387,92882,75689,31548,61588,31016,28203,41920,38338,42374,16169,14067,63698,19206,96243,13081,36687,17601,72521,92155,51914,82532,93002,85133,99755,48586,39038,53151,41529,78865,49862,35283,33610,97048,14608,52937,94854,49197,64740,22250,42953,23701,89966,89221,69349,22103,73306,24367,67002,96816,75836,34502,77760,35043,37320,36934,42226,15963,50946,13224,43210,66735,80928,84118,76285,43190,13399,69480,25544,36035,23284,65295,51375,79486,89647,85348,50890,50420,89704,13515,14677,84239,52174,67802,26229,78247,62610,76208,36780,83472,53261,88700,42981,46782,66196,94562,12605,58163,17959,12972,66884,83644,69015,45366,79349,46667,15096,65522,49968,29408,48011,59409,41991,43455,13437,58244,44232,23565,47993,23423,96911,44872,13190,37700,72583,36601,31354,69965,60721,12234,39331,78477,37910,56524,90602,86993,75952,55616,59525,35843,60873,85141,65385,13191,92844,81870,60284,89164,73321,41674,54554,84205,99099,84224,65596,10521,13944,16430,58654,15334,47270,50282,95942,63444,61584,48501,54707,70540,58282,64585,33795,80782,30200,52685,48478,53796,78103,29244,52087,49637,19119,28540,11531,34500,70927,86920,69012,30572,23774,98210,22643,83630,17488,54344,19289,55122,50628,65799,59392,28409,55915,37154,72548,63439,21572,25911,16537,33183,88001,15417,96545,82214,39819,90584,10373,29124,81259,94489,70884,10002,35505,62752,27796,30286,18481,68802,84276,29612,70947,55702,45617,27846,95036,18073,65277,47866,88738,43427,20502,34444,80447,17237,72499,25961,99379,76193,28837,40585,84401,32153,22493,51975,88782,42649,32164,41715,63647,53764,23709,72339,88409,49563,92369,79506,68550,72664,56840,53281,69904,95119,92131,43757,40077,83162,52762,63215,58803,99588,10676,83003,63224,54291,57720,56569,19294,97970,16198,75458,35481,98874,71320,44763,86739,91432,16392,74045,66614,85180,38276,52671,50362,94789,76727,79706,39964,27057,22415,50618,67576,63724,78836,36541,43633,57029,83015,58980,80891,84269,45812,49857,45909,80161,12823,95963,25870,96891,31741,56601,72438,96422,22349,21396,10082,45805,78591,34377,55697,50319,57071,23656,95725,35379,97627,80281,65213,44085,57066,19721,40872,35478,42306,94384,36510,31928,31265,35448,44117,34351,25147,18787,33815,24955,32196,46036,25427,81132,52389,49961,34877,56220,65536,75086,53030,64479,67164,45437,25850,52198,14069,95553,87266,90176,91111,96123,31053,39612,82476,20014,72106,28199,78447,17096,97307,16124,58901,99935,27279,94470,98014,78304,40844,60496,91367,74052,20291,60051,67223,77714,84246,55061,51448,29080,79131,59951,80071,26113,68611,65495,68890,55339,16121,34816,97069,12605,30050,42785,65239,85299,11305,60260,62859,41588,52569,91625,88143,11983,38100,58840,57644,87261,38314,26060,38913,95875,41239,24515,24982,30366,62828,86302,73852,27338,90486,61726,23143,32376,55950,70300,30329,39271,16748,29347,59299,50209,60725,90657,43171,54663,35071,90942,88715,31079,52741,88334,42566,54317,58717,92234,86833,94663,31660,45067,99522,89149,60132,57370,80340,67073,46364,29393,19721,45020,19115,25086,60924,74274,92739,91845,34406,81557,59198,89150,99728,54279,50520,79678,33117,57189,92253,80793,87776,73470,10782,29977,21830,92754,53536,30249,71006,36593,21573,87926,11906,15318,27082,24970,74870,71063,99955,60028,85169,28579,60873,81754,83870,87108,33931,20825,29328,54432,84951,87216,86256,25531,47135,97573,80831,37613,93674,79047,47252,30774,70623,83327,58443,95329,95678,88706,87933,54384,78442,60019,64151,44298,52249,89909,99411,27221,25910,10138,95600,64359,35022,98691,25073,34681,13174,78482,81685,86110,72562,75569,86852,18511,77448,55580,68302,36850,86677,34826,33869,80640,47185,89397,77792,88606,90698,39061,67842,79816,83844,69655,58904,80871,76843,17818,94380,40595,96015,77007,53675,44939,79938,80082,13618,15795,32048,40290,34349,66217,17565,85498,53448,36146,62554,30661,77831,86517,34410,47514,77204,81957,93564,61037,35669,61629,30727,24560,67919,69360,11374,99021,39393,65018,20445,49799,16361,75217,57883,91539,64407,43374,90586,65630,56757,60418,99793,51827,30489,83776,42237,86117,43138,99754,50622,54255,46525,26996,39331,55458,23138,17159,22087,99517,58658,49014,42450,98588,58700,32572,42032,79333,69001,86822,13995,55661,96669,40865,81038,58056,11684,49041,11319,12282,36770,16306,64820,19164,83102,64189,64722,80433,26356,47113,44708,10766,57971,54356,81465,35325,93150,10104,54753,50692,95824,28709,42889,36989,48168,29673,32669,48602,89343,10954,19108,85572,67014,58582,44360,34316,57783,20172,63138,52855,30180,24970,42502,71071,99724,20933,70691,97678,62603,49244,22162,41604,42794,40950,48322,37123,49775,41306,47743,31626,73027,91699,30976,31736,18200,24496,65407,25401,14296,77699,69206,15418,85611,10006,90663,63673,28337,87235,12080,45445,97512,78039,41627,97299,61199,71422,44960,65126,48470,85816,69089,65043,43743,86756,30160,83520,46328,10469,57120,74087,17674,50011,10596,33700,39207,78969,74602,26995,96321,56172,65122,35664,79174,39443,65204,31070,13009,85943,48207,57701,86876,69480,93311,55980,90485,57200,70529,13974,40133,27421,19833,88449,92195,52276,40653,52664,93868,83949,29703,63579,43732,97361,91550,17296,43227,51658,27763,93693,69460,35144,47876,44606,55233,31646,79068,21149,14488,95829,14897,34443,94478,43277,75825,15504,83497,77356,27816,52280,24062,23672,39258,71762,22022,65346,15648,68140,96370,87672,61069,98006,49818,90282,42198,43178,22205,17157,70091,53850,14557,40136,28812,95298,40142,34297,23640,62510,92557,31979,59989,88501,87243,70728,87694,47219,45269,97701,78777,81456,97843,78595,42834,25820,14589,47253,90525,92410,27246,80882,36070,68968,51206,21344,77786,67274,26207,83650,71496,49494,45973,92211,13968,65825,34766,64847,94162,58940,76052,49742,80068,66193,65695,34502,75179,89740,50044,77919,90105,91991,59466,82759,14445,67935,59153,18961,83102,87906,98556,67801,85645,62238,72042,17845,12581,38884,75877,12423,23628,17020,77962,26710,92419,57630,39056,91277,22535,64220,75967,90769,33590,23789,92291,47225,38408,36467,84426,99957,28672,91367,68952,92498,22239,21308,95340,17153,82477,66856,76387,64946,56041,23645,25300,67270,62061,40432,55475,88417,18195,17328,62847,66153,52182,40046,77751,76258,39002,90282,64176,97286,16707,80240,81568,99078,64834,40789,22443,95773,72516,92161,91592,38941,90077,60347,78551,82624,80402,65170,52287,65766,51553,12572,35488,78885,24943,42264,87016,91354,26422,22840,98267,60815,10403,71328,88252,10712,70783,40830,43036,14768,96700,45447,94118,44650,43238,23816,12143,64115,13955,62178,77501,91568,47937,10201,83392,43164,55648,53880,48194,88256,25955,64980,53649,19257,25016,22887,71663,99438,23956,57267,18028,20974,12163,86586,76367,89369,71291,78897,32929,92397,15981,30408,35875,40298,89149,91436,48542,88383,27872,91906,28854,89093,68607,64790,99676,75849,83611,42816,16209,83324,51858,61230,17130,87595,71608,48970,53138,62281,93385,59197,38758,68542,37862,64359,21591,81149,47882,91725,93939,86621,17468,40796,61490,75205,23376,76631,49897,94556,80611,53581,20546,46221,12127,41372,71235,75288,66881,91009,46965,98984,29870,81074,61780,58869,81746,21765,52838,54728,62087,26689,55658,16762,89755,47484,39022,82270,90323,68491,68061,14859,46591,12815,77976,94342,14073,84115,62504,54833,28618,78464,54628,68260,62208,18854,28362,10126,36365,52230,33996,99436,76590,82219,25309,53135,36033,16118,62059,33597,75480,80618,80849,40707,87821,64725,27299,18283,92750,51626,68610,51427,10967,13669,96904,34840,82235,95436,96198,54409,89000,66836,62843,62682,91436,82690,29967,24682,32112,46488,44770,76774,66350,79837,97494,23395,15276,94057,26090,92740,37193,62911,86831,89947,99302,98505,53218,41425,52809,66306,86207,60347,11827,96182,57983,76334,19580,28493,21491,55364,72936,21559,22972,62364,62575,63991,79181,67848,39956,99189,61754,29164,35897,63268,25072,58193,22869,77646,24275,33563,18607,53492,25106,43923,63280,31023,99600,22966,29683,53263,37356,68210,10507,27834,16562,35618,64993,75270,58312,64990,80339,88355,54999,32941,80282,86224,12904,83689,15414,18779,68291,14910,74347,96549,45720,22234,21274,80622,17984,48621,55993,15130,82637,18465,48530,22837,95423,75337,18355,96891,58422,69608,77638,69506,58125,18418,18483,94410,13631,29597,20559,27914,49753,96152,39529,21509,28305,95130,63353,25427,98491,55051,33600,48334,43777,25125,65435,31076,39685,47902,59681,86663,96456,19948,43597,41701,84427,21847,88213,53314,86096,96072,11599,76389,95707,95159,48507,33602,10349,92907,95838,23242,11375,96842,97075,81532,14201,84123,37768,12432,43965,64391,21619,84649,90659,96384,40942,78627,30829,21953,32359,88637,97789,98685,59134,10011,28524,63522,51480,20237,22297,67080,28719,13990,89832,81928,86125,93970,15429,61349,57457,18443,98792,56459,75092,19385,85845,25875,44155,60737,66637,58453,13990,54267,43133,57968,88303,62028,71783,39037,50160,84408,18653,54960,70280,58209,89522,28495,72946,73674,84452,25731,29607,56857,52201,81521,36799,86105,80549,90673,93055,35596,52272,94773,70164,70019,75697,68700,93909,11932,95685,73048,78420,38083,35019,90330,94562,63502,84366,72021,60851,15395,65907,11468,57943,88307,53782,83315,35928,25124,43835,29347,77614,55161,58632,80133,91470,56857,24957,84517,64930,84562,33744,36447,45412,44234,95133,13183,98954,12652,90142,64625,15706,28182,99974,55522,33884,38187,29976,90764,22489,33972,15420,17892,30312,28900,55788,90083,76479,45420,47273,62978,23645,33206,72338,73355,34149,46790,79764,21143,27806,54327,26819,60383,44386,18399,43679,25256,53326,40061,83653,12876,43421,10705,74994,35198,48005,45262,25618,40523,52440,89378,63705,35873,65323,41587,36279,12623,99462,84304,54993,70866,27576,21918,74587,51095,67075,64197,16549,26022,72708,72371,16585,60996,28158,35931,14158,70204,74442,28501,34261,28658,93993,86143,64920,46310,63156,45935,79476,48312,63816,39453,28678,43344,73841,80480,22552,70270,96659,90280,84633,80866,58913,83342,36649,53485,26411,83570,95731,80059,25400,16786,54531,90188,56180,26109,40857,69255,52850,86724,28472,11749,61327,19580,49455,30533,73456,40096,67544,30851,68534,95712,20335,21472,91619,67593,48946,58945,93199,12154,84840,76981,97663,43596,14277,18213,12408,25080,64869,60187,47808,32990,79996,24347,13205,60145,91328,63382,24677,41801,84259,87139,63432,31145,77585,45850,28389,45180,26668,88750,89408,60074,52751,24844,92784,52142,19750,19461,50822,29530,75416,97546,48275,89229,85572,39109,36774,61861,65069,66525,33248,31244,93526,20258,80245,32694,94998,59682,10627,20092,78403,24211,71809,89174,54477,11255,22881,48543,41970,47335,28302,40316,60273,31125,24123,15801,33293,93763,42706,33446,85522,70920,30562,92119,71104,36348,17000,20289,53079,68512,46601,28829,58268,56773,29890,63863,27669,13757,20079,26414,69734,14789,49072,60437,75282,76830,65443,64328,55014,36084,56783,20941,93355,68706,26474,28711,73708,51056,93745,85097,16218,52044,47714,95516,65920,20470,98720,62034,24328,42957,74270,22700,24992,79840,31288,36473,28085,55949,44611,91112,91480,23257,59502,65352,55509,22032,91151,87910,32777,69873,65049,78981,19631,63231,54140,30877,86157,73136,58454,61384,28164,88602,88847,28854,77058,94805,93395,87181,13028,74585,90160,20442,49509,43565,61935,84709,47696,63907,47819,30307,42025,75471,21944,47088,96572,37642,47499,17943,72454,53477,38129,20527,61411,55149,36646,18163,14639,32276,58192,55570,21188,61653,42656,56141,61649,55571,32359,46191,75985,42037,60340,71555,35646,19170,58956,88552,59904,43826,40661,48669,11467,97957,22714,37215,19480,90681,44669,34881,41574,59728,73791,52394,20415,15674,31427,65111,70475,12265,20278,19770,26509,24618,70359,43271,14067,71712,25597,92343,31712,57593,12584,50132,41786,29897,47878,19402,49210,76413,69446,95998,38643,10259,17433,98322,11160,58083,17106,33478,66120,22422,30034,23967,66155,12102,44203,68035,88085,22094,22421,97519,53703,56600,73337,24730,78439,10608,35453,71601,78835,93763,35416,62273,27670,62164,58174,29305,59421,16044,39450,71646,32924,49845,81015,13588,85065,26986,10535,63259,71060,96236,19412,78185,31371,39187,49361,90037,29445,83918,13971,34363,91617,80052,73175,62015,22498,24510,40568,73474,37073,77575,17495,87949,92492,37455,88500,99743,75640,39339,39848,72762,74643,89413,23068,66935,28938,52581,96446,68511,23332,64788,26298,46593,15221,85580,58490,33191,34073,84223,52833,36256,31954,14223,66759,17125,13574,67218,20119,13049,50738,28919,46217,58416,70403,42732,15572,80842,32181,43745,77075,31752,48132,27900,98989,37318,78556,46694,75368,48163,85761,26159,16715,69656,49617,90914,53115,63977,17196,14404,28773,78960,85180,23282,50479,61056,91179,99582,60260,47034,27584,61751,32763,22873,82478,44208,84177,65584,91492,62903,25153,39849,25400,60860,14867,47877,71435,87874,84755,81108,12027,97127,43361,38622,75918,44125,46335,66371,89557,65303,47581,28757,81864,67832,36536,16659,74348,65080,60568,83066,86685,43489,46162,15164,96665,99472,94022,50877,21109,78636,78829,27723,52521,24931,92599,40561,73518,73632,56223,74048,56815,88788,66467,10560,53553,39099,28854,47101,16154,78177,59099,26598,21658,33972,64880,66234,89450,96277,60997,13908,48949,67711,41552,38040,80390,86358,55178,46623,34809,90843,25363,46311,53227,37568,21534,46659,66253,10312,87634,55367,52685,41895,49656,39101,67606,91344,14176,48764,51418,11556,61141,48055,55517,20526,11012,20711,68826,67542,15987,93000,59720,66707,29110,21046,71943,79694,62184,79633,89638,21078,51300,20822,72183,39078,47421,72669,90237,64129,60553,53281,61278,92688,52603,75871,92562,95400,95639,59581,22860,81347,38977,42523,12315,41972,47565,39054,89993,59273,87025,89031,75434,33210,48266,40170,17981,51407,26511,22518,96241,27160,85690,59983,86354,13593,93795,19767,63405,76126,74314,57600,22365,85643,19605,80283,65312,10974,50505,57484,45564,50868,24861,57258,94211,29498,23821,38236,29126,21317,45746,41134,15885,33516,98974,58534,35882,47239,36960,45199,10744,22223,62777,19398,49772,10633,46200,70564,90957,86378,75432,89607,37766,36791,93566,32363,82362,88323,91955,74085,80282,77682,22912,68322,99939,96941,78788,27754,14439,81626,75762,89490,57443,20522,55654,54146,43615,95589,61136,69962,62609,89149,82654,32629,33764,97108,63186,18939,30904,90206,64967,61745,88353,23457,82915,51044,55754,53358,82046,23682,95246,44838,38351,32472,84731,76352,48623,38530,21656,87182,89258,48547,76703,69858,47711,71251,63110,32353,54820,68026,83120,89543,91650,26671,28304,91004,96959,25462,37960,14657,11656,31946,40662,49556,96707,18276,37305,35121,30890,63027,15179,18424,69374,28488,37840,74861,93882,38919,80768,87177,12378,47280,31391,17931,31714,63610,52343,34046,35239,54032,20597,10949,85300,29653,72029,26865,26089,35322,79376,91004,72445,76361,28077,81551,50318,20352,49197,73532,45550,16206,17963,18321,48111,25238,44923,26482,76692,57019,84055,23690,70437,49154,39326,93281,91447,99575,70223,71280,55134,28924,28687,19607,37525,73601,48413,50276,47103,69798,98756,17557,51180,69313,66598,53959,11366,49375,25904,68778,13933,14384,69262,56905,72696,60572,58117,97170,59959,34222,25993,15280,25369,64543,78310,54446,40661,80840,64016,75628,88944,72808,28334,81532,73651,23277,34939,95074,50850,41677,38305,71710,28915,12194,61106,73369,15562,40217,71631,96707,20059,12580,42998,29982,17237,64398,17128,10399,95329,20210,49617,78820,44640,84946,48730,27977,42304,38433,44144,61451,84496,56948,98850,47221,20850,36826,76319,62828,10846,38912,60186,20233,97152,93434,22165,42123,86553,42776,64215,42475,65445,34417,81434,79489,73913,90187,15864,88809,60620,17264,67355,99563,84415,33410,48978,82063,40791,82066,56002,55289,58057,16385,95141,81759,41641,23543,70576,75810,88546,49283,54093,71720,79653,66209,48971,41060,19538,65271,75649,97121,59492,50294,55393,71990,68702,79381,11513,76130,75478,41237,80939,90462,55476,43136,88494,95331,11015,71876,60368,31108,98559,98535,60306,21138,82602,78655,78665,90455,63850,39430,61089,19135,97465,42345,14005,17834,56120,79388,15509,77130,51330,62453,75785,44564,25305,76409,11463,59116,26314,80913,25763,69850,72881,83353,94939,76355,63396,26124,39014,79188,58583,82191,57964,57650,11807,91361,89480,44282,65807,31455,25116,41018,78440,42262,49390,75641,95587,25866,95395,90129,73559,75961,29227,16126,87785,66532,17599,54572,30860,51477,35292,43613,96272,47458,63639,75721,27479,57929,45124,34583,90890,87636,61731,26541,49383,74268,35264,20777,60897,64652,82658,14697,48303,66537,27359,61240,38643,88230,64581,32131,87291,55837,66071,32719,51643,27861,83806,78764,83032,81337,29805,52957,16452,17703,95718,19273,69410,60948,12243,67975,11573,75852,26279,34641,64162,49902,46396,64369,79891,24971,71498,56581,69026,39381,63911,61317,66674,46960,20923,73664,30560,38126,54296,60526,67037,38721,29687,37490,19111,99270,85776,12797,25209,66795,96160,87903,32869,79634,83763,27695,54541,85965,31025,39938,98611,15900,25695,78398,99991,16143,21154,97405,95112,94341,73449,69544,53988,52328,59558,73692,48337,59296,11380,49534,18083,58647,15845,12576,95366,30044,51536,25714,67681,46896,51766,66085,45133,71429,23222,59100,84647,53526,15554,88577,10086,51469,59361,46157,51670,66846,92059,35674,18942,44435,45499,21127,66047,21375,83673,70934,22860,73992,13792,77046,14332,52479,56700,33914,66017,44052,70002,59478,18341,92994,30101,89610,35663,88137,56658,84285,75389,45860,33720,83794,18673,28823,22677,63614,73918,43516,55998,56069,25477,36414,17339,43238,35366,70042,80140,46270,49420,42312,62949,81763,84818,29739,50104,18148,68316,38057,90991,73700,22614,92839,59017,20683,32938,16706,18603,59204,21041,24456,73082,53239,28405,28699,68653,25606,14006,85250,20159,23370,23581,80878,72019,42215,99252,61133,31124,97718,34911,16240,71129,97177,87221,19339,42697,30308,64120,64814,54789,96261,59620,96397,29883,70122,90010,14894,89207,28702,33961,65441,51633,98545,58238,91158,12879,96111,35722,73454,38480,18534,18212,16583,92500,94575,79433,89589,50267,69726,12762,59796,10885,32861,79996,40071,89474,55957,69323,13661,78646,38216,23159,97627,75342,17136,89561,12869,35872,90514,21429,84986,93034,77883,51488,60322,35068,60257,79676,50685,31401,75949,54965,66963,36932,81305,94746,72265,12563,35396,11394,57586,90630,86598,75634,23825,55395,53692,81814,53062,47856,11551,45049,51040,91171,40198,79447,26973,38002,39899,22124,11836,52314,31579,44843,58763,28327,14201,45726,51896,75765,52664,25963,11858,20913,80540,64119,44927,77306,24137,40727,76280,86781,71822,22596,25264,74867,23927,81614,16040,28165,89034,90062,18167,66831,23394,61116,97973,57058,73254,35935,48828,92258,18724,72433,36011,27853,79752,62057,59217,31753,45636,74160,16939,31331,72258,14999,58269,17142,79611,11927,22745,92646,67658,46269,58408,74037,35056,45136,10453,50862,14680,33288,68474,52168,27722,92897,47824,74375,81777,35954,64425,50124,13840,93631,51249,62002,27661,30617,62731,33354,68820,45946,79315,86808,15888,69651,18267,97958,22887,44044,53417,17747,60528,14602,39601,40200,19823,38416,36924,30273,59289,83409,82820,31204,86314,58640,94443,79586,17925,66519,24207,27543,17012,54226,33343,34664,68221,32231,99739,79062,35747,57968,68761,32891,38990,36558,76046,21249,82792,28727,46862,87835,91161,83861,79070,27238,29255,74163,29739,20582,48887,69732,53575,31189,55629,32497,41171,71947,59313,63544,50819,96638,19266,23730,88123,50371,53197,94357,93577,41817,17193,23103,16080,85465,89277,80583,37828,68896,24850,68217,18189,66742,39884,19018,91329,42766,53622,92012,31055,78312,49354,56239,66403,85834,13301,51956,68366,74727,42787,85907,23608,70264,94604,51221,99112,59928,64429,87264,36770,61592,83454,90665,29355,38875,72911,24575,39949,99252,43997,88393,19119,15416,62978,33065,52767,23071,70076,74324,83443,56407,89395,47470,82447,64573,83406,96592,60310,82199,11976,31473,94852,35526,83603,86438,90713,53082,46739,81696,18415,78792,42158,37905,96193,46050,21124,59240,60411,19115,13665,55888,59066,34197,95801,27507,19503,12300,84992,68047,42317,38417,28569,28842,97599,98501,28392,63134,10318,90964,44043,10234,30164,39274,61940,59376,77902,49509,22209,59590,37846,26751,59368,88279,49645,39050,91904,96431,72041,75979,50182,47664,92776,77002,99941,39665,31853,13594,62373,19693,83570,29367,41529,84565,91517,69202,43526,81740,16941,36820,40996,25013,61818,98805,37569,22009,11069,70102,18644,90527,99552,33781,66883,22331,25874,40392,48505,34054,80233,86372,30371,55042,71975,44519,69931,68228,90834,58458,88331,41900,77533,87092,91075,42258,95948,83674,16974,37615,29325,60228,90010,71793,17594,22972,17383,80228,89361,88315,97463,80877,59730,48638,26663,71293,11245,96626,60711,86723,78802,89731,63452,37113,58175,75543,41642,20742,84943,41088,16729,85216,15268,39094,93108,13903,32973,62406,84305,68171,41578,13054,66800,10382,46388,56359,77054,92265,76654,36376,98080,58277,42381,53801,79266,21266,42363,49346,77410,57683,29493,21315,51778,58193,53442,71902,31227,18806,19663,37996,71430,44294,32804,41207,75085,79469,31119,40457,49761,46181,78943,13480,40008,65206,73946,71478,99877,74303,70601,63787,79761,69775,86425,91423,73363,10798,58568,65826,15143,44739,94083,75283,35193,82100,60215,65216,70000,80798,74353,66938,82104,54848,73630,7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93,55953,65536,67141,56291,57626,67724,70929,60084,94917,94025,90416,54618,26898,51041,32096,59870,92106,68307,64547,59934,52387,10870,35205,40032,85525,63419,75472,65004,87996,48942,86388,35726,16114,46261,19059,78515,22948,28019,70351,19035,65012,29945,94031,16673,21992,46321,58976,34580,45585,78926,80061,42847,18277,97465,50768,76019,72710,46509,26359,35539,91126,21190,59846,61553,49340,61894,35513,51278,25400,47758,16179,49493,49482,43437,26975,41536,26491,24359,44215,13214,46529,89106,35483,95735,77573,42833,27912,61272,86792,54125,75511,62974,69193,76758,78767,56630,69635,59072,71334,53523,99119,16440,40710,79315,30171,69223,17813,28703,66858,61461,19359,46790,26485,63183,82715,62636,55880,99442,94238,65940,30055,92254,72019,89266,28949,85512,80531,99052,41547,78573,55128,73746,13136,80242,70239,23221,81522,69619,33485,16307,13879,26824,45657,99354,45870,78966,40212,52125,76744,53008,17042,31753,59524,10588,86610,14750,88471,78311,80886,20024,46767,67437,30742,92695,72111,95384,27484,30052,86538,54744,43874,86681,34596,84367,52079,33909,86836,45911,63570,14505,79626,43607,18204,16673,19555,79327,54900,74078,60125,54237,55952,33435,26713,90702,87593,53105,28640,16414,73764,22387,91078,90941,44823,69978,14932,63343,76636,12402,88660,47035,61562,27581,89849,97602,11811,30115,34055,23045,90132,52755,59725,11127,12960,45519,31100,63007,87503,24899,44212,65561,67490,78863,18202,16547,10896,36528,67012,76094,27006,98970,74241,48585,84518,35478,99073,99576,64638,16280,32990,63436,98442,31054,69349,96509,55317,28395,84371,71216,79050,27976,66307,36491,85477,94577,78373,92727,74448,68624,78079,32540,66765,81674,92456,91428,99936,45594,64952,62795,75958,83775,88268,23416,97562,19793,83424,38279,91834,26029,11875,32363,16167,20300,24786,83094,64458,21087,18446,77927,45989,41507,56111,89928,26966,73956,80777,72021,75682,87175,52046,81896,26056,85679,82756,96630,58649,23723,50434,77009,16637,83446,72169,35233,17469,51230,56989,89160,41062,44375,22662,13049,34742,52014,96710,53644,75593,36494,12877,23729,15122,89119,60876,97810,27680,97452,78799,47859,90217,58000,68116,25674,62088,60443,42044,95067,99302,88620,81186,14797,93128,66725,84428,60859,13283,84780,18677,94825,99867,52262,18808,48278,98613,33650,37861,29591,88815,68363,99569,78590,50871,81887,28029,98503,59598,51115,45087,98790,31787,98108,46447,17210,75539,67919,44246,66553,93430,51728,35581,99674,57797,89849,83233,75024,16208,24854,67969,68377,40753,18178,23564,99359,27395,94556,14681,11846,59295,56384,59589,52256,10842,31927,73119,80584,62502,29748,63964,14042,27482,11286,19908,98063,19891,56051,59390,98733,40326,22138,78568,74579,88168,50434,61368,73233,94559,82888,80530,32139,16729,58121,14956,83055,98166,70997,86803,29418,85818,30333,93535,53776,37765,81190,26984,84510,37424,68243,72324,31118,78662,20324,50064,60313,91578,53679,27580,28793,91196,89155,27253,40287,78790,98604,56441,53097,57529,63431,41466,18824,91533,44629,68637,67313,84890,44857,37482,31252,55408,86237,95784,55451,96017,57477,91550,45336,41734,40045,18844,22982,56927,25518,48510,70315,70251,59945,62444,24125,15384,86143,29280,52090,46613,42735,35913,80959,50878,69127,20100,69607,66572,63633,78478,44259,78799,85988,34319,47478,68090,20710,98508,26256,87744,56298,52491,33501,46292,29868,33301,87513,39425,10978,72275,25718,97482,24713,72412,49662,55436,34944,70835,40676,91613,10322,63138,11318,59048,20920,44438,96347,79910,68237,66942,99637,34910,80195,85507,54927,14793,96967,53694,91736,13858,42046,58835,30557,10933,26201,20094,88691,33848,68638,59198,91095,26520,13683,50808,64559,61683,57799,72934,28838,46060,53181,12388,93642,15835,96524,83766,57185,96468,91273,78115,77271,39078,45837,81207,25978,74053,74922,23118,77790,89272,86123,72579,80282,26542,17687,51842,80651,57550,26635,83425,51294,52687,49068,35630,53063,12148,10225,56376,97161,69805,61569,61878,32983,42628,21442,89717,18725,78609,62572,60701,43169,50627,48313,36590,22918,30122,52331,42885,45008,32414,57358,24453,93721,44101,56725,70809,18029,88389,36304,31966,48263,36403,34207,76601,99715,32164,16829,37759,66314,42856,59438,91038,33761,37755,10384,66770,14916,47903,73971,38082,25573,41831,79246,53255,35142,65947,11768,65137,49433,75729,11488,56544,87254,44598,80012,59932,60139,47125,75745,41012,70415,12186,62591,14486,12395,99407,68738,38995,87417,76926,63505,44190,12793,40398,78631,38696,77267,27640,56584,94934,66126,44820,34398,30634,33576,37007,46896,12593,53166,91216,98893,60091,56874,16300,15845,47869,99027,14409,59457,74653,58979,98940,98843,11482,31252,22061,67832,68431,82197,31698,15626,55031,72749,77683,99490,28057,34408,53153,51081,41120,53169,46950,69642,34560,57988,63026,84409,39974,70284,84285,65878,80804,43904,41791,69937,33772,39809,53175,40139,62049,52913,90059,32065,97229,36787,46825,66639,81749,15721,93926,52615,28257,51903,67489,15836,46899,34848,41747,71901,17871,18283,75400,88813,60336,30054,48264,19553,48676,12380,95472,95302,11539,19417,41183,28656,27226,29555,66121,66426,67566,68066,74489,98033,35514,63283,45062,39918,23130,79816,84664,34162,26401,23279,64606,19718,70262,72307,36973,46515,87682,53482,21526,55421,56417,87703,85592,93943,60836,31458,40886,39240,31401,89077,83645,96569,17159,31918,12370,38184,79692,25029,58715,40904,86274,50630,26947,26555,24076,52373,80027,94287,68361,59646,20457,26154,95466,23393,35779,23754,83131,30851,95940,53315,17762,39037,15802,68571,49585,12577,27848,33352,69218,11641,15092,33868,64334,94084,29918,90826,90627,71442,40859,58438,27518,19823,17713,66884,35071,75709,30130,23744,98572,18279,96003,24834,97000,96470,87254,89159,22724,25788,97271,70105,38307,20827,10649,45129,94591,84774,53139,32564,50434,87119,92226,20063,86321,54641,40316,79830,31792,18287,83356,50905,13852,60994,16396,90162,87329,94849,32500,37368,26866,31907,47143,24852,31576,21943,90318,68667,52105,85567,94135,49346,40478,65602,78488,89868,34820,66093,51194,30570,61084,34115,51965,35582,20089,87780,66884,78447,44339,12371,21778,63527,88991,31050,55168,22197,42328,65566,57834,86092,81643,97576,15993,43462,31504,87717,54260,55707,95132,60625,77749,87155,42720,20878,17080,53163,94680,47920,92605,37093,32061,23681,95570,63825,89796,21997,82246,95593,52271,76476,87883,28135,55390,91131,26860,56643,16149,63437,62128,67341,87196,28725,13014,99075,68820,33321,97039,29483,58126,86203,99874,63181,17629,50547,54994,93325,85624,63491,16741,30823,95916,11007,11334,33708,65975,91551,71955,90091,63711,33083,31288,38643,13624,75231,89237,55310,53196,41231,45334,73700,98369,58860,16487,74941,47155,82865,96990,96443,79650,14401,17898,22969,29427,77779,29332,51717,11159,43951,48243,89257,76842,95456,61146,76369,73075,78192,67381,62696,77543,31638,99661,31180,29800,65407,29704,77145,13187,34470,32191,65307,85884,90529,33771,63723,54992,53841,10098,59561,54830,39972,77805,96812,52163,24849,17887,38278,95401,48227,14443,83181,78816,43126,72241,48325,33187,50783,91185,78601,23998,30664,89496,20778,11947,35064,54889,94841,42911,33708,91993,28927,91896,51602,42469,87680,46835,63385,29288,91004,90478,55508,14943,49076,24601,43801,27090,82001,25815,78079,58219,23002,78655,40894,87853,22970,78329,16655,71558,48208,97453,72913,52671,74227,31702,32622,27197,47604,95318,75427,14467,11198,10064,57670,40763,41393,96281,34703,93569,32829,45329,96065,39801,66434,21679,13661,65431,90325,71711,99381,81958,70056,57418,24578,22850,16382,61032,98102,39475,56577,95836,83280,95440,89040,34194,40999,72432,60485,11307,94727,24726,53436,93925,46076,69737,16509,94146,64379,19838,58503,50181,91823,26237,56045,26907,42730,41795,48845,42179,78102,46875,42228,15105,60830,12967,18794,17629,57937,43390,58752,72062,55572,64092,40893,71129,44065,70128,61102,88765,25717,83281,35978,65411,39178,95164,31476,17929,68086,64737,72954,28144,16993,67950,73888,99721,41428,82774,38442,92416,40823,37510,60928,67659,32555,20182,22034,24365,41500,29194,93293,83698,15688,16898,70118,74718,55028,52057,64125,73712,77329,60390,90252,30625,36391,11383,55890,56919,77433,40038,62555,62890,14296,45603,39505,17831,75040,67842,83926,80089,89593,67742,33743,72551,32497,31915,99780,86115,44630,68283,56604,52449,23154,39984,89479,56938,77541,23632,12640,21431,95761,72878,22497,62148,31769,31264,71819,27150,44137,81579,87543,99882,30237,65871,46858,57040,61096,92454,36643,92037,64627,18174,80812,88130,49887,22240,85726,91130,58291,66574,53174,27959,62681,28317,73496,90427,45132,83989,67529,48378,76267,78277,93855,87444,65203,59981,35230,44224,88020,41936,81087,93267,86260,40190,60328,86218,82685,17170,17260,10330,74268,29657,43508,47403,43109,81107,72387,78772,42694,65318,26436,38290,65411,60904,15533,42251,40477,46750,61182,84357,98614,90308,42116,96022,38847,15613,93289,74602,55642,49167,36463,72338,91434,62116,31992,26913,23419,72545,19225,25695,72571,29671,31883,53202,30536,13019,45908,23308,89134,39643,74866,67659,46425,44353,83796,19839,33313,50400,88847,45859,81289,97473,76896,70081,83893,96589,14480,11320,70876,15995,82265,62527,56337,24771,72217,37520,56242,13606,94613,19115,60546,25038,66258,36997,40877,32405,77829,65323,59894,56587,88018,28867,85176,23521,22762,24453,31539,68459,17643,85648,91145,33384,97688,83092,31653,22972,36698,65089,22830,73798,64270,62495,91243,98447,81509,67865,93766,68428,91500,26375,60319,63149,94014,95919,84034,65116,48932,76056,53338,94447,42412,71959,34702,67827,16065,80330,71888,14432,41127,31875,31956,18713,63040,21038,69115,79976,48833,35015,15137,62740,25247,91558,91773,71445,27937,66750,29035,79358,71765,47215,13326,66352,49692,68500,16155,65495,12818,88157,91822,37482,40729,10543,21770,90367,47538,66673,56390,65299,40351,43705,71940,24391,96057,30618,49908,97215,82587,35297,40145,16174,49094,56174,44107,20795,78100,80607,44532,92460,95444,11503,13792,71418,42729,58894,12486,39357,64800,98815,56874,30172,18098,97416,96802,20928,53444,36032,82100,99724,31696,67522,74974,77652,20145,67939,64987,66869,15314,63123,90092,97401,71156,98706,77429,77807,37626,49786,47868,30473,61976,78356,17682,86588,40193,32973,53784,93297,80657,45993,59504,49757,95916,28462,46204,81179,72674,19809,59824,21213,90987,82465,57638,33118,57044,46776,82718,26358,35026,17324,41704,61373,91882,74757,95819,84079,99486,13710,15575,62801,29514,25010,12569,98854,69335,99272,79166,88665,51261,27966,49391,35878,29087,92350,39263,95645,95887,68654,14788,17048,51340,57331,67892,49378,69463,14013,19877,56351,52962,61125,38500,84881,39451,85439,40569,65959,25107,66778,40658,57647,48543,48075,22971,48730,70051,73533,26438,62727,85825,30253,45387,53438,13470,70838,57783,38439,74590,40989,20505,10248,41724,43943,61426,70688,54899,11554,98306,64809,75780,14716,19366,34593,54508,20395,51404,85252,16869,41447,22578,73292,59396,84358,21473,60248,32845,38397,25479,72275,12314,87089,24826,92149,43857,38597,24639,45374,76069,23068,43202,87934,35743,47095,44153,94688,53951,74486,61950,41215,75828,35614,25335,94580,77321,24832,82045,17998,73039,51033,33380,25210,90504,74776,39584,59123,44820,93046,62419,59630,11466,63965,43058,74723,50053,48175,97190,60523,53717,60441,27004,17058,48172,87551,14286,81404,17548,74356,57274,77374,47166,23757,80883,78003,17736,87684,40809,23310,32188,20157,78306,48980,47229,53720,57530,91727,41557,20240,94502,33189,51359,43451,52325,25200,66223,82386,76917,15357,66885,15984,23824,40824,86513,86994,46275,61672,44242,45729,90189,99477,48277,87494,91770,56012,42754,73260,71112,91805,54360,85112,77584,78257,88997,47379,32474,90086,12170,53964,16659,71400,93146,33618,23304,88847,39902,98377,11172,29996,61606,38147,11788,54239,57226,25224,81199,44213,87498,57853,45104,75649,33770,11589,48095,56672,34182,82969,66604,30417,37081,77899,83440,45229,83327,25207,51546,40773,78687,31404,96627,88656,10211,51367,36918,18242,33185,57266,83556,27682,10761,24460,63222,20101,35678,41896,65265,10982,94960,98328,16408,34062,28112,83047,58419,30134,99257,46773,37891,33924,48587,49488,41204,57312,65164,31795,64068,32369,57024,65663,98621,17687,63130,74373,66100,75573,31490,58454,49856,42806,57926,34656,70469,45462,51312,98015,70003,35145,70657,82892,36190,31360,51975,69724,84283,29542,22213,63340,89669,50264,38961,78759,49773,86253,42856,94916,31552,29659,33376,86306,54619,60920,17817,51064,47614,35090,81461,95931,48423,86062,43286,76125,90810,12374,43217,10700,71827,95025,51725,25751,51811,46156,41137,21697,39884,66134,74604,12668,25357,74452,48203,71487,39708,54510,30152,88916,36298,20924,82227,57639,21100,54856,60667,56363,21568,72638,59834,25703,38214,68189,25162,14254,36093,78753,45055,61230,38936,64168,99626,72030,54284,74088,62068,19270,90790,56996,31687,13495,64938,91511,22445,76954,76359,42665,79025,75240,30050,53039,49347,90224,49897,82403,89287,52872,43256,28339,27370,75556,20509,92176,44615,76135,25394,42506,78714,41808,44849,33162,93398,88835,78314,98051,19354,50720,83092,33528,96027,32121,67377,49303,49617,93587,41746,12364,89338,58602,89939,13189,92019,39240,31689,10810,54038,16550,34409,77305,40730,81435,23384,26012,50528,99045,82996,88740,61077,91252,75715,96368,98553,74976,61394,91993,38271,51985,88114,32835,53712,18889,64985,21722,38461,36400,70195,54668,56800,22326,48787,27585,21865,85446,43563,35171,51835,51035,39978,40804,91127,11387,27734,98833,13466,48422,19357,33220,19406,69904,63017,66884,51546,71756,35269,95964,95988,96596,15542,95921,52344,68829,48996,61476,21894,58653,16564,64051,80125,16836,99427,69362,43306,32590,17344,99609,56168,80908,49538,46658,53629,55020,36333,41952,37689,94897,50107,17636,97848,91477,12457,58094,98112,91257,82191,93487,30025,82818,98586,44348,27095,58488,79351,41220,27390,66361,62932,38365,31690,14396,50338,68641,72081,79879,59824,41984,48839,92553,57649,87924,38554,13394,98931,22698,19187,40697,98262,95477,96233,16997,51724,82157,57721,22277,46536,83522,84658,68321,12365,44650,11958,90954,64626,38880,85890,68480,79053,64046,29417,43570,26597,89365,22587,66781,70294,43678,90833,49272,85828,87648,52458,22266,35642,57566,99924,58308,49551,89487,87199,27614,13263,99531,68665,21133,72550,65534,21177,17856,66501,85419,83580,43755,58690,77035,79867,38537,62068,39743,30187,29741,91278,61292,98752,62214,98520,56727,56162,71385,57523,33714,68249,45020,42105,57156,57104,81516,17878,12246,48740,35508,57131,67980,57784,74767,20702,60336,64628,32719,63951,14879,46698,62976,46247,34431,31798,48884,64210,39598,42561,33625,80490,83922,72979,32762,22777,37084,67285,76076,44382,49516,70371,38782,24790,32154,21382,81598,91102,85167,33685,89732,16993,14762,31223,48365,97638,72210,66928,98907,14759,88741,99438,66132,51011,44396,88327,74640,61075,98290,12692,49120,43141,92643,52075,58483,57820,38875,52620,56291,74799,53208,74145,38049,28839,34052,81535,86787,23419,53908,96225,27617,53306,63409,54373,72114,86186,28728,30774,15626,52150,56020,66784,90175,43385,44191,76677,64078,17100,49803,57161,10835,57916,28902,48145,89885,56267,22161,62202,19721,84097,73288,44834,48398,75767,78076,84120,16692,14476,58697,93163,33698,24933,64973,17692,78755,17983,16774,86084,95755,82153,82282,70986,61807,80087,18697,64093,86792,79600,27930,20082,80977,11520,74419,62596,58419,69976,54783,77457,44876,94728,85869,50925,21282,60530,96911,86559,17575,44395,92967,29263,15546,68539,49014,60340,60012,87889,40346,20779,47835,66163,63240,52158,42724,86805,51224,96202,91623,11618,87095,28378,97404,33137,48599,78734,84545,23464,23064,24961,43603,68947,16579,18206,73704,82419,84604,15317,35864,54448,78911,87110,52824,11293,73881,84207,31793,16926,93636,27767,46520,58495,43898,53213,34165,33647,95087,45523,76707,39313,81871,30897,47302,21650,23923,44743,86288,39627,56786,67613,48942,11760,57816,76481,37109,44199,46868,16421,44118,30570,22940,12728,73187,40889,88774,75711,82094,39942,43160,44973,60173,52741,12073,78732,59453,26115,11719,74308,64326,33394,79936,28047,28041,29431,57365,79796,32443,58409,71726,11424,14380,99064,92275,17359,83204,68761,96682,59483,26777,19234,91508,83692,85475,90232,13036,91440,76768,77807,34792,74775,69102,99761,33128,83565,77489,23112,43347,23666,69248,69195,62846,28810,91310,96354,80148,35710,64591,63784,73089,25805,45600,43322,28031,58781,41501,19395,74668,61520,90051,11037,28936,16277,98720,65375,15354,58691,33594,97978,72246,21383,66181,68179,86921,77427,84412,89947,64234,57390,42414,49575,48572,58362,16461,92594,44061,86681,28153,63670,60122,77383,73841,95599,75642,31590,60904,51939,35233,17175,34359,35800,63589,83313,36630,67002,28868,72934,84240,80889,73462,10973,70410,65241,65803,98256,72371,18862,76746,68142,41768,14748,74187,40119,92840,98082,62898,53142,95084,82187,86737,67704,49507,88776,52069,38609,44919,27477,36972,11351,65789,60039,60930,39914,21386,65700,61065,86905,68412,73231,77981,84359,47128,41658,92666,14300,81531,16497,88400,68904,81819,17697,97149,96630,45167,72751,80208,20510,86504,23663,19160,42355,15910,59518,89837,87098,57191,34370,29695,68324,20721,90092,17733,44443,89884,78546,67440,96115,33893,42329,24151,11689,80345,78723,36831,42449,44071,55519,29448,45588,55251,29299,32133,85356,56801,19167,69348,29321,39438,46328,25961,56637,65603,45117,82977,71308,37404,24562,87253,36938,57762,25026,46377,56009,70201,91306,90211,12060,97232,61660,48325,68823,87284,77359,32450,47737,43056,93849,76534,36268,92790,33070,42588,98577,98173,63883,49320,34156,98112,51995,79837,45295,47854,34961,64643,40012,93384,91838,40199,20585,75168,57657,22611,87964,92990,35617,85782,60589,57969,99281,37737,61817,27496,48125,11761,95525,20279,95723,79270,27108,82812,37744,28084,27890,73978,40335,32803,12055,27108,20518,41337,58090,73070,69883,55382,22525,26348,54745,91591,79135,25339,94539,61878,91385,67005,66897,92009,88557,74611,95858,45014,87699,91428,49516,70127,81463,60970,44109,36014,27278,91296,95264,26733,57116,27789,68257,17842,23574,91461,69875,74151,49861,10949,21841,83063,73559,43440,34488,60443,95059,93691,16227,95287,46718,68318,27320,14059,70031,15090,73438,34428,24596,18096,46515,86143,61791,18046,35368,77627,69733,63582,73509,87824,35509,77978,56992,91604,15678,15899,56643,67259,96250,26598,87063,48820,30680,24431,97374,67731,38496,21244,80119,36816,28673,83763,92943,93577,19233,10501,51180,74673,87165,40243,36781,25682,15543,46853,91128,50923,16813,85956,21660,76521,67503,36259,58522,20098,90537,95364,68744,52607,98057,41583,50154,65806,63594,15760,39730,16836,83695,85167,19409,37743,72556,59879,28035,54397,46355,68021,96770,76002,86103,67324,54106,78563,29367,73376,61680,89915,41816,15250,99905,50857,53928,89762,75540,23976,38442,62063,60156,21055,12413,15435,49575,92559,39910,89163,91627,64998,98553,30200,50244,35813,72336,62815,69026,42199,45736,69153,41125,79343,38962,61091,96519,87011,16351,26175,91034,55790,54901,28171,28102,21379,21720,41645,96500,66326,68375,52049,99122,13307,83841,33081,76295,73933,14458,69442,86207,53561,15228,67617,33130,69619,15686,58964,27955,32602,32184,13003,15717,91997,94763,90410,27994,70010,16317,36848,65517,73774,52470,42060,86934,77998,75093,39535,61925,74466,46076,28767,90744,36859,27894,58825,88233,52611,19808,64409,79733,75642,79958,67887,81215,63689,18351,94737,95313,23569,18867,19613,67112,75854,48338,71170,89166,64563,65601,98467,69474,23775,91855,67754,92039,60126,38261,96070,38063,15915,63682,44087,95874,40072,88950,52482,22282,46723,90631,32471,25775,61948,67001,99611,95539,17623,50820,99576,43287,75653,15977,17633,11356,29558,37521,58759,18103,57718,69732,32517,88153,10265,65185,28675,52701,55798,22620,19126,61392,79705,93592,58700,26202,84852,66719,80721,39147,86179,45476,62896,23968,17129,37153,68024,76792,76731,11159,71591,27106,48510,62790,23444,83450,76633,73172,38430,87480,16061,52282,71966,20961,26689,51054,54776,99787,37005,84040,41823,44196,29774,82893,76652,24515,23280,99502,63562,78619,80589,31154,72548,23067,19475,76243,70776,94784,92023,63417,68913,47799,63522,11452,54711,67511,47301,20229,47101,53031,67609,40238,46371,69125,34733,73251,56429,28757,41516,99526,11132,82073,96816,45499,88907,27826,23354,80854,23041,72781,47768,58797,16862,64643,51522,12904,41313,49629,84517,19509,74655,19259,72446,14136,94272,46092,14762,73162,70938,41398,52417,83484,18679,54587,91830,39535,52049,82212,72738,83345,98738,73580,15273,31570,13930,78901,17508,90985,78676,46550,71117,33379,74892,99731,59240,94991,98439,35895,74431,65308,91699,31273,71908,29184,46060,32274,26866,27445,98523,76052,98982,39614,98203,21921,25061,34169,19033,32401,53654,28886,85750,36218,34295,29548,16288,59684,22456,28494,98874,29198,44554,71756,10640,92397,22651,55970,86611,55812,26603,61929,98773,15657,73541,38606,58077,35346,86357,14457,16363,46514,68096,25824,51095,99621,11521,45602,82065,18332,92347,72222,51727,55619,26262,87980,60595,40696,51197,97683,75884,68266,22393,63164,73146,54294,51740,35130,43729,76952,81530,10527,73902,68180,21958,51912,62075,76594,86817,69312,23827,92590,80763,44177,79465,87337,37580,74237,95410,88732,59909,46160,74134,61892,29086,82119,82517,98386,74610,65431,92727,34316,50679,51602,41869,71683,43980,72351,68990,11231,41729,60960,11428,48045,62010,81252,44486,16576,91540,45643,24650,91040,44315,22737,70562,79169,87674,60704,56334,10999,16846,60459,90083,42215,40754,22272,18142,70109,54392,34906,70498,16287,93220,68804,62965,30775,37744,91934,14064,99137,68835,60509,94748,42152,96507,20669,88441,69106,97127,32685,16180,87439,80028,12651,81916,68824,26468,44633,77490,51223,89619,68744,69352,25481,50125,72786,95655,61112,71538,49628,65028,20642,58823,16966,11387,89426,19136,18592,20141,14355,30276,57416,19101,67277,15347,62968,28460,95460,35204,66781,40815,76716,41598,83463,23497,35123,99422,13181,61011,31396,98916,28395,48305,15592,91068,23479,84312,94385,42962,53480,14152,17991,67058,43489,78982,66837,53776,22436,28763,72464,25587,36947,14838,38964,84885,93400,55283,50796,31370,82088,50217,12514,33257,94620,94736,51698,85960,84494,43516,37468,11624,77925,73837,72431,85932,13976,43720,75837,61369,10871,53929,59426,51913,43409,65266,18745,61235,92790,54497,53467,73085,76871,55716,23071,53168,91139,74630,69480,18964,26731,60547,40287,85084,79959,26600,68544,19281,95857,76809,44993,37600,97979,95039,74463,96496,85078,57904,95145,17689,87220,21614,75272,34414,12878,18050,76464,56963,73857,87445,87640,88576,50905,11041,91251,96006,24192,63293,55866,22606,25599,28656,61859,90311,95234,34668,87229,14449,30715,46276,78597,71883,54032,82780,88381,62432,14505,37866,36163,95098,77043,47658,83323,43676,75059,76034,33717,45200,69579,27523,78580,29092,92335,84958,77124,65097,91719,19217,36626,99376,17852,44774,34283,52660,51844,73275,34971,54827,53640,21229,13301,60176,93024,57854,60812,81149,24572,34391,43956,30940,59796,53359,36366,26702,19787,82626,70634,53925,52041,44095,19136,66330,48706,64551,27814,23382,30815,57849,73641,97484,89881,67890,66191,85104,72199,41327,85118,77250,35815,29150,62780,71050,27798,12022,19566,16304,67510,47391,55790,95954,15653,94846,57321,41247,13131,82146,36470,11148,48244,90245,44409,49324,28805,66827,49691,45663,36713,33224,31494,89652,95858,70677,63764,10709,98377,88589,77216,42548,69122,18175,33428,15079,33442,72643,24330,60085,12289,40249,36988,23518,87792,90609,90969,83230,50746,80961,69502,25285,67308,47789,54638,86747,31024,30735,73029,43671,31921,35255,86568,69963,43138,22269,27609,76172,88531,20285,43319,72410,66706,12709,91883,27032,74060,25899,78082,72981,72221,78866,25675,84330,25752,42957,73632,39166,46964,21059,26346,31720,56947,37679,62085,51151,59888,98293,23795,67767,68266,99970,92377,20028,58920,15220,24639,65164,33321,56177,15073,79044,71629,14780,21976,26372,99625,81790,75300,91522,43690,44742,88822,86993,92736,94241,50912,80656,37145,49957,14305,49692,98625,47278,97987,57642,66650,74804,65954,31927,29332,66892,17281,84523,87778,85670,55119,35478,36889,95088,59932,78167,52154,96553,70415,36339,40776,30255,11364,64787,42380,90002,13624,52794,26826,98987,98044,70204,92796,27015,34385,64642,21386,43800,25644,58725,37534,34887,82226,10173,95453,65148,18267,70466,43169,74391,77115,75525,38265,73246,34291,99439,92573,92048,26850,28919,77201,46348,95951,65287,33295,98771,52057,88198,19877,99049,85962,94797,65773,85695,30481,38597,18332,53964,33846,83439,94019,72737,48931,50711,66549,26082,92411,99530,61898,56012,57819,37802,92975,78771,84536,39537,16270,42561,42206,20561,17869,54652,58958,32066,80713,97489,25574,23136,52389,80825,60647,94373,76750,37011,25512,50125,94839,95222,58233,17872,36552,91952,69957,21029,81298,69219,99045,46264,36372,42975,42533,53648,23083,20103,66737,99490,86653,94878,13432,17390,59782,41399,53223,30897,25910,13796,54776,97118,38879,66990,61147,31141,98359,46943,39269,88424,32869,69256,77695,25322,12682,31115,42115,90502,32263,51594,36231,45414,68770,39827,94663,22610,76050,32087,26743,96408,32011,44877,88172,39536,61701,56452,77742,22174,30471,17768,58994,53249,34743,91554,98931,36410,24574,77325,56187,72580,81119,71795,39393,12460,33549,38903,87281,16229,97379,25083,47865,73646,65717,60328,86345,72508,15943,12629,25142,77107,44810,11591,20748,64539,86933,80841,46028,82899,70359,69990,35761,70814,35570,80014,52241,89609,94035,30927,78977,79009,86162,84889,83781,83154,72561,27729,13702,93511,77766,26588,50395,72255,65036,53018,82262,75662,59804,33230,65395,17478,69494,18675,58610,77529,49596,34721,79348,96270,91039,67271,71606,39282,37825,36161,32705,96310,28020,16978,35284,92566,57874,68002,11415,33302,48913,19604,70674,84184,27541,19114,39771,10969,70551,12031,80117,55166,66721,70767,69134,48925,60878,23490,73606,69182,19052,28811,34306,32621,26233,73008,93932,48033,52321,89922,98919,94714,34675,35622,92153,24817,11968,80909,30341,23835,51610,96101,65502,39173,94454,30311,42923,86771,47015,56909,38863,74919,26836,19379,23586,38354,95797,27692,88732,79191,19372,82027,73366,58201,18178,11345,78537,56145,23032,53056,48785,37933,43850,38589,93972,20164,64615,17755,54757,64749,69048,40613,78627,98749,60554,26774,15795,89604,91865,67995,51273,31008,25671,38149,50880,14422,11227,90824,39921,46371,42781,49481,53670,52948,81772,36162,32894,26492,65030,65140,78613,97811,83231,32559,24808,11270,72215,53476,93467,32688,87524,67378,37119,82036,61413,43606,93833,44968,77809,61806,90056,85232,17785,61119,37649,21536,97970,19843,42359,62190,32004,81183,90706,39577,33890,76971,52202,47157,57529,68855,28122,39778,28299,67440,14180,39691,48139,90401,79509,14843,56519,13057,37612,93628,90603,86932,64810,11124,32873,32648,76152,91772,76574,57310,52938,40210,86805,89628,78603,98625,81742,10950,96593,46309,68599,66251,53233,99982,44550,54290,40016,23524,72859,76002,97009,50748,32454,24906,85862,41303,11558,15296,35758,69108,38588,27794,66536,16135,11944,32739,96248,29610,59412,40063,82103,67466,93164,22915,96665,58475,14731,51295,85922,86625,47512,93547,96204,87288,80143,28613,96562,31761,93699,10454,19354,61323,52568,25361,63371,52960,74168,56601,12597,84128,74443,16009,38714,73644,97648,99603,88901,17235,57393,30487,57263,56250,90052,15441,53313,32138,66014,35562,72660,73652,41523,35048,62722,93431,66791,72098,21703,49496,47388,52576,52049,74376,65984,76808,83874,92521,65946,29361,30497,32833,50757,28901,58986,54818,78188,34920,83176,96565,62412,46724,25766,96626,61030,91105,31803,70403,76638,39814,30564,58726,92280,29772,60834,71112,85159,50577,67753,93948,87818,65235,69665,53752,92969,33085,12360,98066,89694,62768,67247,18053,95669,96371,61728,75411,73833,61933,30665,77641,80342,36700,71265,79999,45266,94824,30198,32425,79938,64367,45134,75288,76306,17056,21947,66910,99457,40520,76633,12056,91037,38069,93024,19926,62616,71411,60496,12282,51000,57157,33366,40586,24859,16317,44698,86933,88449,92409,41830,85631,10246,92084,24511,39447,69691,39182,15012,82998,59047,67406,74971,98666,29640,99035,16395,37062,96145,31314,20836,14868,48736,46764,42376,91506,22917,11087,37874,30139,66578,86187,24913,74159,82167,18205,94355,27246,32989,29844,80692,61383,24065,54950,60974,52967,58757,24198,88018,55936,74693,84923,49420,50557,17258,59411,70010,37906,84037,17182,12130,63172,39470,31450,31053,85933,18813,88542,47556,45456,32001,48881,43277,82440,35389,77482,22808,87949,61874,74477,75981,41379,74776,27532,91869,73393,70523,17301,53095,78860,20512,83935,95947,54937,73480,20312,14513,79967,83381,60824,16948,58031,97129,26933,95584,73360,19162,72133,81891,15730,29223,28266,11897,56086,26977,23567,79945,77752,92029,15443,65023,42055,63103,66280,96250,75223,35251,79537,70654,45660,63382,22918,12849,19090,61781,56997,67547,24131,80874,19713,78607,72571,10761,84737,65854,53495,95191,68438,49859,68727,19249,15007,24750,89460,68486,99885,15065,17604,64139,15492,24212,43150,19015,76515,57206,74053,15545,76203,78964,49506,53474,87634,40238,50332,50799,84527,72343,92475,39627,37009,19282,46998,51624,98488,74238,54961,31979,80188,91576,16713,75024,96288,60975,28085,61770,97859,50384,24750,12853,69123,13399,74884,36809,36756,78810,83983,77313,77248,79195,35782,92520,11432,19749,26314,81848,66139,53352,11429,68128,81882,28482,20653,57036,43196,87580,70604,89537,40172,24571,73599,36785,73007,85767,25976,21480,52092,61197,61865,11611,75286,49435,78499,18762,19684,78006,76066,68923,49648,67291,27751,57091,85969,74020,88760,76668,47176,35668,44088,72280,81168,60249,90508,49969,21351,48928,12756,22203,25571,11448,54871,86951,73110,33197,60721,61566,23165,63266,43471,42901,93954,71883,80031,23813,65031,68508,31842,20089,47672,84456,65469,62334,84884,37184,65592,77505,48844,32620,36556,41086,21420,58619,50690,36356,59111,80308,86906,87497,79922,22649,39419,73773,76856,71104,79107,71082,55820,48641,47011,12603,98029,64394,90026,66803,66506,66161,24403,68479,21492,71548,80725,24322,28108,66931,54305,28492,84407,76680,27452,29179,15265,95747,18936,93140,18826,96049,49940,49821,85771,69547,19443,35113,25788,18774,25701,55461,36310,57175,94450,23838,94729,13653,62391,91984,39705,31774,53059,58780,75629,77164,74792,26427,52977,44070,58488,11646,42209,48082,51523,96451,35729,41081,25074,26060,71679,12428,52565,79098,88576,64999,28301,11319,54512,15326,74985,73389,34854,14168,60364,50294,78929,44516,92040,95473,92209,49314,62106,16405,93427,72023,38554,37261,13874,39780,11959,41360,29781,96748,99695,44524,64420,97191,60984,98211,12172,12457,33802,46163,91399,78993,58049,61933,91326,96853,23863,49289,93756,47141,75972,63276,56700,26922,84342,38742,43899,15258,31394,54005,68938,12335,16702,92252,34287,35253,72965,78320,83450,40533,29305,61904,81384,94571,74710,13448,65067,23618,53256,35872,82937,92528,60618,97520,33561,37882,78403,85345,86731,12414,79315,41074,18905,36846,56485,87038,63305,84062,31007,58736,74781,83355,31440,62947,48309,75417,89208,36019,21682,99783,94781,94056,21365,54748,22699,90730,29201,24891,76524,64271,41981,36562,56347,77749,19770,76906,79224,88093,34516,58363,50849,10222,45690,93259,63026,19980,85285,35700,38581,17887,84579,18307,40282,65521,98079,54994,44867,25738,71429,15299,32847,90260,56976,36485,37945,98875,40533,16202,51220,43390,58446,35843,20913,45922,83428,64190,89560,72293,38208,75483,74489,71612,17685,72367,52085,58095,20307,50687,89276,76435,10602,19048,29244,12071,67755,98974,30838,76821,63687,95225,61758,14520,79011,65451,47599,80144,38612,18665,73364,68583,45001,58908,74668,97056,22880,17459,74413,73630,49238,86056,58384,53444,35852,64872,69169,29575,95898,53915,97165,29683,41853,69201,92579,53731,96088,49065,86162,94503,65922,60608,77472,51448,23202,80647,85903,22402,89912,18834,62363,50214,10464,20087,22414,47482,51270,17640,86428,88769,93807,29442,72101,81968,29996,41163,69062,53534,58682,53778,17132,96543,86298,75660,43742,95917,42700,27508,65713,83614,27840,58640,93559,59836,69608,35133,19101,74104,69391,82736,27165,70633,72893,38188,62834,70528,60681,88132,30298,32647,68173,42513,67851,62772,12173,19417,39564,33303,47897,14744,14788,27897,77843,77819,79690,14529,50082,38540,96375,60556,87866,25201,95494,23622,29521,64413,80676,41679,62607,58011,33818,29784,48320,54673,91259,46049,74683,18482,37473,32425,20989,19027,45333,22544,87417,77013,66272,37126,35129,17179,17546,50538,86902,52662,67134,27200,24580,20483,66993,69201,60707,56576,13381,84102,13948,26696,75989,62378,15572,72532,36707,58447,48628,12938,30570,31207,61454,95639,88515,87350,25798,29663,78497,51306,71127,79857,34592,76704,48386,99027,45961,61146,71301,83519,37109,46895,56480,24327,42869,40915,78618,61734,52382,19357,61747,30382,15586,66640,55006,18385,99710,92067,80793,47509,51909,90582,64376,67383,68909,97599,87900,15947,15377,32545,13260,73812,27322,99159,32992,70641,80714,33840,12762,84739,16019,74712,51314,12280,91277,60231,91604,90922,85781,15549,21239,43030,78274,44968,87900,24585,85822,88231,13072,49173,75313,21878,57955,73876,73816,56943,42231,14334,57054,82752,28836,52327,32652,81356,43489,36950,99732,38068,70201,21079,21215,47126,78527,80600,78656,92471,84808,32513,11580,85057,56973,41467,18515,62224,50100,72062,23818,48372,94200,37067,29328,85126,64612,86815,51661,54047,65927,31727,88134,44515,20936,90056,18440,71189,31092,11673,25539,36526,14110,59277,67402,87645,68922,32517,17562,17027,71551,44384,62282,83851,17866,33906,64609,15227,36601,49863,96801,78034,96662,56726,15342,21869,79922,88205,38443,17448,50480,50544,89841,38822,63228,86433,29150,51025,39022,26588,60374,81407,30057,74464,89295,20482,40565,71689,77601,35691,91573,93826,10643,16049,80862,65150,33314,19911,59135,96377,42706,16711,83315,96967,10756,92747,90974,93064,83781,76770,64503,17060,34599,33835,79467,87463,21263,44012,44458,82487,32881,88378,63501,15029,46631,53449,71473,44999,13785,21185,90792,68719,76484,26746,17983,90224,21312,78620,40324,78227,35052,26500,78071,41796,11687,71394,82523,56304,29561,49303,48492,57685,76481,21120,44465,17011,49728,91038,62213,26463,52823,79532,70066,49231,10870,89904,98165,63866,60223,58564,30299,63561,66265,56580,37731,24296,14260,85420,85944,44198,33058,72201,40662,54507,89990,97078,21219,49415,69648,23914,15464,97548,40015,53909,60168,91451,78249,12389,22383,51706,80656,30608,40806,73440,24309,29451,51094,14067,22426,53432,40543,10500,19944,96797,35025,32115,11819,10350,61931,85749,58950,70901,33287,66511,88991,36658,10330,13760,70664,99060,52588,15384,10584,70108,20311,54705,36362,53505,76894,87949,85570,54708,72111,16264,37904,76277,73577,12433,90292,90673,20407,99753,90232,80423,96948,62383,74783,86370,68077,27206,82057,47962,71139,72502,41430,27218,80522,37789,32766,98521,77271,64937,61200,44691,98080,77653,63349,33854,64976,85029,72198,82959,61191,83592,42206,87655,99318,11380,96140,55842,89213,51018,33081,49395,75851,87035,49448,18328,31602,87135,89739,20366,57679,66492,43197,45249,42755,22461,95357,13628,66263,72914,27470,93877,79496,97212,43593,88227,22393,47279,27017,40195,30601,83073,41417,54480,67298,27117,64604,67448,65717,21182,34380,55331,14606,56906,75380,33680,37181,95799,67273,10510,33457,23307,44996,78792,92640,11064,98045,55925,58945,80940,82816,52697,85536,68704,74813,73414,55014,81913,26263,96382,90897,24478,61830,84743,45182,36587,47262,53522,26067,48765,83844,19741,26350,83791,64075,40675,51677,84430,58318,10032,24809,62582,26630,62260,95384,53009,12664,29491,81063,19979,54912,94798,87413,34778,99293,69240,91684,94277,25243,30426,66093,17007,65722,94899,36891,38967,20640,23459,98237,50789,19752,20747,61034,11286,44694,92172,12175,97985,38175,90346,49169,95262,94538,85661,20256,44645,36111,71287,75246,90614,57055,67416,87210,90742,91424,17465,54860,21364,54307,46881,53428,99303,84676,66998,17061,39407,68427,99299,69339,12471,69612,49151,70455,21567,94352,28480,95010,82550,49906,51737,84953,37316,35759,95145,37461,90636,17241,81947,68433,84779,86376,63488,45853,26270,13760,41350,52987,94759,11147,31333,58904,41865,24373,97272,66608,94307,72219,45261,63273,56826,25536,12834,24858,37308,38971,25713,75863,56304,63466,88723,84257,53177,87418,59224,39383,66493,60131,81840,35076,26584,66430,54671,22057,66787,10450,73047,88193,20770,23186,74973,45704,71952,87842,45485,45103,23770,12543,45848,46956,16632,87322,81349,45296,37244,38367,82995,54137,87130,91752,93676,38820,83347,65383,15584,46322,39464,71623,78969,20904,72498,96374,88283,18666,34254,13820,49189,77651,39351,91735,70423,53310,48197,60567,12434,84910,13573,31835,93642,69834,94082,24391,56677,51490,88038,96938,77914,19395,67920,52094,75143,41223,32504,98616,22406,78769,62687,89643,96326,87802,30579,67386,75513,13281,77136,61840,28563,42748,27493,53392,84993,98247,73337,85592,97162,30737,85519,88611,78783,79849,24445,12560,96081,61647,34651,27037,21357,92217,53903,81813,21833,50283,61053,58047,35040,78741,28283,50585,15245,44944,99185,31662,19797,47214,17010,57421,32010,77444,99681,97605,15649,20338,82198,35849,18267,64199,55285,20140,53817,46485,33047,45640,52855,98597,85219,23740,80199,19806,20997,57510,28665,88118,30384,48069,54335,74632,74979,47534,95000,41562,44734,40340,92474,28401,71353,95902,95811,42718,37809,33968,82534,50032,47759,79897,98378,63137,90915,12842,54403,74356,83299,42739,98558,75075,58423,42145,42846,56886,72769,51272,12633,97031,80833,68485,72417,60486,17902,33939,68670,19604,34863,68149,71524,94481,33803,30341,42508,90108,65306,67848,40266,14554,99945,88881,93096,84584,33438,89590,89601,60792,90790,24030,29023,94504,91765,36359,36287,67683,97422,80506,10687,80520,59744,39563,15650,55999,30620,97418,78143,10351,46797,21083,26339,57239,10544,36975,80873,67795,42751,45217,10573,90639,58527,78090,23617,59619,36595,41014,59979,94643,97664,96401,32858,85147,56859,28108,18557,88807,78045,10851,82166,60090,27386,79804,15021,79922,52146,68653,74461,74150,41885,44028,54857,55128,26446,59708,76971,69145,76725,65529,45158,18938,99674,13968,66103,12635,64872,62616,12109,19072,70744,76020,90329,16029,19662,42100,84648,70810,52331,25010,42537,54229,15739,39349,51376,27885,40676,30161,59903,69358,71714,55988,58982,38948,39328,74581,56992,71586,88793,76111,23802,29691,28059,27254,26774,13801,47918,18566,73621,31723,56148,20144,98955,92263,67297,53139,62928,10590,75960,79153,97850,82917,44296,28674,34735,82816,29604,65788,68024,23901,81617,41860,44709,76208,27444,63035,74538,56153,21535,78190,64031,74423,37388,60449,13889,60628,46718,15866,91676,37974,79719,63627,11119,41452,74874,29498,80092,44161,76206,54018,50908,38679,89334,80075,13419,52705,88303,62267,82276,71142,73908,45108,22911,39687,68153,15807,61397,14219,59688,29378,33059,18680,13071,76182,61183,78180,27233,86977,61644,66171,67929,98763,63120,47482,91128,35265,23454,73649,96000,32889,36370,18013,29112,85506,42729,46720,78349,81969,65256,66421,80965,60912,48400,55980,20173,30856,78157,85897,21940,85531,88010,53023,71576,63940,54441,60309,73477,58075,34679,23365,89453,86830,20380,34689,67546,18917,48273,92614,28645,37127,86905,52966,30054,29056,16220,92518,19176,86138,40351,18628,38244,49054,48436,79434,56557,91879,94499,55888,85164,24663,87883,33294,93572,57345,95989,42378,52192,48429,83515,26111,74906,44335,76866,10308,74427,84325,33272,43353,45531,34125,61568,14284,39104,17024,68892,45986,73289,42219,95638,32680,79734,68918,32912,90413,68279,80025,66031,45145,60865,38401,34495,18761,99782,63686,31027,58247,19419,87082,24905,65182,17635,75559,86147,72176,75468,46847,44716,84009,41577,21027,49147,71703,22800,51030,75104,51251,82258,58355,50949,84081,58018,88006,41113,15618,10432,86722,70943,23777,66317,64842,49299,74051,68737,62993,60353,91354,85704,18639,78228,98856,40042,81594,32919,92435,81176,13546,62594,30742,17467,77610,66624,87821,24644,82934,68111,44352,71024,75962,31027,15569,62879,16195,98276,90307,43963,93793,98478,73523,14985,71274,15454,93891,97496,52297,28518,12871,95610,61716,65156,13888,77475,37989,63362,93629,26567,65203,42063,42528,88361,11952,61756,73467,50194,45507,77598,86696,49929,30459,42755,60107,13882,49694,73338,17742,74849,81307,54758,43928,43692,89843,63109,81615,21875,73276,80573,39284,63425,58051,88021,16048,76841,85895,20011,29113,52939,45187,56209,37410,18387,48382,80189,67085,29580,37401,87795,91808,61668,99835,14353,75712,11411,76179,86464,20418,28651,58999,27884,77266,40768,72532,63443,34630,21411,92759,79789,95390,67149,20363,13508,20294,93890,26338,24177,44270,86130,61371,47764,30915,81174,21555,54772,10877,57294,78766,79333,86302,30810,95402,76096,77266,28863,24113,67920,18560,14322,37855,76694,23283,60931,99743,66134,95896,46128,47512,64362,47624,64581,36707,38059,35504,41375,77451,32906,82070,10239,89081,70478,98991,54000,60581,66961,79911,39598,20253,55214,82946,19442,41532,13132,77965,98932,80657,60370,20909,73150,56377,54878,14797,21219,13977,97095,48870,99358,25120,91228,58439,68206,12502,51926,76625,52226,61535,31377,14697,76152,95743,44956,56296,95567,83612,92570,94349,27589,89417,52389,31174,53807,76429,55329,85023,18346,83945,17855,64284,37420,54557,44149,72476,16985,10780,42376,75442,73000,19074,10941,74749,27245,26073,53929,20120,24848,81946,55124,53191,95880,86674,67245,13058,18782,70819,81607,72483,33502,35160,92015,99556,11862,65096,14191,84296,75311,43232,57759,41162,21235,48977,40651,51799,63044,89332,35787,22526,62673,44724,34464,64940,55974,45065,39990,83171,38296,22676,51732,66788,12969,11723,40486,80251,72231,79932,24116,62031,73758,80018,33631,12599,34688,71152,73722,70499,16537,60350,21593,68935,48003,92364,79555,48992,36732,59345,70273,87125,78579,44481,47746,98484,44574,38308,36174,62837,78288,27414,82251,18304,66071,12479,56134,64857,41149,21531,99762,18886,78620,86060,25977,91836,49528,10119,36364,33415,18628,93574,75558,65253,51418,97998,63037,29093,17304,96936,16740,62175,34547,59151,49087,46038,38154,84656,99894,15488,52344,59802,89016,49446,19929,63155,54451,52969,46733,97561,34386,53664,45147,41953,76019,88846,56420,48303,66801,75936,65980,84581,26776,69157,69788,69655,61078,30798,80160,71463,71490,15465,20128,89472,79739,13540,83610,31877,21000,59248,21902,89983,42923,97606,26963,59285,68330,91201,77004,32401,92195,12548,83783,50247,26866,50058,42291,33369,91264,65017,29738,22812,64105,34280,65107,62049,64632,40921,24585,73223,54573,76523,65698,56484,26273,24375,79001,97828,53928,71820,86753,29300,77714,29057,70523,31309,49368,79525,13917,25171,96732,14242,28318,48882,54126,78228,41536,81706,35679,62527,22252,66240,78542,97333,46454,70411,72985,75146,70560,71205,59147,94247,50090,37204,14517,26451,81493,27299,10184,76902,88102,42613,60702,20356,84586,91098,42081,74100,56108,25910,60494,78321,19162,25099,60553,70556,50048,59452,98315,20233,47686,10385,60266,51385,36591,20922,29386,70020,67541,34569,44216,89650,34616,37353,45423,17626,81958,50854,54226,99040,43167,74102,11600,58705,87962,82035,45788,19370,38210,57337,95006,32608,52833,49161,18204,75900,49477,51339,25781,35915,99103,31610,84827,27203,26749,49175,51189,39108,46519,38374,60162,63929,50783,76331,15057,86504,73338,53828,82840,55102,82804,76114,94331,22990,59256,79615,56897,74888,13905,59773,57594,47637,57751,30665,10018,48897,26203,94458,31266,83325,84602,64348,15225,50678,59695,87382,33149,52640,80244,80498,15416,62797,92449,78403,32666,92309,35121,18019,70296,79590,27208,81793,57382,99757,52840,34149,81519,32551,12595,19184,29714,92279,99228,30088,86939,20660,33838,22506,98546,62587,88801,28270,92055,56109,41639,51113,35291,85668,31881,69008,98259,27552,82755,32035,60960,24158,44233,36089,61207,31069,96060,63216,66754,58495,55698,79765,46373,26244,54905,20936,44689,39954,45797,54618,41280,48462,45524,27418,93828,38616,92928,79283,23390,67871,53942,39631,66372,43717,59026,56929,33895,39953,18180,26347,24114,78306,31907,89969,41815,89937,15294,51341,36557,73865,29060,71597,58413,60944,30421,88837,85106,71398,84610,41443,93105,67397,84087,90766,58476,98705,16321,24104,49347,91695,72531,17348,65626,19954,68468,37743,63315,27595,22414,16308,69673,59003,20160,33023,86226,32488,28146,73358,13203,22719,55943,12525,75824,26568,31201,88681,21838,95074,96199,58625,90902,58609,21818,72617,29134,54077,97864,35650,88274,65541,51227,78392,35864,90084,96522,90450,46678,31900,62788,52897,77918,54005,93136,20222,26891,59498,19576,84850,73539,18289,54684,21564,23818,36095,72511,69495,96745,44934,91718,82135,43877,86336,41706,26046,38795,67352,88879,95512,96849,63360,26731,67655,94469,65671,55712,67808,58983,91100,23022,40704,20359,32593,49381,92118,49677,39614,65386,54631,26048,36691,23167,37728,72707,90737,93924,47936,27084,13274,71553,94565,29555,42759,69880,71168,79757,87015,13491,51844,13950,62614,34097,65221,80298,99941,18976,44316,19610,72262,19320,60733,36858,16538,61655,81849,53272,66247,77682,85585,20985,79434,89625,97970,30763,60124,56504,80873,36773,73294,83287,24654,70858,65205,94578,42785,38159,30041,37772,14023,31492,86215,75340,85866,51724,63041,73135,59811,91141,53305,64784,81474,76588,21783,84586,39911,82405,35462,93428,38787,70248,31141,30031,12332,12378,83006,32278,15458,10843,72152,24943,23878,45961,85515,29297,91834,23082,33529,39209,54921,25109,91254,45089,89527,27471,95852,94258,49847,33336,45862,96325,49208,65629,18287,88254,17663,52511,16714,85169,96354,29070,14105,47622,80198,66732,29524,66209,57056,53272,40010,70586,42793,71608,81223,22534,33508,60793,70504,20733,99104,24041,94502,37848,69922,90990,83202,23519,68154,24485,92202,85579,60376,57803,18922,27294,57311,87731,79004,91523,99551,67380,66898,97273,61437,40981,41797,35769,35075,90311,16775,53295,70320,52103,78891,21733,33460,17224,96980,75397,80696,29008,35508,39992,46075,21478,58988,74600,35279,25194,29142,57228,19050,81732,82070,47218,60128,62213,15085,14402,36918,92995,41274,26094,51923,94025,39808,90699,46135,44479,14657,74275,62054,73947,82768,64723,77819,53520,16069,28331,78748,36972,73175,58533,49981,59348,83797,81214,80600,93301,98533,67243,82857,78554,64313,63688,11339,73703,76343,60605,57872,77565,98516,97498,16436,49387,59310,67575,18231,46183,24735,25427,44981,69553,24946,43546,79944,97531,93981,93500,73649,50346,88795,92474,37460,28752,65432,84816,65380,89023,20461,55125,59643,65491,90578,63300,48006,68335,78621,98945,47555,71988,15904,77063,86958,99674,18291,37661,32441,73598,80839,86423,89245,23016,85204,13819,31469,92291,96976,53454,93341,73390,93483,91573,64750,62248,30980,53739,16277,49318,68768,67697,57690,97550,55140,53267,23335,56519,84238,47677,11266,93318,90048,72911,55773,55159,47398,50823,19497,15246,52461,42095,12518,76521,35416,23561,96950,73299,93046,12417,67854,94428,71504,30668,21285,49675,64453,97210,13425,97278,29909,99319,69492,94271,32861,48141,16774,34130,28894,46818,68830,59165,74632,84004,56702,43011,38574,63497,84407,32667,58532,55671,86107,54314,70201,81333,96365,19044,75072,93962,10337,63626,59352,28561,85397,11484,95350,22527,42564,97824,59073,48146,11179,64776,52333,56684,54260,79471,95758,24199,50943,71304,34739,12704,15043,27264,73877,72237,63708,12771,10761,99002,48519,54419,18083,30812,65761,59422,38719,87365,28858,97597,35768,74815,46534,87130,95833,42900,10894,27756,84828,82827,60033,23796,99748,14095,28411,90688,44229,45427,88266,63402,66338,64012,63942,41281,26884,78894,56945,24900,42551,18102,26438,73669,36301,56040,20441,81468,65540,13186,77555,95249,28624,58713,58069,52299,59822,16629,53633,47655,65501,64787,37080,25791,69161,76681,46222,84935,68760,61571,65809,93989,18552,82966,28006,68421,25712,53003,33060,85461,28992,34837,46033,78369,38914,23757,32419,12048,81047,58000,87636,44720,81341,29145,32308,31906,32496,29051,21508,87201,72547,98753,66351,10756,77124,99817,30669,87905,67112,46559,68863,53302,35471,65472,93732,72776,74828,55910,15188,82006,21253,55764,81324,98137,38759,63801,33711,12330,12089,34894,77967,61403,41302,61325,32069,74489,93238,25205,80294,37094,70630,43310,76783,25888,76820,13619,69361,89397,52654,96154,85925,49435,68944,55173,29480,41154,11792,45415,67808,86728,12778,33045,48619,16480,64781,52554,24872,87901,60144,85770,76894,74180,10232,73643,70125,76980,39878,77958,91060,81162,17024,46588,10571,63070,62484,53140,18811,76842,66733,83002,35814,78329,67743,51644,85355,34269,43451,94356,85161,85742,42982,88597,69046,32927,17017,78589,13235,69147,87939,79269,59602,94111,78388,84413,73903,25319,18282,17374,54514,79521,98266,28706,52479,60838,31889,67969,76146,19514,20397,73397,61165,28451,78734,79332,21161,26392,92694,38844,86474,67265,64823,68919,38950,40351,68108,35569,41585,88446,90373,59246,44430,84522,71280,88411,92873,38770,39924,61827,23440,58202,17993,77641,13070,40539,22870,78990,35225,57336,68877,19410,49413,85669,37970,80182,96234,10439,11008,18601,46167,60143,21765,61604,64942,81737,57539,98753,25619,98258,16116,83010,26787,55027,62787,74555,14539,40670,76642,23508,19718,21063,99320,15696,39268,19335,89079,48034,12992,71963,47100,42721,43737,67386,58862,74522,35467,22416,13058,27391,91703,61996,74942,20517,58143,89406,49269,14331,68555,68550,20091,15228,59586,68787,54949,81627,90726,71496,46136,15399,27114,60419,16186,42495,39844,17809,19560,34592,67167,37547,63484,68996,97229,71006,97727,79748,23573,51980,26604,74618,71602,44358,94824,14566,51987,27534,89440,10776,98542,90521,65225,10535,42897,59505,86361,21931,89558,49072,92076,89138,89777,99513,96073,79626,14175,51244,25629,73716,88748,17741,54042,39540,41799,54252,85719,80854,95379,56531,54019,53838,98436,17535,34197,37214,32774,61112,62611,28479,98262,31062,75479,83667,52135,47952,18945,26164,80613,66155,17311,65978,94265,97260,77305,94784,23486,38767,37642,92738,14682,55020,36586,38291,57898,90139,49994,25325,43030,13612,79053,50591,85010,13852,26591,40327,52081,94254,19008,91988,32827,65490,30887,20097,26025,14473,38448,97849,57787,73800,35017,23720,94093,42819,12126,87813,80431,50283,48333,39500,58121,73964,89608,54403,31468,81648,96119,23314,57554,55372,85579,99192,68949,28183,39029,60338,80425,22954,58163,42214,59157,71199,13848,65645,54855,18490,48226,85009,35630,10291,90479,72048,82325,23958,63645,21952,94886,42488,14205,78668,20439,93727,29725,75557,35142,91532,41516,73564,57839,75440,32408,81290,55643,57866,25916,68308,25233,93899,51649,22155,38209,27242,32039,84602,49969,44653,59851,16144,26997,54277,79864,82716,33007,90943,70170,67014,76547,25708,54623,66943,11571,95538,35830,42980,26697,82037,21234,49443,52467,34034,93898,39977,26287,44067,16572,26185,55674,63205,40273,98510,30987,29144,92608,59688,92002,95151,97966,93792,56772,37286,35725,66488,90148,69426,72806,69822,42190,96460,33337,68585,10450,89827,27277,58339,25553,88683,53939,69183,42865,83743,66034,54410,87147,23338,44650,41629,99329,87248,42766,37843,85291,63042,39816,10620,46024,73133,71827,44212,65432,30235,78205,26892,26604,72916,52492,48191,59716,15004,82953,43598,45192,92892,46911,45611,83660,93525,98826,93345,19965,58271,62013,82231,32637,96072,39414,52104,97677,51672,81576,24983,69387,28659,28729,68944,66664,83793,52852,77177,42899,19855,90055,47602,26404,27787,46432,41631,23668,32960,94768,12207,21623,39982,88124,54080,60661,32647,96325,81136,74189,88551,71822,56101,71278,29261,54838,95721,56723,34754,42603,43177,97758,96744,72436,97187,68972,57474,75599,41026,63184,35223,18300,48022,39934,24497,18352,41771,64526,25451,73857,12055,82166,70424,11966,65170,60868,54601,36383,91258,95029,92331,45436,53073,72151,88677,89901,75112,64202,62073,98320,97200,45009,79068,44375,10234,99875,28486,11588,37161,45819,15182,43084,91341,58525,99906,44209,15623,65157,45046,68045,76637,53460,87407,35855,82498,37561,39333,60103,30147,58147,96239,31369,19175,74130,38177,76951,71847,93445,99322,83489,10720,52844,93443,62839,15006,62742,25586,44806,36032,81330,48013,13430,28498,21045,20629,53664,44679,10207,58606,52780,16315,29663,34202,38837,62760,38867,27564,50890,53780,90125,38849,67906,86938,11995,42248,70323,88227,29081,56696,44299,45661,77921,46901,92774,66149,85529,21287,51805,52917,86474,10702,78735,31338,61772,42242,11956,60532,37715,88590,48403,17586,56965,21573,92165,64167,21133,20796,83757,28560,96681,15120,46227,78130,39762,76517,86826,68105,46792,40741,38241,75485,95471,60231,88839,37153,99336,70740,83152,70556,41542,85509,36217,77445,83324,57474,66798,78387,26930,35268,72913,50098,98993,11882,28643,41614,22013,54134,13413,15560,32845,66632,90249,96567,91087,61004,43610,38915,84250,40999,66709,81378,48151,10086,20577,51719,16342,27146,24892,62042,61155,52534,59619,23229,40561,67670,11847,69136,28248,95377,74091,73975,74346,29738,92640,61312,34989,31344,91045,39237,23751,89038,81529,31273,77220,90408,54337,43703,39086,77686,48979,66966,84545,70080,97901,76038,66807,48770,59314,93024,13379,85656,20233,23882,92980,69592,70835,21240,45642,49945,76587,32355,11634,29289,76391,58015,68149,68626,20514,48560,63699,83087,22890,66531,36320,93412,66813,54484,88333,76920,48824,91459,63520,38888,52021,41230,48237,87918,50828,39912,67977,30897,64133,32405,90072,43850,33439,58737,51291,17696,30764,67506,85085,91843,11303,98113,35458,88338,43514,55143,90299,85324,19862,27336,74413,58883,65619,12164,28597,25448,43637,95993,93675,35331,99050,92369,11309,91739,97469,90817,35693,87949,81205,93187,55814,81085,78610,44182,23759,20428,52493,51542,66443,59554,62516,59269,44455,44855,96331,24831,18197,64789,98122,12012,73966,34498,53446,90438,33644,52418,84028,33281,90824,90197,94855,62350,95288,44686,56095,97645,52172,42307,52000,91233,93307,80566,24205,30800,51049,97053,33468,88104,44783,29111,50982,52721,20203,99111,27882,86709,13834,73694,55119,91048,22400,10472,89910,47315,39417,38221,31162,79149,63075,47578,75238,43933,17166,11151,83728,25453,15756,11435,86750,95698,25959,87501,20857,70587,67625,41796,64536,17926,23024,79835,23078,82961,28119,15638,63244,90772,64861,37648,78266,55716,56864,45884,39605,59422,60112,40169,67024,38868,26515,82096,58805,67350,47515,48683,37196,86243,17796,40962,86978,40408,98466,70401,67800,96242,85045,97724,87677,94344,45684,61356,33323,48247,19767,40911,91391,84113,61429,72162,91716,33652,45124,55079,44802,19829,97829,18128,32410,13333,41226,21310,80504,89408,89866,18503,51974,75217,92093,75109,56658,93202,54859,65755,56622,53474,65805,32100,93682,14525,22069,37955,61247,29684,32877,59690,36465,34206,73361,57581,86605,95030,40828,34759,61075,22204,62453,56660,89803,64396,24300,84769,84147,52725,47756,47353,50514,94190,48381,48230,57726,96776,34454,13944,62056,90041,49068,58066,53991,81571,29270,79585,60845,38788,28729,83014,66713,80531,73017,15854,69655,33459,65129,11875,40362,73671,49935,76559,99438,24204,81051,54295,61532,85100,54145,57495,61834,31796,14228,62860,51856,76839,87727,73402,12118,91370,25129,47021,69754,85973,48279,38622,63810,39163,11412,97438,80225,54140,39034,89456,75919,32761,38539,78819,96441,27983,62529,89849,54830,53302,23858,42517,76720,11315,88098,34833,28023,28525,80971,51050,44665,19744,61908,23330,48259,83212,80038,53502,45285,25804,99007,55407,55783,57192,21904,75877,96759,47433,60059,45620,37057,80137,53575,95603,99304,92271,36971,15387,79798,83766,35855,84945,62620,29311,71835,81821,36974,58421,79813,77387,78468,90762,36955,27593,97289,16863,82424,84819,12263,52015,48323,44284,64672,53804,46652,46180,41300,54654,72662,46599,43513,46618,58880,84708,66634,42726,31464,27576,38813,38510,54202,85927,93261,78299,18706,98923,61396,82319,35585,72469,55139,20733,81503,49218,12762,60059,49983,28176,14617,11491,37241,26450,59699,37512,60262,22622,96133,31519,21813,42901,43433,69529,24895,16605,20579,84428,16907,36487,25899,88528,19127,24628,92802,81062,47923,32976,20099,52858,55012,13211,21157,57390,10232,40162,71566,62495,64100,96316,46756,76117,92305,91281,86582,18287,21880,54163,82487,81195,21638,37178,11278,56736,99035,60189,78981,89567,47396,71684,79460,98087,36359,42164,68324,98729,53687,40646,62525,54092,36091,30296,87482,78992,56792,14636,29729,86926,88056,91981,34835,44565,94713,77246,24310,94564,22358,72369,74539,30229,76053,30931,55372,65720,25520,59714,67254,95365,88146,89217,34314,16570,41476,75609,83408,27493,63854,60375,58021,61336,76105,76016,98789,48360,22909,45579,70055,17224,44453,63587,80444,97352,66196,57801,13420,57010,90739,40440,31473,10806,33589,52011,78938,94851,11226,36126,71067,29952,81812,84608,33325,29928,59833,67035,39392,47244,43714,46718,71779,36020,11786,95576,57144,34709,11638,49054,42348,19355,21116,12576,63822,22182,64158,92250,10047,76519,47447,75587,24676,69134,56361,68183,39212,81995,52726,39891,89219,28152,57344,16708,23829,70534,34858,80180,61790,43631,19999,48056,54601,74949,36633,67035,45323,57140,23143,56771,51988,94453,45719,62502,32497,93156,45097,23460,26439,85479,63076,15992,78943,57908,76189,54312,94604,10229,86346,64543,79286,78693,49370,43991,86304,57081,46071,86623,32307,34546,56368,91250,41317,19999,89494,78132,33984,38852,63510,47745,33007,80828,87412,72849,88078,97199,47363,94824,92949,73012,34214,77626,22380,49998,78136,46353,53631,75867,87564,67617,34925,80651,97721,87158,58604,80630,78828,24217,32867,46520,36536,33409,18183,73712,88569,96113,42335,67051,65532,87580,12872,75035,24611,41352,53836,73276,48221,41430,56976,27912,31022,99074,38888,79554,12012,61549,68052,65061,71380,46611,52437,61313,21190,89410,19445,15301,53725,35157,57119,49921,35854,72087,98010,99305,51453,24017,92730,69622,75145,38813,62344,29662,58488,73830,44609,99396,76815,20090,39778,42958,59024,28965,68935,35590,13349,29423,24431,46699,86169,96580,80330,23331,59978,62376,15108,88379,11216,74560,27494,18431,17289,27070,53279,96829,96600,60354,34525,47220,69457,26866,71824,83557,67510,88372,52471,17680,47352,46239,44437,72499,29289,97895,86758,54990,90790,82922,63815,41254,15847,21735,76278,13317,26663,74771,92794,28601,84032,68136,65512,30965,69504,44497,79631,50814,93083,24477,79841,68212,99633,11340,38755,57637,35289,18647,58300,43754,15940,15254,93748,85122,47615,52407,24416,10361,12380,14815,52611,99317,66906,27589,70531,48401,28479,54257,50838,95481,79457,43016,75630,73649,42920,85070,84753,29110,96094,30365,16060,17570,89281,69649,13719,73582,90408,23600,19634,53736,71747,51455,72026,69640,40545,43925,78407,93081,38037,11660,30503,83504,73955,36537,19407,65679,91908,24916,20013,65209,54014,74654,65485,26839,62387,85058,85835,83882,76178,69949,17556,21984,23395,56678,77772,45107,44281,25857,45453,44514,74828,65904,15293,65157,19415,79773,23171,70393,36786,41005,82043,52434,44961,20511,15895,43435,73209,77910,16094,61190,80599,24834,90167,74844,73047,18412,40528,83259,59550,51216,46948,81065,23875,53435,66463,76225,15080,42754,30311,86409,57744,23561,16257,90274,57068,67028,59204,59942,53239,14542,65917,89785,82315,92801,19066,38917,38130,47812,12116,19326,29759,24064,25081,18062,69286,76462,65120,54722,33455,95444,36127,69264,98669,52527,16619,64822,99737,44947,18908,84038,81708,64947,38975,89930,21732,64894,34468,48493,20262,71024,90353,72688,36061,33076,86007,72337,58140,92752,86445,66001,48045,16863,79747,30376,31086,30788,24711,28530,55018,20474,15706,64961,22398,53235,21633,23241,45586,65069,82395,62155,66600,47972,28653,85243,72060,65541,34569,63211,48826,16932,83430,30878,31460,10434,99917,13760,44330,84681,98862,33551,75291,98635,27680,46039,91828,84032,64227,93259,52849,45413,34985,84568,33576,21003,63753,18424,51365,20924,44701,22864,65922,53898,81053,42615,81169,39203,49090,95396,71749,58120,82338,85571,47345,35388,85523,57569,28752,96362,60170,83610,46681,63889,94327,20049,54053,70732,16018,29522,41211,56205,70657,94976,97048,66988,30387,72627,54180,21052,93302,32243,31553,83413,65367,76612,64420,15832,73204,58572,22348,26772,41898,62397,48504,76317,22007,74160,46706,86714,47972,17318,70525,73477,58819,31456,98646,98538,90533,50050,73870,44288,10927,88300,88794,27797,88402,67073,15216,36797,82338,74070,87726,33130,96141,79532,81516,33812,72773,44893,79410,10396,98049,25071,72707,38827,39394,36210,72456,38100,87611,34800,45579,11921,31616,65232,93144,39735,95699,68293,78896,43819,62820,17047,90342,84676,12034,60515,63248,70335,57598,52875,85355,41390,58792,28204,44384,93666,99248,65137,83133,60530,14289,15414,55370,98476,55108,51659,82159,48921,85288,72232,46681,69677,16626,78268,36782,70326,59824,36827,79576,64889,75333,43551,80660,93102,67701,51217,59731,49361,35698,37177,48526,65942,57887,61623,60701,16993,27788,26199,80404,80593,94635,76997,39856,61789,99562,62141,62324,28105,13838,57271,13811,14023,45314,81566,37592,20940,17730,58708,38630,32640,93443,60103,94626,41264,50205,51147,76496,67255,54034,20722,25850,61234,96894,70433,34404,59697,86069,53147,76378,27667,60579,81701,98820,36878,41359,77252,19836,17803,72351,72310,85968,44917,88691,64716,14573,34216,16039,15210,95536,71534,91272,65964,30386,21209,68045,43456,49736,37295,89931,95593,37269,26145,59828,17732,88186,42636,42439,29715,34075,22282,34601,14759,22358,28228,79466,82952,18313,45945,68905,97108,13007,97048,61714,82883,37758,56984,72553,46187,84812,63951,54321,17198,95463,33766,59369,36559,93323,60582,87676,55067,67443,35014,12725,25286,29557,64535,31787,85053,30214,22074,11690,23148,26049,27669,46618,93466,46124,81435,45708,48304,30287,42859,26882,89124,47733,40951,51781,59788,13135,12906,16419,10864,80604,94760,80672,84882,88054,31116,57456,41469,24484,19017,65911,57693,56862,44429,29296,67738,55088,75569,66684,77865,74233,20325,79658,22850,15443,51456,96403,67116,64700,59185,22280,44027,17054,98381,78537,77214,31393,40872,54264,70650,95356,22493,28986,11328,97459,25301,29833,21799,80775,10383,98940,25915,65559,34877,11123,22421,44060,76494,44070,14776,28848,54770,41852,32385,81366,38935,19671,78261,85834,79190,75205,24984,56804,49084,20467,24741,56643,34810,25656,72826,11364,89855,79119,51273,21269,54424,84395,56385,16042,91535,66566,53332,69131,59789,72728,70283,98841,16396,86473,65037,79696,92276,53384,30556,11619,69275,43115,42365,66013,25917,88784,77497,51356,58071,41991,47479,58147,92960,12837,30292,71464,98582,31423,53366,11982,98132,89542,65537,53859,79177,36772,39262,81445,56080,87676,13601,92721,46135,22384,52610,69469,81758,48014,19857,63417,53053,82560,60591,43799,51053,49050,59702,56791,12962,65776,96021,90316,87432,60434,60583,42902,65680,83502,76116,18605,42672,80323,76771,78361,47495,52731,44592,23948,23927,13213,37022,11229,25840,12299,41619,32151,89406,34830,86554,29998,52644,56940,32160,26147,46777,23397,75405,23142,51280,86682,85112,74018,19179,28815,64071,58177,96091,90164,57398,21262,64259,39018,66380,37526,64756,22244,78139,74403,57031,73696,55127,47801,72456,37855,74519,20277,46756,49290,92873,74046,41676,91551,74840,72453,55422,80649,20817,37061,34913,83059,66085,33949,22728,39816,29604,72427,61633,57879,45688,30274,88328,55374,64023,72521,69305,57466,69698,18608,92776,78041,27880,36753,93774,50363,30834,50764,49899,63899,53953,56803,96577,92465,75610,93697,63504,87409,60725,67221,82982,62887,26369,24903,34084,69505,25317,31687,92008,53837,68617,65152,12095,36848,96542,51495,41002,61411,86502,62505,14256,72083,92594,23055,62088,57915,98339,56944,85270,96252,97023,37470,43358,12862,40829,14823,85556,13735,48400,68577,61748,71093,75720,67444,24651,51590,72555,89512,78173,68275,90670,10071,76096,50935,49699,42367,62507,29384,96358,13819,22029,77904,22783,89948,11390,63417,50362,87245,70901,43500,71059,43463,84379,35212,81212,18568,95109,27431,68618,41753,59785,95108,92532,39991,88034,70564,95766,27535,87690,80660,55716,36734,78475,12313,64314,76826,62799,84027,42430,14278,63744,55488,69945,18112,69337,76383,14170,40293,75482,70626,64271,50387,59524,63014,39933,47711,66225,18941,72624,68075,53052,64461,35329,16707,40635,44311,62791,53246,75730,47709,76028,47631,88218,98498,46397,40618,97393,37743,73855,28450,44431,90535,34233,53006,57074,97873,68769,57805,66265,29255,70772,72754,59477,59538,39484,56226,48714,54723,18219,50798,49389,90556,87277,58063,54515,84255,85573,97108,69927,43234,38004,23747,46805,86776,38477,70182,65299,26235,38952,84114,84293,42964,68951,99583,58335,85181,96852,97853,97559,36938,26089,76259,99626,73964,83099,70684,78692,62446,32259,51163,77018,56956,59756,46359,96907,93745,15087,25230,68970,30766,14610,92004,30726,42970,71657,74391,35380,59015,34761,64442,44935,25515,71296,25015,13017,49280,12682,33707,80829,25557,76916,95527,76071,16761,28280,94139,72305,68562,86053,33900,96085,31377,29388,14018,48458,78458,47660,27880,17723,42112,52675,39588,99749,88085,18086,32741,62571,93413,89188,49354,22371,80984,38065,50446,44493,23188,66314,12852,49063,12840,39573,38385,87143,84385,49122,84180,54385,35788,64601,69575,41994,84770,58547,99657,33204,93766,59334,57306,81539,97943,62097,89946,27254,15216,45304,66460,51361,17131,98828,35351,18838,23210,91450,34337,87808,38066,19169,71932,64396,74819,57584,48440,93469,71354,29464,35110,32443,91043,63353,18184,57862,59531,49900,63952,77303,52665,95094,72638,59949,30516,40193,52057,56693,34516,46019,16279,32874,97082,74158,48400,23088,10110,57842,87094,28870,81388,31197,50357,92636,25649,80590,19073,61971,53893,90935,62719,31714,72378,34666,53100,43157,11333,83470,60661,83921,43050,63124,77223,17137,71981,10683,85120,21872,44525,88776,27205,35003,12747,19972,23843,28207,44456,81549,71662,65262,68395,87174,72772,11883,53606,31856,74371,95086,41132,76415,35368,44323,42030,77298,23644,30342,87303,56251,42755,26959,58013,95299,13802,36578,61960,74403,64938,39511,75181,60290,49945,32255,67212,42253,31660,40163,21571,14296,78551,42691,66368,38054,44830,86453,57431,33603,82669,28343,23122,90243,70097,95046,95180,31721,72660,60946,48051,55946,12730,36321,12866,54480,19153,28624,92613,25289,63847,76197,19895,59299,43817,55344,29002,85068,61412,99508,57432,71953,34851,65768,44626,89841,27287,21843,85229,75073,35608,77477,58577,21410,38753,65870,71789,46961,25652,91132,25023,67552,98575,54736,83823,84905,91270,20500,28175,97679,27480,25791,15807,31399,61406,54679,85051,22793,99364,85962,53382,52826,49898,89864,49192,33766,48112,62359,25276,93148,31908,80317,61397,44467,36759,52948,70238,70379,45598,62332,18792,93310,59049,51283,17770,59991,19428,82025,88979,24803,12220,92814,89325,26314,35721,96689,62957,18391,74942,26927,39157,99134,52503,16030,53061,84966,79201,73170,24156,52076,96519,75963,61253,84482,51005,38446,38827,89685,48640,57213,79329,25509,27869,16775,67638,41785,22588,30054,36867,59981,38729,35410,84971,25341,51566,62781,53322,42427,55874,68767,49410,48993,64160,65179,17339,73682,65286,23804,91178,77855,32228,94542,52665,80131,65850,47685,17105,46385,17054,54918,45686,25790,37532,47925,75172,83827,23788,66814,62605,79006,21469,21685,94742,10943,78042,79393,93871,66428,77393,92191,66094,92340,27333,80790,70059,47458,27546,24032,77524,83117,99858,70916,69283,26566,14469,27462,76440,71193,83941,70134,19816,52325,62640,99809,99137,89535,94272,78742,10905,83783,28427,95787,86067,19762,33266,47162,22526,19534,37728,35256,16128,28964,25335,23615,45876,88473,27650,32712,46823,35984,39226,14655,64123,64160,32853,36688,61280,47142,13041,22187,86509,23918,65763,60846,37398,58601,65832,45648,98454,56034,52316,15114,90219,23950,57579,24560,43249,31746,84291,70409,91688,40725,79733,33569,33250,45637,18057,91074,79096,83040,49660,95422,89919,24438,95473,61052,84512,62693,49626,88042,22927,54652,16592,33197,47799,71425,52990,36749,68025,96210,64629,47062,77697,74709,98710,26810,64816,71792,40891,18894,44037,63810,27815,46518,45877,55534,39999,41762,68591,32954,47409,93843,58789,73982,97467,50692,93072,47314,77242,31995,75373,10052,81578,28392,33226,84559,90563,32662,33302,56080,14369,88365,71063,28119,75640,18335,58450,42437,48488,33450,79419,58223,10256,77274,90566,25381,84597,83805,71729,37885,90321,84517,74698,54958,56246,76719,81559,87676,55171,14984,74016,67169,87862,52390,98690,90255,31788,83047,79130,66144,11356,33391,64153,11908,80297,28615,97018,39820,51772,60303,93272,59667,74687,95383,29200,72593,33876,11960,49332,36589,77809,24093,59033,93612,43351,27411,69905,78262,22293,55011,10625,37188,65862,46341,56095,93818,69992,77691,22262,85806,26930,21535,90692,49624,84907,69463,36106,13880,72374,59558,18742,41061,47488,88636,67081,88048,42201,38041,37541,31340,88843,35253,47170,80863,14592,96080,15410,56901,15083,37867,80662,74877,35330,70985,22965,69723,74814,28918,56409,66648,70245,62262,62656,74635,90401,59205,18130,10013,95246,73193,96862,16669,78684,64186,84702,16254,58947,83017,68733,98977,83389,78520,77438,83238,57496,69532,34707,44793,80010,65223,94456,57440,38684,35408,87759,79859,58026,36083,22311,39450,40637,90836,83200,22383,45387,80987,48135,81062,22746,65617,46520,15400,26406,63499,95770,35249,47328,85932,39628,72128,91710,21402,80782,63505,42730,10323,96222,84995,81507,95040,70825,97849,23533,28759,90232,60117,26387,76017,75653,53731,45362,57751,92083,82823,45084,55249,72444,59279,71998,89634,39775,20414,22298,64235,95428,64979,70017,83567,51766,61924,84261,48606,64011,54597,39852,47005,20762,76839,74545,19480,63638,49934,11457,33534,30263,54134,57002,10141,45855,29037,45878,90937,59738,22231,50581,52301,20512,79464,54515,20604,12692,14623,28167,33805,12849,36633,47170,49986,42075,84415,92465,12873,10478,58686,59148,71543,45659,81229,77925,66881,19094,19354,60584,94157,45505,87303,46009,75979,29744,48654,52200,50906,61393,40776,70364,50003,23499,51382,80260,10683,29965,40139,96891,20281,56602,37114,75152,75125,66122,58920,55357,10984,52161,18966,98990,58016,66953,86122,70832,59766,33991,35357,93187,86348,45465,96226,41674,61324,16352,39903,25891,96172,56644,22175,60479,39890,94304,59682,66327,44396,40716,68290,35653,17447,48868,98517,11340,97520,16312,90468,70245,92440,15033,18455,26244,75476,84129,13992,11480,98095,45602,56986,41022,34730,51515,47697,83238,22491,23608,45080,52425,74728,47975,40441,28774,84703,29374,32306,99956,68776,12522,22752,75028,10624,54556,39542,41994,12832,37436,60283,76100,49519,69090,73600,90064,59631,22768,35487,75592,29697,90625,11564,42161,60354,31076,38600,88969,50671,53676,27750,83448,45262,30017,59521,90729,47555,65821,71632,49776,88476,75493,91243,51272,18696,76071,18811,58933,20893,12060,93176,94738,27005,35935,53573,65375,33077,63651,74480,87875,46014,68086,70943,68675,79526,81270,70399,46271,54481,45749,73966,50932,46986,16621,52762,10476,64420,25206,39562,71579,29733,25438,91900,55050,12278,89218,20863,23347,36720,52820,90058,92905,80407,38901,79881,64405,52871,11115,94917,49080,17949,25264,53066,86480,97903,12373,53682,64594,42535,84532,80762,30784,76169,44914,27654,27814,54836,93231,22236,51102,32550,53377,87935,27944,28779,47573,30366,95864,12443,88580,48262,25005,17014,31583,52414,81532,68657,62929,99840,92559,19582,87983,66954,93956,66250,24269,94778,55925,91724,85436,42916,66191,56824,24285,81126,43659,79028,51551,43693,60210,78554,55802,98768,59925,43847,40503,43950,72292,51202,86999,48007,47788,42666,59343,24016,56615,32917,43498,62567,17167,28105,37303,63725,55345,97399,92350,30453,38817,62415,14101,41889,80799,46253,12055,87314,22389,99626,89784,37223,25392,47870,65030,25342,92338,48086,31190,26104,93564,35727,44167,91660,70309,97975,82650,18388,24649,55821,48061,82224,71618,93589,56763,23581,48469,57158,37550,76512,27541,90883,29572,90568,33395,81193,23245,52154,90212,64581,71282,63235,85656,32472,80499,72540,14945,15476,29893,46393,14073,11222,91206,66166,23018,25403,79253,82858,74413,81342,79317,54302,36710,31610,83478,53161,18186,53518,72856,44377,78060,38482,87325,22093,12477,19598,40110,37171,90174,69627,89567,29766,35287,19406,82110,45104,20975,61367,18587,84432,52209,64873,99403,37873,59695,11808,29016,52536,33804,55742,33364,28785,81993,50092,94343,42204,24342,44291,37042,71516,50493,66708,34122,36975,51522,54120,84439,37158,22969,86654,47127,30911,45727,13558,72274,50614,10582,32347,98177,52288,12888,62714,42600,24919,47531,46077,12007,62251,17577,58137,95797,10572,76505,36024,46840,78506,82466,59575,51719,88661,99598,83355,93727,42943,52448,96595,21959,70236,98689,17875,75638,74489,40967,13756,27521,69096,98337,52311,12595,70941,44289,94616,28450,38723,44361,34835,61353,41521,74724,40348,32729,83994,43449,48375,29842,28674,21648,12725,39631,68379,29257,91447,71104,32877,13156,16306,72326,14618,21095,42593,31381,53015,12037,81082,59994,36030,84884,61125,54328,99192,23943,77575,75866,37263,70760,56387,83914,85313,45825,98423,73665,65315,16836,66341,65609,85337,68492,86894,84171,45338,83347,75159,62909,43195,66873,59012,82450,14016,99339,99481,84480,56004,56016,86410,67160,25256,67834,73281,84256,45700,13632,44180,21969,41936,62934,86562,11170,44931,81912,67347,47215,97085,99653,52417,77632,33817,86446,91183,36490,17612,13488,14024,68279,63935,60310,79121,70418,18105,18469,73788,40281,28692,41559,53032,16845,70155,40180,86990,21970,32321,61945,64586,56284,28777,77074,23133,66946,40810,93936,92693,67777,70871,18308,27329,79822,20240,61510,55078,43465,52138,67251,10396,17898,95804,94481,11658,65113,86775,26024,74420,17424,98629,30449,62047,99556,82739,26160,52422,22491,11889,42036,55451,32057,97840,32801,77603,63571,28085,43234,44846,37198,39640,11925,25326,99680,65615,97811,39554,31620,99534,74853,51364,86798,51255,27918,28334,43861,10486,59760,26719,30428,36086,10469,55680,82860,77706,21211,90249,67217,86726,74181,71922,68409,26794,42056,41050,34515,49529,31493,28405,73261,65846,64199,92143,93098,39723,59227,45789,63599,79754,38811,83433,15743,54748,78680,82712,28787,58693,44371,69962,68751,88162,71455,43190,20430,43974,36407,53561,91934,67425,11621,72741,18095,60642,61579,11698,65598,64275,78935,57854,39823,22417,51599,58034,95179,16240,45446,99144,73402,57830,34308,16544,51952,58150,33686,96181,94527,62641,75422,56914,46273,61586,42083,70985,96035,74061,41804,89145,37984,60968,69495,21649,32588,89791,26616,82502,61015,98632,61719,28239,51782,51814,19489,22348,44156,99130,13088,90206,60303,34467,55000,55665,97717,76908,34230,71354,19684,83940,94833,50529,69686,39705,23602,71838,63602,95999,98134,57815,71512,29169,94023,13640,59952,44318,92327,38195,10470,40204,40174,62799,33338,59206,84469,22330,10668,71524,55409,63451,42311,20464,71276,87077,58549,59343,75813,41035,79160,81104,55217,18947,62485,56709,78091,60370,89225,34142,35784,85499,94775,49180,37862,42564,86756,89419,62846,80921,86430,56149,43872,30852,60087,23400,34450,51400,16037,36074,32977,25378,61249,35870,99388,62319,20541,30057,75181,25591,17427,38742,79182,71954,98122,27998,64680,19537,43639,23684,84158,17257,24257,44064,38949,95509,54052,13436,41712,78516,27789,64048,66742,67252,75350,94548,92871,78731,48845,72951,48150,89017,17493,22906,42707,43383,68236,14115,77293,53982,77741,46866,68765,71771,79963,41645,67362,82165,91890,85567,98152,71499,83753,86202,79534,33583,92046,82073,49595,80882,26869,44491,85039,67870,48770,17087,71368,22309,36512,43783,75553,59307,30223,21058,93653,64825,73666,60380,72384,10233,24130,29130,64488,33865,91171,84323,73577,39455,43097,89147,92196,75001,84632,67226,78015,81145,95541,12348,55550,74075,33338,79743,67865,59829,68560,29737,44647,81251,17900,39237,98879,89021,88466,15097,22796,68981,95132,41889,62307,94718,39785,91065,43135,52965,39908,91091,39141,85804,96916,94248,67777,77748,87158,29081,62285,25697,56414,73189,88168,84192,11854,86631,76040,64537,56242,32927,18220,75293,26928,59552,33396,29795,48706,75745,79204,92960,19239,19582,71440,27658,59379,79072,90114,48512,85601,44358,75266,64537,66712,96602,78630,25073,42649,20190,84902,94002,74567,69329,91533,21414,27123,33559,99128,69705,69026,39031,62642,68714,15722,85503,89547,34774,91098,92393,52491,31356,80459,87108,99100,30553,12999,14868,61524,63227,25198,23911,14769,82897,22186,77311,14073,16325,76020,67188,63106,79020,64908,23585,78618,76060,63768,92920,88525,13211,91994,96007,40163,52724,36148,23993,47881,21346,62169,40517,81653,91043,17771,16778,62549,11330,98759,65409,39430,43681,86995,20200,43765,97054,72974,40153,27096,40510,59782,62461,80233,35749,88756,70976,42038,24182,25477,25733,81872,70435,78779,76155,90922,29619,83038,34977,38265,59833,20693,38111,69783,96747,19045,85277,91153,89353,57720,40089,27826,51389,25881,40843,86255,27086,13036,16356,29846,25706,57466,25066,13233,68572,74474,50889,50704,13530,67835,34463,39635,52096,27840,97353,95013,44989,51881,81394,51588,82572,31148,63468,76100,72388,71192,62366,18144,72441,41579,63967,79045,98872,32794,36993,62450,99134,44876,71470,90637,17513,98922,37069,21707,84867,66796,85372,91891,10771,28217,30033,87104,89263,57976,36713,71686,33843,42633,26961,12995,25869,32341,14428,41129,62516,31160,84876,33936,55837,63028,77439,32985,97410,47902,65332,98434,35332,90843,83175,24311,98625,52033,47435,11603,23327,36996,28632,92441,66028,74043,16960,55321,72125,66423,65310,47478,98142,73554,46784,15652,99651,21421,74716,57607,71557,78050,27776,38191,33677,23344,58816,22408,26256,41501,25510,73766,99883,74527,22116,62062,65036,32026,83407,59248,13004,68879,46516,93432,92290,47366,59410,30663,40284,16033,71779,43269,20500,95745,36671,10319,61740,52630,63263,35803,50102,23273,83686,78648,15566,95891,94598,38770,45845,71667,86602,41502,68002,46777,14816,19075,73660,70757,10360,63273,41253,27810,40715,23292,63918,41307,40551,14869,72681,24632,68067,22723,22433,91585,12334,95603,18879,16065,63902,20809,23878,74628,97662,78142,33555,53646,54076,92731,84540,52361,11491,51798,19363,45614,19902,85125,87480,57955,64590,32937,77230,17796,10767,49683,13638,50575,56656,56259,75882,16667,28986,20827,87288,26219,70560,99026,93830,78651,79868,72314,37612,98158,16501,75731,45558,95239,57623,60417,60847,27436,90519,96147,83044,65232,90603,44939,82670,42446,72956,76944,44899,63317,71602,13168,36273,85481,23838,89056,61414,43783,87126,34174,80332,36695,79237,62867,36324,29117,94284,95029,99148,66720,59607,43623,17074,97908,40537,42358,37585,82094,95227,17412,99661,80774,85779,14029,42511,99473,72943,95551,40499,75126,13145,60156,44969,80613,15672,72667,66922,32660,74872,64570,72439,60227,62928,94892,36436,94253,98832,48340,22756,49404,20324,99905,85786,40407,12517,18148,69696,76901,15127,72179,60265,80404,83060,80196,98115,16475,64566,37254,68191,79519,90832,43140,86170,45447,81772,72077,74187,32027,68226,53544,16653,41178,62738,79701,66395,52940,64002,44620,95161,43561,22022,49269,89999,21953,67789,97244,94016,81550,58788,96819,25982,82503,21394,98108,75015,34736,95739,79543,39099,32210,73732,19000,49515,86277,98795,84927,48565,98490,26746,74910,91323,25495,27634,60290,85776,57993,97169,63459,20931,12389,35474,89651,21942,66821,57174,47499,56345,48784,16859,44924,77173,98546,66183,44260,68944,22783,19928,65915,38005,57738,65445,95069,78057,98760,19318,94301,50168,73627,45813,38673,33654,39807,37650,54846,51748,34535,63289,78261,91047,84233,16415,45009,74467,99043,84479,11034,29441,31479,14592,86459,50340,70850,64562,82384,89186,29264,44640,49888,44400,64234,22946,23569,73184,75933,13200,45919,77925,28457,40157,12403,39118,73729,15239,89240,59416,54168,36107,17600,47734,86965,81660,60929,55286,91358,38147,92645,10193,71603,52261,86980,47890,95279,38830,52403,35270,81514,55279,66312,16385,27103,70318,86143,49650,77952,25597,75617,71405,72583,28288,96541,68255,41757,58759,60431,90183,53202,56791,20795,42554,46649,21741,26269,28286,36636,55358,23223,89031,13676,21008,95006,83650,56542,72977,39043,32963,10071,63297,27440,97806,14064,14827,17764,33502,36289,74930,21714,13042,18361,60225,21723,49390,61404,24668,25482,85453,54316,28535,42599,85562,59546,99056,56179,63768,87434,34602,85005,19856,58042,38809,86263,20041,23537,79074,13149,38860,83395,38094,33051,61626,44384,67226,84378,27206,32232,66173,45845,42267,88676,44430,20678,25723,16732,19349,73220,40071,88486,31475,34433,60945,98615,88808,59794,43520,46330,66461,24078,53396,63925,90744,61881,94179,61802,60965,64586,75994,21380,33709,14533,10004,11114,75294,94442,19681,85617,36031,39786,24187,58115,25813,51411,59925,49453,82296,80050,67750,18812,86024,81560,84890,80192,63338,35458,33733,66225,32680,23308,93541,89417,11740,35008,19029,51591,17869,76196,49222,91516,75365,39671,53737,38556,77976,38807,44974,15143,64390,88714,44678,47800,87799,48324,14057,84950,49618,21863,58343,55365,57275,33674,62723,28606,98106,35932,48517,94227,90256,40748,35389,28636,87307,98757,85983,66481,52759,91288,55967,19507,95723,17256,91193,80206,20405,68600,69923,58075,87141,22092,37686,27041,57755,44150,63340,67463,70968,93918,87088,50479,52365,38450,40586,86567,25542,85924,55387,11039,52851,54072,48426,19969,90869,64366,43418,31524,37637,68143,93296,12625,26736,79488,27343,93149,43846,70985,59455,83744,55133,17434,60843,54734,77394,63625,42608,46066,81176,56388,59236,69858,78702,82959,79688,20098,94540,53337,40324,88119,13156,72893,87417,56320,59389,45682,19501,77416,22126,54486,52462,28384,79032,52161,44118,57934,38810,91791,31438,38818,64441,29514,17044,87797,86566,36908,94520,83519,32465,93271,64649,65244,65025,57992,24873,94637,22222,49769,95462,41823,91362,58886,17445,41319,13568,58937,90499,17692,48796,13338,65976,23804,74668,71372,32363,68274,11798,83603,20971,35813,23201,96899,50956,34208,64697,40867,45473,82786,38114,30943,90601,79314,52631,99806,80078,97775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4129,96559,44716,47187,54916,64066,92278,23246,43870,61993,56445,87055,52256,24986,52335,64222,92187,95434,49503,46687,16910,43903,93678,23121,14595,26816,81398,24806,28302,93955,37413,46456,44027,17373,19360,13148,69587,65782,99726,97388,23603,22711,49824,19572,54994,14727,60654,78754,48554,51369,81388,15934,35256,94264,55936,77149,29208,16008,36288,86847,49069,32852,44934,30353,84653,70846,36304,52599,28696,71690,51180,54770,10238,24585,92836,82609,46061,77214,35106,68597,20672,82066,61291,65789,83386,17840,26272,91949,50802,84417,61694,34112,10466,33146,97086,94746,50244,54833,51564,54824,23946,84329,51939,94726,10560,47004,83540,62384,20747,91575,97475,30529,52160,21874,79926,51640,33545,42210,28366,61740,63583,78425,69150,65006,63516,80439,91390,60158,73920,38341,40115,89039,88482,87014,30403,93232,98028,95188,16039,89865,66919,49208,35494,18264,45908,59864,85705,74610,28254,56487,14537,25044,39170,60598,92634,86778,32028,83263,24335,84987,94118,26338,60590,68436,93510,65579,49042,87908,12536,29103,86400,91546,46292,60969,65440,22659,22431,82327,89953,80049,41769,59273,26511,36776,19995,39424,29639,54728,73100,11873,24360,76065,48723,40233,61752,29844,58396,71489,22454,93596,82408,93766,53979,46702,48054,42197,91725,75502,17564,93533,80942,45466,82299,20886,71855,93320,46094,11654,34542,34701,77558,93083,21574,70757,27405,53037,22452,10053,82469,67907,67739,44406,39417,33149,80038,42306,22948,97324,80709,94522,29600,29864,13808,68653,91894,56642,27065,81576,57739,35738,99719,22442,14492,84252,33926,49447,15663,21894,98571,72409,46107,95297,84233,66633,28147,49637,14986,53282,99478,85687,53732,73646,21090,83828,65795,20840,35560,23732,21621,48571,30113,54871,56347,30837,23731,16326,54026,30120,61439,62812,83075,76783,63614,91349,71823,35377,75877,52784,65110,66128,56745,74180,83391,76122,68802,57099,93265,85696,56016,83843,86951,37831,97882,21600,23494,62816,94900,99599,43219,14864,59584,73239,52394,70345,42716,16940,65209,30690,17488,64132,70350,92570,84153,40137,67713,77959,89989,89617,51979,54785,62085,22148,91393,92498,65752,76962,58474,19867,47905,92494,32691,21292,77546,40876,13405,27951,96870,62099,26665,10401,52266,77385,29253,19737,95017,74857,81482,78160,77945,23421,22713,24189,86727,16188,75285,87409,23269,14142,12609,14224,25506,46576,32321,72767,34850,58366,40003,77337,45657,44099,42804,92405,47509,49834,62454,17641,48571,48922,67868,51799,27351,54884,36956,79598,38047,86798,86132,58602,25233,88858,21003,12183,12489,84958,70018,21448,76204,28355,34588,22373,73604,94565,33123,86640,48104,49634,62214,40176,91838,29238,32833,81624,74867,37969,82469,40363,50300,98462,24439,38820,22289,15557,87001,79214,52580,78476,71411,38734,95207,47186,10643,40446,79729,69335,46610,81442,89581,17928,75375,17287,96562,76384,21580,92490,63487,86770,16406,76749,68488,85333,16484,80612,38958,56821,63872,11120,57471,90254,11985,42065,28825,13634,23365,73513,14394,33446,10308,65696,38258,18583,84610,59067,32277,56626,85400,67428,60403,56029,15774,46838,58916,94205,36837,87717,97271,83752,10559,75005,32838,35084,77456,41728,57900,56315,46238,95957,76626,47496,93965,92080,57651,61883,51245,65635,22036,59448,68866,66204,90615,20610,67585,23533,47574,22771,31343,98646,48663,77431,58294,50878,99983,97291,52242,25579,14876,59916,29662,77208,78860,92101,15608,97537,94651,44910,32168,78590,24650,40595,17149,83068,77838,97027,12378,75183,17977,55269,30350,82378,87359,70480,46538,91348,92004,55902,92861,68223,82081,46944,33354,45307,28294,14331,20646,42379,43586,21175,61018,45582,49687,39688,97597,21079,61118,70687,64633,48908,63380,12910,30181,11771,82166,88200,79260,26145,88352,90726,41835,63257,15994,26739,82404,30765,25803,57400,76071,30923,67721,95570,34752,63632,77659,92883,93457,16879,69237,55888,25533,79219,41904,34127,74939,97752,48934,42978,85600,99094,16668,89936,82824,26198,37549,40004,37628,71077,93746,94951,30865,51751,48866,96752,29852,80823,61248,42342,68196,91803,82301,68443,40239,85382,38508,82772,53408,13169,29259,85012,15962,90864,72784,22300,83138,53869,18433,49760,63922,68312,87021,62897,26076,53633,21362,70651,33599,43336,85295,69153,38443,40710,46617,11127,32857,41716,79476,86199,26454,71759,85213,72798,39590,32777,55291,38655,23787,10412,47470,32984,37853,66870,33483,54084,61049,72471,89141,47817,36196,65008,42435,73255,84210,75786,79371,60081,16724,71089,78259,85743,46045,97235,47609,38263,61518,60483,38768,78837,33692,65983,82890,58800,14949,62462,33592,86767,11723,68031,34547,16889,22937,72141,58841,80556,82647,34618,30307,81290,88580,89998,20032,35804,67705,80518,58599,40198,31351,51700,98284,72418,95487,57538,44799,63837,93552,18973,13558,48964,64558,17273,25046,45152,58322,76631,16372,22408,77382,40501,37735,43409,76020,66113,82716,17332,68957,66458,38053,12815,97106,26867,40443,81713,58569,32089,54955,70128,66034,87364,73337,48762,79696,93352,92510,64045,69047,22316,67695,90555,15176,70386,35460,23603,90602,68108,89450,42632,12470,17586,74644,50389,26173,56502,17967,71311,69268,15342,53652,77294,99545,25495,78433,26544,61138,95815,30445,96749,30270,61360,67603,92636,61068,88558,11819,13633,30215,22212,18431,35963,58164,76762,35833,20758,54807,32663,32601,60131,88068,78040,36774,89926,34680,54088,19760,87042,78837,64002,87368,59586,30535,22905,41982,33607,37425,52962,77890,93545,71408,37106,11380,25534,19850,48831,59439,46535,49142,97673,98657,49056,21937,75398,26498,39274,62805,77757,37198,44418,72712,68310,93494,84638,20517,58195,15074,17020,19713,35474,14415,54628,89119,14929,79799,11351,83139,26932,64948,63762,86875,63892,74502,66110,76466,25026,15175,36125,63314,62444,50652,27244,98010,52998,60567,90653,92765,49773,54870,75539,52737,98688,29919,20366,52476,87534,97074,63520,41977,83882,66330,63807,51543,81742,74485,69377,88482,48214,61219,75399,75616,16384,54019,63622,85603,63108,79561,31028,22778,89720,41770,49684,14984,77159,37989,65033,31461,39195,56096,22352,25183,72236,48705,51556,57780,73760,58969,27986,86431,89365,46286,86642,31477,13260,80257,34756,56299,45501,64348,44069,81601,19798,34366,20258,33795,29351,10900,42927,64021,67894,31835,59236,20609,18067,56639,12102,33640,94047,24973,81651,72737,37537,30961,69986,85331,76023,14712,79108,88018,43907,12637,63229,87645,54548,31911,63732,28668,24449,99780,54244,85823,74125,80052,41588,76175,74485,47795,47044,77283,33464,77664,34432,94102,96305,32968,56406,35390,80609,32815,60741,25140,79942,75663,39512,93067,43611,98622,81585,18584,81042,44512,36788,36540,33206,81385,65878,35408,21260,80733,43738,57666,67203,72691,33541,93792,85157,22703,54231,64719,61374,18897,18583,12909,98436,29866,36981,29436,70055,96315,34729,32760,85669,92923,81437,56440,28667,22258,97465,81440,61083,27768,15701,89064,60472,71967,37810,18812,62905,88942,79166,36215,67285,35465,89535,32477,68210,42029,79450,35108,22487,97255,44818,16727,86964,66688,18271,49806,43978,81599,51658,76776,30425,98210,12821,81181,93430,60232,38214,87671,14291,62823,77817,40788,16105,92150,49635,50470,82027,53077,50443,83358,25387,74909,13190,66217,67371,64360,45811,67128,11001,82881,33920,22922,53701,14104,11917,91260,81181,16321,42293,69588,63264,77131,96277,33063,97243,56009,98266,94950,91601,64046,58003,64269,40427,88382,74472,85133,76338,26452,53598,38274,15328,62320,85138,38108,44355,62646,75635,40671,41032,67682,71307,19765,54308,54219,48451,24516,80302,58403,34507,40792,45110,37021,94713,93227,32648,14191,25074,25667,70017,55532,82892,66639,68122,95068,91518,22912,63612,86760,86433,79504,19796,69710,12348,21709,94937,62624,88763,46856,57961,63481,22563,81488,58414,35590,93057,54514,20717,50686,88176,34023,61566,59165,99703,11620,55105,23343,72253,75183,29061,31797,55652,79262,34386,96724,34974,68500,63421,44075,61956,94251,76889,11420,10423,62439,61713,95544,85545,45076,15344,79190,42390,43446,34886,90502,85311,52320,12375,42898,20603,20019,26562,72925,39347,32593,84228,90806,88331,27031,31649,39523,78467,22613,49265,12076,45350,46834,66681,72280,32284,53695,36897,81014,25921,59022,70656,94259,14107,71431,29394,71275,64732,74432,86457,17999,65613,63184,23718,42635,56288,34908,54588,69133,66156,75689,83842,69059,65640,66474,45598,99441,81423,91884,82889,85033,36571,86419,11294,23766,51933,70169,84080,93564,57233,83192,99703,20568,93938,12748,93894,80000,49640,92331,90429,10487,16398,87624,92550,59557,35344,26406,79559,87614,34322,44026,58550,43004,10789,82615,78524,79477,99854,46420,69429,75333,57159,77078,46476,71093,64215,13713,54529,67007,82486,48305,20303,13631,85265,68630,86763,54994,20491,96285,48072,94598,40409,46879,25846,43706,87077,22811,35796,46557,75188,65004,55531,51664,48485,18321,79573,44577,45672,75254,91282,72488,64157,76692,16617,79711,54295,89989,56500,17011,10727,64799,57118,51049,72937,25749,50919,68770,33275,86976,41005,73905,18927,14751,16901,14142,19015,20762,50317,22819,74575,93198,31718,74662,72787,47114,54495,27554,27044,70157,45182,91308,68493,77861,43369,47368,25426,16774,15886,17729,45517,78483,29110,27432,30486,27778,14212,62204,32613,91811,97469,96552,37619,45086,94590,53525,77051,25229,96572,16107,30622,14628,19840,13444,40393,48000,81918,79393,22167,57848,62782,27618,10483,46337,49290,59547,72908,63784,29422,72007,34014,81470,49896,26236,77424,43081,39436,89125,21312,71652,37029,53328,72984,28475,29247,17917,61642,95583,91311,68455,50821,31536,36471,46151,56821,73600,97058,52505,19612,20906,71344,56817,70478,63210,42141,84620,28541,90901,45971,77749,39574,49128,53215,99889,11636,68596,52247,20528,84623,81360,37464,68747,39290,50080,31794,95446,24014,79685,12124,29287,72883,83848,84202,64748,18487,77077,83171,42851,14340,38225,53960,47433,64627,47336,70356,48715,33851,91303,19441,87864,31088,35126,71314,60149,52770,87326,22519,19200,73995,68091,10926,23224,85150,40808,20791,23066,13491,95833,28692,40482,82378,94784,37087,84147,15990,85634,92127,70749,32543,79227,65242,93907,89119,54203,74840,86804,46596,51273,52412,64893,50916,59244,95434,26990,86431,24803,91505,92325,24717,32112,52977,11098,64219,27481,63504,32710,74283,58422,33484,59298,62260,20924,79535,38743,32803,79506,17428,58725,31604,52570,79526,93053,84181,91328,13769,52773,19430,62698,34447,22954,25802,30817,49508,77300,58471,30337,39717,22677,43589,96381,37301,69874,50268,45292,44414,98819,45383,49424,57386,11109,80615,64746,62475,36992,12371,74623,83103,59934,75865,45671,80034,44876,21324,40572,57216,14591,30628,36660,59298,80910,93407,11004,89992,29039,42819,13870,43435,79135,88285,51587,25325,12137,33329,35015,71404,62469,69881,60521,69267,77418,72664,48828,29323,91676,50077,27099,18219,75899,42168,29181,15637,37543,80148,97466,19087,36263,77164,20797,67544,25036,14310,99234,89531,75814,76853,52196,93875,59130,30544,23742,30923,37846,46010,67501,21909,71311,29976,85823,48777,40061,14269,68281,99929,10960,29415,89460,17291,62825,90868,22082,58287,72846,11391,65099,27099,47378,19066,70994,74635,73929,50895,84807,14057,13281,81642,63424,81334,85385,96126,27771,62754,16529,87920,86356,62218,93515,44554,69531,82440,54767,88165,71849,17213,33192,75640,45543,74119,43833,99567,59229,42629,25201,71820,96180,66528,35942,25512,17427,83511,73989,33487,28542,28688,81388,75086,98087,24008,48837,76671,75816,59032,45028,91578,64014,19387,80640,82299,15913,36072,24752,57687,75070,88064,40541,15065,41895,88878,46970,23252,83437,33635,29714,42641,66857,35797,84653,85559,66228,73982,34787,37747,38799,52690,30721,27100,40198,30410,88091,45007,94158,16194,52544,22420,47648,85488,77083,99395,56206,46290,98280,84770,17718,37999,87247,19076,49865,66705,30339,82523,90912,53027,65726,47384,22102,83991,43143,42869,78326,60654,30511,42551,59803,12214,96764,39539,29266,99871,24132,16148,51654,39914,82027,53750,72648,25257,99887,27731,11646,48007,89377,57769,18987,92634,22041,23028,58702,86072,10924,12553,15782,51951,69586,82183,68858,11893,54256,65793,77706,30277,57267,35916,45777,48362,64534,83290,82183,60125,37736,45417,57212,89079,63537,27476,58247,20396,84037,34746,11337,49637,25753,30032,55535,90541,46421,95272,50516,43875,85635,23229,19955,62471,60135,73020,29368,97991,90712,81850,36056,49238,20880,68787,63900,73096,18550,78281,10127,74000,96726,27240,16976,36988,19928,15791,24841,25883,26110,80060,76534,53111,33718,23639,27077,17009,44799,99705,52295,92269,23606,84342,42530,60202,32430,82003,37502,80039,18158,53164,53602,97595,52468,46837,33091,50883,74406,13370,84743,90968,34562,28966,76335,13672,39743,50618,53482,65668,16225,82188,59780,55571,14449,95275,63959,96656,15141,37984,25823,20217,46958,85383,41525,30583,97549,16108,75319,47015,16351,78872,53277,42162,76063,36420,50328,11644,63867,83176,57285,35763,42142,22692,99453,65160,31828,91696,91316,39272,94481,92527,63530,24989,96862,70744,25969,30084,30786,53088,26773,86993,87465,87610,91194,19526,83758,72036,77677,78162,27528,54275,32941,34181,21913,93016,86234,98363,38979,25237,50586,29312,13979,25320,40216,75949,41524,23981,95826,33055,70872,12002,39062,56183,27880,40869,92643,25379,97145,36692,65485,69198,36639,55436,87296,44621,20607,14325,88906,42575,76829,52405,23282,31010,12899,62602,26031,13104,55378,29875,41706,90046,21234,29009,10317,17553,18988,12578,42826,34539,83153,68831,84349,69923,78725,77933,92668,60404,41985,59860,64657,76567,37323,74365,80977,37620,47137,90690,47703,43439,84377,54742,89236,76563,50357,75330,72330,38213,34817,15120,64117,79639,92570,52506,77918,82434,32455,48912,30422,35319,81625,45147,34417,29549,80876,71518,98686,54354,71430,69437,64814,18993,27114,32222,27681,70190,42691,47601,71774,25274,82148,87006,33317,79688,64980,70129,73990,23369,16241,58419,17550,80258,39727,76674,96497,28988,48893,88405,62317,63869,68900,58017,11552,88451,10382,94084,38277,72747,90875,96744,63414,20267,20376,45883,11915,49281,41570,23191,20834,54609,68872,28059,89243,57489,41969,27338,10539,95758,80511,42297,94181,23179,98159,35385,27611,45166,44229,39928,99079,63008,22714,89673,21685,38227,25368,43193,14318,37547,11650,22739,89792,33699,77880,90517,52027,14581,65307,62414,91209,20798,81743,31891,30688,82214,83353,77293,67670,15441,20058,12313,70570,45502,97808,18045,61048,88369,73674,92010,53772,62725,85069,30747,87855,51141,56104,37400,84812,48627,53168,45301,57958,61042,84353,98662,87321,19692,20498,68102,25081,44764,96052,83056,30094,89960,12547,96058,59113,97828,19359,77162,63054,39273,69376,29109,78088,49335,57861,65429,75788,36681,18125,22648,83037,44745,13980,46667,37282,92677,13859,24956,56453,94893,80373,90585,56516,45055,14073,68998,85147,20984,70591,89037,20140,56039,97479,92425,61486,20686,68165,10368,77380,17162,34701,70060,79195,74044,44744,68252,53714,74675,35935,48321,85273,99514,11060,72600,70300,90087,85689,58234,20452,28474,95925,33826,23451,16854,93112,66234,22164,53281,22960,64771,46783,24608,86718,15156,81552,98424,46065,30153,80407,69934,15288,19478,96097,91410,84874,50628,19220,77250,36516,91372,32882,14437,95512,28823,78486,59440,60554,39854,41184,14933,94383,76019,79687,86068,36125,65016,24213,73806,56503,25099,70051,23402,28323,23004,42902,71412,74860,53643,57134,60246,35812,47167,76262,23136,62828,95302,11471,21236,20242,75070,97228,68175,66738,11326,33166,23253,42260,26695,11364,33268,29222,84709,45570,23277,54403,23698,83202,21915,70440,84375,70197,44032,63438,19730,97544,10781,21865,41478,87385,88850,29500,23941,22198,31741,63300,33882,18889,76494,49617,49587,49079,29355,61487,24059,23730,86337,41748,25943,66858,80939,55115,74005,58830,82134,50735,64395,60097,35502,60149,21529,30123,65499,55977,60696,76259,17146,64414,12262,10468,91372,99438,20667,85260,21759,60627,88503,47964,78115,42428,70604,78267,71451,48006,99707,35759,85976,56754,33660,52868,32532,84143,51943,82005,96403,16197,90376,62115,69006,70500,74571,19108,53603,88268,76318,77778,69837,64868,76279,85852,36201,60168,30438,73955,16428,57302,86322,42615,18420,20968,74092,70464,23338,40829,99420,32576,76381,97390,49378,85640,15215,14068,13006,43701,15094,33949,37918,56561,35954,52154,73256,12760,72632,68564,57049,99638,71798,94316,62436,90464,10462,29809,98410,68390,29972,75766,86151,87164,55869,39443,74515,74867,96612,67434,72626,96727,72420,53886,47452,58936,45934,21289,62806,20277,23964,71100,74797,95481,93810,37298,57091,42436,54623,11740,36346,69326,12225,19033,78767,26278,92578,78351,97732,49251,52654,88700,50657,13685,59152,65033,96756,74811,52515,25596,49830,62330,83377,69703,66493,47532,86736,40354,19170,28261,48492,27228,16698,59878,47482,36956,43920,60072,12617,19863,15532,15406,76471,96816,84556,58098,69821,53427,67208,48723,32529,63607,93156,87856,84582,91563,81930,47156,73201,66294,45535,63018,69932,50692,40197,19196,45134,93096,31259,88480,73852,40063,15862,59890,44036,70741,35998,39320,89513,23139,53121,10997,59154,75126,89456,17690,75037,20202,89723,18086,67821,20491,13134,67408,48121,23618,71609,13579,86447,10598,16152,63511,22464,76517,66316,94564,87587,89428,80342,65801,99702,14263,70571,24346,99577,69806,20949,20478,41138,42239,27725,70267,84891,77456,19688,32213,81056,32583,65021,74402,98957,66277,68543,96921,65303,97467,53688,64212,90520,31357,10309,94359,37775,98431,86850,43819,58399,83157,80750,18182,18940,33839,56802,25776,55916,45304,92941,17752,23554,99840,80491,81709,18956,27911,12545,29976,41751,74402,32963,17210,92720,22916,30226,79514,41094,15801,99447,72342,84425,87357,88198,97752,16696,49977,32269,40136,48376,13521,17652,22816,33392,28715,63021,62650,80620,19577,17772,99401,64449,94229,58318,64275,81274,91209,79942,96403,82987,32622,53251,84068,83670,94567,83213,15357,47531,76838,58683,75958,22929,29642,31990,68044,30610,64345,90454,83168,28094,18510,61249,64959,40232,79855,44602,87545,52041,96167,14988,89987,89444,25042,28630,15885,85673,66519,87508,96479,27812,39913,48968,37876,37985,83067,63178,29954,39479,74345,33654,91533,39764,14923,59066,11371,30309,10839,52025,72294,16802,37274,62654,86351,16647,14322,84845,34680,48047,20050,53938,56272,19886,39105,28061,62844,30744,61085,81306,88102,39605,18317,10485,97111,34553,86952,72660,41521,38182,92753,54097,80594,83781,23995,67132,38582,13485,69638,72678,74066,29724,20183,36380,39143,98403,50160,23569,60602,47007,28913,26656,20426,72899,41413,17267,90026,25121,96560,70732,33322,63925,70957,75641,87247,89369,29614,36484,97201,64436,35669,86183,29412,58115,12259,90449,28484,66448,34001,37386,22670,72343,69923,67931,47791,69166,39181,16708,77576,91342,60763,95002,95739,21548,26454,18796,79321,25211,17956,76109,57758,20738,65524,96057,20146,33873,13231,84806,75259,23116,83018,97647,61507,11176,84620,45560,88523,25449,88231,81971,94242,64571,89457,59213,46326,38287,57530,31852,50684,53992,99499,84092,83974,22857,82279,24953,80825,13130,55017,11914,44360,72837,22428,44549,97703,96898,97166,56879,90589,96465,35476,38920,85789,24645,70511,21407,27862,66860,87296,39871,84106,42187,63332,34770,85967,49974,26596,13121,45582,98507,85464,26070,62314,26038,34863,47364,71328,16839,23014,57520,96732,67429,71737,28493,12495,35898,73227,46607,86156,63081,11357,67628,96453,61506,52973,64984,68844,95294,35061,38099,36724,26168,63791,10084,78844,26402,87005,57212,39695,71348,96270,24639,42356,51814,45354,44192,81794,55371,18802,22302,78128,33550,73759,85224,24871,48887,31765,52373,79985,71953,94319,76226,86275,56754,17892,92462,68509,41050,82640,24569,46639,29562,82456,95817,20143,17771,39238,97811,19965,53678,59478,67904,11260,87271,57078,79764,52412,18136,17354,71177,83946,34136,44983,98998,50690,55779,70694,91756,90318,51621,83877,67676,93812,25009,93182,87657,23274,91257,90865,99784,35087,37812,71040,89549,80897,63542,35484,23939,68125,10509,50529,68109,66238,84636,81637,32865,56565,40439,30566,36153,50247,31104,11290,19381,90145,97101,72610,67501,35032,78692,89031,22191,47809,38850,18776,77203,24825,92316,58024,91385,69129,59463,74095,18577,92899,30309,92653,11862,92834,50864,53669,66193,81873,34840,43013,81125,40088,95064,50481,98597,91354,52899,42037,84726,46971,65305,69367,60965,99603,13490,40875,52493,15568,39247,16674,78376,43201,43030,12125,92635,19545,93801,12400,76584,81840,17356,14552,16243,43900,63118,33773,57939,62402,99791,47966,53981,15804,74454,55813,39389,34565,52376,22717,74915,87099,26516,42134,15501,50888,74855,68180,53983,45922,17648,95745,64543,17771,90288,87730,23024,99441,16731,90941,33247,57202,16620,31375,58159,80936,10753,34653,77788,34999,59693,10834,73930,94823,17349,24329,40675,82127,79853,53950,22803,53592,68870,54153,85627,48279,41956,80552,28349,19006,84894,52385,88992,29179,93721,65979,54492,74192,26694,44135,46907,69382,51640,56817,32312,40811,42011,93149,33880,44570,81666,37798,70613,88633,75250,84963,51848,48830,41196,21775,44966,41633,40574,51929,45432,87709,70113,62001,66862,44687,32075,93012,48045,60307,60939,65182,93054,58359,36866,76148,99640,77776,92067,77653,42854,83863,59632,26421,93918,61571,86540,88656,27269,77068,64777,76027,32781,22304,76767,95319,59526,46520,76126,15278,93640,99023,31113,90782,75431,11358,25692,86309,73489,50391,65204,31564,69319,49064,12567,35736,48310,47443,28198,89407,50202,60518,12755,67013,26992,60079,93495,32464,21294,97298,89954,88024,76958,60887,11752,81744,55638,14511,25595,21414,63065,19036,44594,97725,87743,66811,72720,26934,93453,26047,67821,54641,86546,59816,26812,20055,79213,38507,86101,10592,49733,34106,76476,59420,96037,92052,35499,70960,75727,59869,35791,10242,20608,79395,54703,43661,26928,75796,18906,51033,55568,50006,47765,66971,90690,28451,28573,56627,84304,23148,52348,25388,63086,10772,36519,87995,35497,28111,74551,13718,80071,95767,64821,89451,42148,75421,14025,29665,73617,31871,17317,86141,98328,92758,10328,20975,40821,84765,19003,23057,49892,13734,29378,21957,28246,25013,10700,12627,46109,57207,18505,20762,28586,62680,17894,90267,34177,96630,30434,52836,29261,74839,60957,41032,62088,83331,50735,93086,85266,36555,55272,77815,36488,47298,52600,53051,17514,96533,80518,41950,81251,21183,16122,27081,72563,46985,45795,87443,46863,89987,68172,37372,21385,86171,69466,62735,86344,85976,93789,69691,59993,14310,63725,40214,31059,71913,55442,69878,15865,95693,54597,12840,37135,86191,59148,25185,61935,13435,19510,88830,69836,31511,40136,31647,25930,15289,56296,29829,91175,84843,27251,93187,53302,10640,83440,82667,94175,80305,94265,17498,48782,10025,95423,67019,93458,29674,55331,74034,65667,61458,32996,72004,17854,87676,33021,19276,71716,36909,71128,99587,27957,14785,43254,30440,66142,50689,61898,50726,28814,86976,95448,85455,40147,22373,17016,26478,87392,37378,75215,66596,82200,45868,57995,48496,93412,74819,30981,29547,40419,10174,10628,89108,18906,24163,82595,69466,38690,69040,43208,96944,16916,46365,15602,71856,90780,46784,11323,45402,75751,69424,21061,88509,61289,23839,39978,91775,50022,35124,74303,25106,83020,72469,75306,29830,18035,67456,12444,50098,24251,28016,79112,78749,27157,34101,44939,20435,80138,19151,46102,87943,32572,13416,61610,45281,17911,42549,36507,66256,20420,81691,58233,56311,67491,65746,27469,99730,17310,89173,19499,10836,94994,21949,15381,79199,52401,41394,42664,35864,91902,73659,84577,91106,58136,97626,41699,43076,18621,75833,38934,34088,99405,59801,65374,31934,17822,16204,42062,10257,34374,51872,31378,25981,59075,37334,76384,89243,85834,98881,42527,41878,64728,89140,64677,66239,26358,34474,77576,19921,90340,89744,89410,37120,16183,65804,56204,90547,96530,15074,59984,53744,34895,54227,90911,89808,60930,32367,15689,10995,99267,68681,14671,40745,27085,84497,98777,63266,28398,52471,96985,38167,39114,40015,75405,36577,58748,14847,35521,90801,22827,59704,53276,55200,14288,98221,61402,61942,55561,33419,91885,87087,88482,15188,80539,45535,93493,31727,93404,74171,21586,19769,82700,14395,50151,94438,74744,26008,44154,96789,99357,34341,42054,98689,18513,40043,40411,51834,95700,24567,63783,37142,27344,34405,64945,63185,99974,43550,29049,69649,72975,57807,14526,95232,42116,37926,30151,14002,44576,28947,16650,94521,65747,87823,73795,29001,35173,82447,99215,27828,97043,66856,40435,53876,36325,82174,20360,57327,49583,81386,49225,89390,26837,71074,52551,24060,10527,41891,86934,26212,79204,43031,17024,17346,88020,72961,93291,88170,18812,31785,90668,36589,76807,83839,37777,21410,64455,51688,97468,62423,99609,56695,22962,68872,69579,98626,78730,14935,11426,35790,19793,13021,94140,30674,96129,83618,95475,94480,92702,16617,29809,74952,90093,85148,19881,67860,30233,57088,10331,58511,21392,18935,76977,19510,51345,72808,56249,18546,38522,76882,99981,91097,60867,57583,12871,78388,81914,71801,97739,20974,72548,64562,56631,13254,75325,94428,79376,31601,18578,45546,21643,25752,48235,99129,82004,70867,58859,86028,24544,82532,21804,17908,47652,18914,90199,49166,15366,25507,72375,42671,16071,15154,69828,65287,63484,12869,35055,18596,85411,25113,89607,59500,49144,21567,59923,99582,72413,85555,70970,20427,66637,96223,75230,36213,85521,62703,98871,76291,74309,93977,65716,16516,89698,36658,60951,45318,24825,66340,13518,20792,26616,32410,36103,51753,54596,73391,48119,76393,73864,37897,46360,88292,55006,23575,15046,74446,72387,44783,80849,75943,33190,68085,23378,58712,83942,97852,51028,52350,32543,34843,95963,79926,49104,96077,23659,66055,37020,54364,78400,35290,25188,18307,91237,77155,73738,53709,77814,11752,79921,14419,26376,76845,29335,79577,10283,46169,84043,97615,43688,53417,24620,29377,57666,40644,72098,68082,41446,12099,61159,34343,87895,87052,97912,79983,93564,40584,98031,46830,42902,53381,51930,57007,77212,93072,46578,50632,81538,56640,90239,53714,61838,54342,50104,26469,27275,86063,92306,18870,58042,87972,96681,54654,80424,62793,24033,12437,30872,80124,29101,93945,36561,31140,11348,63238,37125,53661,25989,96665,21669,55740,28194,38913,55026,27894,52884,92384,54043,76511,74038,72642,12226,29999,36820,44073,49015,71643,20850,46870,91417,14031,64160,28572,30341,29450,24617,90351,46402,88800,28559,40245,76959,26663,34552,73270,81534,12955,77726,41005,43643,44158,40853,96091,61243,48030,31757,89122,32484,95631,53715,76378,75100,47307,42601,33804,21590,51612,10564,96619,80491,66110,47342,35163,28273,46217,35861,41427,65861,73786,15258,70587,22496,90885,91007,81794,95532,13734,98288,77964,62757,86358,34484,35516,69185,52042,27081,42679,94414,63435,71794,81606,71392,41264,64588,14247,72756,32963,82714,69024,24378,36771,47193,36432,90323,68552,41298,93635,27162,13005,91829,46964,33156,20078,58100,58472,19611,38020,50414,54979,82828,42110,79703,36013,98220,33279,24617,91882,84742,26745,94602,85740,51713,83510,83607,43654,53348,99969,35183,15895,12355,65841,60895,51899,17834,33752,15374,66618,41437,94975,58665,14878,83451,52571,95105,32430,61727,72448,18187,19907,62072,46938,67317,88737,79616,81578,61347,24706,71021,18221,90042,78363,77682,21872,51016,99767,97904,93223,29459,87398,92533,12764,27987,20970,54289,90535,14483,80505,99817,49377,31501,59567,81720,14263,22699,22074,43110,12235,13431,75980,55396,26534,11284,10617,82555,96065,18867,62656,52595,90145,18318,14744,52014,64882,61328,35149,56953,27682,94100,60016,53248,18399,69812,54225,43957,98839,49051,98550,21575,20832,11123,78518,88343,57787,35642,80922,31062,81593,73207,86301,44702,58795,66503,80175,77081,47343,10146,36899,30579,46055,38494,13456,28511,96676,98500,78104,66092,14202,86022,52331,66950,77643,86248,16191,30685,85451,42421,50663,13054,15019,45386,71520,80033,59758,53393,26410,94505,71402,21353,28975,59546,67575,76584,90177,21461,76561,77603,99226,79086,97926,87557,63265,62952,32252,82591,50122,49724,95744,82182,23254,70143,40585,33937,33269,64599,80922,29632,87359,10125,71122,75552,60208,98985,61038,73225,45582,18755,53407,72602,89218,17732,61784,94138,97632,27187,52091,56817,27922,62119,90236,64308,50481,37193,12340,66055,87833,39895,87613,18843,18783,50563,86236,54317,70513,70380,85723,91930,54304,86126,73340,32681,96793,97592,31587,84474,19997,95620,39925,77315,39743,81269,36225,92647,98039,68950,34664,30765,11390,88755,52341,38327,55463,61406,76886,75497,31751,54441,19974,16628,76995,64504,30973,74604,57144,71603,31799,22644,61524,45275,36982,65431,56233,19180,26507,41197,67890,49564,29688,89337,50022,47600,13088,55084,15265,40606,77273,16170,26645,19197,77772,37880,28179,95864,94216,92541,80889,55456,24662,68235,61373,67847,63934,54923,66119,47288,14119,69933,49961,71146,76433,82192,80261,38299,14984,47346,51406,69959,82320,33525,67329,48507,14037,30273,29135,50335,74365,77650,89816,48160,81823,99599,44835,66747,71132,14094,11824,49016,69231,54719,41040,24049,11286,30185,73076,62553,22615,86742,94740,16191,67690,59839,19517,38318,62795,85244,74391,82839,68264,93157,76613,73096,56346,83597,92424,24323,17846,34890,39768,28822,83246,38475,53508,55313,27996,91783,17877,17773,39517,78781,93647,98757,10326,38319,45445,33633,24239,85910,71013,87890,58865,78352,69454,18031,32523,30531,75103,30999,84848,37035,54580,25975,26569,78372,71321,26044,45161,71108,28002,37295,63299,54408,46130,61883,60752,92637,55530,69532,44181,76234,67431,97209,75043,45775,15278,65663,10063,61761,60251,89089,30874,15807,19034,34864,49919,18978,31062,70710,10772,25451,13244,29511,66144,47166,86593,43741,71077,35311,63649,25323,14124,38231,12054,25100,35364,36895,17722,57656,98814,27932,48137,22548,20577,87359,63811,33173,64727,17114,58343,85101,80038,37849,82286,61598,58432,51838,84593,76808,99283,13022,59120,55740,93041,11069,29740,42119,16120,95542,58656,11447,51421,69473,53205,29917,95741,51204,28012,21395,50288,23714,50001,81281,39645,18333,60202,24814,44495,23885,13910,23991,77959,95029,49892,31464,26483,55478,56185,53422,29465,67621,60227,92170,24337,34056,79414,39360,95264,12399,43865,48179,88734,21270,23224,10347,60778,21053,27930,76095,72537,19741,50541,58825,50307,48967,15973,76113,32823,53413,40924,25878,18047,25425,88559,36923,93761,35941,75195,42939,44079,92235,10070,20009,25780,73344,28697,26337,59313,99484,54075,42300,81944,61916,73447,13839,76508,83053,99464,40016,76613,90524,43637,73457,12175,71810,34007,85873,85484,41580,77547,40766,97794,84841,48514,71625,52324,36786,63806,39471,83914,11087,65865,80982,66981,46844,39399,45894,76491,82658,97088,52678,91353,19558,90603,51640,53818,43891,46934,30518,32182,47131,72000,27264,13513,98000,26650,35057,64153,94342,61221,85746,82715,68199,58175,39211,53419,18241,76466,62155,59506,26153,53579,62265,69118,47609,54729,40582,50721,42995,9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25,37764,93969,12074,46514,87827,17974,35562,90717,70371,95047,29121,38902,88892,53193,62766,26327,43268,52975,36105,16597,83214,30955,52022,85527,84774,68196,62753,83245,78291,49911,81684,84280,83305,24063,81033,23366,84419,57314,24371,22385,55691,76539,83466,93607,30385,93620,70445,97845,27951,72529,76809,75393,73884,68897,84504,94618,46256,89649,85809,62175,33634,23911,99132,13493,17565,15505,37643,89610,88983,37413,52182,40019,56328,22508,62783,97352,75158,84613,56496,21555,13493,19366,42976,34477,38679,54161,92618,29827,62753,20341,73278,16520,19811,33058,39893,58468,33189,11993,85433,91069,84772,22902,95077,53960,30158,31450,24183,81144,79003,61277,24133,45697,73823,80823,35409,23437,69219,87610,32792,80299,85207,50347,77344,92403,23187,69660,67459,94151,14456,79073,21486,56970,16361,76069,86024,93599,82826,78487,87989,75154,50651,74730,24629,44094,13920,15551,36078,82909,19756,79108,39488,35338,13675,77634,91284,45767,39729,54035,27491,27072,93573,32491,35403,94013,32262,77774,26039,42007,32809,48267,77000,10638,41517,56955,39453,55011,83367,76272,54085,33869,47434,31828,87796,79463,57095,97146,71777,13680,44033,17186,96658,97172,82209,84968,66318,86497,84640,11760,90344,66693,51637,82007,74830,40273,22587,39062,27724,20667,31871,89392,68221,74775,89444,87917,18441,78885,72115,76534,84850,26609,84066,82928,70416,95353,43752,13957,21510,11683,20009,11917,36519,26432,99259,78359,47895,14186,14107,42939,90489,85137,75173,77264,27680,18139,28626,78948,66561,25388,99089,54036,97107,23739,35198,97881,63300,53826,43764,57031,96014,66165,68636,27954,89175,49449,58772,81624,61180,34889,47588,49735,25061,79751,40028,10120,24909,61608,40245,34690,13161,59294,26255,78994,49544,92510,73589,91966,29117,82696,62316,24784,95558,47697,44633,39052,36063,40817,97222,13385,10979,38178,46955,91329,37356,92357,61243,97045,66794,60632,90136,54604,84473,91571,73458,51289,96902,36481,45110,39328,85157,62356,83004,15670,47315,30675,92655,45829,10224,59283,98048,25958,32933,15176,87541,99824,51761,96841,66865,86285,28826,57976,90583,15503,57120,53753,82198,73109,61167,95879,31667,50049,46319,55274,78931,93287,18447,71762,20505,82508,74875,34231,53397,98575,48088,54886,90787,47574,34544,53275,98993,93427,59132,37626,59847,44711,80010,55177,57945,26962,87315,89729,60834,66329,67638,36546,53794,27652,82446,96522,15723,66014,29343,41984,59219,89811,60377,67560,32351,54852,75218,66282,98515,52507,72840,57023,46295,28764,43671,42049,74506,35186,16676,40886,11773,76396,51521,17055,63319,85776,86831,78027,42724,85165,60655,10903,33789,31700,61770,16818,32248,68801,42137,27672,59994,76638,28984,15743,54443,32192,14980,18361,86848,60391,70142,96467,30068,69652,21181,90560,46514,48168,97306,91240,84581,42579,60351,29057,94074,80010,71408,28045,49536,76083,84858,17523,86190,57492,88975,84097,59656,12211,37844,60748,32719,97104,58051,42011,56820,62141,85320,67636,91945,40331,63014,79568,70503,94848,31797,35766,49940,92611,77908,13409,62164,93793,65933,54336,29020,57516,13731,10908,24740,86708,35177,53457,27770,94372,60772,49813,69565,84387,50705,28664,49563,78882,84110,12612,56081,43557,38190,13796,91056,28326,85078,82571,62650,95894,92847,74490,93819,41516,22898,24050,49588,56497,44193,81603,20022,76768,40696,68331,58762,99943,38123,45046,11916,32550,77482,94589,36741,30964,92173,75717,41663,61414,21510,45995,74605,70534,10603,10392,23023,95504,39303,63889,12039,57308,93828,12671,86012,40928,55693,27711,33147,54288,10578,48008,26163,71879,56115,51000,81070,88394,41030,31369,95475,89346,62643,83760,43015,27077,35286,90110,95410,61913,55384,93088,71767,56610,70182,28852,17641,40200,76471,61122,82445,65021,15671,29642,69070,33317,33077,21560,10171,63744,61832,98052,67539,90170,99095,11568,55967,99669,45776,10893,30623,66677,54502,59849,99833,54051,45679,96620,20050,38750,94542,23851,59579,63616,71693,74902,46422,86427,73626,82490,58386,26739,24803,86897,12106,95862,77929,25360,49661,68685,76311,27609,63256,47579,90489,34875,68391,14590,16344,47278,20354,66989,90627,18840,63290,29240,86637,64371,63691,31689,22389,26292,47844,26122,44366,59143,60566,43568,44977,44167,41601,61813,63288,46923,70375,15223,10159,32750,50470,59545,36654,34890,52637,46903,68892,50449,51581,91611,12126,98269,46423,74152,66131,15053,36549,79560,56090,94953,58389,74219,82838,94891,45779,59655,76529,53272,17702,49825,87791,74546,38203,94708,10364,24030,51729,43613,99414,31573,22095,44669,79125,86457,11613,89153,28951,98329,99251,22626,14813,34949,10689,71823,62042,86169,41247,15595,74129,22105,32282,14698,92311,43956,84232,49932,37103,38988,25416,91444,57076,43603,14776,54239,63937,21155,97661,36670,73313,79943,75036,26861,72177,51765,35400,76761,69267,73210,76297,56251,29962,27119,65169,42493,25456,30187,46973,48753,38380,78824,36480,81456,12446,24847,42431,80177,82980,43826,37740,14931,83432,15279,87789,38747,37130,99874,70131,58291,18805,10345,36767,12565,49344,36651,49118,20122,87803,69461,24838,22306,10644,23620,72871,47852,58068,32915,50314,48422,10001,38502,34222,69422,46388,29084,45765,84049,49647,72903,64679,19910,25442,10802,75470,93479,73154,62723,82070,34549,44956,48248,27307,69452,95310,17004,31458,76659,34653,54935,82794,84814,40959,85329,91727,71357,79226,50138,19494,94231,26718,18904,79986,44843,10511,96511,38707,66421,95721,25668,36397,95109,41121,76180,99935,78913,20774,87007,11487,57173,11087,15780,78474,21825,81211,97859,50120,72921,88449,89208,12548,53915,13407,40961,47471,43673,94385,54837,63631,21446,58572,61753,41040,14035,39100,14439,53851,42488,51923,42204,90897,34797,40252,38019,11403,91142,67782,79838,79134,92399,98267,57937,37717,13484,48897,99276,92515,43749,78557,76222,72509,85404,18657,72141,48305,19148,60598,17764,22987,47853,44390,25723,88730,48799,81221,54793,64149,46916,76677,68909,59573,89393,77227,15474,93304,29720,66607,88465,68001,47162,79873,67708,77620,56999,53469,23263,27465,56862,44525,60278,23986,26555,78583,81124,29170,98559,53753,36989,59584,61416,92676,61673,16099,19405,97693,30988,72352,42746,31799,72633,43497,90537,70250,79901,39140,96121,35967,75832,93453,16936,37059,41000,24213,89307,80463,76328,15193,13647,83895,20415,40241,19785,67018,69975,30417,59570,88872,38577,70148,58807,38767,53283,68627,14372,68214,62802,35035,73779,34080,25736,65661,22205,96297,17205,42521,36298,64026,18010,28924,32419,84301,75166,73067,21191,84785,33967,80147,53295,73621,26097,69280,69411,72851,42272,14833,40795,35409,98579,81032,23345,72927,59137,15692,13566,78431,79949,98866,81832,25861,88070,55927,20776,96953,80194,99661,69391,99251,47949,87206,57396,23810,70191,89349,96747,59871,98900,64408,68436,93166,82300,86171,55823,23635,91146,30143,30886,94784,31416,51934,58855,49103,64674,24782,68959,78025,13387,79985,37741,89286,39995,99677,85837,48816,61020,45102,40477,31851,98686,79186,44544,94670,49756,41966,80812,41755,17271,24963,28523,22376,32974,84926,15936,77847,61622,62311,86685,58493,49413,63119,37305,61499,88688,67624,41097,86042,38896,53205,68659,26721,18097,26152,55697,13929,25685,68208,51047,78542,19128,54836,46896,71262,10153,18183,31963,84015,20948,19636,71734,78113,79732,40916,92375,56956,54772,79039,68608,75787,24942,67195,47018,32728,33298,57971,80906,86565,28043,27262,49698,79510,91907,41892,11927,74076,99555,51753,91502,79566,96878,40212,50289,36429,83360,38655,62566,95878,73725,41706,68086,64734,86805,62541,11536,20112,34208,38991,30476,44463,87834,97728,89495,73344,77204,67564,12932,91737,68578,66321,31707,17046,20262,31871,32089,79945,24422,52158,15306,54217,15539,52865,26196,31649,16756,21478,28246,53170,56639,54980,31071,88239,85904,84264,26981,21146,77815,57255,35337,19456,54901,80825,75415,11301,54297,49571,41205,66758,70988,90114,28431,11797,69530,28046,65150,86844,10307,45886,23310,74129,26771,14626,65422,19284,98796,19002,39126,50668,63204,18727,44458,94229,33264,54948,61400,30007,47064,29653,43910,78497,93006,75962,14836,57490,62521,38624,44544,25555,72958,64625,16874,54982,47161,28455,82915,43900,46895,21922,36629,14731,62174,25363,33088,70085,80897,85566,98888,41324,68403,19055,56453,22369,16687,85564,31087,81307,42476,87245,45653,31165,54815,60170,31981,52891,31224,50506,33091,33824,76630,56931,40005,88237,58870,86678,57953,34765,30839,10327,60879,54490,23233,43226,90634,32038,57594,57664,32164,79701,60170,61189,46405,41479,60895,39424,75837,84168,57082,73152,59215,12211,89157,49602,73964,62264,83272,68763,68232,90918,65624,99298,96107,28355,54986,38334,57947,92510,40106,50167,80961,30780,86466,51716,80423,15707,94215,94393,35589,42222,50680,87046,58994,49807,10006,88932,44974,56285,22029,74082,34286,37637,19352,88410,82677,67823,62980,79200,70676,38682,16767,18793,91081,46363,98603,58321,29249,58263,85876,59740,36630,20686,99642,38232,17013,33285,22985,70358,27279,79514,12276,16372,97377,24406,62885,16469,34386,29725,63439,39673,43578,94049,87610,20636,99807,96746,72203,69790,21113,66515,56808,23313,22154,92324,49026,29585,65330,88224,67804,80015,66359,20883,57551,22436,39627,53430,43439,59136,96450,14465,70405,47141,61362,32454,86189,11451,38752,67039,31788,90636,22954,58928,33955,68292,24128,15195,40047,62985,27900,16430,37300,74472,96551,95630,75800,64868,99499,60395,88649,86690,84946,22132,25308,44306,20706,25186,35056,39151,59924,65135,57812,95592,79645,15398,73011,54375,69041,51120,57853,15427,41855,75374,20905,13074,60410,38962,75947,85945,97456,90166,99114,78034,46484,14701,24982,34515,36402,18259,67264,33738,61421,78097,14157,25942,54427,14707,34726,62379,16325,90361,28769,23993,35680,29956,31767,82311,54178,19351,25031,40068,77098,60646,89880,36576,64255,97895,16282,52884,85670,37440,14453,84484,51853,67018,98280,64774,21685,72541,92168,89928,22518,94563,45648,54508,50740,24530,66240,56773,22727,62706,59042,75585,42695,79032,78496,32776,31993,11129,36646,78894,14504,98095,64983,94602,79049,89739,67347,32312,94956,46291,39475,87716,71909,57022,11057,76061,52770,22335,64103,82719,32865,64115,27205,20423,50161,27394,70786,53700,71379,94403,85295,12335,83077,48762,97094,77104,75004,47693,74739,47494,32882,52948,84796,88475,37736,28175,51288,22335,89005,40937,33058,88058,97406,10231,45945,22123,49646,36172,64462,51102,71105,11101,58951,46888,50473,66058,73550,41722,33858,16101,14980,43974,21088,26978,21492,83929,33189,66192,92499,21984,32686,69519,83448,49921,63477,60871,41933,20339,85981,49031,90471,38513,98213,96029,82176,35629,94205,88477,88995,94580,86697,53643,96248,82386,63987,57193,46011,80115,57382,51798,46914,34943,82653,92330,33710,15571,61973,29114,11257,52238,89810,22827,49129,23591,41880,48428,12003,58882,59317,88293,97054,60715,19928,41667,53242,87025,25515,50898,75055,58612,34743,58432,14729,76147,99032,70924,17708,69135,79696,83206,49898,22203,57349,44868,75019,50219,24504,29121,52512,85630,16379,26000,27373,16802,25042,37225,34026,10256,16597,77598,69146,69434,96746,23440,91364,10415,58747,62710,58196,37051,23122,37270,98157,62030,56357,22633,23340,44452,75713,97734,84012,89414,31544,95304,67644,74815,65995,11246,90092,43770,18601,33856,70111,49953,34980,34295,37355,45482,44767,16688,61029,51945,32148,96610,80950,42867,66744,83567,37910,91795,15747,63714,58317,56028,14681,44663,16291,94347,96332,57344,40481,38174,93744,25364,52423,71052,79460,97722,65965,13502,33566,76905,55316,37862,68315,78888,46842,51785,44376,41032,41804,33647,46099,64155,42868,72382,56169,45948,77738,18484,80531,64409,78280,84391,99292,15256,66134,61646,99185,79153,33155,95012,41024,30428,35906,43560,31289,15432,65313,98558,68504,97251,27985,15582,64631,60222,32087,50513,77272,88226,17894,35379,18584,55620,54243,44981,16480,33153,87932,72907,82776,14261,79240,33486,50051,82928,18566,10586,81952,42203,85866,97978,77606,65593,46614,49711,82284,49300,44370,35300,50532,68235,81664,28303,10058,16439,54336,50953,82097,43782,15018,55024,23882,47930,66123,55235,62542,79807,51483,61378,65866,94675,20061,68331,50878,75420,76244,85489,69632,37979,21506,68707,26661,38217,95760,58653,63094,93195,72138,86012,44454,88214,54422,57106,90039,56461,27954,14413,88732,99333,74374,69927,27871,76735,57299,76773,48159,70526,50726,87213,76307,30563,71398,46146,64250,35692,45328,35761,20776,68458,92035,52783,47535,81380,52702,97548,69554,47971,63205,51334,56198,52687,32842,54312,69430,25670,77470,46328,58819,44765,34300,36476,24977,43519,14849,42753,94240,43167,30216,55926,22146,27623,25081,17724,69875,47067,47962,69805,91037,91590,33777,78491,65119,90003,50833,77936,70045,52978,19655,64837,57059,77632,70728,26258,31166,58984,49023,20901,71368,22030,32034,50692,87437,98966,75971,52919,32199,81149,99995,36084,38508,47021,12001,79555,42233,45605,57694,39959,94551,12799,54977,88839,96450,45327,15353,47668,89602,32521,72427,98544,79650,86688,40802,87325,30951,49908,86946,40053,23808,92841,11299,65152,72415,17047,78406,83199,81489,43911,54087,31129,32070,75569,96022,91389,30419,22445,12652,78548,46246,55585,48854,43338,61962,28868,13935,57237,68415,38962,60723,50758,19182,75944,52960,69280,27144,88569,40518,79902,27306,39046,65973,64527,41798,33820,55168,29953,67499,98198,70819,85830,50005,29927,49713,30855,65587,23334,79589,97147,11637,98479,97370,91555,51535,82439,59224,49535,38997,73632,24652,31667,15109,60775,40765,93294,69608,48992,89086,99193,98828,23556,49228,23813,64993,83259,47869,97529,11353,78966,92445,98046,54776,80527,58182,77124,52992,69560,17970,17754,31716,24845,19298,54769,48357,86257,22869,44623,28533,91407,70635,44589,64464,80263,17609,54676,18548,43252,32947,27442,98860,73368,94812,73092,85031,53955,13996,64023,72225,18563,73994,64355,72357,11149,55129,46464,90655,52937,84355,32267,69538,58197,77220,50005,88776,59143,25780,26269,60207,63628,89466,59283,52551,20390,23032,59866,92872,32990,71072,61492,51170,37767,76309,26942,36937,25070,49479,45334,20914,83544,52431,50480,51442,57581,85561,12276,33030,94392,15991,91105,52045,64580,68792,11042,50786,71445,41867,97406,63531,93186,13897,30170,33169,10571,84702,17303,70479,73781,17556,21657,78051,76470,62894,96145,22362,43886,59592,72063,33255,77748,85560,46039,66378,92318,14214,14293,37926,90535,95067,83330,30884,46153,11804,48052,29583,20725,96481,30660,76397,18288,38246,42308,28731,50404,87557,18816,71428,28518,71161,87628,28921,79615,59253,98715,61261,40759,93898,42739,23084,49894,37843,68147,70181,16906,55232,81821,22474,23909,60785,26206,27563,46908,46276,37899,25623,21996,27647,51906,14187,86334,20412,16092,99517,87956,74023,27368,87979,31697,98812,16360,67924,53033,57833,47167,98584,29846,91419,51943,41003,51881,11948,15583,62079,52799,89388,92805,38055,79845,69901,40548,79960,29521,44529,39119,36690,50927,69917,72666,73801,91611,13939,48027,61029,60636,29424,88433,73548,33072,41417,82228,89480,21572,21876,50132,75381,24715,79684,46399,83253,78096,24562,84721,60362,95565,81933,75083,57893,82212,23226,35303,61279,35472,28360,36197,89513,32407,74356,78114,92817,64460,70652,36558,96210,93575,19518,12433,43854,94695,92949,26450,65552,20956,13949,71699,82251,69754,55193,45851,87843,50716,61616,62801,76129,89051,64549,62956,85688,31260,28138,41989,22342,27417,63435,44319,77903,54113,86651,91054,89941,55805,39411,80704,27484,67365,17778,11088,76934,31921,42199,84308,99830,71073,84860,77061,40981,87823,70539,38101,77639,88004,74494,63797,92408,75393,54787,17038,86865,28675,30736,38354,12875,26151,12581,78969,38404,30145,80650,67150,31557,40598,72750,31304,23769,32997,91290,23907,27488,88221,21426,95751,41915,10417,32184,61785,41529,52501,68230,49073,96742,10693,19108,80452,37532,35430,81822,35248,92650,20381,36972,82011,90657,80091,70082,20923,91206,11105,27257,35955,46881,59597,83877,91416,34997,29774,69959,56624,11363,82487,72607,67140,77842,48068,37868,65701,42219,30771,46878,64253,55622,16282,44912,52657,25891,98968,15921,47996,27618,57231,85140,79040,65228,60727,18737,22154,99077,90622,36182,66675,11201,56398,91957,55162,23429,56502,98400,92137,18500,22293,73519,89554,25288,44638,82662,85832,28101,95485,51126,57664,95884,50701,96454,33615,17626,15836,27473,44975,48531,73034,33567,47451,17073,42803,62977,33335,72181,84758,40154,87197,25505,60981,49142,29828,15953,84012,66829,33565,55971,24885,88379,49862,23795,25212,72774,31797,93449,57585,12137,14017,13218,51267,48295,40828,25293,31266,69800,29121,53908,31170,70666,80832,43560,41394,41355,50769,72745,56128,61523,32712,72464,95120,79924,93695,88838,51027,11317,70268,20713,10642,33358,89822,70026,49251,45647,19504,42202,26554,42886,32560,19941,16496,49382,75010,70540,91590,16442,81927,22358,68365,99543,72597,72211,94179,27481,19119,94845,70854,64580,11952,31864,69600,96831,21339,58431,78458,87911,88182,59172,64358,10317,41275,91633,68972,38793,89554,86779,66452,15820,52376,55511,35799,21961,11438,46741,70452,14605,20573,93457,68942,80421,79417,73594,57909,78176,76266,92121,12122,56058,59352,34886,94465,47797,16429,36609,79072,76324,21352,71926,49866,92771,62087,17950,55596,97967,44191,40033,33713,76190,93510,72035,42087,37561,95423,87614,83478,79863,63897,79673,30816,65762,74031,81503,82663,81917,31243,72123,49814,37292,13182,43860,62840,50908,20608,55577,69669,21682,98384,51425,54368,34775,18288,80551,29834,90791,78918,39325,57764,63807,38958,39544,15326,50342,93478,75295,97338,50001,98184,19193,69511,26608,82832,20309,77944,99901,73119,44545,68173,43915,90561,37701,33327,52463,49998,28867,19877,22874,39158,98416,77515,10066,41019,25014,24297,72982,88714,15673,21687,53399,94916,41038,51505,87713,83855,91262,47181,80010,84660,34963,89492,21597,98525,76832,35302,20533,69165,81789,87803,36518,25865,88529,50989,57512,28948,10472,76392,36173,47868,98445,72398,37750,47891,59262,56379,57402,86715,10094,76800,42594,97588,45521,35694,95121,70389,48270,91593,71589,77002,33195,33222,18045,72265,24353,86616,17519,46445,16699,48019,74244,30839,46630,89469,18148,30724,22630,17722,60061,28458,52311,62693,12239,93921,52239,31961,67849,68868,80450,41763,77467,84358,61640,59393,43579,92069,41364,74148,42296,37264,24304,97005,76749,60980,23676,59400,87709,26353,86544,39631,27473,78825,86651,30221,88691,60854,22795,64125,77517,87730,82265,26685,56791,56460,85783,43385,51596,97533,74878,70321,35498,70998,72772,70708,61877,22392,56677,49646,49794,77033,22369,58500,26985,23626,60863,62516,89286,54657,31771,92122,68433,12691,49835,86437,43955,38880,77546,83992,44490,78376,88300,84144,25447,86643,97160,13942,19023,45472,80624,12860,29075,59497,53378,64769,96441,98969,72475,69430,40298,17101,19563,68976,46251,21667,68095,65165,98610,50889,85939,53151,83113,67663,45515,16683,99739,88381,12748,11189,96965,29718,75332,54373,91296,89779,19628,51694,43989,46549,39351,16765,41378,38632,15111,68649,37504,60056,30365,81882,19262,17571,57726,62951,57433,24646,93283,72284,82229,12682,61472,72353,11038,91903,89152,69628,51492,50048,37372,23453,60083,88044,63304,73275,32026,33914,57260,78454,54692,56528,20667,81675,52616,60177,29040,52834,69237,40940,83500,91557,70700,70532,35996,90645,11896,65042,73016,18602,57302,69900,85279,79915,10188,87788,89114,89591,62268,80011,49763,55476,14189,99694,41127,37693,54259,10449,90970,75937,34936,68489,63431,41665,57960,15862,38062,57593,92836,90067,39528,41667,80748,42447,66739,24253,48072,77419,44134,74567,69170,61735,79801,68110,13277,45591,19057,89612,68810,12600,64660,93384,63821,38569,46435,98553,83564,20472,64148,14040,71192,56573,96858,36905,94770,58492,54009,25020,35084,82090,92341,17497,89887,37905,14724,78142,40894,31734,95576,48112,69783,70351,13836,44919,98104,20037,52004,32858,24794,89697,40782,15041,87102,71096,67496,99831,18546,59746,10439,42266,15550,24967,98943,57355,17677,35549,11403,56450,16684,93235,83304,78431,52956,17109,64285,86065,38292,17910,35005,89192,97870,21287,87490,64430,48113,28438,78716,62047,53751,58951,44281,85785,85302,25515,42399,47141,66323,70623,32589,54647,16822,50869,62563,19467,59410,34740,83080,84560,77992,45828,12649,55043,95319,45816,11715,77318,97615,52425,69391,62635,24169,85936,78633,28599,30004,59789,92854,54908,12003,58121,16076,57417,93468,26328,24180,29641,96505,43563,37792,71349,96894,87854,69003,28513,80013,12303,23229,83971,65189,49293,90783,84342,99225,94716,85878,67403,57268,42196,72057,58508,61410,58277,10674,64691,62841,73955,90034,24388,70395,67886,71532,83554,60752,80841,41552,84373,76639,32506,52576,93304,90436,90450,16590,68649,15259,58981,54264,66749,39214,65699,92743,55685,41813,10283,17691,68158,22049,28101,41377,64986,28618,97103,62710,48376,79505,35892,98533,75061,47341,93374,74129,17704,22883,38894,28406,79691,87347,18090,92839,92423,93951,64586,78856,52368,58247,94476,50482,18258,33733,95569,93946,35595,57958,74823,75310,49800,78010,89699,98884,12540,61901,16242,15545,57456,96414,27304,87776,43651,14462,95474,25828,18822,24361,90063,44201,97036,58885,79005,83706,16853,62749,77907,50724,60269,44451,26002,31037,78709,13926,25771,49716,66171,30610,10818,27885,66207,39414,46884,86518,52666,10736,49814,86499,42820,98611,31738,10549,97053,14916,60685,67337,91176,78257,37092,18445,69823,13159,35863,21209,24337,57448,77208,32482,93211,29628,23796,24652,46513,18909,25867,80337,55224,81044,85898,73082,55471,68227,39432,32718,78759,55606,56419,93924,22185,51629,61427,58128,67816,95543,58991,45336,67651,41612,68713,88929,88463,11631,37146,67094,88603,31885,82793,94823,60307,22718,30059,92459,87667,32777,87173,82301,47233,43996,16357,44786,93603,53977,25559,85392,81867,18891,83109,82558,78525,97355,81564,39589,42295,40224,11160,59197,61191,28043,52009,55549,54397,16655,77589,96637,65957,47351,89646,27767,66547,68963,23935,67341,62708,94504,16272,71400,82268,11977,72304,55393,99352,82438,87541,35545,81509,73997,26924,40096,48524,61368,26785,44460,96287,66119,76799,37690,66058,72795,48728,74021,52603,90978,62591,12169,45090,47423,42616,64558,86093,68501,72430,44085,95223,16699,42286,53136,37521,17018,45145,57340,86625,19677,26599,98292,63563,50158,30805,19282,36390,21322,36451,67863,26670,82487,67496,87035,25801,43451,92642,60938,47193,45187,81829,27745,30868,39584,24831,41391,41105,30433,82865,77503,50076,70757,84760,49982,92846,62771,58245,40778,62022,15980,31456,38495,48509,84915,82659,45237,75850,23788,98325,94044,39070,79089,22045,52386,98837,87860,91789,65276,28277,93228,57581,94732,36621,82318,50355,68569,43365,77214,20603,76498,67998,88545,14629,88889,93868,99718,73184,22913,34853,47933,25068,33005,93987,97381,60417,64263,76941,41919,32257,14536,61838,81560,69793,36296,33765,34731,38179,93145,61858,90018,34610,66919,80386,74370,92396,44868,74860,46791,11046,68674,73367,72795,21506,91889,25250,77368,54826,17578,27528,80617,56468,98675,84810,90161,43527,81185,34110,25098,74216,89766,57732,19755,73177,31759,67679,53524,44889,95712,56624,48846,20989,10135,27480,87523,10000,31140,67753,11676,63205,35329,54209,71863,37362,83943,53924,69684,93233,10761,94704,31094,58933,16045,84985,12278,64382,62039,77303,20952,37266,11531,26547,46779,49878,24464,38174,42613,65427,73162,80595,83893,43690,45234,31688,31309,40033,48172,67324,48707,74277,17353,40374,48148,99525,12709,32903,23799,65662,53099,79634,51508,29030,25169,77530,56912,93543,14721,34272,11400,97734,61405,41954,15786,88228,66334,92394,84685,49316,55495,10516,15951,39288,59324,22292,31555,62584,47668,44498,83951,26440,90007,17008,25088,34312,68711,65401,14885,17861,23532,91228,88503,49243,40184,82171,36838,95404,80417,81725,65195,27060,10021,86975,93332,59503,73282,97743,75504,99190,75358,73878,69885,46793,39926,84566,53574,72933,64910,42709,33386,20703,65637,21826,63821,72128,16017,14297,37539,85240,67467,57565,70384,42508,95864,51262,99461,29654,96229,83974,89072,10581,23677,27100,82815,18675,18854,90163,96881,44000,87668,87675,24282,19795,20996,37923,19227,92160,94114,46993,94274,46421,69021,99203,73355,40713,88690,72827,88707,70570,59449,62568,57812,42506,94726,29432,74396,36939,77938,49238,99944,57588,75876,71408,14808,89226,98454,10602,89644,22771,66322,73954,66567,32378,25290,13877,63535,91420,85093,62883,48261,47747,49921,72323,35551,82523,57157,97454,73963,51086,81053,73129,21502,58791,59584,45220,53300,80883,61260,54618,25142,35513,85376,48560,90433,11502,18455,42684,62988,92597,27388,97616,63994,49929,38235,67304,22850,68766,88674,27378,25429,73664,32584,67030,90132,52820,15743,46038,63595,92603,26469,14528,30326,50491,30773,20084,72527,36559,47562,56946,12506,41174,37516,99245,42743,24732,25632,97016,13337,67985,17923,81279,85591,78391,81341,22967,33405,13616,58085,93201,36610,33665,98738,19133,84591,57965,75600,58958,52403,80009,96066,68887,57436,57553,64580,14220,84852,47393,68690,62798,78994,29939,37393,22069,64701,36578,75992,11048,15607,16162,21999,72066,17436,88450,55309,87627,85424,77659,76767,48863,26478,12498,94165,91567,43880,45583,81403,44391,31130,90066,79238,62757,31363,70977,62981,37675,29993,11798,25148,70503,12212,47746,31176,38298,24698,37515,64607,96278,77850,96732,98054,47772,13698,31557,87640,31324,72282,45902,65230,28925,50967,63729,79045,20774,38270,72502,46622,88817,23889,96084,49724,85070,55634,83351,29806,31970,22602,31514,67276,93376,52669,77347,81723,34280,47135,81671,76035,60674,97089,17266,66641,23554,40395,32297,61217,50085,74036,35840,53494,67346,47516,60687,98935,29822,12140,37175,81313,49727,94636,93995,55126,50491,64746,11990,50791,49958,37735,39505,23809,48511,80019,99739,86274,36831,84015,10973,66311,53299,57773,52085,90816,54580,37069,90340,97519,79191,79429,72725,86130,98532,92816,46506,61976,10350,54293,42533,65717,29223,42659,34090,78721,89579,49793,51494,25033,32904,95744,13779,10914,60426,10300,92840,79889,15799,47103,96586,96988,88364,54568,69146,81110,64523,44779,46283,96837,16070,67871,47270,15106,23913,38954,61433,81953,15568,18804,24818,13605,21524,96618,10701,95602,65644,70766,88422,28804,58696,98555,19378,77357,41637,44960,69518,54955,89734,51915,36034,72538,72039,69062,53232,75790,91938,54928,68243,60662,28155,57800,23042,75353,70934,27237,23952,51322,37311,66672,28505,91716,28742,55480,95272,25316,54322,19536,16556,76072,41875,91183,36591,84448,17433,84945,50247,24995,54835,39133,51853,23939,13464,85524,36963,15481,79012,57377,97330,75215,15193,84236,94577,55487,53191,24187,16806,16676,55263,46768,40552,86811,85819,77343,25894,17984,54384,86597,97505,68942,70548,87100,66050,51322,44279,26051,18677,81442,31021,63979,98612,59787,99344,39260,40484,33085,73798,24698,43459,45432,63825,32114,42068,30720,68039,69844,86543,50799,41619,84041,16796,20389,64739,50628,40121,16464,51855,48769,61454,89072,12939,67407,45717,74821,98114,65390,79289,47591,67965,23531,42650,54816,74734,17530,97831,10274,56374,47823,80608,25394,83031,86245,32198,33422,73242,29817,29841,87177,64942,49091,23059,32315,42126,99802,72336,29439,32053,84098,92538,39304,38932,28278,47591,88171,42127,94527,40886,88757,19562,65995,78017,49436,73796,78511,34546,21802,48997,54210,35715,29851,21241,69068,60172,66050,54253,57711,92452,91604,12126,52404,29375,54612,52775,85870,73268,99954,48335,78817,19028,12622,13922,14394,22115,61525,72999,49204,15880,85480,34550,76092,78265,70776,64130,71106,58458,99193,22067,31668,38792,79249,24623,82239,72125,13036,94367,13735,52408,74666,78098,70096,16987,19571,67890,98086,77752,93602,94423,11637,48588,13715,42676,69695,52910,13020,86770,18348,92792,26768,61969,15056,97247,42697,74310,12008,60670,93012,41175,89731,32475,52885,88249,52273,21007,72795,27889,26852,49580,42836,47197,91560,69639,64903,25728,65472,76243,78257,77363,55463,18364,86413,36745,67361,18313,27022,57068,34059,64786,64434,98481,30197,92635,91023,38855,31847,87312,81105,62823,53465,95707,59466,70292,82854,82625,17178,54645,69011,15297,21133,30597,63250,57179,89614,50497,11236,23091,63757,82850,55313,38326,11364,64827,76304,19730,40540,39123,94482,38275,98811,49747,74744,38987,72493,92169,99409,19207,55638,33924,26345,26134,81205,27545,18063,18318,13536,96805,83854,18281,30880,28705,34301,39431,76779,67057,50717,56792,45174,93465,75141,85942,63861,61865,30368,78575,80167,86823,71353,42265,65504,77602,43256,83138,97994,18790,95980,17241,79390,80022,86081,67868,96522,82135,50886,58701,35697,75312,79105,47737,25581,60707,37035,50342,72274,77441,32728,67040,64503,30630,87870,13805,69829,37048,95628,50552,76172,21122,29094,82796,26704,86994,26887,32609,45012,17060,25438,95891,62754,23257,60874,54637,52066,19504,28850,52225,79388,54702,29214,72889,49035,10842,61958,52206,79657,98383,15514,34934,70472,47119,24310,88747,10864,63307,52873,10182,32298,51728,34886,17560,19280,32842,11922,96718,45282,82449,10500,62109,42210,69739,21540,51329,73286,47961,46995,90017,10496,41828,91417,40310,89797,82776,87295,60147,85764,29569,30173,57421,68183,32611,34321,23598,21975,42265,63113,79462,67008,83949,97119,61916,84202,71004,13623,89049,24091,21799,21254,55766,94482,51143,55929,62615,21230,25343,13256,29822,64644,30987,71086,14718,20415,11491,30049,44245,41410,87098,31664,72380,25874,60113,32832,72943,20321,62025,14788,17369,88549,11056,76911,61325,73072,76930,87716,13839,60286,15968,48882,34298,57576,83354,26474,81511,71976,51353,29958,61467,85486,62695,76975,44299,77832,54331,77595,52511,67911,18828,22447,92240,41044,28891,36672,11005,42261,61119,41160,88939,16684,25019,45177,96041,37789,36548,60587,58447,25768,36878,45381,62801,73030,53862,88370,23624,86255,99160,74730,89168,67081,39056,95055,32728,34490,20428,52042,48375,88828,85818,54685,29522,64619,32337,57238,48682,29541,35146,79448,55906,66108,15081,56190,39644,77909,59341,15016,90859,15236,74364,97851,23847,54336,43652,64783,87619,93037,26128,66293,27145,26174,46801,29119,20410,17709,62740,32915,39076,40202,38705,41591,71157,26638,17274,64632,52209,11822,67000,75111,52437,80389,73715,32290,27873,71300,90518,80754,95230,59091,35804,78846,85418,40443,97258,28559,89531,44108,29153,25902,96936,29721,81252,46448,20151,77904,22261,38739,66962,71922,37414,40179,42384,19413,84913,53021,24783,16466,34222,32143,47972,76152,13975,53130,46815,17629,96511,50023,36390,52722,46260,59704,40082,42609,79371,67670,44507,67775,50937,90765,76006,95698,55454,55019,57983,25277,21392,25958,28784,62305,27815,53431,45501,93693,82088,97468,10278,34127,68471,58198,52859,28331,45633,35433,63495,56778,37365,19369,74210,79307,35975,25522,54748,22329,31258,51186,70641,31704,13657,45846,80964,71655,10668,99397,54258,44472,60995,44094,75720,15930,25000,34413,70739,69185,19266,12380,57797,17456,10525,75449,74986,44324,16038,50342,35870,68118,95210,11616,34151,90781,75809,24575,27849,96145,46377,54858,29934,50207,78136,11627,28391,73714,19062,12215,29055,48274,32059,27895,91122,89371,31477,11564,99425,26724,26321,66500,34199,83420,52765,82342,82309,14326,64210,32898,95806,61356,42849,29711,62348,79489,79831,89838,34811,27765,86173,44683,65966,14528,40152,67348,68554,31402,87402,83959,75831,29409,68695,61633,33484,84619,35580,58128,95280,90521,74336,20102,88702,56585,47830,84976,54114,44041,38264,37857,11465,38449,30492,60592,94513,45945,31686,88849,82589,49413,25164,70177,15374,85433,57304,81148,45778,55295,87906,55993,58546,46351,26522,42704,99875,20431,47762,84153,19003,67509,73313,88437,31172,17687,47561,77804,88436,91272,43539,20770,48058,45781,89870,88530,71466,88654,99217,41990,30944,67811,25795,31897,57260,18340,31157,40246,60881,44792,54040,90239,16710,14916,50263,87932,33844,71384,52747,83211,95572,28367,88436,95349,79546,21013,11296,48437,94443,53141,64662,18099,26437,16726,86619,75103,25057,58215,32409,69981,67415,69009,10479,70488,78207,34888,92618,70868,40234,81336,29843,59902,56582,60099,69678,14619,58384,34314,37348,27089,34954,71763,60760,65047,62696,14323,88255,80275,53246,47589,85867,65661,95652,97209,40529,36751,12067,56348,50248,17594,55905,29823,26375,43888,81433,10886,10051,68442,16084,87191,83722,49156,80504,32024,15518,86884,91776,89467,47218,75375,15435,90076,46956,15462,82592,79438,37144,71991,36461,65724,51770,56946,45229,63578,20616,16126,13109,65383,40720,73298,82398,31797,72627,34302,66821,23438,76684,14912,47403,65027,27850,21477,20179,16490,80479,11131,39049,54812,85621,10114,20137,94652,65036,43583,63737,51306,26578,16380,92721,53964,23838,61805,39774,84702,17373,37732,97927,92803,43988,13198,25353,68759,87583,96926,77373,58689,99325,16763,44115,71591,49289,18403,44490,29507,71508,93360,15970,15845,82189,89313,84253,51307,52722,74173,33372,12035,53965,91571,71682,79259,20579,47523,24209,38970,25116,14735,59786,15137,46469,75333,43526,47889,92124,58007,38670,95514,40195,99085,74523,36075,81841,81481,74165,68455,50226,36055,25582,31181,53789,39987,92272,66970,43308,43166,66124,90440,74304,42030,96332,84014,92092,10644,89841,14857,12824,54792,91110,11134,96835,98319,51581,79523,32319,98271,16267,90244,13931,30270,46835,34447,13509,36857,72761,78223,57223,40614,99084,74921,67926,57957,43333,92292,17524,16516,27425,34482,94484,79281,96572,79834,28958,59037,18464,33008,91861,18841,40102,38194,97490,48459,56062,82125,67807,87997,53667,38389,77416,12088,48063,70728,61913,36070,75609,96428,44348,36798,90983,45643,12609,55399,73571,25923,85125,56230,84676,98722,38680,34131,20598,65637,42485,42916,51552,11105,65795,87287,67708,42535,64438,92088,31558,19052,82437,83724,20268,57661,19646,34820,92135,70937,77975,25974,99896,50756,61529,49988,32475,64324,81797,31739,80674,45134,78587,91550,89690,73346,90642,89355,50845,79515,32064,84427,35382,48267,71666,62682,79589,13194,21435,83133,63339,26932,86427,59545,66085,63038,16003,39834,49657,34609,38872,75717,60193,17135,97894,36925,37981,28325,19324,28124,59753,32021,26702,85966,74741,76840,66638,44063,31729,40763,36996,17078,14666,21186,27642,54418,86530,83222,13683,15572,86662,38972,91355,39483,73905,68623,80746,66523,11268,44311,45184,41751,71437,59367,70317,68733,23106,25400,96520,77978,22370,26395,89250,12384,22585,48645,51257,93294,70593,34416,23769,26612,35777,21340,97495,40251,29981,49252,13751,29008,78523,37915,29823,67768,37691,89078,67168,40097,83173,82210,83019,36187,69741,79562,80517,70123,61162,30323,33813,58805,91769,50860,47962,69186,48481,45809,62416,40139,46557,93880,41469,62329,98822,62205,41986,22930,80371,99189,42332,12149,15037,88349,97813,81892,55622,16427,15975,12202,12922,25945,72688,41049,19495,17989,62784,90087,47803,39299,75607,62307,26938,13740,73686,86408,37281,20739,75148,16759,39443,94379,43113,90243,57141,18539,96695,87912,86079,84114,71639,89386,53935,17793,80432,18860,89343,83507,88155,30479,50030,11014,83887,74810,66751,27661,94907,78353,93462,98470,67752,70391,24705,18558,13875,95054,57600,95826,92369,55195,24964,52081,31356,29140,62876,43765,36418,76967,61619,24495,62258,52113,84627,45726,77236,86507,41845,68954,39324,35327,59491,76610,68754,81073,82955,85550,79856,78870,62980,33076,90708,35311,54713,93745,17658,33202,53332,68383,52419,57574,15635,58088,50064,32048,18939,53920,81512,42464,81914,73131,30443,77318,91172,28210,14465,98495,87708,56066,32681,58764,64188,51714,71286,50546,98452,96288,71160,69703,24948,89334,46693,78337,69261,38052,53284,12145,27354,16886,43543,34360,83106,57054,61321,28984,40613,36122,25126,87361,64849,12610,60848,71614,33255,19280,22607,50857,17910,44659,93928,39394,49986,55140,55912,90757,33523,71531,83995,27262,79806,70714,82533,30016,39591,54280,94035,30665,31160,82081,40069,66427,56525,54591,31571,65600,58163,91401,34951,50960,50547,92981,10804,56914,56911,43685,40073,20368,51181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,82690,65857,23636,33909,73098,73336,56228,31679,77256,60578,37794,90703,26032,29311,12287,99523,60007,32310,21253,76401,59639,99005,51364,75751,62653,63094,27138,38915,82993,53551,36459,51649,68222,23567,13608,95338,15887,40483,19502,55845,23801,77704,24184,30954,18424,32421,97928,92929,80440,99843,49319,10857,42774,56374,12403,85025,90872,45226,40411,31683,44308,21211,29731,31106,40618,32742,43065,83096,40951,47190,61198,71024,34599,33244,52443,79466,15472,66776,43218,35576,37521,11490,12584,34221,77106,81065,20116,67673,65314,33131,11014,26476,58125,28486,99621,39862,95542,71146,57604,82334,20289,11024,64718,84286,59340,62030,53149,66740,78466,54523,97307,50624,64120,96507,62808,24895,31181,91146,67463,63438,24803,75964,97728,26749,59422,76212,25664,93340,49990,35930,87950,99022,37999,37513,58730,91340,20749,37281,91722,41483,67023,80873,54037,90448,38356,54610,70938,73296,76395,73864,26615,80585,21659,27392,58459,11413,53177,14254,85444,88427,35489,96829,39269,57929,17403,29248,19611,32857,90263,82360,83595,64321,39690,61531,82515,97114,41780,22055,92094,79159,49494,12966,54097,95101,13997,24863,85425,84547,30342,13830,72412,15425,64290,39769,44644,99168,44607,16403,46904,37342,66783,15184,84139,44922,27010,49517,89132,15883,61102,51396,97932,50240,49878,95349,29902,31623,30578,65905,13227,78860,91423,74149,78116,50250,17328,17999,57921,86954,93251,52252,80383,17474,22016,20665,99943,16880,59503,62037,37739,39756,97422,91912,22772,40160,88886,70828,94248,55753,89870,86687,95435,67835,84798,78796,32137,70585,66008,89057,38736,15208,72974,41573,68396,86477,45397,58213,22921,87747,65058,34681,38557,98487,61712,83045,15024,37300,61706,32459,98054,64155,63385,32584,17784,22300,13223,19489,83369,66893,29522,41533,33916,30254,83307,61432,55812,50630,24801,82535,36255,72407,73046,77085,76195,54106,12468,63592,17067,40947,82804,92942,70591,18556,13522,85924,87960,58553,70067,19161,58388,91238,34925,12373,25544,53883,18074,52517,78303,71920,32149,26436,10148,26154,13826,71242,47772,97618,24903,66135,89119,62489,80585,88270,22040,64410,54470,69628,30679,79998,25132,62654,27059,96556,46311,31089,60405,24375,88387,56810,38889,96644,36234,79632,17020,86953,24120,76440,60200,42601,50192,69282,15793,94087,80078,34679,58387,27265,14401,99840,91258,58645,25154,85412,20136,79460,18143,55358,43729,93171,98299,69557,79146,58643,46217,12158,51022,65706,24465,60880,99284,51878,89334,79967,99337,10209,94776,82672,55261,54637,56305,93225,72698,32070,84280,19447,34166,16676,50918,53284,82036,16517,21965,28965,87622,49049,31112,98742,51207,26159,91611,88294,70198,77921,83390,92416,12538,72345,48786,70342,46938,32457,15820,88375,17367,88652,76430,73146,56657,46370,42940,46391,47483,86823,90263,63450,96515,35802,79651,79510,86911,68853,70244,51677,29664,45650,70321,54561,27342,47282,23162,41000,84709,20220,80579,61518,95028,16247,82088,38193,32754,29266,43894,99624,85535,28971,61715,36091,39511,57556,92871,71770,12141,89204,87181,72423,56111,96002,86060,13394,49349,19167,22877,33175,52155,76407,82496,57295,14967,26315,70364,50788,31368,62271,23913,72394,90275,80259,88456,19576,18287,13778,36485,55575,20003,78318,92658,80587,19212,56589,69018,54763,81331,36083,52245,12888,46334,69870,51022,93221,57122,43680,84176,69093,29684,74042,29868,79522,58413,59838,69474,25780,15090,41020,98104,55574,65395,92115,78655,12919,99884,23141,64863,13100,71079,77978,40696,77871,25126,81751,24315,62918,61304,38196,52323,75259,38251,23144,47460,46470,13843,15081,13676,67451,93792,74298,30326,55328,56229,62659,10537,76587,91795,72337,92557,56308,51121,40761,12502,84285,13894,67548,44248,95001,21887,46149,25408,35100,76681,94065,49026,20775,44576,86298,55761,90182,31696,28564,44599,33816,56785,45699,54960,50549,80503,85568,14193,69516,39117,70662,94262,24929,38881,43949,31306,11483,23835,65143,37559,40226,40286,44377,87741,58161,86109,22761,53963,16462,27050,88439,12579,82984,71560,19413,46088,91958,64360,66484,67864,79877,73416,43739,95384,24073,91382,16361,20611,28361,52880,73815,33557,31741,77961,54859,78530,74203,94544,52740,58013,77738,25349,84517,83065,40358,20792,73722,97093,60473,65418,62001,54908,42854,55672,78877,27683,64976,52826,94983,97466,62896,74123,73443,64858,79060,44156,41871,31462,62102,34319,95194,59677,19677,12790,56175,17577,67112,38454,85959,27831,52318,16241,85678,94235,32518,59905,10706,21511,17670,21827,29394,83388,57010,90956,63050,29678,94376,40980,60172,41304,45588,85130,34795,92117,78130,50803,18866,51914,48564,90281,73688,11710,43199,98152,18489,85739,96309,17726,24788,18565,92234,84176,61223,13935,80381,90062,87653,15519,50864,14166,20426,54928,43519,49347,46778,36165,33403,59893,98043,10145,11292,20041,22151,54545,22921,29710,66141,51486,50150,53714,88193,54123,46604,52034,22889,36794,12182,72063,68317,90212,30940,95255,25079,89781,22712,16217,23057,42658,97475,68602,55317,24697,16254,38143,48587,10150,61083,68501,74757,42525,76032,97829,26956,50862,54415,59345,86973,14115,67041,62919,97078,41868,25862,55690,42553,31817,71195,31063,14247,56946,90132,87200,40313,90537,92776,49788,34065,50310,56873,44978,25650,61356,51260,15378,19913,36002,74272,53521,51445,46952,86217,77470,60360,51697,62239,66835,95488,69310,33315,89296,52752,46827,45839,42588,94553,91638,28950,78542,61274,60767,77296,57084,82235,67876,77027,66958,48044,66514,67853,71813,49048,28496,19473,40267,41251,46918,25493,17232,23594,11283,45506,41985,41889,39253,97272,26610,38363,72665,19719,19877,75777,26317,38408,56619,10897,41489,39965,39864,29906,24024,36625,44356,44488,84259,46137,11276,15219,69230,36678,42028,14178,99054,68537,19113,98215,17220,66899,69554,86651,97730,55705,11226,54121,49159,95066,10257,29820,17001,27612,12710,66698,81901,73549,83092,76386,57476,26111,20996,90468,99673,60145,49665,94353,17435,42232,57727,37352,77752,74724,31132,23352,76138,91222,45873,35663,22760,67674,38599,83026,42194,59875,73738,82336,81744,51779,98156,90596,75447,85526,61223,37790,61317,69778,99533,61146,78918,39447,40739,46462,11293,90453,42574,66181,78482,24804,33611,71987,23596,43843,26992,22493,37281,82446,60372,63929,16724,96665,93725,46956,18271,31644,98413,79471,31025,24653,80765,47154,40590,41869,16499,57494,95747,61609,18748,53374,82563,84799,11430,30568,89413,10534,54798,91423,69940,40159,81833,61899,72652,48930,84013,97570,40527,71491,49038,34897,16647,57626,50111,18417,18083,36067,68789,18637,75142,91818,16398,89469,86146,40248,14313,15908,51995,75851,53284,87860,26461,26855,30964,74130,15930,47169,36354,20231,72312,96156,95149,77624,19835,99986,61622,84941,54103,39697,27617,44923,36764,89335,46097,48253,45985,68958,22018,49994,27805,33053,44812,79456,41531,29167,38691,47340,66720,93972,17251,82178,15181,21028,39388,19713,80264,31064,16434,10605,41680,65927,67976,59365,14529,97279,25929,30923,94738,29258,28754,11034,61511,31675,68404,42727,18199,22575,61562,81258,92053,68209,99103,27629,35514,27347,15512,74856,97887,62560,90482,74453,66108,33615,18112,17882,97015,82009,55483,13963,83578,15601,32123,79418,83038,12042,63397,24980,15415,73969,43102,37598,24444,84078,84499,39490,88517,19053,54009,35610,25986,78173,49453,43083,61530,94512,15899,29531,63418,90979,92636,90209,38964,45339,31096,30286,93630,27507,43593,24870,94489,26317,49564,61900,70513,14223,93142,26995,60655,54800,27363,45673,98923,29814,85063,23594,94211,36525,73094,90392,69311,91986,75455,24062,83717,24662,41372,10260,92173,48512,72595,54699,22931,82448,94322,38619,71847,13418,10706,63245,85327,98963,21362,61972,56657,88758,67726,19452,96133,77795,43158,73928,35915,21374,94693,15590,94358,13988,10509,77847,63232,47711,69087,45735,74765,20467,94731,58764,39665,21808,47961,54660,88886,65555,72773,51320,38143,99120,60085,58168,96594,33971,65119,54280,73474,33299,56205,94978,25471,48352,83284,57787,79342,21859,58525,29832,88947,78465,11932,43353,18235,28785,61743,73098,50962,33605,20170,57648,16009,29777,24059,23337,53720,94758,81142,44971,80223,63016,30605,25943,69438,67996,94728,35590,54918,60408,89629,50692,85131,68329,77229,66918,69145,47617,89956,24108,56394,90958,42132,33401,15374,26104,30404,32097,30134,78074,88956,22647,32093,61489,75604,73133,97335,51153,37031,90459,80927,76772,41827,84414,83272,22700,17781,76820,14474,62420,34345,67004,46135,58911,70302,15669,71007,49315,74713,21110,45141,65758,36357,86665,87475,94797,66971,16123,75641,90493,98612,32953,98625,49840,98296,39237,51409,51087,84307,13090,30838,77334,40295,87821,42036,85862,22420,47178,29726,40735,59995,82421,22942,47076,40604,61212,33327,95979,99667,66755,93410,74773,92282,75529,87783,78558,12102,41725,81027,21680,44252,67854,20449,60161,94462,79322,10162,91521,92204,93686,67330,24559,57076,36095,36948,33550,66492,95959,71128,33098,64265,93358,20114,44683,79849,70769,25734,10187,23836,90969,47472,92630,27872,22894,90314,18266,58379,88157,72560,15594,48553,91797,69824,26502,97073,95761,11837,20859,86565,82890,67972,76849,10979,90272,94402,91204,23795,40574,99853,30299,54515,39823,38730,96640,21034,50320,14737,98886,79106,23124,30676,31473,56696,78260,72993,41942,38116,24510,33954,88371,38309,60862,81430,34478,86264,11571,21527,31125,29627,73602,98812,70127,44976,96417,12258,29066,20595,88827,10898,59915,76966,71014,91095,97829,78045,26272,88176,21075,86507,87304,38814,96637,28037,42922,68972,47062,54909,44256,45362,24977,38079,99784,60375,47614,70082,11426,16390,26765,38301,33465,16005,51082,91536,57532,41555,51850,90082,64926,20467,89444,22015,21536,31385,48935,88965,12449,52984,51729,14513,23598,92776,50799,68234,71854,26465,61732,81308,42715,85056,27657,31658,67229,83558,64635,64236,26806,74762,54444,90640,81340,48041,38375,48399,86072,82443,38989,51372,49793,12872,84165,29112,71741,79119,66697,78250,84408,28379,68591,99545,59553,25914,96602,92309,43736,60775,29064,88405,54135,85761,98326,73347,74481,79017,70414,48670,68454,15005,79920,62322,31950,63968,84085,41527,69914,48839,51620,87700,21429,36651,64150,37367,14457,39226,92987,46727,99726,77528,31347,43616,49186,21556,35839,64636,63550,13018,43183,37192,72195,11912,85737,83527,96793,14507,38280,77169,73755,35733,61570,46527,96344,31472,47268,94834,74634,54143,10759,92679,19069,96399,89081,97054,65202,43970,16873,69932,79716,59342,25247,58315,15434,76764,81904,15678,36068,74813,15966,10451,65856,88795,96330,76946,97414,52483,86042,12397,83512,53940,41475,24853,63585,86106,22920,47379,26278,68126,37721,54897,98872,79046,46817,76256,23590,58316,28023,53812,94295,89162,46394,33517,29971,86329,93768,67118,79099,16493,61896,22583,64497,95248,64691,68258,66384,79971,36919,68554,24158,98955,18156,95807,76654,52585,33094,34201,37360,19571,32142,62058,56382,80228,53026,62207,22107,13502,42379,45073,27978,75254,29459,15525,35371,38120,91234,10844,83648,12157,46903,15502,13516,12372,56608,99473,98216,83827,17748,65216,54300,30066,30029,24215,44976,62760,32168,74862,95280,17771,48627,46432,59763,81143,18022,42338,12335,45002,26297,64439,46619,96142,44305,26796,54088,62262,45117,34487,42128,53228,49783,41144,99517,30912,32968,26620,42713,59270,78981,57937,30878,13947,57505,44002,63902,17764,52069,28398,52682,37768,42922,69467,86890,47163,45791,19513,78347,67761,12006,28660,34552,81387,43840,17379,66255,20715,68519,45777,99612,98933,21982,88963,45799,70145,45482,66938,39727,97466,53360,15670,28901,29240,85903,77276,92247,75151,73704,53271,98008,10149,58014,87026,19376,57011,28904,26700,94448,12661,36118,87822,65910,36466,14091,42924,75798,87086,10455,60933,74663,76135,33883,67344,34696,17806,54998,52311,23486,51491,71060,15757,43587,12260,65083,42836,52832,73742,57125,70038,24010,20790,90184,93226,84344,18997,41018,38274,62811,39000,56909,84872,55096,23547,88465,22801,37782,27247,17018,15093,16419,86819,19802,82238,27049,47364,90725,96211,39015,96059,79374,70720,21616,47893,30752,70212,88129,93993,84693,67791,89327,81953,99636,96078,54675,72902,28854,53218,36169,12265,59799,62257,58161,66737,65439,45323,73272,40883,28609,21115,27572,46676,59717,20894,19888,72672,29540,71406,42684,13814,73543,61365,95715,38341,68348,22336,80291,53642,62939,75728,56529,18256,57303,33577,71921,82710,94304,58564,71098,23488,80958,90766,12205,14817,72496,20341,17462,38375,10219,84263,96074,99350,21219,23559,57960,78591,69133,58159,23981,22169,33335,85475,78462,78309,81622,28765,96380,81167,97911,82271,30671,53540,62613,20106,56424,42117,86890,47271,67656,94748,28849,48219,41726,16969,37622,69387,16758,83703,77252,85780,59498,37877,22022,67142,91071,99626,97669,74478,73848,14937,86305,10832,88807,84960,31983,32464,54785,30259,45253,31386,31780,81735,91865,26523,96646,97587,90732,63255,58341,42536,34227,25499,23264,90881,14784,39333,28757,24104,76215,22095,32722,60204,27929,56229,77459,99104,19106,76427,33973,24781,21285,79250,47319,22479,21803,46046,81071,27100,55002,22192,26210,14999,24523,68840,32780,94231,48564,73494,35880,57167,20610,42041,40259,21821,45203,75390,51426,72008,30534,87340,77849,69322,71589,23971,55297,44387,45011,13024,97216,61312,82870,81389,64366,46783,47517,58459,39999,85914,28448,97225,31127,75752,68557,35171,24288,86310,76949,80172,28336,59768,47171,13763,30971,89030,31875,93451,49916,77056,75470,70906,26716,18987,57835,54673,96386,10883,83159,45604,31588,51602,19648,31714,12136,94753,49949,34262,47996,23062,99419,67993,17240,42266,53575,67456,55322,77091,63141,63019,60518,37451,11750,69412,71895,78549,25487,12829,95495,79085,45026,26743,89473,90049,97886,92497,89351,90452,81510,42823,28742,34968,73992,93911,34790,11852,35545,71049,91092,10293,94525,83797,56140,91286,11250,12185,57266,58274,69202,58902,72205,64920,78339,32772,10026,85344,78681,47273,19642,66228,83500,32178,51836,31559,96985,17744,27681,14469,84143,41677,47684,20980,37149,33862,13233,95194,44542,42400,56091,62132,30281,24151,57338,86365,92197,59670,74618,50416,40865,70319,34037,27094,24409,97119,44864,98186,81104,54112,26001,33940,70238,56093,99628,81802,22004,27290,19620,51748,74455,47348,80911,98870,13501,39434,80466,82665,58055,11342,13604,54082,72491,26355,90077,70885,42790,66800,29921,63045,40297,18599,91719,47018,19208,67663,13139,36514,93231,91194,89149,12489,58558,74201,15746,91595,35715,28777,18938,62356,31445,42495,26873,22130,16021,31554,36576,60405,24572,77027,48676,27067,66810,12285,25678,19888,33126,37340,97258,46428,85310,21686,41773,88291,48351,91301,47676,85216,26319,22283,57338,60011,92629,38793,11768,29033,90696,23915,76436,24895,82410,97312,44348,21515,66226,55933,60621,44406,37365,57282,51736,40176,92652,70602,94650,22861,95351,16333,86589,55077,32056,22867,45959,64384,58741,17210,15681,23787,78920,23589,44777,16752,84630,95304,77585,15104,20862,16890,98841,65468,13719,84440,73185,13157,84708,66268,86640,15876,33725,96340,10681,66229,62627,21623,23958,40208,96480,99533,12503,75140,48072,62933,20218,82985,78263,80002,76577,20420,32496,14815,46992,26519,93669,70982,18608,76745,95171,95814,39868,92463,29063,49501,66925,64813,22646,61810,40802,39613,15871,50120,21694,82787,70280,28062,18441,82848,95088,95264,22333,22184,23796,79952,91930,43240,18971,98893,93112,59131,54495,95463,58756,93353,56572,48237,19604,69384,22274,37724,37632,16592,72865,49697,23361,86582,29352,92326,66688,67582,14248,73130,28102,55134,74085,42833,61116,50814,70499,50869,33249,60168,24233,98177,65624,88240,35773,65515,96694,52786,79711,68940,51690,89209,20786,66891,36812,57299,47157,47692,78495,33895,20143,39056,77171,88669,67019,57175,12382,20923,63270,53267,49702,19619,70486,76724,39141,52351,18714,46522,35927,35096,85834,99950,16576,81130,87973,66767,55737,83517,65580,56648,42182,69954,31441,99637,29250,99761,80513,93180,75370,40238,83052,65067,16338,44668,21184,50918,67699,92768,50816,52007,90719,60687,95718,27894,19850,87238,57408,92766,37981,40999,43797,75851,21544,34063,25114,99933,63191,94580,35531,99760,86403,42376,70381,82975,46906,98796,29180,60335,18387,47428,25170,23923,59055,51168,63055,81286,62709,99187,83219,78385,15304,37232,12643,59519,97897,65174,55102,19366,70550,11459,98916,77245,50288,85681,84735,11388,43645,19745,89133,10867,80957,79364,49572,92779,87035,44244,73085,90962,34423,50496,86088,20656,65045,24784,27159,14294,15723,77951,77362,59726,43931,86108,68892,82337,86870,68560,63059,23068,80967,57051,59885,42443,12176,32579,24228,27371,76970,36855,88497,32845,94584,43172,90027,93221,95213,33090,75076,28368,76200,73310,92445,58947,24078,48249,24022,85923,40852,80077,98931,32002,41942,53599,43936,96360,56323,40093,50795,98603,71030,70553,60030,28180,12296,15627,36719,86933,21721,96750,50932,97861,64906,42274,51138,96301,78274,44461,54603,21999,33385,89131,23667,45878,61287,44012,71273,98145,59075,85335,26028,58686,73819,12200,79260,19658,74278,66451,86003,50894,46199,11690,46642,85618,20164,10163,58196,27420,78708,10048,73544,12029,96104,16085,67518,40595,19566,38424,24906,17249,78194,42290,37780,14661,36434,67090,62883,35961,67760,19910,90377,42729,97094,39552,84936,14211,13453,62939,70769,67790,91503,52699,43061,24818,50134,40343,22470,69245,69986,69999,82629,87294,44899,39823,10487,28421,86014,95799,27453,85564,30152,17402,24955,38475,15289,15711,50465,92433,81022,34973,78056,96234,58653,44526,77407,44135,68962,73802,87707,47769,28847,69980,12270,27665,39645,16557,55612,66063,61161,46518,10680,42310,73574,22630,75781,40345,18912,74056,33203,94920,76632,90132,87806,88325,41053,71411,42929,48542,77093,76887,64159,64987,79491,92635,11543,96616,82802,66981,78392,92672,37208,54293,10196,31910,60005,44404,99718,82577,27300,20115,62109,89060,14033,80205,62083,72589,27935,80374,56041,19180,66963,22158,80760,91520,64694,57130,22062,90243,94966,37842,21968,49285,41152,91175,62379,71180,29635,91404,59315,28518,23146,44272,49125,49021,67903,44964,20886,76322,93928,77793,35518,75654,82602,84194,74679,72277,59348,58471,49844,29641,29722,21602,17907,84818,15743,16649,28585,77059,33766,40998,80836,21822,92831,72891,81464,74556,29263,58282,46082,27256,78249,46820,83628,63155,77859,33582,24796,73584,79666,37663,53200,68115,99782,60990,47754,68611,87476,62995,87069,45226,35921,66399,32904,13317,68008,10662,47779,40791,89550,10471,73557,65794,21670,66676,53878,85264,54559,73271,26598,26642,67122,94184,38052,19680,94008,66906,72138,73433,66549,51023,87660,17310,24734,75342,80837,87356,11187,36549,13709,97702,21981,37290,32998,77811,14970,50912,93856,64613,68582,74053,86567,90743,70163,15837,45044,24805,12826,37278,19417,23542,63155,34748,49354,44490,56761,77869,54210,36517,85867,56349,25982,12759,94213,35034,85402,49932,44585,26305,31406,18772,50375,78492,17259,53159,28024,70505,59926,27915,12566,37864,57794,16858,85117,85371,53456,62817,99693,39996,80698,91059,94207,47364,68807,78837,87147,22725,99352,16731,35437,68834,67956,78560,96911,41132,29761,10168,37993,27506,90908,73548,18674,46015,40940,55475,48255,22468,12137,72986,94320,95215,28041,17011,85627,89180,57634,73268,71977,91252,47678,29351,45527,66403,45649,72317,19805,50787,14451,84561,17373,49649,56006,73089,53915,61791,24244,84162,73596,55481,89950,17137,22248,19866,73653,75362,81880,46391,77624,46896,67418,10071,80337,24357,69629,95222,73018,12719,50695,75738,66749,49113,74619,60641,83167,55583,16973,55197,92620,37471,73458,65789,75706,63032,39185,11303,63866,65982,12092,44797,18968,74601,86259,98724,76638,72415,52494,36655,37717,66190,30165,41286,57649,87910,73585,86003,89187,27013,76067,48700,74409,32896,50245,96598,71160,71736,10302,54197,32670,53017,29231,69483,71265,35299,43321,10172,83274,47705,27533,10990,47586,48113,44579,47102,39311,66474,31715,59545,70737,69612,73866,15759,65613,49387,60396,82807,86164,98381,96646,17567,31522,62912,31101,45134,95373,37400,98535,73598,84949,69295,95966,41670,46173,39299,64003,38055,67894,82444,32529,63544,22363,98849,69696,61606,70537,98485,75292,14511,32301,90214,56904,61418,51653,97265,98093,88885,59940,95517,34327,12191,25192,25258,57042,45552,32905,41982,72490,53638,25597,21032,71980,41201,77159,10403,11935,84804,22522,57306,39071,76563,97661,60567,11093,16206,73284,83003,82955,30809,95902,94984,35581,17501,62821,67382,90802,47808,61550,37134,95023,62035,51338,19617,68000,73843,98980,87465,13296,73393,26111,96987,10717,47694,40487,88931,17453,52748,13263,59735,68173,10277,52870,17894,17507,89591,42412,20287,77403,28523,26353,93121,70658,11638,58283,26288,38195,39329,27666,82524,91525,40729,28946,10429,22360,22324,27379,29555,76476,74363,45664,16143,93901,96957,73689,54329,63513,38571,83660,66695,14619,11455,71651,33860,33667,24708,98973,55910,66614,64674,92062,78399,45557,50587,30448,21636,15741,98846,97589,67994,14157,49692,10517,33831,10307,96157,56721,88904,50903,43051,64085,52097,26115,40263,96051,61527,15605,52779,62883,50033,20305,91356,17256,60599,87558,88605,44485,93707,41132,61759,63384,39857,73400,15330,56625,25333,53740,81676,30023,99106,94318,51212,64087,87304,79613,45705,70163,44546,80460,91477,94254,79732,93282,23733,10077,78066,80219,71842,31023,25143,91613,73097,70567,81808,81115,46250,70452,98219,69388,25725,52190,46739,35035,30410,75502,72671,98023,24432,95997,79983,64237,16538,14103,74938,11979,89725,43364,87204,55937,71513,67588,53857,24471,74558,92094,32154,82702,16446,66578,61597,33452,66897,30227,70857,20334,70694,37601,78012,22764,21789,80747,45262,60067,74776,24348,48850,60871,18605,63013,11322,12493,44125,55377,91193,72766,57960,15788,29608,87651,35435,77579,78489,54023,10878,78172,56450,90339,75022,87421,49887,24090,85213,40723,43749,41715,47122,19341,55446,77529,25762,43868,75386,22315,38662,72435,21231,70352,83223,61087,88435,33308,50573,12453,57955,86143,46003,51690,19220,93250,28856,81766,67608,85280,61587,43600,39188,35550,48119,52323,99894,11385,44516,51170,21562,55493,37289,95573,82901,93734,19262,10964,12253,99368,62455,67684,10856,35330,53139,17265,44382,63331,62684,17191,27667,35191,38528,50984,26720,12046,98405,49350,62999,30555,24607,65292,31232,12946,89469,86621,72660,93969,54015,60693,62389,46152,33391,51882,71944,13606,47588,93354,86588,83843,92064,16165,77485,36142,71333,23490,13753,93926,43293,62273,98368,59104,33775,56596,54210,51360,37452,91552,57526,65727,38233,20318,59068,12729,84783,64812,56937,34870,88978,25354,56531,59221,23976,27964,53884,74191,89218,47744,51177,13166,15993,44630,56833,57974,75254,12145,87848,79739,32807,14876,66783,15936,22627,54372,11071,63073,75306,40203,15219,50491,37889,58258,90971,46401,81069,11209,22513,99962,85449,55099,69925,26623,99560,41356,56856,41926,82931,82145,68378,97986,62886,61646,32949,21982,55959,70607,11145,48794,14420,68344,81207,91229,95640,67642,25475,14781,55164,16067,44074,48933,93119,30957,39913,42835,85957,62183,89091,62530,57731,46867,68377,78856,45932,66765,79529,22631,24612,58236,83753,79832,33056,86178,31768,87573,96163,46311,30088,86728,67731,27099,30526,32999,99341,52808,66887,47941,87096,82437,60679,70299,40772,35624,17576,95700,53657,75631,14044,14575,22616,25193,80737,71946,78293,65650,17151,52162,85614,87540,69498,94379,91672,92867,48268,60992,77649,33946,66068,58359,55357,90738,78149,49142,12196,50545,83559,33535,36488,89216,85388,57672,42735,18690,79662,68729,29108,16418,62860,90286,21264,86861,76126,53959,41963,27724,56055,47525,92700,61270,16685,63674,58299,31788,59987,10950,87507,11602,11858,41776,87651,95009,90036,88391,73485,86714,27129,93013,28839,20899,89199,57026,93984,91176,74713,38256,69216,30179,90904,62453,65312,12626,34510,43731,17479,77712,31100,69015,88553,30340,99935,63668,26641,63096,48979,50608,62623,97965,32237,23855,52908,23639,67623,30008,14303,39264,84015,88857,10091,30390,91897,17315,43485,41165,11618,74412,14498,72794,95296,70468,11059,93168,19649,32552,97402,68266,33239,92952,83928,86235,71951,45537,91693,44075,15140,26537,68840,60896,18319,86109,47036,96857,63550,57154,32318,33356,44968,35672,12226,70630,48649,85900,17891,58258,34100,81660,78392,41873,25935,24014,21295,80692,32038,30041,16215,90923,19231,62625,45128,50645,42630,84794,30633,33386,17472,96400,63828,29679,42014,62039,80398,88917,96065,41126,39345,61186,67880,82660,49366,38357,96145,93879,64606,11914,74733,58864,61430,26396,91601,49621,62669,81285,11380,14584,29378,68484,64516,21567,95418,60981,46458,14956,38401,20785,15980,46817,29387,73445,32071,32391,17860,31447,68423,11485,26731,98129,10650,85487,10789,94997,64216,98404,61519,79945,90493,13021,85017,15834,49328,50075,28672,84516,28330,73048,61709,56937,93852,49843,29771,80435,79513,56873,31554,91633,78658,19834,92200,24595,64851,70221,55722,96554,84638,47349,21744,35720,27483,22878,90480,68603,19318,42185,16860,50041,65381,77054,29670,35894,93835,53040,15026,62249,47433,68003,96762,74940,43774,32689,51514,51376,20493,47219,28173,80033,77139,34347,54486,61961,56683,82056,15550,62291,61908,82746,70372,37241,64363,42395,15758,53045,67737,80376,20746,36232,38904,88867,45984,33093,69892,19069,52689,24814,97736,61911,41591,51107,42415,11274,46133,58162,61270,55346,99029,91924,61145,35669,71833,30757,84854,85904,56682,38985,57101,53310,79492,26277,95987,94718,94465,68988,79642,79726,68529,72242,68140,75672,31367,66390,92094,82345,91518,59434,47722,46519,98577,48557,83681,47775,58483,66206,50622,63828,99710,73089,31926,19373,46305,16443,90462,60713,32939,93902,67503,77056,76227,68994,23796,65206,53792,74758,84084,31980,35752,54498,72014,56329,52530,62710,26395,56599,42294,75430,30777,18921,65591,49093,89371,31712,63147,11149,56422,91771,41910,94583,79549,69227,27539,89999,94917,59439,80795,97443,68553,11824,81526,34424,19674,51174,75192,94647,18518,10957,79564,50970,84520,82911,94929,44715,61902,56613,24776,57662,74846,50003,68603,65494,11998,24941,48448,23749,30228,46884,13947,64064,33159,71778,25411,14582,89248,78012,11008,67615,16057,45802,19249,25727,47205,39043,72368,39691,74504,74564,53991,28130,99083,91799,22501,52264,65690,93705,24522,38666,43366,52215,77464,21387,39570,10404,14495,60417,55948,65058,53224,90461,87148,72108,90796,82603,35161,87207,22845,56969,20263,31601,19963,70404,73445,22044,41142,20070,90479,26230,12060,93494,17315,50415,28519,42992,66476,38874,80299,93134,36920,80798,51188,55428,11599,17087,45348,70153,77890,84821,58764,23048,97356,76268,48669,64033,59377,63471,65324,11728,97358,13565,66636,55074,76908,53056,56737,37668,82328,17651,27008,24943,12223,45903,50446,95496,22282,76001,77234,74996,87031,21163,58200,54854,77569,27001,76785,21019,29772,23377,51904,53882,74931,28756,71404,52904,56308,93856,49050,62294,54742,64373,72876,82991,32248,21459,49247,35219,48016,29830,60056,74788,21399,97087,35043,36516,97099,81743,52433,37131,34213,98601,90874,92384,78126,96012,86059,56381,41829,68340,31618,74189,20527,50482,92509,85837,50652,81183,30661,99071,78511,33640,74280,22122,73715,33385,78913,70554,42412,98593,51893,97034,63829,31052,89830,25446,39850,49411,12711,39994,88760,25893,54880,56983,68273,56031,67686,51975,84868,10534,29269,18980,68352,51149,76311,96840,83698,98751,91538,42563,90212,28106,98031,84511,34712,86875,72632,98010,90668,21101,87554,78876,12045,89113,86545,96349,68556,50388,17018,69316,54848,63919,98414,51642,43706,37110,29214,38445,17387,57160,97351,67948,67164,59488,89764,16169,14521,41839,56986,92473,16806,59856,50045,86991,47159,80255,31210,71722,64977,75262,38897,48388,87298,49654,19277,90382,99833,81353,74467,68219,48736,62690,26884,16155,39606,99281,61369,96842,93727,44070,96552,53630,58845,34621,42040,13064,73594,25268,26833,38254,50918,63735,86164,16949,26826,23639,87659,37840,15033,63322,41609,67550,68914,66595,74153,26042,35646,32333,22084,75989,30637,60328,64583,71964,68897,87092,17972,79910,43179,67459,87469,72516,74527,49084,11683,36710,24846,99410,35071,82313,90846,91654,44230,95453,74318,51443,93398,37103,36254,44532,68695,32527,99695,20654,28548,58009,72340,60249,68123,94104,79677,35491,71418,90572,94680,44323,87618,22939,93551,29658,26854,88467,73413,30312,13702,35482,84045,30409,68547,56435,95257,40984,44841,88727,49276,70396,73298,25963,64872,27309,49092,83455,50576,16110,68644,17409,45172,47150,18305,38639,47717,55448,35396,35811,11806,29036,19371,58323,61061,80368,56293,70925,54833,20138,90378,98155,61751,40899,59930,38211,58201,81972,57229,19757,12379,92016,24950,56793,84967,18281,60428,97753,16171,26557,12503,83825,15256,79740,91477,92709,68647,11059,66800,34302,67812,25476,65196,12824,91063,44991,50527,70797,99658,66389,95897,50108,60408,96645,50136,80643,22037,46092,64368,81266,39388,39723,22212,14355,62534,91322,60351,14750,45707,81412,45968,27265,97397,25213,17891,74549,99133,59604,41630,84180,86375,31097,22851,45061,57427,14124,80486,26908,69432,25364,39755,73964,21204,29210,58237,65028,66914,78298,22469,75948,76210,22534,98748,64681,76523,96652,81408,84652,54498,92430,15790,67066,87767,48037,34915,66961,72538,64585,44812,42631,97260,75137,46717,88358,74446,45001,79208,17177,74253,78117,92681,43787,93192,70054,71733,99629,86861,36307,61936,11880,20853,16170,29314,72186,76027,85918,53802,80359,37964,80766,54811,99188,24067,42213,98391,36729,38501,78473,62273,12540,64993,81656,41131,82372,56392,46806,36577,64231,67258,78206,63974,70675,25385,61548,44536,83395,18928,77092,23177,91218,47147,31066,53645,93832,76048,41062,72065,57087,95985,77839,73492,61317,48847,79860,70532,41784,26448,12535,87484,91941,66859,80238,58004,11147,14511,33915,81279,95798,69645,98099,44503,25582,23697,94486,29599,66878,69269,90759,65196,54046,26107,25875,29960,77026,88372,35081,67891,65420,11253,20773,35658,55339,32481,20468,65421,91387,52868,86100,99072,42038,98475,10072,28298,66597,42419,59286,80309,74584,74210,15561,27238,10408,58263,53870,79499,68141,65604,32864,51731,50306,59466,66212,35648,20216,20966,72822,63510,35536,44086,23714,67882,16414,81388,54568,29223,48114,74220,32565,88866,88402,66997,57646,89842,97405,37481,51998,42162,71069,85000,74789,22455,51760,98576,24195,13798,93656,68220,42374,97700,18859,30710,87422,81029,91513,12885,76025,94043,54540,40182,94864,51104,97207,33202,66122,58837,87217,26554,58602,48779,13576,11207,76279,89215,25480,87654,80889,62182,41316,47610,94219,27010,98410,14329,71445,41372,70665,17233,59692,41402,75283,39806,56221,59058,92727,23069,92410,79265,13442,94744,69652,82059,96973,97053,13994,52289,24789,46744,98803,81511,53580,84594,72961,61519,25711,41995,64118,71130,50467,59591,44013,92308,67326,40410,49834,11091,97219,10216,16759,56683,22435,73865,41710,72366,68254,99350,11881,30184,78714,29731,49392,26998,46105,72643,29496,59761,91483,49731,67711,13473,12536,10399,92251,97499,41373,90742,77532,79151,42346,48792,84928,80764,94096,92901,72346,24440,12819,25725,84348,50277,70500,14914,67833,47049,55758,99137,54019,86952,30576,28375,44550,61155,77290,97555,16779,22552,33237,60154,54140,63018,78864,40066,21556,46477,96804,47110,95566,16602,82700,72526,40520,20816,31237,27716,60636,62971,99058,57733,33838,34171,45135,94629,85514,41915,97386,40066,28304,37046,47588,40944,16151,58457,19724,34092,31822,83902,34707,63503,73984,25302,70249,76672,87550,99072,65977,61162,89409,22994,83122,73034,37495,77901,39797,18824,82491,21971,19136,78423,19231,82552,43976,42227,85172,40579,29218,59614,11261,80970,43459,38737,28340,73006,75404,16526,67675,29943,59904,96966,55302,41803,10858,25834,73319,68021,52220,74927,53018,77481,28709,75468,44831,87585,54475,41640,89379,91670,43326,92765,39310,96398,63278,63482,24652,89194,37643,87903,92319,19147,56240,25760,76489,94780,43376,74890,86051,34698,10040,71297,58328,39903,45934,65454,92416,39102,56413,60927,40265,74844,68643,38575,44949,17610,42100,35251,25481,78718,95011,57094,45179,15663,68734,80923,68289,57176,41708,84960,63701,31287,98553,11275,16149,89807,85423,74506,32028,30762,55480,80619,71291,57960,24855,55133,19094,13014,68024,20809,96285,64034,57114,27130,80946,70873,91319,52939,96939,40700,47075,41298,42040,47582,97023,70786,74098,17174,37507,65165,92628,80465,24706,23059,43719,53118,43868,92586,12382,91895,47727,71772,50732,11691,67811,87041,36127,35032,31431,64747,66446,80467,92116,67886,77421,15548,10155,44702,89886,75584,82496,10047,68527,13058,30247,10320,52881,96379,39721,26416,85504,34655,89700,82241,86864,95075,28607,55070,34125,19666,17864,93956,62227,91367,76319,85038,24445,28156,47746,57977,68697,53375,70697,39921,44364,79538,70527,33150,76562,65368,65054,49739,59830,44672,96699,93799,33070,87459,85193,86786,76531,50833,12094,31176,94861,17029,30142,97378,82203,31800,93051,69987,73548,20617,97290,45570,74226,88183,84645,78211,28850,33787,69572,27947,35214,18515,82943,92606,28210,63273,34851,84614,89449,35927,87154,80617,20785,67274,57262,90862,36291,55788,78614,67760,91855,40427,50053,89898,96481,86095,88783,69656,70358,22790,50211,56026,15015,20341,15830,96378,53384,33154,99862,48725,27664,15799,33210,11354,16033,65898,62206,36150,21093,22017,87503,56981,26773,45195,89862,38397,94694,58085,61872,31779,22316,15471,55660,57189,55850,29185,93596,90478,56347,16174,97198,78519,48834,65056,19602,78091,84707,47466,38254,90770,78952,56064,42410,35044,37627,96691,74313,11039,42835,81130,35353,28574,89181,33786,78499,25465,97130,48942,65279,53090,72015,44886,45408,33381,94677,69501,99290,97793,96674,68702,93876,61846,14490,40483,75957,95003,18909,57827,69810,96827,25603,77814,84528,65697,20344,44723,83048,70921,67476,39419,79523,57569,93151,93797,41785,30587,68037,38350,81249,96441,46076,88153,61018,18004,39910,95489,26653,16068,54933,13939,50629,72734,51980,79382,62650,29269,91984,94953,38118,83910,17820,36492,77849,24523,69945,34906,23765,93449,69188,49986,60228,57284,55071,60065,79019,83880,15716,81432,25691,73181,11206,71830,87293,78395,78791,31916,53416,51879,79616,54146,52217,87936,80331,71154,82959,27379,20238,67676,87549,80921,13650,24082,58534,26280,60654,63400,52270,39751,31460,55116,65966,72514,99197,24234,82608,77067,68701,56728,49507,80798,51074,70566,63383,95095,20607,43180,38212,20834,86801,84830,35832,77443,54732,70061,40829,94667,99819,63758,10257,28067,50974,95375,43955,46306,61851,59143,78900,19122,23648,23429,91803,52707,27006,68456,72287,17210,44687,18072,64120,43448,69889,34040,56562,40511,55363,30573,42712,82583,79549,13447,94978,17035,58130,94224,34922,91961,88405,83368,18539,33036,94178,72674,27074,74700,46179,89390,59415,91612,52489,79472,89760,42654,40885,82569,68020,44988,17130,91285,60593,87599,10584,14865,28939,80225,27280,11671,52136,26135,95204,50913,63818,77675,31481,72375,11577,96328,99446,22750,21696,36976,67179,11603,75096,53767,68571,65303,24347,19137,56415,67386,84897,35022,35633,73149,65135,40756,94608,38253,30741,44102,74965,37412,72511,32352,76318,52217,28947,73361,82414,61783,38519,23346,10983,98619,19780,42300,82970,78063,77182,92123,54204,20271,43281,49755,86627,44438,33834,11672,40046,95195,61427,39142,54611,92618,20378,79913,18200,28347,67645,16718,27494,12391,45341,22569,45338,76573,69904,98998,81235,84872,82563,56885,49839,27619,46388,33254,92103,65416,91876,36856,85609,16356,77397,90663,39509,96926,92317,15073,61998,28238,11078,75730,64833,68282,37745,79034,30756,96995,21050,12373,95330,46635,44612,36326,17827,29196,25452,19793,20765,91572,81673,61184,39782,90952,92869,15352,31439,49233,67423,53289,99377,66905,96982,71461,11571,62397,39765,90232,57357,87580,73060,54300,75979,92980,91215,40011,76898,18596,90872,34396,49931,94861,93363,55914,84421,41702,43944,37395,37070,50449,93226,90818,74143,26558,88613,30992,16802,84298,76115,36492,68738,27001,19533,55497,12023,44206,77177,24475,13751,15779,31002,92810,58301,49950,43212,32671,27254,71940,51184,60183,47648,60398,29091,41384,32865,44509,97371,28310,75165,89775,70885,23506,66705,56416,82017,27869,34603,21260,90411,66016,15231,35761,87478,33614,96666,52964,86132,30330,56655,30865,90452,21552,74729,41706,85039,41606,78910,62909,30371,67950,69451,73478,83428,49638,67720,46634,83158,16839,75455,88193,57598,93354,68339,96061,75514,31893,97361,63219,83337,89841,28199,91427,97080,74047,58514,59799,58860,76025,61787,86129,48806,34162,79060,81554,14445,57439,88913,74085,87355,61502,46337,25925,96598,55731,25120,55515,51835,93017,51194,72875,46313,75070,22057,67293,26525,43192,12484,98228,71648,59335,39711,96523,80147,51846,40352,40546,67718,21527,70924,62055,74025,59356,79534,26821,58279,97162,36332,28484,78992,40115,34121,77619,83197,75961,31534,14895,94236,56716,37525,98503,30268,20323,13275,43625,23120,58150,25779,11661,33797,35145,13731,37873,12682,56513,44408,72623,47806,58635,75679,44499,80341,84702,42642,84165,85870,20306,98285,58377,27467,91393,12506,47624,37750,87091,97309,91203,17817,31045,62331,89597,29576,94073,71095,88126,17945,94062,39636,50048,17011,96311,89920,80379,30594,11192,43290,67227,32191,71614,11048,37853,67176,28629,85921,52591,63123,58238,67130,83273,34573,53248,80330,37229,72531,97773,46106,13539,74306,45139,27628,45313,47128,82147,84145,96795,77307,66067,61186,52709,20677,47219,85714,95917,67306,29620,29910,74925,95842,98436,67299,72035,98019,94172,61886,57210,26525,66954,89983,42428,64272,53007,79706,73924,68229,59864,94428,54097,81084,46321,56364,10251,81769,58078,64299,16449,28245,83841,78313,72264,17518,73437,97611,60692,24487,33725,37598,94730,13399,67450,27923,23548,54689,44785,42687,45220,10677,41888,87929,90163,44881,30328,27129,42992,80401,65964,50788,98171,14990,26493,40785,59341,61356,56963,93387,48962,11878,10017,33506,45590,22735,47103,63429,53710,48273,53156,92364,44170,64192,30049,21191,54151,88898,36154,19878,67783,38723,20131,32509,11072,68963,12246,38924,16450,26441,59353,19282,42635,76550,72894,71960,45243,88898,53576,23633,23406,65604,96845,18655,74819,21349,27038,94195,41558,55541,91717,27186,47313,37257,48057,75142,27033,17856,83279,93421,37099,30931,68113,62540,64676,53702,24155,24902,12806,80248,99801,13725,76970,46891,45613,45240,91679,29808,73423,61573,88976,82300,93143,70033,14091,37690,49346,63676,67496,19788,44339,85869,69937,11508,91954,30373,43717,73500,25898,38591,16829,72360,16667,83507,22410,46097,27219,80382,77329,82186,11975,32917,31210,45048,51268,71843,25715,15540,13702,74658,93682,56429,99091,17442,77960,34979,30747,75959,43771,36277,33340,16769,39526,54386,58372,61944,59772,97788,77093,92943,63504,99534,71540,44022,21969,60273,20213,30442,89562,93087,22704,60347,18585,93558,50825,87160,63970,48668,89800,57935,16037,52946,67775,88685,29711,50072,54642,35425,74572,80904,91881,91494,41579,54136,11920,53575,35203,32295,86857,59371,65840,10355,48802,68730,39430,74590,67717,97682,30273,48380,79801,21712,59859,34409,82637,30462,88439,80897,97687,60792,90936,11192,98101,99212,60720,88678,48090,64278,15374,63736,60690,71105,68636,76314,59163,35757,46673,19763,39141,50019,25459,85352,33256,80359,30822,95985,70735,23331,20794,73030,67513,45179,97485,92478,64232,82517,67811,19294,28584,11030,44967,73475,91436,77236,47377,17629,90635,86723,14936,22713,96777,70344,78311,85016,16832,52307,56726,31489,31628,14810,15781,69762,58257,27987,82661,37538,87842,81590,66471,38474,60334,52529,52897,65129,30901,97289,68111,99140,46525,66207,65800,73033,27011,38491,16026,98341,30544,61996,32182,78212,65139,90076,98750,73934,32926,84658,89324,63920,97157,29024,92644,42453,54463,10910,32785,54868,14931,59606,67016,16720,87058,33782,17206,78752,75009,64858,98696,63702,29887,47774,33147,48560,39227,64225,76200,32147,44629,62557,96915,77804,18463,84456,96746,24518,71504,28683,19854,11552,38364,49809,44862,53815,61259,28959,91064,67666,77771,89419,11979,57056,21524,73449,20106,31069,58317,88943,18813,51385,51448,14785,77907,87740,88542,37316,65806,76613,97375,13852,51894,72185,62369,39741,11655,93517,40244,43174,58107,58026,99660,72793,16280,73626,22693,15002,40918,74723,28619,20789,87485,22100,83955,35725,17999,95511,61421,68247,36326,74341,95885,61067,98677,57049,52310,53683,52088,42326,70894,21948,39195,49146,38049,85382,19519,65367,68063,19015,15125,68734,66662,76489,86076,59748,84836,89345,11511,24474,13747,32480,74015,72624,87272,68577,18978,97078,22737,25473,22773,98990,67157,16157,27112,64163,47098,30095,38197,34071,44659,38902,74156,46646,31008,46524,49895,29855,15235,33212,86070,37557,67954,12768,64376,46711,82160,44529,37271,99044,90285,31675,56901,87939,81019,91089,88401,90977,70958,82805,12488,56446,75193,58302,96447,57928,43249,82006,35715,22695,71424,98564,25175,58905,74713,63053,34408,98991,17209,92837,46887,58379,75431,42589,74880,84559,23204,49525,58251,96217,42755,81166,45571,73040,42531,99686,96808,25376,47520,53566,71953,70046,26423,37493,32904,19119,35374,53428,52578,71882,13775,67352,43709,95248,14897,54021,47068,85236,24199,55008,84756,37963,74460,57349,82144,95420,43676,92077,88803,73285,66246,63220,70518,81205,43568,39991,52895,96475,24618,48449,37281,15746,28801,17475,36265,76502,88527,28099,32787,52040,93341,93009,21005,22167,90772,82672,49574,32901,73753,82254,18976,84266,56528,61242,62322,84736,73112,61067,51935,29295,65321,74790,41659,10279,10034,58468,97375,79605,23143,67862,48740,75811,94860,28163,20162,51615,62691,67635,68278,97629,97170,84846,82639,36540,99300,41916,75897,94116,98431,11895,42598,65494,24109,20632,74067,34045,37513,75080,79439,60087,66061,25170,63012,87450,56181,28774,64670,34030,20617,70645,87778,13672,67481,46925,72745,75590,94761,20303,82954,15052,63443,21862,70360,78553,80811,57740,38976,28755,53879,87132,36332,44762,29393,77214,84375,49879,86837,72229,46792,69981,96704,77916,72038,22797,61863,63745,21843,26373,99244,17051,57076,29169,48726,51355,72679,11654,90004,13912,16505,43202,32760,26787,37156,93490,99672,76265,16236,92260,80455,71988,90359,92734,30396,13735,83485,46041,11465,68589,91926,98427,73027,18557,73426,64774,40022,35423,47540,49451,68086,94007,86891,96125,77154,36976,25711,93417,31314,26995,95071,93077,54506,27159,81618,84216,97019,94553,15422,74548,59412,90104,45656,42597,41528,29011,96097,39668,97956,65542,26436,95383,39151,77545,37286,31874,63768,24913,25460,81654,63736,20912,10757,91196,54890,22482,99184,13199,53554,65808,15933,36620,24381,66118,54830,76319,82130,96733,75191,38101,19182,73977,78926,29409,53398,44926,82143,36544,75636,96274,96535,16376,81355,65820,58118,63576,52291,31745,16314,22866,97172,64845,54468,86463,10375,21597,40933,78623,83087,43664,28046,23898,72426,23173,60386,59363,39969,37353,76232,16522,64252,57675,63560,54361,43409,29154,14617,26943,89086,23304,29485,72396,26832,30265,48409,79381,25517,31701,84819,89181,60022,97813,12718,95366,83514,26905,81332,37778,38940,23477,71550,13620,46996,86814,45940,70851,20696,34569,57005,93237,67188,88712,41534,35543,26561,46868,10876,79991,54705,47320,65737,24473,63325,65619,44629,14205,83004,99668,26540,84444,48535,83755,67068,27925,71568,23862,22719,39179,84573,34455,61267,56287,45363,66835,74487,81008,74796,88763,88469,31699,39849,93434,62909,46291,96880,46811,77153,66717,65394,26872,58576,75781,11416,64961,41192,68507,71917,84201,73598,24461,94878,12049,14090,36102,59900,39497,59920,46990,84363,51843,21187,67444,38062,81524,32433,17972,87075,23861,32576,33347,19885,78311,58123,75586,55442,49005,87225,20357,40565,24190,92606,88023,17517,29231,55880,49565,32032,97798,20528,73340,54111,74372,57435,34728,19678,61941,14148,43582,95518,56697,89654,30970,25319,71357,18202,30906,39308,78230,88222,47623,16495,24392,11446,70279,69531,21778,22389,54827,49925,99902,91276,58933,75025,18390,14809,69304,69676,17468,65243,92980,58573,78756,96675,42926,94349,90314,51210,75223,42029,99156,62574,19732,62463,53318,40767,66081,31482,38359,37951,96795,16668,59386,31074,42979,10593,78245,67621,47779,10035,43019,47556,77307,47255,40502,20862,30148,80564,77327,57803,91748,64323,23711,86925,48478,23963,53914,39425,15926,84635,85119,74955,73048,23809,22172,48967,44925,35882,44179,12463,78852,16432,26040,81046,91992,22163,80200,20531,23625,75138,20052,79108,82004,84443,66049,27909,81976,80727,64417,15534,22037,11825,63145,40311,83366,83741,77535,40998,63709,48121,76559,76575,20975,79210,77069,47251,68290,57979,14402,32702,24893,61322,20659,56224,41542,19551,85537,53414,62766,57653,39666,53814,14010,21244,46260,20969,35909,99772,92823,48967,92476,50306,97313,57991,58276,18448,40829,90816,69001,74662,62197,78946,98995,46517,52331,32914,65313,17651,70993,31594,15860,79957,25225,12357,29930,66663,77667,49910,98570,76194,65549,50218,37983,14240,65254,37044,67896,78804,79882,48630,21578,14086,64659,92921,95901,22921,97508,29649,50682,74664,91070,52226,84581,80638,44115,66758,89097,45470,52495,39571,21485,84861,94889,31981,75192,51775,48539,88349,38903,19983,42500,10152,65244,19838,15062,22044,73587,16211,29908,76216,21210,10200,18411,14086,52060,94033,10859,49748,34955,23671,77206,37632,49759,90558,30292,82096,70996,72794,19499,95664,22615,86861,28958,36839,40353,59915,63652,61384,30289,98139,67311,56277,12572,82462,96679,39943,96464,48392,95049,17013,79564,48212,91576,26294,81207,81434,32697,38573,40604,18229,80754,38203,20998,33039,92299,95654,49210,88114,78617,69144,65314,17598,12503,32595,38276,82359,32251,64189,84724,38498,48534,40827,72710,46425,56962,62205,74075,12131,49834,78333,41239,47637,94151,34346,91802,32477,53008,20052,29287,72097,81705,84565,92368,79168,93647,17821,93753,16597,69356,52822,79345,25776,14381,17330,52704,20213,41671,12694,28328,84967,20677,88462,24782,10471,56348,58526,40055,28440,33425,32662,93131,18410,36353,16283,99465,21696,40728,50427,28945,64474,23250,37568,62418,52663,88497,49858,15075,83538,88742,24767,11418,56318,69856,45138,53874,68300,76003,70042,42960,98186,82758,83869,39535,24887,20512,96051,56841,54204,49628,65645,96577,53359,89586,95370,47067,40436,22013,22397,71271,47567,83077,68248,81516,94398,30581,73301,30752,49628,69808,23444,42311,90924,96717,48478,41864,35100,79256,45002,65533,54930,51333,24513,10963,15822,96791,46661,88101,86175,85170,41039,63839,57798,27095,32246,34568,80909,41686,61225,18917,22878,94215,32139,47074,22388,64904,55951,76493,85475,58627,60695,61618,10583,45783,74162,75315,89451,27520,87216,33186,23959,80793,34629,24057,94760,88607,99760,40752,65176,19701,89396,24263,37992,75231,57150,79291,53873,12032,34334,27911,60999,78739,48315,99341,15960,81519,56082,36422,99871,61634,34590,67256,60550,14476,19262,35529,74636,80770,75491,64345,35272,90302,25603,29133,37724,46787,64397,79604,83012,33422,78428,86838,25725,33795,23625,85622,67543,58934,48523,50975,30553,52692,66307,16526,22098,42175,97515,85924,37927,66699,26387,10243,51325,59469,62958,83022,36139,56721,38426,78605,45768,49402,91798,44484,20799,23280,22504,38911,89610,84047,64450,62260,82760,36552,16240,25897,55745,42129,51436,28731,28624,56069,51992,91281,76007,33166,78817,39028,44206,66908,36272,59243,85039,37937,58509,13763,48262,97720,74773,31529,86796,19889,29971,39900,38008,46016,66005,17520,11654,46043,24905,88690,92341,37938,83859,10326,63357,74191,44754,46407,15264,88226,66363,25441,18347,66569,57311,12481,63705,76108,84395,14411,82678,31915,80398,83205,84505,57713,82356,71196,58236,60382,70672,97889,20308,59087,76513,55465,66051,31083,13948,49257,96339,20761,76823,12404,54045,38545,29079,48202,38414,89842,87814,49977,11816,27978,83347,69103,51953,59628,29664,47918,98307,36815,60130,95603,75411,72621,77252,99634,15291,32899,51690,87954,67349,80222,27363,71591,49002,50185,11365,40854,52039,18259,98000,41926,52706,47742,44970,35392,74082,12314,41988,63798,28407,25058,71251,94735,95088,29344,62702,40937,88243,56588,41680,39358,80047,64053,20643,21944,17647,74325,29751,28315,93564,61613,22442,36628,19145,21939,30649,38768,74165,51659,66580,29378,42906,92668,99979,22089,79306,25467,27836,30077,70778,24467,77954,49226,81717,64082,87121,91267,28452,66296,42465,75317,96227,97824,79045,62312,90087,87774,80898,81693,34198,97900,51843,25140,73927,27929,72198,71334,27700,76147,70106,86321,11688,92112,63536,37373,13418,31112,53454,14073,86405,56673,32818,77287,86067,48109,68693,74138,92446,63826,18832,84848,40582,34556,32223,99776,54786,19441,38991,79521,35414,81648,86202,51805,95635,33323,91610,65505,65916,23727,87006,26151,19912,55192,66224,44733,73032,10392,34418,56360,39688,48418,27815,98492,61397,63788,76067,72522,52716,62966,76369,49087,45088,60715,30657,53561,64014,29930,69677,42435,44727,79448,91042,98972,36839,73379,64171,50268,15756,34377,90895,21128,74756,90524,88383,60967,10869,32360,93284,89953,48866,32501,81937,54198,87915,33947,99801,14112,86796,92661,80503,35130,13377,57256,69700,97708,30114,60836,67857,73960,70710,35651,17355,65263,21912,90734,97888,60969,94483,94797,95332,22609,57854,30025,60089,41100,87094,14480,32235,38620,64680,84778,38348,52423,86516,76314,95586,54665,40649,79653,91586,23175,93940,24343,43698,53465,30042,84047,11728,69533,83432,76454,83789,28248,27677,21845,63637,76713,71609,32670,54232,75740,35662,64257,83385,98732,52596,26772,25766,30173,46389,71916,63947,12013,95068,22331,97662,18217,90367,18055,26891,71469,39550,60047,85637,99298,92511,92276,13818,78419,87136,37552,96029,26079,77283,69690,44873,71847,67576,16195,69033,45412,40377,26548,92924,93776,82110,87589,77103,21099,94740,88554,25225,88518,86405,49295,44123,84796,43771,47508,11650,80715,40405,53311,57486,48407,22064,27137,33902,42152,96242,73624,59118,11755,93370,29326,17701,49515,32454,60540,70080,15950,31486,52148,54505,31913,80885,17281,35607,66655,15231,41098,60135,81660,58466,83848,27544,23244,18786,50288,55029,33135,14962,20701,66066,41114,51208,24022,77284,67039,66645,31656,21145,55789,64831,25455,64963,89553,16919,79195,76426,13188,94473,73376,93675,56519,26466,46185,59922,19330,30792,32774,40360,89487,91609,22700,58651,54231,83713,84243,75344,99025,95847,97682,82932,80926,17816,56925,67339,13080,19279,85583,73556,85150,14874,49808,63527,26186,65843,27893,88657,75180,74434,44156,76284,82572,30165,10690,88495,50208,95122,79801,47056,58488,19505,72494,84416,22974,26722,54298,61663,32596,22258,75432,91385,16719,99572,59613,97143,89942,24717,72971,79956,51071,97749,60314,68110,40427,65340,30062,10484,48328,36323,89446,22254,20652,64257,45884,58392,89097,63831,86386,98101,16002,89757,14382,80872,39194,45676,43932,10538,74020,15230,62234,22196,47050,60097,14315,81867,89260,73214,30767,49751,94907,91736,19762,14797,70157,88114,79072,17497,38220,69999,80068,42192,19682,83356,24411,49011,11666,93282,84693,60617,21387,25847,33533,42742,28956,30258,89569,12481,77674,74733,78928,85855,69182,43582,16352,63693,36193,84899,11636,63052,95770,88085,82006,24756,25913,28270,85888,77301,35834,81820,92356,19558,69528,30876,29165,13280,49758,63316,98136,60714,76070,16068,53730,25365,65989,41399,49624,38153,14341,64317,17217,32724,37939,78173,41278,19767,83016,85420,17553,32975,73042,89824,77857,82883,46374,66644,61206,73783,92730,62109,38495,63059,23594,50892,62501,21048,38786,98756,11563,50626,34733,50740,43295,25383,42283,11082,44816,47876,29095,47966,42846,98536,84387,98511,96125,41253,64914,70085,85747,30776,92439,48199,64988,99817,94008,85158,10633,72024,41235,66202,61043,19811,62493,76014,90800,93147,55868,10605,23929,53210,25448,76712,34220,50883,33177,18354,50537,14724,30529,59662,96352,60826,21509,65654,73087,26184,19423,46444,30758,39422,33316,88087,62490,89594,22905,96999,27693,91198,90756,70361,83177,65362,87165,52085,50067,54780,37163,55653,28815,93445,49048,98650,51258,72798,48930,33005,50350,59440,23178,49412,50495,69060,44917,47888,86735,33090,93985,90510,49524,41667,60152,71827,59631,68981,26343,53155,34656,69312,63680,69857,90345,60917,67578,92617,70406,63838,36926,51168,70029,93601,46703,29171,32057,19735,41019,42704,65759,96656,19010,98444,77314,22131,58845,41398,32289,20054,20606,46746,37175,80631,13199,87241,19610,65267,92546,92821,76675,17114,58869,97423,79782,87418,34483,25532,21809,18505,87999,90573,60045,30433,13665,69250,13288,84580,81908,57782,47756,73670,99632,64940,56553,34539,64199,14105,97029,47881,39769,82046,53486,75257,60366,29016,31595,93314,51662,85591,31722,11856,46783,33808,61489,23687,36553,66683,46774,89792,77788,93683,78587,42716,83154,59383,34307,62675,48478,20837,50903,76612,27018,52782,61620,36023,97059,10692,31083,86803,35892,64248,61140,20063,96313,28277,59457,80453,81919,74269,55250,72256,60251,26084,10609,19436,65162,28020,97421,70150,62196,81693,71048,47205,32051,80625,52761,44507,43259,83125,32031,96050,33653,25245,71792,30670,79406,42917,63362,63784,27980,30350,21735,15203,52040,18893,45109,20754,27120,98753,46408,83244,91539,47992,69947,17273,95506,49792,34966,87465,79742,60566,22375,61595,90793,62039,75761,55548,67022,56421,49250,96716,97332,98850,38097,77176,41828,18020,63451,89761,49769,36948,66323,67332,59210,16420,49719,62645,27935,35900,14854,16560,59855,55783,88060,35807,98759,44825,39246,71689,71116,40777,53257,20516,29689,97196,37201,53101,60870,68556,91888,31928,67069,39957,72740,21765,66088,67257,69684,55154,20330,67490,97384,39375,47660,99234,21923,66611,49976,41809,71598,59397,51377,55286,13250,10409,80535,95318,67167,21228,10209,16755,13117,93534,23440,56073,31662,57858,27403,46399,67332,46797,12489,91999,88050,90361,86608,40470,92039,90509,55295,12265,23280,44563,83818,73793,82229,60613,10373,38754,21325,12336,14105,79105,88245,99707,84853,66501,51335,90253,98091,97281,30874,37974,61734,40219,13916,16637,64596,53610,73697,54108,53954,41738,57715,18365,71718,56554,17097,24830,80193,41463,13017,36859,97581,30685,55858,71649,62169,63102,82932,59027,12885,72013,40636,25307,64506,69188,12166,28819,23641,64145,19135,40782,34689,66868,80885,62890,27258,12941,69681,55383,89606,70895,28874,87476,85963,97303,35913,77408,63174,99449,98189,85603,36825,17230,30674,87846,58141,10545,60771,77072,63477,72098,47067,94314,39027,54467,98998,84978,44578,72512,28301,71272,49013,45058,50482,43830,50795,34350,13511,75980,95716,66025,37137,99846,44496,33501,91691,32283,65790,82762,76232,66666,94487,88218,60277,43754,72781,36242,27754,35072,92927,40812,58115,70992,16965,56800,15554,82153,42467,34036,48271,30065,19037,58019,25445,36099,81000,89518,28144,32283,22313,84597,42134,31083,32225,47810,94418,82501,29678,50228,21304,10618,60882,17582,88728,34341,15755,61267,81460,22935,35642,48661,62178,33986,36451,64891,12373,74858,92856,57352,79119,19464,39792,70649,48462,52271,25192,58279,13427,14410,55730,11408,48952,78981,50666,84248,50453,89294,70021,75712,71291,25555,26435,75694,77948,48123,79300,10551,42362,99340,13939,12415,76635,33256,88569,63291,56351,14888,20092,56517,92886,85922,47651,27412,44380,15397,17736,49824,24286,33424,42026,88843,20299,58141,13858,22326,99325,16069,84505,27813,69566,37314,28074,80221,21720,98973,63960,65327,65957,92912,22384,51228,76930,50712,97573,95480,97984,26750,51855,11459,64621,33716,91757,20825,52071,34242,72091,20541,44630,30307,22057,11048,47721,64744,78820,88112,20615,77517,39289,53910,34881,76275,85061,45368,81511,97409,79478,25065,37512,30888,72815,73241,71401,41442,59911,80197,66857,44762,24038,51626,98529,44413,76101,29363,25586,59301,45192,43925,10302,96415,93668,18176,11945,24492,61929,88377,12048,71873,26397,56791,37163,58957,85636,41667,77073,81926,56594,95411,34176,96872,67427,15016,39344,20258,18076,57536,24450,36748,55953,73334,45129,29599,22749,64232,67566,62516,67372,50101,69997,11853,51642,28835,24390,51512,93491,76634,95771,47030,29595,63983,96456,19490,13938,68288,30755,76753,66096,66898,83017,92259,19784,77843,11441,82093,56332,95404,17308,87114,53040,32361,68994,79787,34653,88551,19998,59140,63226,26654,54555,37595,42329,27434,76596,96508,74485,80848,65482,41845,70781,32112,69434,44367,68935,90695,92661,53600,63151,11566,73704,39221,72393,34402,21136,21945,93837,52732,82879,77119,26652,92697,50006,97757,21278,96766,50723,75552,18956,84914,12961,94089,62213,98294,16477,17921,38295,97495,29659,27242,78877,91805,80401,70363,14646,73444,82598,25512,67116,35170,34561,14351,79389,78007,15449,98867,19843,64932,83848,51516,86058,92862,27098,66056,75454,32170,78692,69125,86700,77713,24143,37411,90390,71843,30272,47085,79129,78098,28822,56963,88950,29525,21226,63687,63269,45466,86847,55347,51050,29240,87290,63840,77627,48761,44462,39609,84341,76621,30604,56593,70619,82216,39322,20770,89404,85802,27185,71892,21989,14275,66847,12537,86682,76557,82167,14103,45754,54951,17982,96032,89445,45893,14077,96282,33963,34885,82140,21081,49060,44444,11338,47339,91843,66457,99824,32916,11653,43492,11479,62308,40295,53582,60587,87024,67631,47703,15204,56404,54491,77735,20335,37434,93209,67911,33699,74984,55162,36405,43091,72332,23205,11796,58641,35527,39379,11662,19353,74814,26703,88043,79927,89548,52029,41191,78195,27849,44222,91044,91340,15780,83580,98847,56042,43424,60386,45567,70801,43208,10275,59010,95014,74838,25764,71879,45929,75936,47891,26813,47527,23375,46687,10353,50617,50869,59556,23192,97508,80574,96132,16175,22931,86954,86823,16059,28810,43937,82174,67042,40943,95255,83507,37581,77491,70845,41736,37210,85627,42613,54287,87524,89902,64956,54805,28677,21599,71724,68206,81340,90243,89131,44493,25766,66302,96074,84068,93713,54255,89824,52581,62525,60120,59225,93466,11992,35034,14616,89476,37970,33643,32167,50849,17125,56429,99965,23474,59861,11159,23344,41654,45198,38686,62298,21317,26049,98274,26274,48914,40849,44420,96844,56584,31936,78520,62383,12755,76255,33580,48492,48905,30296,87597,11942,58812,49290,69809,42204,92387,79025,28721,36316,29511,92140,89175,19222,11596,15246,84659,12003,37630,52112,88973,57331,80563,92478,46168,53806,76254,69564,99244,26445,52912,72750,51303,54501,91220,27124,42830,10363,43297,34734,97490,18195,44478,66383,58832,47787,21990,48897,47817,33233,24580,11685,43518,39170,30375,61825,60811,48222,95453,19529,43143,93909,47747,84606,38004,17846,50196,65751,64071,96068,57996,34675,31072,41785,71407,32642,55610,19927,50261,55659,70949,96454,82517,50932,14772,94513,83615,17102,11418,71991,42030,38991,22230,10572,62557,53403,47306,87284,76106,80336,39585,93903,39777,59741,26833,20205,56259,72859,22355,41107,10579,56078,59313,15809,12885,46424,36030,59782,48014,57512,84089,44221,45735,63944,19873,95139,34649,46910,74137,90580,45734,94431,49903,33163,91108,96870,25300,62950,33113,76794,37518,72366,82229,30322,75258,23640,88588,72610,80762,64330,12044,24364,82585,29499,64560,79234,84275,86327,37383,46281,80614,43667,89767,24703,75533,52693,26869,26742,63635,16029,52627,77086,59737,21325,55059,36460,90704,18314,68863,63888,89817,98502,67612,41473,73804,31587,41220,32743,99377,68595,52861,81926,11159,29945,22214,77861,86218,19974,66606,50538,75535,66515,16506,80256,52072,11597,34193,61196,45870,34280,97462,88473,65771,76441,33440,28775,91018,76608,83529,58597,71236,78986,89837,97765,34024,34839,24433,28533,93439,39140,88825,41989,82379,63615,72684,67213,29456,45493,52026,14435,41310,24961,35519,53526,73771,66582,11893,77486,62638,34001,78660,13815,76930,44224,85257,73819,28578,98850,38293,87557,85341,87983,47866,89221,27824,63623,87698,47788,72152,49884,63150,65096,20093,22107,52217,88912,95745,94494,20678,24561,38163,73480,35405,88237,61606,45343,72427,65747,94321,64680,82934,75998,92875,37287,35053,83014,74284,40883,52487,37566,86415,57184,12578,86394,11841,30738,81967,89323,73916,72733,18545,75649,48317,61615,12428,52680,95807,11508,38605,20013,87198,57006,93899,22601,59597,21896,56399,83234,97263,95344,44193,44709,45106,76917,24727,43239,29963,25921,26206,57651,44447,86049,12240,69615,86280,91955,68861,13344,28728,95776,30180,83574,66976,61127,68878,22747,88939,17382,35169,29056,40986,33279,32079,74679,84550,92266,78462,86528,65095,28641,58854,54108,72731,80078,32044,79898,61517,52718,80676,93361,32226,89485,25625,47111,10320,85400,40444,49730,13372,83538,90747,52052,22608,29439,13532,12588,96705,95574,74013,70773,36611,53533,35762,71640,79182,62101,51898,99572,36385,71517,98292,21148,71803,77485,51191,86667,93620,83051,52283,87245,66565,85692,93277,75010,92344,85545,50160,72853,75811,15727,56207,99221,39143,63986,91908,97312,41041,72061,72378,52919,89523,75366,24224,17390,37620,17650,44565,93948,70118,72988,49515,79339,76138,74988,97744,63361,83500,68792,64402,89010,86859,97942,82275,90500,61074,47313,60055,78933,85219,22582,98725,94775,29583,83119,77613,96115,44867,45492,89571,38087,96607,62575,88344,87571,49771,35142,10028,99104,93059,42425,80665,95157,20887,99603,86445,19401,39383,27507,63092,46678,80919,49159,84530,97654,88745,22637,53083,51567,47862,97019,15226,86509,25818,22254,32028,61913,75302,64528,53824,92415,84273,51574,53899,68816,68982,13254,92639,92099,20795,48226,79178,88072,37042,59014,66018,72484,60082,25735,20216,58228,87490,81987,95813,18310,13190,93591,84814,45935,62874,86521,25022,51541,21388,57314,73493,36689,13097,25066,45764,72395,80391,73203,49209,91345,44257,77662,73482,36274,10775,12742,49921,50813,29378,68965,90429,49635,24141,34912,77538,45292,88284,97120,88513,66608,27262,59557,13876,80724,72390,77562,13692,25321,80743,80148,58530,89629,24773,67201,20615,60711,76000,87951,74301,84624,26054,84463,28276,54530,10934,81988,55795,53612,42686,93810,65077,35276,85545,82188,61424,58916,46889,52622,43082,78260,67173,19820,70971,26710,14248,46083,99143,25004,83901,74451,93621,57769,98672,75699,64618,44394,36960,12127,45287,84865,20083,24645,58797,12670,95064,98795,32676,70927,57997,23511,13255,30698,49168,56035,55854,18862,42686,29759,37007,84931,92437,42521,53377,79192,65933,47762,60967,87181,26502,59827,31056,74624,23060,85434,79543,61316,34075,91920,78704,51506,18685,79826,84749,71392,36993,57675,11002,71596,57254,89268,61626,82550,89469,11248,74987,26710,37377,31743,13648,35929,93229,46103,22884,56050,34738,70152,82832,78571,67911,85351,39976,82447,13230,96115,89026,81945,56714,32016,64037,51087,34906,10371,58846,19459,95462,47722,41688,99823,73176,57667,36554,72014,70766,36805,46176,10196,61106,24138,30167,36946,36291,94047,48629,31776,39133,21403,53422,80755,93433,75657,83787,51689,14913,96549,56267,84884,82523,97745,13326,49650,93827,99489,74721,70889,16946,97596,23306,97962,59311,10233,33178,98576,47479,63151,74526,20976,98423,14616,39273,31722,10708,12252,18091,87407,10562,81087,85655,62847,97630,90781,44308,36386,85353,93346,15599,78381,10813,67459,48409,64765,63355,27198,75502,37327,46290,31513,24131,32813,47450,63783,57955,30801,24503,26697,54201,53835,70322,22967,30496,35970,32396,93492,68043,56217,86099,54902,80422,41488,94863,27404,60379,48049,15347,62441,78657,85670,65106,63039,41230,20690,42421,46621,93437,99217,32775,13835,60025,15185,79778,67015,44924,21247,27415,88817,39627,24490,96195,66807,31336,96676,18655,47162,12127,54780,50941,94856,39501,97384,72607,59541,52803,21605,51816,87378,77492,60122,58487,75922,18202,92715,57136,64938,76059,92710,72461,91433,30498,94069,57344,49294,49442,16513,15566,58412,89762,59619,74323,82091,27147,94421,16037,18530,52046,18633,74132,91627,27690,66940,25664,91759,29380,30372,81073,87884,83275,69466,56736,91124,92390,61343,29398,43941,23868,13515,21405,24919,50613,50464,96221,41315,91822,19517,21311,65198,50015,11452,46423,57554,69895,75948,39392,66118,32451,48739,90204,95005,87660,10410,44709,28226,25140,21791,86937,14830,44054,50649,89423,51415,98094,24990,25637,23332,77238,95291,35413,91758,80534,66310,82395,32000,10720,52889,86017,91903,37055,57152,45490,49640,47436,22266,96173,45385,97779,17892,10072,89516,27050,88386,36835,60852,53042,46656,27787,66245,55851,38905,23910,66917,48418,44441,94288,54609,12234,39511,39566,92511,12257,49606,28592,56659,28072,68510,41084,55733,77708,93520,89751,91649,90204,77674,99086,49333,35000,17991,30191,85416,19121,91261,44352,37558,13016,69316,95208,98109,93362,57896,60391,74091,14502,47250,11021,69592,40745,94709,21302,96540,55954,83862,51110,40524,79613,83916,27448,67302,56918,23464,34017,64348,42365,46887,96462,74326,80979,82859,69288,35707,58368,25746,91137,53254,51989,28235,24935,73458,10163,97889,64186,22899,11048,10011,53455,64007,64329,84756,88572,24664,97303,88763,76590,44040,98845,74380,16803,95924,28740,42646,23013,80688,86536,38391,17298,49240,25367,37670,43680,56351,56416,24485,84614,17415,68073,65936,58611,29681,85670,93605,78253,20416,23343,90467,76069,75545,14550,27969,42823,94029,40796,57130,30247,24988,67419,64455,38308,37012,12872,55016,93020,94155,29536,86867,39106,53702,50666,51984,19080,38725,83896,77895,28322,35684,38742,75050,32839,52316,99026,56157,62452,75677,11514,26971,34649,81174,36358,87315,67521,61904,81941,99303,78984,34516,78458,95675,39947,77173,64655,74496,82852,80311,29598,95264,90240,47379,30450,24782,92604,88461,24462,61345,16168,45736,74527,81308,30025,40499,69336,55458,71459,29656,42100,31913,10382,29127,18998,13236,85295,81088,54583,66304,33829,71531,59110,24070,57776,41796,11137,85702,76594,12634,15540,73462,73517,79120,68709,91814,23902,54630,81271,74866,12442,62070,80528,38472,48820,88802,16945,66354,21730,51627,82543,47120,96750,40952,66882,35564,92475,35310,51107,64755,76511,41620,49642,86643,98900,18897,81491,85690,63898,52074,24060,93366,94245,50715,37677,77906,89659,89399,19037,27135,28564,84221,98371,24397,61667,53702,33219,30525,71802,59335,90120,65358,96808,87005,26868,60614,19352,49870,92841,48909,35356,28015,45828,59611,41779,57492,48702,18122,57057,71567,89311,72896,46418,68435,98360,17012,19149,20815,10339,11553,56850,45898,14314,19833,34995,30149,35060,45866,43914,28534,14310,20856,32207,27715,48034,63156,86732,34777,96325,73685,83157,42114,97740,20051,32163,65409,18099,73587,99157,50855,47295,78098,77002,69947,18578,42076,62758,78186,91779,18829,67163,35786,30782,65124,69415,98996,41273,80553,38995,79404,38387,77818,82969,81087,90951,43627,11591,40016,44113,55362,83743,84703,99030,49171,41200,59574,99975,63076,25278,19753,58387,81032,36643,59290,17072,13541,33540,67071,77070,32838,51242,95596,70462,56869,55457,17902,82357,20834,92670,12128,27658,15409,15532,49311,96889,77543,77623,32126,38272,46579,73026,27170,47932,21286,61423,91991,91488,10837,73586,87765,74437,61257,56385,54120,38880,41854,95055,34101,42167,11892,28177,62503,34919,98783,41006,74160,30084,17159,91936,59971,24495,48639,50599,57504,57624,23155,91811,40016,65524,14875,34449,32672,70859,37465,59361,91939,37756,26050,41572,35510,32838,31760,26026,92816,42332,27091,95020,38368,74464,69751,80624,71419,65841,19447,38113,22254,77113,42260,63581,92389,37495,54601,87120,48373,79738,98845,13974,63159,72507,94740,38698,87815,23701,86183,40181,30833,72330,31198,99836,74418,83344,66639,53103,53718,86267,21550,32130,53903,92881,85929,66872,99042,52674,27322,19982,65326,81026,34131,31931,70074,32363,22311,87744,25690,48142,90110,18720,53134,36713,67137,87992,73698,18777,46035,29558,87899,90316,79311,78235,39476,13387,18495,50848,45410,82622,38652,46346,67657,60826,19532,42039,94487,19927,87163,39088,76153,91902,35961,88568,82072,20138,78088,32356,51291,44200,22216,54002,54841,52271,79159,27506,70400,46222,24453,24804,56303,66415,90931,99553,48691,23057,38079,60310,78104,18992,44548,79724,56582,82818,78623,19977,27143,13817,46770,49880,47965,89617,52835,70534,91053,39259,17948,56012,97432,97447,45272,63569,59165,71849,81334,91118,14113,91900,30236,30176,16780,88259,17786,20567,96011,80493,40651,63903,57362,14233,68948,26614,63332,97465,14303,75363,83964,60062,99363,53299,78316,65483,52396,28754,92798,85636,96603,49978,45936,76613,48671,51908,14299,32441,63594,89026,52299,75792,47652,97447,44672,70646,71686,15809,44875,45358,61158,49897,75180,28502,17174,90478,16866,12847,10486,33066,86429,54910,84996,25291,42210,81541,73452,23587,83971,28384,22740,38582,56456,43467,77635,39090,97682,28499,81913,65405,95173,70771,91639,38108,57128,48861,72112,16534,18918,64281,25724,85599,46701,11181,22711,37985,93038,69525,46085,84368,32871,23885,78876,41024,79827,14503,39138,37206,57652,36845,88294,48727,92170,77886,18114,38706,57236,23824,82577,69322,90642,28335,18567,73661,52145,93295,75551,30812,85352,12001,21037,79536,73606,12753,28693,13689,75558,76333,92899,98673,89859,25044,35021,86559,45310,41859,24495,31496,20452,43253,53478,30980,23949,63695,62864,17883,65143,53400,11710,81823,72156,88206,21449,68232,31842,74970,87315,84720,93289,34978,64109,60617,48664,32467,84539,47839,42192,23462,73660,97849,49234,43878,34983,38586,59636,97028,68333,48656,31350,71759,54819,31445,58638,46263,42627,26239,29195,64192,63751,46366,43180,20849,46556,31006,22972,83738,20191,92088,56138,39333,95036,74063,84084,79557,56635,28223,62157,49172,31425,77187,66034,74488,64375,70525,85841,41137,15835,19655,11540,54966,23548,43942,83401,72651,27016,71238,74167,93136,90540,22278,73011,12808,81514,77541,10393,40201,66787,69517,85699,90545,85252,31743,90482,61853,97472,78455,87793,83509,85068,22900,98200,57468,10535,99015,53957,75950,58741,50610,65912,78477,72492,50859,22458,37169,88585,93794,23868,48184,39663,96796,56902,40929,53335,74936,73350,67337,77932,85723,61111,21109,35893,16429,76050,97458,31809,86023,40993,87302,76783,32892,51157,16178,73172,51019,32551,35766,77321,68896,98831,78305,60088,65260,11674,97630,43557,12959,83309,68008,13633,73715,49718,30168,39147,20203,53313,74247,88930,85945,70075,89437,35083,85370,12586,60517,41591,98383,55130,50665,93558,12651,61602,80276,43704,91835,54110,77099,54224,24667,94110,39954,46168,50371,76090,51239,63386,46951,46028,42660,18689,20282,81497,51048,14001,43738,15436,40445,36907,86429,86691,87252,35092,85307,70545,74476,30091,27194,86961,40757,73834,90217,68355,99009,64349,60986,67336,18476,52769,81356,63585,70698,73310,63670,74504,38090,26390,56431,87989,36987,66557,48384,60528,90376,86579,26576,94927,36294,51517,24357,94486,51506,30693,27893,72382,12975,19298,21034,43649,78695,22654,17601,11593,87461,88904,99452,19220,60001,34249,57783,33942,48806,93887,52973,50784,28074,91956,15625,69526,22364,48391,36944,87013,80067,16723,83509,21642,58887,10058,14154,25696,90807,43936,34332,89534,54372,62186,70182,12963,92270,19417,21064,20728,27280,49914,50963,60653,57504,95098,12645,32888,85201,69459,29015,14301,35713,87683,71207,45147,34512,39963,30731,65920,26756,60961,21778,53564,83307,47985,45211,70093,16465,53276,45472,19615,26471,51547,50347,43616,28933,36739,76952,77687,21436,36615,94077,41601,34011,86926,14103,74090,31748,81586,35051,71846,19532,34902,42496,92116,62177,27908,75676,28503,57900,32675,53592,13406,84689,14719,66272,95067,89970,66903,17028,71163,12919,79278,85734,73573,99265,91651,44136,10780,48646,63848,88152,15716,82572,13198,65297,65162,67538,10691,83075,65129,83227,22103,39326,55243,44269,42003,14111,60177,13628,55814,92949,87424,88962,68900,19150,70967,25063,50460,48758,43611,40527,58531,60647,16422,75541,56018,91546,13094,16708,85944,39762,93879,62113,32077,23932,44481,19707,60450,21854,50739,58305,31069,23118,63995,48654,99165,95217,33029,17760,54205,99945,27796,18467,88633,27841,44242,87620,60202,51676,23288,62757,46733,36410,23467,52535,75272,39481,61774,23376,53240,95229,18308,74327,55271,86490,18057,24749,22777,99945,22915,75627,28641,73799,64908,17938,80301,93822,19547,15229,17734,58936,83621,53984,12938,17668,22929,85734,23779,93159,74119,18635,20781,32135,68063,21003,15514,13463,25030,65133,24597,71846,23222,72873,60430,77637,20040,14535,69205,70676,44940,85686,38720,85724,72455,29903,94097,99580,47867,88235,29773,96031,18988,62320,35114,37302,57170,28225,50671,23043,78352,51304,10722,74053,35837,25911,78317,12721,32486,41840,24149,28126,28238,74313,11423,56822,26827,89121,44592,91889,81302,78819,64840,92554,15139,24824,16113,17239,69522,83287,23414,11633,66740,87530,62447,40775,20623,17473,78107,93365,88513,61385,69877,72705,23193,44315,56814,18201,76451,62233,56196,86775,82122,77937,40220,76235,73206,53268,66905,44151,31634,73445,44345,76124,30628,47683,78507,15251,17663,48165,42844,48884,77511,67213,62556,97622,11084,33336,93447,62743,71261,98467,75198,30237,23762,18543,77606,35518,42837,45525,67631,89853,78368,90027,22300,20987,81386,77802,60261,22215,58002,96893,63571,67261,57747,47054,15696,26778,77497,32435,75946,23706,23730,13462,26749,14933,91724,96724,62235,83812,20703,64790,48012,40092,35974,45768,69134,45495,84432,45278,14815,83711,90816,38080,28178,62898,21457,22969,44759,47328,83074,65456,53731,34522,74784,51610,34828,14733,76618,54260,76591,43642,88821,72998,48356,84580,90287,41009,89678,22808,90034,52814,61452,76872,75543,47263,86828,24892,72975,91933,37094,90817,95859,54790,59973,18424,14555,72616,67875,45339,30881,99065,23842,28410,11848,39192,88787,23228,35243,31942,67424,78974,94031,86164,19274,15899,41526,79989,50259,17369,91056,37040,66373,41145,83469,74320,62061,88224,23308,92275,41557,30070,92638,39248,99506,66806,18829,17037,19100,98807,41867,23076,24592,83604,44427,53327,71795,37004,16591,38057,64362,51481,87572,41196,74979,46588,61084,60198,71092,98287,92777,70889,85113,83628,53788,44026,14012,88157,68174,81629,77835,88958,87869,72768,27179,42774,82155,96038,88930,50951,69792,45383,61465,63365,91445,62501,70377,67840,72664,48428,61101,91649,22107,54276,98185,17032,60427,61542,93089,44643,83012,25546,30863,35812,53254,80162,15155,64083,29288,83998,99281,82687,60649,53204,88998,16463,92402,44006,70846,44734,63794,21316,17179,25152,26317,87175,72865,18971,13355,12870,42489,45317,21665,81101,72274,76778,84459,16619,80097,74023,94345,25896,71139,27377,16793,15205,49404,43721,49864,22498,63450,46243,89202,31639,73538,20600,66381,61326,21735,55511,78279,76389,14337,36211,56733,84294,62982,14597,68991,62875,86740,20518,14098,78949,25247,86253,52772,85379,38139,79308,13530,80519,47085,20088,59239,11339,38153,86654,74287,97573,32873,44173,54220,60248,56333,21170,93334,78933,85208,71518,93487,25515,23947,20780,14443,73910,94488,89504,89910,34595,34006,68074,38041,86714,83471,58729,21139,82691,62520,92768,77148,53855,57071,47641,91612,73407,97907,60644,34707,71711,74028,64399,22067,79022,74751,16753,59712,45300,99054,67141,34543,26963,84601,41913,39727,36824,45379,73918,78070,43460,95674,62545,77867,41558,84142,43061,96648,31246,62914,29912,60227,20935,98200,16147,62656,71794,79969,35786,31900,68623,52483,31316,73199,25650,36594,58746,25080,16666,71604,97699,28232,29157,95704,46160,36240,90006,64232,92797,86432,12140,83200,39176,60692,58923,24714,81159,58859,59358,73407,43262,63240,62149,95390,25494,85432,15650,93111,65098,13961,25814,91521,82364,58081,78216,79121,86296,11146,75121,39319,45685,16004,90939,78058,98450,52048,37550,73996,13479,13048,66785,85766,71411,47367,28277,21572,86719,54933,81637,28985,49830,10649,63427,88708,88558,62492,81110,36474,99355,11511,48769,10834,45619,30494,20543,92996,55457,40087,90540,35181,81997,87378,20752,22083,73000,36867,62988,81995,51046,10686,68459,66251,37293,32322,28019,97433,11143,29376,21409,38983,36181,87770,75824,21018,66365,83567,38903,28678,84698,55792,69655,16548,90477,89787,81458,32229,80386,20942,31861,14144,57305,77885,34595,23536,11423,34178,92075,75832,49747,63944,94562,90792,26167,10310,12744,18642,19311,60493,73324,61319,76201,94891,12584,37324,65940,30982,22885,82585,14529,40688,70434,26867,21294,35233,92693,84819,67532,49117,77478,20429,23923,55653,90391,25433,78711,65443,11988,79658,11045,20203,83185,15989,82367,17196,19174,26764,64143,72855,41539,72547,64485,82270,80701,54981,41730,43292,47463,83097,65683,88537,63676,67962,50819,62245,12546,27047,61854,48955,59103,20779,89152,59707,53633,33524,67297,82477,12238,87724,21546,37646,80669,10481,96523,81079,65321,60996,77106,72929,39545,23375,89100,51453,51188,12522,67545,50871,13836,25209,96757,34844,80558,24694,26281,42817,90899,14027,38501,66699,96689,55892,48158,31758,41909,35585,41526,31164,33919,62062,50228,66852,33337,76908,22817,21199,52431,36332,38280,33858,26014,76435,56617,34529,97366,54804,61555,92629,98836,30362,33727,62315,96439,11917,85968,15240,18977,79584,43572,50929,52089,93195,84581,25767,72623,15033,31286,63622,56258,49007,78411,72199,30037,30924,55247,59811,16281,40318,28624,68392,17135,36552,74121,85938,82565,15537,98866,56614,62854,18416,19098,29370,89089,55689,51577,14375,50969,23596,51055,65120,48243,88369,73658,70858,56786,80668,46136,38521,97503,12354,31537,70304,33959,41454,84617,53133,55884,28724,27797,64864,35226,87957,70131,15437,14762,26272,80874,92302,20413,50685,88825,97294,98394,77158,44722,82953,35181,40020,80535,31687,95267,66190,15390,45307,78499,69223,34321,68769,84985,61001,15023,41496,90302,54683,49472,65692,57112,81980,52716,57626,40671,88550,75212,78960,49620,68740,86775,64770,62472,55341,41662,29453,54423,48290,44673,14724,66707,16690,50383,23072,97166,74457,46671,35654,50614,16693,56052,69053,83927,93350,20604,25753,62133,89532,70437,40971,52180,48309,41262,57386,67587,83205,12909,28121,90129,64439,23187,26939,18386,90520,83847,41497,39309,80100,11103,94380,45165,74843,13064,20752,97307,98028,18704,37887,12053,72810,29710,85314,73437,11747,20724,28600,31472,60818,39602,18810,37150,58186,42064,65999,60726,66592,98919,79485,32433,43979,85548,82844,75081,47734,62735,84258,76818,54181,15252,59122,95203,43836,96146,98317,80160,76528,70985,90465,61450,45552,82713,29512,28788,62096,17747,84127,96249,73328,14210,29071,10261,79964,43236,36450,56544,66660,53541,65295,92319,48315,83915,43689,50766,51803,77004,42207,85974,80678,62441,51657,27508,85928,72140,74344,90218,88323,65075,10729,23487,72523,53031,63354,92470,45261,58579,99738,95689,62539,78617,88337,49258,83667,52403,86641,49538,61507,14490,90162,76469,50065,96529,79405,13807,60876,58814,22584,58185,79695,19550,60740,33151,62529,74622,57251,88508,24823,76866,64353,70144,29381,39853,36856,67261,34542,51904,13061,59914,38018,20002,94034,97225,15412,32090,11922,24451,58156,95114,80298,20332,34874,49053,45809,47691,83125,52255,62066,67517,45443,75729,71982,18828,42536,81217,27679,82360,47870,52218,99054,35012,86752,77744,48825,32815,12741,98265,39245,68474,70388,99024,43134,49391,63937,77780,96480,92107,60134,18854,32362,65779,94819,35850,16512,75905,79316,83176,15590,75515,28549,88716,52527,30736,52935,35092,19742,82113,18386,25853,23211,20813,63207,34277,90245,39143,67710,14551,71772,62242,48266,77278,47862,76316,89112,61033,18168,20261,94284,93531,74466,18951,89090,87940,91204,57531,97652,69432,13303,97004,25063,94214,52827,20552,95490,33320,94079,53911,52425,81968,83535,99976,37349,81461,43306,23427,12707,70416,74140,39849,95241,39322,76766,77234,16237,41663,86463,75236,13499,66186,17753,54041,40159,53755,26840,35090,75102,44414,32566,89458,78632,62305,36924,38090,43894,52830,37500,75130,76471,32912,66841,49463,87607,40250,77333,56805,48907,25091,11868,10214,28512,37640,89543,74982,69827,24551,10573,90348,28509,55732,49075,87212,78690,26770,34057,83391,88876,99526,29479,71607,21476,94432,61151,92367,26067,64890,19755,61530,41936,62657,75029,29169,48364,35736,88859,27490,14578,29270,79564,80987,12655,91177,81867,33355,93894,23189,49200,63762,94014,81131,87473,80270,36717,40380,79545,93660,55527,25447,47605,68152,56948,74588,45440,73560,55117,51487,31907,94674,37225,22006,90779,13012,36697,79779,24230,86170,57996,12223,41536,82974,70887,73185,88071,15370,82427,91375,12088,87851,43336,72262,78927,45931,91058,15625,14227,91219,11359,71490,87588,48222,18148,35135,56687,65525,72922,61825,21940,33928,55251,83313,12941,79319,75619,92558,36315,47916,40597,66628,28308,41792,75943,29397,43850,73630,81647,41341,26437,96977,79239,18766,89622,76450,56276,42482,89206,37166,82149,58105,60470,56572,15196,22736,81363,36946,12528,71566,51145,41108,27932,92124,90251,28571,25281,16885,21856,96992,39142,47347,73876,61739,54596,51209,39061,64076,52169,56300,55382,21656,55387,32372,49371,85443,72392,42945,95669,29200,64759,42412,86560,17711,97205,84030,79496,19839,12849,76318,12780,15887,82210,25731,70815,28174,24945,66780,26119,26890,99658,57971,37037,42058,34800,38747,92033,73806,15193,94761,39344,88249,76885,87731,36932,56947,15973,30834,48077,13364,94033,77819,87890,82876,89562,38065,47083,12627,93143,83748,51022,19896,71443,58511,99419,86749,45485,33698,91819,69474,83732,89850,89000,62995,33158,50461,53921,46729,81521,47082,53094,69665,67577,55940,82588,52788,35250,17091,15368,99164,68725,50678,17970,27556,98237,57360,40304,56821,70949,14975,70608,21915,48897,78622,43561,12759,73972,61529,40562,80301,50347,62878,63812,42456,20765,20186,94855,97677,33817,20052,86342,94919,37271,91289,78155,13105,56085,18061,77181,64044,80960,28321,14293,98561,43444,85696,65602,19974,61689,67797,90278,12667,72002,89367,94236,33857,18573,47202,95017,86978,66428,71398,39993,72007,57844,86697,73508,81080,80664,52415,79159,58663,19596,31167,24918,21959,46492,83097,60281,95882,63795,81973,82468,46886,46045,26276,43589,62445,86423,59618,19114,23377,63176,94135,84175,46314,53505,67592,61532,63268,80046,57063,63058,31671,89081,46255,43645,72556,63509,23617,28873,44427,84049,18421,15595,75763,39564,80178,77358,65870,76916,47401,13627,95662,33289,96784,22273,78941,40963,72097,58119,53320,12877,25069,94560,47906,52399,94582,73234,38322,45181,86239,57838,72066,70961,19975,72299,44522,34405,58161,10730,59045,16525,94404,44801,99894,11170,97701,17251,59637,40274,81479,31655,99412,53440,26412,31811,29496,16652,91960,63161,47029,55065,89153,60624,30138,56221,42159,73924,41188,66412,91946,70979,30138,61178,66780,49133,19278,61200,81147,33944,11915,57450,54892,37203,33003,21286,13178,85158,20042,34182,72150,40505,67982,94450,65754,50409,98865,49603,26696,85975,58492,77510,80498,46574,12987,95285,95002,85501,49615,17600,23479,15914,45682,10420,31186,49108,67506,45791,88678,54526,89864,13870,47860,81979,61793,70423,69031,29305,87354,18027,25297,50857,52166,72197,51050,21142,92710,58973,75153,23612,58205,87166,17569,36189,56043,45296,17606,38357,55516,66979,85353,34383,46473,32266,44254,11402,34826,19378,39948,72148,72100,40057,52852,24576,13328,83239,68028,50154,73662,26031,23604,33886,91678,73945,64176,57727,84385,86980,81364,49440,25084,27650,18092,97464,94874,84150,56861,90098,44869,93300,77895,16156,18706,89730,23966,77168,15436,79915,53719,14442,99832,15649,54993,59017,96146,93548,53789,28236,21829,66387,65160,29621,86990,19520,79056,10578,71546,33729,86641,37901,67128,21966,89675,84972,24309,19713,86933,78464,42591,49008,97114,38309,98000,86355,37942,66026,44867,97544,37670,72272,39764,15721,13947,39228,75874,53266,24206,79864,89796,63310,86170,43693,86348,64647,23564,24798,68450,29771,92545,90575,72068,86906,40260,24409,43367,15940,73466,24735,63273,82192,28717,76300,91765,83343,83950,21800,64828,33549,79048,27915,13315,65743,25653,85054,14908,19556,35916,73832,75117,20573,55036,98352,87745,42011,97371,29754,60694,57277,52706,23884,21400,74882,35771,30447,65694,62645,38595,46915,40011,71469,62412,74466,12148,58107,30587,27217,71123,93543,42664,49809,88053,36149,46446,91092,65613,38733,32850,66548,45346,56706,49736,93010,20600,10401,21264,63269,67000,79848,46013,65722,12051,46598,51326,37439,24275,37942,13346,36036,19784,89773,52659,17473,26296,87923,40629,77997,80679,92049,96957,12232,68132,49823,32107,31497,57636,98577,79419,37458,12995,17280,51982,62796,97067,37425,50468,29240,72894,46482,75947,70462,39795,37280,63098,56596,85653,39779,41659,46239,87877,51036,49489,58380,84353,18136,35454,73260,39325,32319,30524,15976,69878,80589,37477,50847,48367,90185,50216,68417,66615,14649,45213,98862,83846,33321,70643,66665,42885,77894,79358,75659,91541,11447,86745,59502,23030,10199,14874,99361,19121,32261,82806,72926,10393,86432,47754,60211,46204,55168,64584,44804,66520,10902,36876,64265,84213,71346,51198,11688,54784,18924,48365,64327,10668,74041,89839,64734,76653,23028,37026,19587,16461,90841,18636,66262,50835,54683,24545,52781,93034,92940,25165,83192,47942,87662,37731,73260,27251,90847,32153,94925,87260,22559,86782,69851,38517,64451,40160,56452,93002,63069,76581,81277,61386,47312,13903,16081,89546,92121,76988,94537,66163,70888,31569,86209,73589,17576,31331,47516,82087,55778,11873,74832,37812,86609,71532,34817,17897,22021,61430,63852,14695,91247,26307,42630,97148,23456,90902,78775,96713,36960,72557,66904,77445,65947,46660,75537,10547,17860,23855,17440,25896,91977,26223,71088,86739,44458,22384,97802,86436,92296,89527,66954,38037,52398,23046,54488,86516,45512,22261,95505,45947,96470,50250,20101,87827,43034,68548,48686,46819,72514,57066,13157,19686,53011,28443,60246,71983,29169,38631,24349,76949,20612,80735,45192,56346,17480,20715,71508,66286,82731,78013,22062,50315,19638,18055,41268,72640,60449,54058,12893,38826,75405,15103,25250,95038,96170,74303,80002,80898,13710,25374,19863,52085,74006,66580,51328,83573,59126,12897,96101,64785,44116,89952,95732,56372,23918,27238,34944,64995,13003,46214,63211,37238,90973,68724,76584,23762,99564,93660,63505,22077,44610,11241,17037,54302,95236,48972,41148,76485,94107,58979,24862,39065,98192,32422,67917,75845,24964,96810,42330,30496,93585,28297,74447,31855,19693,85998,50715,67078,39246,52268,41513,52870,33677,79157,97531,12725,20057,44424,97422,84715,97878,62558,75708,92600,85555,81244,55379,80458,72717,45530,31825,23706,75719,25344,82869,42760,45291,29570,67034,72998,11844,77432,83430,27445,10624,41961,27780,69930,76846,30296,22384,59718,28572,25718,64363,71464,89738,54436,28401,37987,91512,70404,71687,30808,29182,27933,38328,33769,30346,40580,42713,27583,87016,84199,19878,51515,29894,69658,73096,27637,14407,82847,34657,86661,55905,21851,85730,60633,20184,90323,32130,87032,38227,97421,79464,81404,21700,12196,99914,91425,21567,68105,50086,41654,35703,59079,43601,29435,47278,95823,23842,35887,51429,27174,28290,59096,11407,58368,19765,13192,30881,23820,29298,98629,39874,24796,43210,57178,15471,74506,25373,65943,11311,17099,59715,33437,38843,49186,56480,86852,43674,13857,28832,27876,58835,96111,32095,54712,56985,24716,19825,29098,55194,59828,11034,68760,71474,23560,56715,51907,79422,96148,49808,87616,79066,23590,20885,77274,63320,87774,78990,16287,89472,59115,29358,33024,33469,23918,15767,55865,25174,89111,85654,27916,10992,90173,19291,85604,90389,73310,31172,38975,88829,23046,13987,92679,34278,24960,62720,19691,33751,87511,64222,72925,32643,94021,99497,92166,31711,70027,48917,97240,43941,73862,38971,70586,40351,71124,75492,72265,92030,34277,59653,98317,18522,31049,61311,30742,42230,24699,31406,60488,58106,41144,43083,18449,17656,18656,64707,82641,19281,71955,75421,31790,41485,47884,64441,22579,35997,17482,81201,59739,21820,44330,27296,40973,84720,43580,34147,36942,24399,55279,90482,12280,44502,89729,17424,55341,67872,74028,21076,16404,13922,55268,79354,54486,91409,27280,82712,22663,17431,69541,25467,45502,16215,60315,86885,33934,34663,35539,14704,73929,91334,60515,71093,86115,87116,42300,44434,86360,59709,32359,33111,73523,81035,54925,61324,45681,49963,77777,21164,77817,57848,75916,73758,60815,34601,56584,66741,18381,98230,16275,80120,66724,63002,12883,38814,79202,90472,92867,98607,52877,70687,68857,69295,96514,94996,97106,31001,14124,84531,80971,34285,87944,88853,95016,75152,55656,48534,30360,14471,67930,75220,79521,31244,27183,22652,87878,30567,41581,43946,16847,60667,33836,31523,54028,39789,95930,30321,44150,66744,61190,13101,77836,32202,69700,73236,45448,36298,67237,60040,97613,97679,60130,31200,26819,47176,14445,60091,10048,30447,89895,44547,99694,55409,35438,60711,46752,76459,37708,65613,23675,74513,40738,62947,29765,18797,83916,98417,14800,64210,32328,84121,74094,33696,25443,70372,27722,78022,22927,85529,83120,68132,43997,62409,22928,90272,42096,88366,76589,85197,73258,90064,68595,92064,19103,47174,39655,27722,41952,61809,70076,66484,99108,32764,44293,59625,48484,25687,29810,41916,37815,19265,24244,46698,32323,74894,31771,21030,42659,68396,81598,91572,52363,16370,25551,67631,93730,95089,30219,92167,14496,26709,63392,48435,91093,71360,97206,11327,14687,12640,45637,33862,24642,83261,67083,38453,58124,41738,52151,56985,90904,49332,55134,11280,41309,33762,49726,89756,14758,66077,72941,39141,92554,44574,60381,87584,51076,34284,41610,50628,11400,21907,68076,17719,24167,35057,71981,98032,32274,19279,69185,48269,54960,96496,14405,71861,98303,96782,13373,95785,84094,20246,39474,35464,86024,39465,19765,55346,62940,30860,83072,33098,75849,63226,19154,78013,80835,65949,10674,47526,15040,61685,76038,13630,63700,37681,51087,90221,38385,35260,25348,47403,18624,87560,78849,48158,71392,93346,35319,87732,75824,74608,78311,70461,55908,13194,90061,35473,36239,14111,57513,34789,38311,87368,86144,47916,39078,68979,89887,38537,87990,17977,32465,58495,73518,87656,58127,68278,68697,81876,12866,69829,39101,41088,54214,39352,56307,10902,39789,86729,17386,26293,95759,12659,75891,77653,89416,84257,23428,84583,70800,15409,73870,32135,33574,97866,52306,40761,41165,36458,28180,37959,98601,42877,12578,50553,33226,48775,60244,70198,28060,12014,56530,83218,51977,11537,94811,48430,56435,51597,33916,85486,58336,80697,14129,13894,45527,59232,57770,63173,54115,92435,96134,14824,77049,29164,82995,51613,22590,32072,21502,88004,69844,43083,21167,29155,37426,43456,49592,34928,17220,93432,93584,99582,35346,27813,32858,61029,54754,25879,44425,95524,13860,88852,22932,53079,33607,75459,84058,63186,89705,90272,95331,81338,10809,22801,35139,87239,30943,78069,32494,40471,58089,74910,13395,13253,31794,30150,40342,20576,11519,38970,37414,57365,49149,64067,45234,83619,78704,60648,58243,26812,79205,38498,75809,63395,44364,15539,52035,22507,46368,18034,51342,96474,85629,22868,16664,26095,20756,33239,25991,14694,94666,19557,89000,46592,50845,73642,39685,86490,23297,68435,13521,37254,63864,26387,80010,95634,17297,69268,28383,94312,78274,74912,63534,59083,60173,21725,93067,24300,19926,58880,33352,34143,90825,34284,22685,51967,92184,55717,46439,54435,94488,12317,17978,52048,71578,52566,95400,73659,18858,93471,67553,98636,35100,14959,62667,72750,68806,41362,48340,43375,18704,31070,83737,11548,56422,92357,77963,55756,46725,23158,83549,32466,48049,69928,17397,75736,62138,56794,36006,49953,53455,32132,75016,28286,79376,35447,80007,34353,51711,27321,20282,87412,37513,17126,89237,82034,28787,38861,13075,27292,87897,87545,52700,19675,78096,60463,14921,61985,89002,62849,26585,33523,49327,15053,50481,12681,66119,83176,18996,66967,25163,35165,69561,82666,70273,29517,62140,16296,47964,76883,24346,64090,37011,30246,65714,45455,91083,89467,76096,65651,12930,71444,98602,56824,54179,90552,54503,54930,16431,71813,66720,83885,93518,57769,61462,37332,76307,64775,31873,23625,99635,49545,80678,45048,82419,22573,14157,96440,50559,54426,20559,52410,98811,94754,33083,39812,91466,47790,16417,95740,41626,18014,34962,75615,27056,63698,60209,74141,23287,97721,32182,55455,83259,93719,64697,23648,83695,40592,34308,37338,96064,84619,79254,78552,83390,46102,64536,15431,67449,17119,79094,28828,47493,47270,29720,92256,18323,20779,55146,19460,27916,32736,58548,55090,74513,94799,22737,10029,67232,48057,64934,40969,34487,75966,38251,82314,19282,63606,10440,85926,27468,99812,12493,30945,62189,85449,78241,59731,96305,47385,79757,65383,26246,18525,99642,25648,61392,73246,58543,25906,37534,33291,10510,33400,71462,43890,20771,53761,80653,41697,35202,68271,90796,82445,36678,47134,19594,69723,56529,55678,66620,94666,39352,92276,18729,93488,46851,22444,37162,71562,55721,69319,88434,11632,57073,43443,17805,57659,54827,43411,53493,80757,65738,71086,14740,47071,12360,85634,89738,16609,68801,77309,90788,64200,81189,30095,50658,76800,47320,48709,11866,67172,12098,75282,80555,35412,85462,31627,44197,24135,22491,69072,82583,68802,14982,34052,23906,19472,22287,79774,36564,93140,27132,40840,25867,34457,95336,47436,32151,91070,25931,18296,56642,95572,52362,47325,93492,68440,20533,60333,80527,66274,69882,19215,14380,24857,37070,29240,45687,19370,45666,20308,56415,21726,35052,93624,18697,34353,98841,35602,98690,88300,30409,85953,56271,55643,29944,54487,56596,28594,50019,61749,68173,53508,54182,55433,73755,61555,41577,42592,10711,63742,24921,13429,59640,46522,40645,95131,51132,49770,59343,57975,33352,15064,66029,74035,42144,69133,77137,63046,26238,63479,10120,27178,22269,70059,81819,99792,18843,57178,92665,80892,41406,92413,85860,24897,26266,12501,32344,87914,88490,39913,23972,96445,92917,37989,73701,60814,48887,83020,97309,61612,52232,59189,11608,89380,21141,44450,48591,53068,78489,20738,24896,83963,58981,37779,54041,14748,12312,25666,82285,30497,83170,16986,38885,80379,99366,25460,46931,54583,15790,40644,51882,90896,41886,81289,66742,27922,98187,45073,16951,79027,69570,57110,51467,25273,41051,75164,84183,47902,12599,18741,24256,50301,16923,88904,15063,74754,13588,13830,54735,48859,58980,86183,70891,46825,19311,83427,63897,21779,50548,96625,92989,54360,37525,56034,85835,10260,10429,77104,79016,63618,46966,79488,84619,41016,82685,43692,18338,83192,40649,20559,11272,26849,74185,11692,62502,23817,26288,72494,84444,69392,98266,70653,20147,25055,64975,49654,79905,70881,29149,13504,94769,59335,27837,54419,46272,20460,64891,64942,33806,10573,84460,54558,35113,34898,97961,86544,85041,89044,48012,60378,30830,44980,62568,16915,81514,58879,51677,99162,76966,76695,54536,92883,12914,12401,18251,65192,36350,19304,23119,94877,84476,94270,41227,92856,38183,69453,84098,45080,73908,80618,60152,88014,18920,40604,43903,70427,26239,57992,13922,18955,45793,48351,31794,36240,26852,20027,70435,82803,89086,54926,49441,19221,84048,33171,94039,78998,19601,91533,19473,42851,53652,72839,85999,69190,90074,61392,87746,13768,17433,60619,30510,55653,34157,29817,61193,73075,27579,60013,83903,52637,41573,13935,17118,96551,78691,37802,44335,35192,17889,75380,34068,30770,57275,75991,93656,29048,60958,54198,47885,55351,54733,84717,97523,77375,56484,59625,37092,11852,94392,77626,15531,28052,15621,82799,61133,91634,95483,10192,35709,49280,52647,80045,70176,34013,11354,57448,34880,20399,65070,83424,46911,76135,90148,27758,32318,51219,75392,94584,95915,78813,82562,69577,97349,99210,70567,70014,73119,64508,97795,44645,46916,87727,45732,90103,36546,35002,93903,81008,75035,68143,15332,50385,57668,67487,11715,50136,51074,87263,33815,31513,94831,97612,72913,61394,61826,38014,63514,36266,83238,74874,53148,40348,11749,67149,97005,53833,43395,51842,24173,39656,78431,10369,83213,76806,57071,49516,77274,34469,39962,37486,78992,48739,19720,14502,74174,90752,41289,24060,77370,29717,35263,14696,24530,53483,86407,98858,16822,31071,88636,62356,95738,80923,29818,51918,75895,23084,97811,19118,12103,67511,69740,87102,16985,47569,69109,23450,78420,83245,11576,69636,61789,84312,74395,26650,96363,17807,94929,88878,49364,23254,59589,11362,27689,73540,87349,38462,75666,11270,36076,12745,27248,91390,26089,60044,99752,78216,43057,98231,34398,64332,12026,77577,84525,77121,26849,46195,40092,33667,44154,81970,53058,67536,85792,64498,79155,85071,76428,93248,26044,60479,31374,46900,55936,22537,94872,24159,74591,14479,94151,59087,87312,75226,22231,31521,78984,56065,14861,66041,74589,84001,80208,18989,63328,83412,32999,56838,26180,59058,61834,58823,70861,25046,82554,45767,32701,77800,59615,61624,42214,18047,66569,44222,47514,85905,94266,26924,63764,15428,46189,78418,86442,82630,99981,10583,40007,29928,48547,85803,52981,64621,52361,45639,26735,23830,71460,29636,37012,30792,42433,47386,79725,74179,76092,26841,62481,99407,61368,22515,63157,41432,37890,94600,18621,63901,37193,98847,43469,87957,18644,84557,63163,39477,30071,60343,74302,25662,83444,89190,64043,96279,41209,88094,44892,92327,85682,49568,63790,55636,27828,91024,17449,45433,85076,24945,30072,59046,76790,52570,60341,79184,99638,17123,60205,39591,49200,81671,75724,24670,22880,26667,42873,93240,52211,11788,53603,86559,43189,10055,88777,26491,57511,54828,52559,92253,56497,32940,40205,70843,99557,25198,13380,34938,73012,43537,76973,38727,59937,69034,57759,67427,98328,38261,86471,23784,59674,98877,26565,24153,44433,20804,80020,28204,85191,25254,80006,86280,99467,58739,14221,66105,37636,55515,63721,43099,27459,83620,88176,23844,73954,21250,82088,28000,97421,10101,93436,29647,70808,20917,28194,89146,77510,19296,37276,42589,40823,89105,63654,74511,35914,89238,61085,91978,44182,67085,11393,21701,47385,61362,51882,67991,67310,70308,67739,79274,51872,65770,25592,71159,81915,33278,24385,95958,64817,53188,48996,78220,62105,14560,75588,58795,12274,46114,89465,67689,34457,66660,25988,21905,41122,10347,18280,95743,82914,23190,73346,51745,79931,13107,37014,96867,62776,59603,48538,79695,33724,59567,57281,83581,58487,19754,19678,70513,85844,13023,87219,99296,34688,69215,77214,70716,44132,71662,79193,48529,78972,71797,22501,42728,96676,12854,37377,33783,64584,71463,35476,80970,99115,88412,78635,31326,54186,24181,60414,73900,17913,11795,59165,84674,47748,14759,70873,37074,30342,44221,28383,52451,77276,21527,25830,42913,80104,92475,39699,20583,83428,98573,79353,81918,31314,42338,23191,27085,71282,38876,22362,25692,94884,21977,49061,97634,43945,44217,77102,93627,38375,56805,39720,72730,89195,67854,14657,43349,18071,20220,65502,43649,22833,36376,94521,82015,29439,15630,94070,30399,24719,21090,85484,81558,17402,37860,72902,85198,61514,43014,19908,17246,19710,38384,82313,74726,93770,50004,52217,20709,50254,20915,89609,48760,68110,38682,50049,59010,21713,87144,28597,17415,88716,68569,22397,23537,11975,54427,51795,40175,80420,41077,23782,28337,81891,61421,12282,43757,19362,38566,24136,56248,95893,36734,83633,32262,74939,81086,58648,21255,95441,24798,70396,78020,70123,11467,56796,83368,68767,93072,14067,49302,52192,43176,23602,23262,98943,19402,72496,60122,35190,41989,34954,88701,53624,59474,32636,83731,12897,42967,88809,97438,69341,55658,28772,19597,23403,82386,49605,36922,10476,25431,32994,86012,67615,39425,15132,65445,94569,83074,56450,88766,34711,67204,37135,25765,85341,18436,78032,17683,17606,86352,76397,84614,46987,14718,78888,14906,74597,74094,54439,55657,88955,49808,46227,46395,85371,24018,64397,69094,87178,50198,49468,64360,75794,20828,44545,91620,18508,59010,88794,11647,51433,54248,37166,88243,88993,97276,65271,16425,83805,39697,92687,54941,96389,25688,13682,36829,94718,49421,84526,40584,83387,47861,86769,18045,22678,38905,70402,50091,24524,29134,22723,48318,46332,77845,16231,40539,49643,70869,51277,17359,48472,67388,72636,21372,88158,28950,88031,31657,72471,58767,13187,59541,93575,26383,10735,96261,90579,48181,13207,92052,86495,54787,84223,11511,23662,21562,74637,42956,58654,32794,83720,69801,10971,48622,36604,46994,97723,56647,88420,88711,58141,33367,51013,27726,58983,64644,25867,38579,26145,79351,68710,25292,74996,13990,58330,98649,26270,39506,12330,71282,32526,32445,25472,73917,49604,15408,13737,63828,92871,36791,16397,79227,78421,12220,99265,20044,89711,93382,83007,77469,18295,61626,35598,41076,91047,25120,11987,84830,92285,52468,57024,85242,78820,43384,73505,46215,42811,89605,65403,37560,29549,45106,64158,67669,40216,31394,27651,88519,56215,76124,62467,40526,82739,32004,18233,68392,28478,69113,47293,38014,34920,82592,67013,54700,71943,60843,97481,55407,84945,31553,65002,76286,20659,87733,31984,85925,94370,37454,11845,93513,82237,35734,13710,57506,16759,17954,92701,70359,33525,35174,72534,17701,34350,10314,77069,26330,88668,14259,35308,18970,45103,32228,76146,59306,68503,68077,33521,60998,93815,62943,67065,63562,83484,96803,83746,17840,87760,81345,35388,73662,96264,93815,19992,38340,40863,40207,18946,17659,19842,62497,14175,33645,17022,63529,83205,95524,76609,47435,11264,27503,24457,41378,76468,57316,95084,50830,77364,83557,66422,23134,94538,72013,81242,98929,86868,12919,69056,54358,50613,17700,44436,33161,23426,72467,46823,63732,44187,83844,14045,90770,44029,96579,54830,81150,27432,40501,86054,29717,29983,65658,95232,29236,76590,73199,72150,91672,62068,25682,55820,87818,10899,20526,67748,23426,16797,54063,47921,56665,67195,69556,66842,38117,70747,40075,92952,27602,48140,34400,52380,97430,84895,12420,81614,34518,55699,84742,96038,63239,16618,86581,83634,34482,48143,53625,16610,88956,51687,53851,55770,23052,13859,37789,56930,65618,59884,34174,96714,33652,94619,38245,61383,24494,20932,19363,46023,45653,96687,73184,28596,87167,95385,41725,71339,11826,47375,30366,53776,53547,44475,39403,50496,38988,96425,73111,24539,61158,29434,85938,17940,66915,20053,56360,98358,92847,95388,92927,60607,46711,77399,74495,24754,32866,59509,39451,40856,66493,37147,30613,16350,50217,97884,21598,87409,86166,83744,16582,45411,42775,36898,33557,31598,77570,84746,97241,11148,71366,90024,90061,83946,68302,59546,68254,50957,41579,33883,68783,51567,12670,11778,61452,47277,61994,99527,69844,28442,77226,19668,69063,91756,96857,66678,54948,22140,46587,69003,76877,61218,38893,71701,46607,40503,16180,18853,61582,68032,86001,55006,20376,91317,21534,79436,84666,82887,88479,97195,27216,59593,44006,20797,24943,71544,76463,62396,99795,60800,12334,75111,76242,22170,93188,60853,64248,27014,27545,92493,58911,74319,69930,85505,54085,89690,94244,68261,91165,53506,89636,36946,51580,93685,62267,93658,96783,39065,46995,10165,46182,42680,73093,46254,51759,31817,28470,81011,89378,26215,45046,61935,47323,32601,60939,92175,97968,76394,87909,17512,90972,80732,58848,98822,25238,19157,22456,14656,48597,84788,96166,71295,37745,84100,80755,57367,85092,57560,42128,11413,58010,28599,56110,97228,70475,20669,41660,18856,25984,52424,82330,74638,18369,12942,70788,87540,50348,49759,34858,67626,50694,44769,72546,61789,65106,61999,21753,80712,35930,53496,11717,10595,51601,20800,39597,93543,63286,26004,36159,43143,60959,96381,26518,63515,76636,76540,62662,12886,59967,53780,15662,59754,54009,39825,18083,33618,87629,65615,13175,59096,45121,79139,71117,82121,24422,19603,85704,26132,50365,11189,19278,14255,68449,84251,31469,20875,26298,84097,51386,15495,22093,21606,75619,60133,27376,27533,52332,46886,17491,65110,12587,17095,38190,51488,96831,94300,87370,99306,22070,79935,28816,41980,89967,36068,50120,37176,51002,75962,77370,64707,97789,48514,81481,45777,78836,37472,37770,51878,19695,19613,23590,67639,94206,40290,42933,87404,91038,50175,32318,78104,50758,86576,61685,81144,12635,51357,39097,60381,92301,72171,63029,67644,66972,39385,78801,20693,21320,94552,25414,25192,33071,86260,22058,24131,92286,99697,43392,49154,20052,59592,32422,81439,49872,92155,48859,41312,49405,50104,62248,91726,58308,94382,38609,56484,28196,69680,14913,38405,14071,99569,90513,30343,86151,53013,98829,38023,18707,73484,20922,88292,38466,91965,12563,46487,45792,23773,47954,30926,82774,55552,53088,53747,46565,13646,22111,76366,83149,15609,31706,34365,79861,71037,75060,40268,59069,55858,34409,65483,24764,92144,48536,69433,16113,86495,48650,17924,66382,75650,66897,95996,53664,89114,13117,55617,22638,71062,99433,27039,97003,78483,99852,32007,74260,19553,50658,75241,23703,67497,66651,76607,28866,61997,32294,17788,40603,74832,59260,69370,48983,72591,75037,21854,19705,21278,61592,40759,14185,63723,67118,82196,72330,14361,86599,97784,56040,44108,86729,18216,51810,22392,47092,82429,80409,24989,86318,17593,11429,28341,24777,81593,84243,22949,66538,97915,31199,76188,14440,65254,64947,77817,10871,96999,34294,59118,47559,69330,13383,70688,98902,14374,80566,27017,16887,38465,75567,10589,51878,71012,21112,98623,63057,12804,27181,62157,58411,52312,81618,93982,41525,42697,41065,31773,55711,68307,22224,39306,56435,22556,37669,76809,28679,28711,67780,50007,26780,57809,74588,22085,99729,50455,98032,79966,15479,50877,61760,70551,84124,19149,11273,95648,69381,96874,61019,81885,23736,61755,66008,99079,49265,28757,95385,92774,82577,81795,62253,67511,81760,71206,40629,72491,64008,40107,92981,31502,50586,55924,42276,26237,62234,93707,17551,83207,51333,82670,82535,60241,43674,29037,45347,27319,54492,13494,67515,50052,56798,70411,86201,19257,15864,62176,38326,28464,73955,24762,29845,71903,53488,74904,79339,28597,20098,48615,71870,12120,79617,45057,82945,39710,74612,52257,31268,24907,84448,92953,49619,22424,22899,59635,33901,42726,83827,74718,66115,12724,88225,28135,87997,84056,21011,81660,70909,91709,18255,40509,72921,74958,53738,42666,42068,58773,67246,82066,19053,39663,65962,81314,74270,59926,17017,10636,94073,24528,86416,87105,88068,29788,98492,97603,23614,75079,88701,32044,16459,89330,32897,77197,62218,38479,84809,20014,62643,51831,58911,44202,12832,99503,66155,12194,66364,54901,12307,78236,43341,54990,81743,42460,46322,63590,10190,84966,23583,30805,72584,73068,31382,39268,73378,69333,19178,69132,46695,42113,58715,61961,99651,17940,35301,65721,77330,25257,96807,62164,26828,44656,37521,62724,36646,75655,43027,98606,35081,25742,67634,99111,24518,45105,73810,25074,75422,21966,78199,56921,12639,21242,25291,79574,79886,93497,79556,26635,98460,33451,44633,52948,87692,50984,13958,23092,98986,90657,80329,26276,42761,91535,30345,76802,30985,77211,45238,92793,21557,94993,43751,52569,55299,98223,81892,14197,67574,41975,59473,53985,23196,96602,92095,59323,18971,36258,79382,83234,83513,65721,50910,19671,17254,29731,75309,48885,79971,73682,63977,30157,63943,60611,65106,21769,97969,44659,40439,40925,77509,62972,19854,10998,87316,41713,73229,32558,62575,75129,44516,27901,24599,83201,85036,39664,75107,22921,88520,94198,90662,82413,23806,22125,59402,45648,88379,18604,43421,25225,49684,46679,51314,59072,25333,10348,21785,11862,31657,94556,72956,65391,35072,98386,95225,67674,50304,36059,87317,98662,95852,74863,19227,56943,12977,68777,93610,69991,50338,46671,76970,66681,11308,49594,43199,38781,10263,32307,55839,81456,32025,78513,36081,89874,58262,77732,99857,18312,30561,39087,44028,12015,11741,15493,11421,18272,47347,18888,62905,29035,40701,11628,27964,76176,57772,67086,28982,80863,92741,72031,24467,20399,54074,13916,57584,87853,89074,12247,42232,34161,96820,36467,18477,21140,81755,22758,27863,69262,39647,39103,55960,58550,80923,71535,30729,90544,15087,83781,56012,48322,58081,99025,15290,32514,83116,35305,16150,84882,56176,98045,57188,44021,74127,79818,54981,70470,54262,27487,40701,92077,30714,66264,15130,78701,59617,80362,38946,88814,28565,39625,92621,43086,41593,71833,40055,27583,20073,54651,92057,51702,69230,68673,46002,25216,77818,52918,93963,47352,69271,84311,26027,22630,70017,74671,58277,29623,89289,14238,95221,27273,25390,44746,26605,20620,38043,59822,36953,65302,91058,24602,48488,15106,34370,17872,82864,48008,90890,66752,74792,83994,46473,89353,37960,73673,18422,51953,18953,49123,45044,48670,84064,85724,59432,72299,82448,79732,40000,91739,69875,61819,34621,66533,33668,10798,92808,76522,74692,37303,81941,46851,44811,55485,75603,61269,50506,84134,49253,84942,92103,94626,64130,66254,45842,78356,75686,67330,55475,99633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4380,90585,76783,24860,45141,37113,90953,11911,81379,30693,90130,85509,58120,42214,54393,20138,14784,15890,70953,65669,89545,58497,90359,34973,99785,51480,63687,63056,48591,71358,18301,88258,17460,18359,85387,84610,95531,89406,10396,36207,59323,38348,84280,85468,30477,38586,76368,44915,40275,87606,14923,54861,19529,63472,46949,18957,56763,24608,25224,23509,37759,95185,21138,43316,77129,14365,12585,94953,50489,27483,67342,19001,10698,41682,32783,64780,31956,25660,86336,56767,95136,41177,12614,56654,32506,71178,25286,59917,30002,58905,57911,13271,63516,52619,31465,94910,49092,44693,43968,72222,27467,94651,65605,48090,65197,15177,43617,17061,98261,61830,82025,27410,87205,43539,40116,70292,62052,83253,54790,11097,49139,24413,70363,24220,75606,96042,82822,21911,29725,21178,13221,41669,63846,91599,52971,21453,95689,87304,46422,90988,64615,56516,82224,14201,22723,66415,56653,22253,89650,64381,68730,84938,68541,48643,79624,57988,49491,87691,25656,51725,58850,95245,10700,59779,84809,16479,38992,81891,47722,65785,78799,60815,42981,77106,50875,25875,65153,78081,21077,57147,33192,33723,74509,51648,76369,92132,29514,19367,99250,93806,97590,68876,48762,80645,89007,85328,14798,64035,71949,29869,38259,15459,82457,80259,56543,70281,89393,46151,81304,40107,51542,69537,71481,88786,68427,94908,13907,94333,76479,27417,39682,55479,16481,14063,45744,35551,50517,15142,64219,42897,73321,50408,46883,77077,10888,84631,91935,33729,89003,47562,69750,41673,57154,94590,28144,93388,83833,13646,90830,48173,26307,52846,18228,77948,57363,45112,57121,76032,31833,26558,95471,82058,14187,12245,98205,69184,39636,99048,64321,48256,74612,40260,37126,25572,27960,56080,31705,28797,54798,33400,44139,87549,52095,42554,44110,33449,45131,43941,95063,11015,64368,86928,17230,46282,29078,13530,61599,85859,81141,10132,39506,62889,49779,70393,39156,27005,43790,51657,77397,57620,25717,44046,65243,27176,70346,39892,74162,13170,51402,60572,25078,36725,17160,72551,38240,99219,44086,94891,80669,48503,27933,79732,70640,13427,34969,89581,83741,73879,86409,78780,57407,73530,69364,26822,74816,39471,36608,55849,47888,85893,26914,22784,38514,42489,44650,76335,13017,62899,55133,49585,81037,98906,64747,48785,31697,88312,61388,77234,96416,10857,89912,40870,59282,26280,87994,25387,52601,41493,48435,12677,48265,50264,18256,44629,97875,80019,42803,37267,60738,81061,29131,78303,79729,82447,46333,24629,18313,61662,99923,28881,35310,46139,86010,23447,94628,80904,60448,82379,40608,24047,85064,55705,32087,26474,63963,90859,11915,76842,25765,95730,28247,87888,57922,25780,59200,82535,72199,57406,90278,10476,86268,17027,35785,54034,17171,66493,95558,59182,14836,80540,90648,11036,61238,17800,92730,57333,36782,47115,63715,89828,49603,36029,52617,49374,50447,25318,20057,45964,77851,51686,83389,87769,35232,15557,24665,32927,47914,96251,65475,96558,26329,94585,22311,62674,84009,43786,61605,70954,70560,26589,48098,91828,65548,53552,89439,91195,77415,29269,15899,19177,35795,92621,22557,71511,39108,80900,31976,14318,52931,79252,80722,52014,93373,82330,25649,51736,16454,87797,73104,64840,96775,56115,12152,30493,74089,28228,15234,72163,95859,66680,10086,25397,34590,73292,54273,75740,38584,71751,71512,28724,93856,42475,48567,89510,24478,42030,61323,63201,24414,19952,30589,89632,43213,30292,24777,24405,65402,36964,29134,63962,77263,87300,37180,84299,24094,61774,86783,59748,96759,84807,82126,99889,56480,44953,92547,78733,10250,76580,65395,91450,72527,52458,80932,85915,42244,24978,12744,49597,14903,79347,48929,14352,30102,58698,45618,61240,59144,56885,62503,28812,77784,77936,24662,45133,98391,36731,24192,87493,62466,15977,20102,63923,48596,68190,74332,85312,77661,78684,46576,21464,48769,33663,15450,89177,51081,56668,47581,72566,12086,24700,12284,50124,60629,17842,10748,70770,61164,80732,12636,94295,61156,85398,72504,27214,89133,87354,52289,40886,23638,26693,41970,78202,70889,90732,25439,32847,79897,31942,75247,25497,65415,62452,11037,62038,96643,93848,20111,23374,46606,32160,92866,88203,79772,39597,35809,98964,33804,81602,26835,83670,39380,88761,55405,52289,10302,85349,97201,65563,27480,90514,36517,62977,37341,41549,67960,25887,53381,30539,67746,59506,71546,31933,94090,83765,11082,15106,44619,33774,99222,63619,15904,85854,93188,73929,35214,42080,19004,72976,44468,55848,15243,42503,55697,75093,15858,22317,14141,73567,39244,32634,92631,92093,40284,86974,44810,68367,33565,70826,60519,33851,64794,74040,71528,13257,48802,89503,91388,42494,50775,46414,65202,82379,94620,95347,91720,96399,96983,71513,40429,13178,70956,55713,20183,10798,87388,13946,60198,42374,76345,43550,50877,29770,35409,69989,17462,77034,39692,43064,45840,20630,58214,53323,75652,52647,13422,38777,70487,38873,94451,68875,97085,53779,11092,67021,42298,58685,76077,12819,87642,66804,97432,56943,16198,46840,71801,18824,38372,54817,89206,81807,21716,69019,26964,76220,20265,40654,60330,45793,37629,95841,34994,30693,67989,67574,54149,40643,36487,30231,56608,45386,37287,53312,22589,50006,81205,17901,93051,26780,70547,81653,63428,73576,62494,79582,36096,63504,61525,26688,28052,86210,66836,11452,44775,60193,42671,96102,17295,96064,12520,47236,70756,93917,31664,15874,72775,84829,58947,43749,65118,29999,91033,14387,66011,90786,29416,19471,58266,21640,59509,56940,84752,83526,27854,98355,37975,75872,78913,32537,15385,69413,25914,68505,24218,97842,96180,74061,33416,60867,49972,62112,54451,28447,75683,75020,72219,53306,83782,35142,39189,32337,82012,84928,42080,54283,36642,52571,96281,25359,10608,81136,12755,83230,41104,60104,31327,61913,91031,69814,14711,65145,47402,40490,97727,51686,60529,12925,16393,97489,48235,26861,45245,12780,83280,86248,68571,65762,55920,42604,54249,80185,69871,85480,43479,53981,36850,13414,63965,80504,88430,75266,21499,58852,97096,35258,23702,74497,86077,64912,12361,45927,78701,56540,26330,58638,55978,59023,84676,97303,37334,59632,47026,69591,52116,12669,22391,57154,16854,47171,86559,20620,43988,62236,85623,38604,18668,21264,70060,79340,49224,80411,19742,77010,79852,10923,10741,80685,81674,62934,42704,31948,59218,20522,83253,49603,20601,59966,34267,36801,69550,43544,77567,85368,14647,59802,89044,18000,40142,85126,59710,69442,39696,45263,98038,64945,45442,84323,54950,38923,25067,61780,79088,99772,88255,16525,82772,28580,41349,19190,47538,26408,10121,16192,23838,59535,78021,24741,50812,45169,35244,10379,42189,37666,14151,79409,44471,16638,91370,43722,10061,97215,42853,51679,64914,70997,38453,43322,46247,99577,85547,20662,88379,71143,58868,36591,87809,96212,60296,21036,94574,77501,18734,62944,64649,13195,77361,81464,97721,88173,61336,49336,92635,77344,89974,75915,15855,75883,42161,24789,68136,73251,92267,97330,88310,81945,70072,31704,21660,81318,98646,41297,86661,80337,58607,34241,76795,21972,37981,93707,24869,33236,72150,34793,22741,61490,26572,84397,45667,16634,53261,25473,74931,10487,89735,51866,46589,54009,33322,78873,73746,81231,14241,37193,46365,87658,57925,67594,30083,56454,84765,28236,32498,92804,11212,93805,58818,49395,94447,64467,69974,47360,87707,11982,53147,52346,54701,38024,21371,84672,64348,18682,26866,93710,79396,52032,37396,31951,80549,88890,73150,62714,38163,53006,32576,63852,82598,26315,53590,38988,83263,70408,89833,56065,99750,96813,49401,86643,42136,91996,19184,61860,79313,54873,66259,32872,73917,59374,68631,72688,72919,44168,18284,44706,12372,64030,68301,46799,40329,29245,27804,31299,48096,87002,32423,75259,44079,93622,38187,17431,96682,88135,95925,88858,30037,98037,26029,69549,74654,30164,96625,29775,60429,96293,79209,97998,91675,55290,89296,89800,42049,56874,94077,69248,40478,18363,55310,69692,43877,75437,43562,30656,93193,22183,98754,75439,15922,65926,80061,10487,85445,27296,98620,36575,60003,80375,23460,32986,53342,33676,87748,21667,70881,34254,10860,91982,38371,32103,34973,73251,38292,56280,20697,89874,24008,27265,38145,62656,20552,69612,45407,35006,54351,93810,92904,43743,17233,56260,60689,66817,14342,59357,75837,15701,27443,84800,40483,74111,28315,78420,66459,65220,10490,82523,73444,23015,24534,93475,97238,48462,30849,73220,62696,23221,34795,53359,68248,63372,74992,14675,73630,90413,18237,23191,15477,76414,14585,71582,10693,60101,79294,64996,15431,55159,19326,70954,11728,52312,89653,44877,67166,37513,19231,13097,35953,71494,87825,69098,86089,68609,83338,31083,99683,28376,90762,93092,13466,73650,53948,68460,83599,36999,92455,37994,98456,19384,90089,45118,79434,28895,90408,64920,65278,78214,16679,68301,45004,69040,76813,56645,25110,99428,99593,37235,75393,44642,73965,64523,53573,33633,69621,94514,37081,91410,44869,62318,79417,47858,55337,86048,17124,89435,87374,61305,90097,30779,15823,80504,22917,88297,80885,15341,58265,70158,66373,71168,72768,88853,90168,82181,51916,78765,47365,85757,91225,37802,99951,35444,62906,96484,99659,48974,22494,36227,58109,85851,69608,45929,97760,66471,77364,73633,93480,25912,52939,74056,96361,23574,75830,76295,31043,29641,17174,70590,84287,27075,26073,17602,81945,29209,26188,18338,45039,68807,17828,44824,59890,42336,46342,23669,69700,61346,88560,41429,29425,90254,58718,65061,86281,21436,77299,64911,53814,96535,84300,12084,62086,95254,73550,12022,25901,36818,85473,79965,54114,44623,78236,46226,15361,37465,95270,29778,59185,27721,24684,95364,91390,34108,14854,68739,27333,38044,54653,79504,71532,30328,99493,36918,13211,48871,24830,14109,85404,98639,18881,88308,83676,65886,11358,75909,90766,74201,14852,35890,41132,66661,30923,73393,51111,90842,79644,53977,55723,89975,23396,81900,30262,35205,47523,62340,92508,99863,54736,90103,34532,74817,52082,17653,34950,12404,19916,19714,20957,21228,85696,62775,23783,88928,90944,60116,19413,81445,17616,61473,99161,70278,86532,71729,54763,24862,96049,31068,22549,36219,51146,85913,40639,17190,36560,47056,47921,81426,49231,45461,25812,25017,63726,82920,95127,85764,20405,71923,20856,56429,63607,92015,18105,78528,83747,12936,61680,42965,88113,42159,22760,22672,84486,73327,62647,76822,37425,47691,13165,16702,64545,88319,17988,79643,89843,21131,35921,33255,57778,96363,26495,87392,37176,76152,53020,85136,93465,69371,67043,94925,11737,47302,71432,17960,78289,28671,98356,67031,51689,16242,93899,23518,37577,20552,23628,19687,73433,53745,58287,88148,40517,39514,45011,36273,16545,60480,55782,57207,66654,31613,55650,41298,70041,10095,26536,98107,12667,29898,36076,19202,67980,59804,41582,29447,16404,64586,37489,54928,10624,26229,31940,47675,29139,98467,61147,78881,26722,55722,54227,90532,67474,35577,17509,45233,15564,52612,66208,85684,48612,95337,21749,24616,79844,17559,81725,52763,27347,61775,66879,28855,78355,67838,86756,63568,30179,15481,85060,11149,37597,51387,77587,61964,33197,27696,48218,94385,50705,48586,12218,17579,86139,57719,72287,74660,30463,99801,97428,26921,30282,23440,14807,41859,60743,75304,45126,54648,38227,12550,52567,18517,72501,31015,38093,23806,67854,70533,76416,14381,15971,40222,82689,68882,89671,88845,13347,76013,94104,87767,31501,75504,40385,86729,95352,37622,40307,71909,81806,67891,30455,21423,28937,16034,88822,53751,52052,33278,32949,67792,43717,33341,85511,39991,48212,61890,13391,88982,76863,96904,61191,74910,72815,45852,34127,49861,66640,97600,82682,94053,96561,81470,17872,98682,87336,61316,16978,14466,56158,26892,93422,16750,92478,82518,68002,65563,87553,79324,22153,44042,19805,76922,74282,32350,71656,46841,60884,41892,64108,61346,72108,77325,92235,11866,23511,93477,47474,33037,85262,47386,49649,20776,58954,35132,63063,34179,85298,39814,76726,54404,57214,76083,84869,18732,92981,43473,64994,41450,68537,46040,95373,87737,19779,25483,87710,11511,96457,95230,89114,68887,79485,77761,60124,65163,26944,19472,76665,13900,77723,65290,29431,54115,47731,70770,82080,42913,91099,45267,60701,25897,52494,13013,70925,43206,66730,98109,93717,86409,88560,77688,84035,30814,73744,46552,15402,58524,40848,64173,50494,86311,50046,90774,43217,63463,26319,69389,67300,78377,53028,30450,28194,42086,55379,97335,44120,74921,39029,27276,69152,47558,64167,76996,61013,79945,98940,31266,42132,18633,23630,84256,71305,40862,23482,81933,56848,23366,71213,41371,12877,99332,16644,21113,20512,24829,41449,97280,71660,29772,24226,40106,18294,49450,27354,58615,65435,26665,65526,56342,18630,59784,87474,76743,16375,70569,71751,27389,21291,15983,98581,26332,58707,51883,85533,28640,83999,51514,25882,16734,47995,78948,28409,42492,37863,52282,85541,62386,82055,69292,39148,31728,14431,86341,46747,53026,17773,87037,86128,78770,45130,44970,79753,17794,25425,72219,38861,31239,63643,36748,96015,51686,45052,11963,91008,27402,65648,84385,23512,47923,36776,98016,19395,11173,27462,94471,38262,11672,72329,58423,16115,61444,40911,67482,73588,40833,63598,40964,33429,42552,83553,52484,99094,98146,42641,66380,99655,67121,94291,56262,36150,57235,46328,77655,66743,94338,68471,82782,57177,81972,74104,93235,39712,81195,97876,41594,85810,28028,61944,79805,48664,40351,60841,38697,49827,20759,53556,58246,30289,37175,91333,57866,79060,46900,30251,59645,25464,63792,19425,11730,31248,23819,43323,84358,13660,49256,51025,94924,60610,60323,55529,15522,54524,28685,31833,30710,93419,47647,83285,13138,58805,18427,21077,77771,27833,47898,53597,31130,58280,77658,97651,50849,15534,54298,76691,77195,42205,74299,77375,49856,83246,14722,31676,56437,95274,60457,26552,78083,38296,91882,53341,49902,61324,34827,10320,60253,91927,73404,24686,25470,80279,17150,45798,90744,67897,53561,96525,24539,52377,28301,47266,21196,68940,52657,21345,78354,90514,64527,67431,94390,84211,97221,61823,78105,10854,42373,67484,62159,57782,94749,94724,59982,33526,11939,79212,53733,99074,41229,53075,43305,53936,22067,80074,91695,23011,40495,86534,22935,38853,94716,96285,59410,74569,70601,89474,33235,47024,83781,13905,27349,90080,45234,90396,43840,48993,43640,89792,94652,58220,64733,46659,77176,59180,81516,10080,31774,71298,32069,65123,57164,97427,90866,98086,16953,32260,34371,10386,88814,24880,13688,11664,48305,84790,83713,47287,84431,49877,78526,75145,21876,14044,86336,10798,75179,22197,69101,12558,18724,37688,58571,66186,79348,85007,67348,85464,18895,39786,24114,59780,24021,13421,87572,36618,95382,66020,61056,87133,11683,34064,89975,71431,53976,95515,79424,33488,62273,90668,27931,82139,47977,46909,28946,17839,30398,48350,75452,49338,47105,44221,45230,31939,25230,87892,44141,28200,22505,81967,72235,39446,95688,64839,32228,44306,40450,79156,31913,33626,16128,96161,15328,40592,45394,30481,28839,71654,17342,67831,15492,99198,87450,32294,28971,19960,97270,82992,27298,28536,81566,96649,65843,64329,64348,30119,44413,83639,71014,11362,36744,21370,83476,93226,71145,29437,68985,56954,97755,19688,49999,89600,59003,83064,55788,99860,76231,10272,43537,80202,10643,12192,57463,58816,58233,93560,90523,57195,16258,65588,68537,24899,77689,64535,36484,86356,35805,56918,37153,94895,64253,54908,35941,91501,17319,81320,99204,81424,47111,92772,54355,99863,45243,48949,95044,67565,21991,79477,68894,27901,58195,76427,24106,69518,92080,13682,84507,15066,83123,15042,35600,15577,92405,73717,23282,68393,72024,21493,21881,62989,18986,52675,99137,44970,85478,12803,39216,16463,31347,99896,68566,92429,84212,46472,70746,21391,18763,82410,76572,42302,66071,27454,69315,80993,77346,98641,38015,87334,42813,14348,96857,95008,91280,95652,11382,57361,19929,86910,52921,89402,11875,54160,62003,73387,60085,43859,46837,15409,75158,32561,74448,93613,14877,92352,78512,75404,80772,34371,85922,57815,71207,41155,64261,63860,41352,45362,66764,44318,71145,39250,33273,83401,68413,61707,57722,38136,41470,38855,40288,83335,97944,94515,56847,87156,28092,69371,35972,29803,84840,55312,62284,85754,50301,12194,44112,32246,48348,80814,61775,13804,29067,58162,84588,24410,87044,74959,86165,96726,67523,84332,99115,46658,59818,80868,34342,84249,57890,84649,82661,41985,40074,17559,35864,25283,45537,54948,79237,42820,95895,70575,63397,88411,41020,66421,14695,31721,93983,10474,13691,94095,75435,49678,47350,57830,73725,54023,24987,79011,82907,31111,88006,33812,15003,93847,33871,24362,78421,44766,39798,58897,91779,51498,97379,57206,10382,45889,70947,16991,92091,15839,41887,66814,30144,91428,62738,69850,57397,22663,97313,21431,11370,16280,61348,40982,49070,54931,73182,20912,27934,45416,21784,88755,69144,70627,88967,70870,52338,79938,26611,35884,79924,11036,68881,33091,94726,45916,75797,58524,67106,53404,34533,74870,57243,16768,90571,51921,50662,30579,35141,14151,90381,31373,33098,74531,54978,49914,79550,77341,14221,98145,92425,88772,65024,99958,97261,80098,33175,90069,97993,40074,59019,71651,42308,21062,92758,21234,27436,38872,21379,21386,84784,99252,42954,84150,91597,50788,66581,53049,73692,26802,81642,86402,89926,84249,59852,75679,59555,19688,80836,29384,10435,54197,78822,83647,20095,66742,63789,53828,58412,98478,53988,47427,39594,30135,29747,13785,35689,90061,60221,46356,98583,51010,36621,61611,46756,28789,61094,50206,44536,81649,63305,16519,49417,92288,99970,31472,48413,96207,69265,51851,43110,54670,90346,52580,16121,32227,62848,34665,36509,66127,72410,45629,91919,70873,39358,11394,52842,87797,71627,58538,40890,15868,85281,53162,91332,98879,30911,65473,43775,19082,95186,29928,71785,22032,66061,37804,13467,75815,71659,46563,53469,56119,28966,72417,73190,32365,63552,29516,86719,20727,69919,37508,83795,17990,51224,64005,88984,13691,63674,42560,93632,34082,87451,60055,28336,18095,82709,26049,26139,97359,18850,35251,59230,42668,42039,49731,54572,42662,99558,99275,68483,27689,59791,56312,18229,25802,29977,11031,45159,95748,61252,80475,31363,73525,84093,35535,70662,64064,95881,57572,94315,42092,79883,17754,48902,84319,51724,36558,20445,37401,52933,82708,70059,81043,28371,91593,46938,76504,64123,14130,78023,31431,76774,44072,99761,25877,40112,56087,43191,60254,99252,16653,64659,97010,77908,22024,56352,85076,23079,69028,90194,57666,73648,59889,53129,72048,51840,80241,97719,54947,29143,52357,32319,48017,95085,17031,12419,94163,14071,15526,46408,38335,65408,86510,18989,30025,81645,98580,96899,85857,25541,70151,48101,10149,63826,92539,44191,42061,54771,97528,53722,48654,71752,38862,60845,52091,45943,20438,49463,35808,40558,43272,75283,34437,95191,36635,75177,30838,20950,39099,79105,48093,60740,89646,36654,43220,46587,62143,34593,21536,99825,89348,33872,79196,58290,30706,12570,70386,32410,41182,20573,24892,85000,18706,33075,76790,28780,98377,11435,70468,87999,62381,93974,43674,11211,50463,61338,43239,24490,36972,89052,27521,21945,55166,68114,74450,27599,76628,49908,34116,31465,72521,94379,90683,90451,82605,20236,89629,72595,69766,68794,91768,20544,14715,85391,40001,72297,51297,37286,75147,82154,56885,65329,44327,45357,95561,67585,57161,20481,75234,31158,32067,90496,21675,66945,16169,91496,45246,17203,76837,53112,20128,45587,41366,23366,97442,62541,86104,79738,35315,43533,50560,32496,45103,81596,34247,28439,17747,77000,41761,51986,33010,46401,66264,91379,41039,33050,47292,80660,71806,99486,62679,12118,48011,41756,26889,80480,15586,27499,82279,54500,54645,79970,91046,83963,15913,61260,28183,12907,16162,21524,59390,94375,19770,51985,12756,78925,63084,17835,75290,32731,40353,89543,89252,30075,63243,95863,46541,61485,72620,75944,22331,57503,45923,29686,96593,33540,91546,88980,37541,87651,24239,38648,73832,16344,14088,21782,28891,62990,38413,32146,27924,80380,23673,40939,12749,38573,36978,98422,24351,75879,26035,76649,30114,91968,33876,54805,39261,43268,64637,47620,58010,10910,70326,70976,17863,91402,23752,52087,67802,82951,75512,30541,25901,86280,16511,38709,49552,91693,73064,70835,15758,19064,85163,84019,66816,96147,20128,61874,75448,95230,75733,91584,25097,48028,16625,72932,96938,78731,33790,84434,62318,10852,51359,49491,92991,81767,84503,82914,93001,58564,26636,91574,50144,76473,19382,21335,35085,68848,69064,14062,40802,54059,17655,89527,78616,81606,95372,16649,16569,52611,32360,97983,56962,87063,76669,11825,83544,54673,72467,63651,70986,87519,10352,63757,60293,79048,26230,92416,56468,86544,75988,52756,76013,54392,24232,69637,89845,98088,77560,71722,11627,50233,48637,63432,21424,48476,56412,42545,79264,53506,15534,42118,18304,52399,55240,30161,93037,23024,41631,17165,38944,81161,42756,76198,32523,71899,31486,56230,47065,77956,98382,36035,75034,71051,22223,19372,47101,38658,72467,19984,85392,33834,48802,15836,87234,66117,21700,16585,31966,64140,53424,51195,86193,58718,36047,57199,31847,87813,95252,98705,35627,74763,42290,36224,11743,21106,51791,52636,65032,83392,89703,53849,60851,22516,40010,75740,52699,76736,36091,96976,73870,44553,40227,56495,45539,24949,40420,94379,45151,57240,28055,85455,62561,44288,58107,54387,48744,48909,64894,41631,92465,63870,92721,24408,10069,83167,16940,91010,80864,22472,63235,32032,59813,87332,33741,64597,62881,10521,17993,13743,42379,21005,23238,65016,66303,55797,63065,69900,51346,38521,66301,85750,52205,11011,38358,15069,71455,92512,27766,77722,41874,81450,84401,66308,72273,92753,52924,20774,55497,70682,44437,42437,77287,59643,48459,35180,85342,84325,18688,13092,10623,77133,85045,23334,98197,94068,36711,64256,81967,14445,94577,24480,58407,61292,81250,17666,80063,21383,28992,93501,53315,82934,11074,33758,53792,63026,97256,10815,78164,40785,69930,44219,78376,75234,53139,99168,68416,42266,21480,85434,78490,39229,11776,80286,54383,24728,88333,51520,52109,36410,51837,72403,74396,71397,43511,92197,77810,85960,85229,74194,83578,93576,19003,49079,70197,33532,58696,38390,57651,85431,79605,68695,45004,39544,23488,21914,91586,68310,35075,37532,24718,95625,25191,47765,11974,17950,90196,23189,85889,27473,15699,79814,38308,24439,34307,26327,98624,41724,83906,56723,19252,93895,96757,31321,59616,83783,90876,56995,32195,77546,66070,19058,42478,82510,89908,35809,87078,16326,43897,32475,72278,68667,57706,57002,25800,95155,41418,40674,49742,91978,75672,86384,97848,93216,16912,99042,45039,59548,90502,40555,19833,42023,61089,15054,30360,81891,38708,68973,82781,82295,55290,22113,15971,76795,30611,43185,59161,54271,23433,25381,86060,65530,96830,33230,47151,26125,99892,72906,60145,76363,87208,11062,72711,66266,20190,96708,53520,98603,85179,51782,87310,59597,57758,56738,77167,56253,69605,20172,78519,55347,71648,81605,37371,54297,21299,92146,97875,48059,93065,10955,17511,72184,23011,57386,37172,47207,22643,69795,90582,29796,53112,13938,58102,62243,63871,39433,51732,96597,35948,86273,42172,34188,57136,62811,75959,41318,11092,21998,20824,55752,94701,15168,38634,14518,80562,49043,50308,92349,28128,43337,69982,32779,24240,41089,97091,78989,72715,40032,39432,44257,37026,40941,88570,42732,95666,99669,51529,84610,84696,60595,15873,96896,76445,53681,25467,12273,93471,39512,49250,50698,81245,13541,33867,96712,32233,46543,35202,10021,78306,77710,48946,45144,16197,15611,16825,93967,70691,23526,29842,79565,23158,65054,92183,16028,67104,37469,41037,59223,52124,79006,41108,20913,91148,64435,95085,65287,68602,15564,49183,61682,74741,75123,39952,43710,38954,55676,72798,46839,70670,58999,13289,20958,24251,60327,82854,85810,10172,62143,92545,67566,71689,65476,17435,75880,13630,65053,16511,36321,80237,19313,62899,93826,33092,17600,67249,15587,34291,59345,95565,34512,69982,24725,80949,41528,69856,55554,15165,10685,24368,37511,65457,90918,41984,70290,87561,78960,52279,38929,21545,22101,40330,46266,55807,32208,29992,21053,99138,47887,95451,43601,81295,72902,85501,93834,40846,72171,70001,39948,11653,64414,88360,53632,47506,57759,56442,80288,30371,36398,22558,31285,14471,81489,63010,70529,66035,26340,83882,25277,27886,59043,59853,36801,13843,15210,51454,46569,14604,69617,46804,30818,48739,50235,58086,21473,55448,44889,71825,53735,98933,14532,69445,48146,93457,86970,81374,65155,29494,89945,44681,39798,27402,99878,96821,30681,80897,52323,79179,26664,47687,57638,15733,76130,53717,15978,80134,71824,54702,74833,89476,12242,74831,20667,68847,93184,14196,32358,68419,85261,58044,67855,66220,21273,74392,50919,89551,78279,53195,56493,40123,58619,69682,63730,23319,81276,82027,32386,20886,35989,43327,85603,15020,83689,35807,57248,13348,60223,40540,49188,18229,41566,69745,61004,95850,44390,15433,25389,19821,51655,35729,59192,55152,12717,33994,26556,78394,70105,39717,39763,74479,47245,99506,30748,86707,55867,28470,15331,87902,62698,90221,53011,68648,67181,95907,53623,45020,20881,46542,50630,60330,51277,98632,36388,68743,58081,67095,59548,84479,37166,37679,66331,70291,25137,35436,92202,44089,65425,91172,62778,53147,83254,98582,45025,75735,72781,70888,38510,57995,90505,46136,96540,10840,58885,78615,65777,53832,91765,51292,46865,89960,85288,40011,49936,24168,20672,43494,73577,74143,88198,79922,11857,95906,56481,30284,82137,69316,85377,84004,21604,82639,10199,51894,38630,26475,48064,78094,65818,20436,37798,13529,21335,56991,12767,31029,76204,76241,63723,62498,38113,91533,56876,31186,35719,46269,96088,70563,37213,36889,71361,75708,64795,26271,15067,96416,43445,86968,67147,12097,57192,77605,29669,55952,78457,61071,42446,82664,60257,44210,94073,58385,34012,78574,36302,36638,78549,46008,29043,46443,54613,67441,10135,50387,25554,11217,72486,38169,19126,28785,67644,88972,52867,40006,52493,68528,48497,47343,50066,40801,67181,98595,66782,41621,66762,26578,49617,48698,38727,77798,76951,65485,53765,62968,37949,82062,34054,60981,48667,80377,22360,96630,15506,90622,86449,89958,35884,18918,81198,28639,58519,92462,87836,62557,32240,57387,54463,49987,93897,98170,59631,57744,48958,14726,35135,67145,38558,65337,67551,71414,68948,69600,51458,83210,98022,48252,55640,74691,53656,47275,52232,69434,63106,50881,49812,14967,31592,97644,82232,94703,44004,82195,80155,41925,76860,25016,14934,89902,41370,15416,75146,77375,80154,17566,77100,76175,91786,88412,16104,18267,94748,14673,82161,30209,96749,74601,82119,36805,50661,96280,87977,69782,93127,38148,71425,15723,17780,17574,35357,34198,88705,30399,32842,78599,49569,30946,11084,59319,58661,61055,11055,61857,56793,93660,93103,72527,25338,72230,33708,42642,65578,31991,39113,42210,96829,49074,38577,46741,53489,12316,40558,91861,46419,20522,88090,15526,90740,98086,18965,56930,79182,23195,69828,76221,57982,60570,81058,11319,44696,57185,85542,87968,84993,24208,61659,13627,78152,16196,36925,46838,39189,81599,32042,93940,66421,17547,85787,40005,50375,54192,97450,38623,80896,81783,35147,22446,16174,24418,93375,71047,77366,99046,78184,57051,45921,92976,65230,71173,83956,15675,89962,29379,83976,26841,53238,13647,14789,56602,96242,75663,25955,48312,39888,41785,97198,56473,50581,83818,35661,50796,61550,59798,54525,13659,55266,61500,50973,87533,77430,15808,92962,98151,47204,68066,13086,38599,84813,45913,82908,35149,70226,33859,65361,96015,13784,35694,22298,48875,61090,88093,79176,95254,36094,54181,96612,54165,24594,42689,27008,70911,26224,92147,86171,87668,28682,88632,99389,50461,65957,98754,53625,81774,59346,13431,95141,63510,21128,11685,69211,88447,35502,74006,23170,29016,11699,22775,73041,45905,78669,58804,40886,39161,14585,31545,16855,55364,40446,56025,66397,64221,94318,19951,51487,93293,18156,98107,35715,77351,11710,96954,74895,41322,89387,41607,96483,34439,60480,55708,84421,25149,71444,36523,36341,62305,52671,62485,64304,46901,99797,80772,35128,42699,35765,55501,66343,44700,62409,71547,76312,53946,52781,10050,22646,92414,84021,59745,67247,80573,83404,65351,41022,18948,47855,44693,59580,78363,54246,81800,63245,59871,64593,98178,80176,19329,43887,38809,53987,33760,14389,11382,30444,62398,56669,78989,87952,83950,47165,94768,75881,37001,44235,20933,84567,76579,25662,63371,11673,19065,19968,46041,35077,66397,41665,91646,66316,42679,19775,21993,19564,44677,10376,50318,19165,61639,63864,65601,13121,23479,12807,26214,24852,52816,89443,32006,66214,45035,28095,65546,33133,92829,75253,47037,40852,75195,97587,24916,59749,41295,15678,22713,68923,86698,19434,12887,68235,44668,19367,19673,36316,80651,60513,57989,92091,82304,17902,29340,59000,44549,38608,56153,92578,69369,18416,11828,42800,72001,26689,55754,87816,14808,17440,75822,89169,22700,83859,16163,33534,23503,91330,19297,10813,79693,64917,32571,31986,25862,44771,34249,79867,83086,77007,75787,81609,87381,81540,24679,11418,26994,64174,64859,49267,81889,98331,20831,48297,56907,82648,30541,59363,78533,77039,50614,60734,49635,36638,26011,88396,48055,45964,15771,96849,11877,16148,36574,66851,65442,35378,83286,72958,73269,61742,72955,13535,23685,54699,35026,85559,63285,49776,77908,29289,46139,95802,47089,62035,67196,39971,38139,86816,69107,99547,51357,75465,66376,81526,15070,24548,26011,46190,47481,37720,85047,55977,49057,37463,47332,74953,60649,27769,34408,10860,77497,47055,37644,85572,96284,87061,89295,97942,22709,76701,85120,28989,22966,24519,89369,13932,30956,69563,95675,96312,67307,27352,57392,29472,82024,26681,66224,74531,51789,54536,99330,78784,21864,58973,88221,98590,95067,69143,49258,96414,31182,27276,29679,46681,68342,40519,90222,22232,85428,80934,91426,57380,89312,23679,13521,78783,96714,80402,69515,65730,31606,73737,70848,86750,40100,66528,34584,75703,12904,11265,78788,33009,41330,97511,79930,67060,43648,25181,83629,76529,59127,83848,39316,22802,69540,30795,90163,72619,30508,97571,30488,27158,83150,13719,47702,86945,11324,84832,75499,21891,26405,73741,40836,67162,77831,30550,90403,12598,84641,77076,24616,39251,38216,40746,73479,70202,86925,87120,43904,46765,85601,44892,60708,49339,33378,21516,97495,21295,31339,70687,40408,19757,46442,96321,36024,49771,55274,45569,87692,80187,47316,37361,91608,35108,30483,19634,80400,82720,64943,20658,29249,92264,39949,15786,36614,71152,68969,30363,52989,67952,71590,50599,21418,62970,89202,78007,91278,70100,41425,24817,95232,73012,12744,60712,77806,26740,71497,67660,27870,92377,45842,17050,35186,29283,14352,49479,87044,40295,89201,31454,43458,85028,54161,68152,73902,43385,45258,76189,69246,25593,67468,54182,83623,41690,45345,88188,10045,28034,85125,97704,94428,44619,78491,87633,17262,77977,73207,47548,14382,26206,98130,29756,45149,22465,18821,38428,75322,25289,31624,21324,82657,20910,96175,23101,25243,97689,92012,30642,75078,86236,78396,38283,78690,92610,21051,56701,34572,65950,30497,61403,83422,22898,67082,90438,78567,25348,79657,27569,31838,65049,26948,88512,41472,57073,73994,30430,42212,89740,43133,64590,40481,37147,44176,86014,12202,20139,50739,83645,39822,32847,84327,27622,27687,73430,30468,55649,45682,60305,78181,23644,40844,81300,97319,73047,34625,53103,77148,62779,73702,71748,56436,72285,94215,21780,43226,33950,78487,31303,22153,93730,69360,13629,25557,77977,21290,60423,88188,70764,13653,87656,83592,52130,87036,69685,95951,16756,82935,71622,69553,17612,96952,51674,16001,44608,57694,70257,24984,27799,93012,78734,26196,28846,88261,65639,21128,39449,36044,46512,54565,38836,55953,25098,45728,41075,16596,14061,17069,30787,55109,29575,11399,31946,94252,25687,90542,86698,66917,72273,51497,48299,67007,15207,63149,81946,98787,15274,64679,90874,71086,49040,30879,12536,72181,60328,39862,81905,98801,97227,89495,77681,59965,15347,89267,45840,22576,92448,60761,63472,52379,13444,11470,60870,74833,62274,63527,53141,51894,93461,72620,41108,97469,91888,77941,38992,83855,15362,19627,53377,82211,66962,21311,14029,81345,17670,59089,25397,13668,83196,27064,76083,90678,57843,73417,76996,37856,20107,23583,73161,11556,10273,99911,64302,88383,79615,14017,91697,71012,41872,17212,45985,17237,89396,63432,40964,78565,43934,69438,62273,41131,50322,89690,46975,59705,80599,57780,82278,56643,80154,96860,42885,97068,17964,90131,85536,55534,71377,43968,10624,97782,36783,69303,83690,70626,75886,71318,65162,95912,83535,40204,28918,31337,20155,35404,41344,93293,85690,59336,59372,27643,69253,94568,12075,20011,91851,98222,61266,32325,73791,35432,36720,14288,30150,70538,31702,88597,96637,69223,67262,40121,26528,19054,72151,11768,16117,79684,84990,73706,83471,92254,34530,26942,58120,68156,33830,39542,88015,43521,29230,92325,19909,20330,50015,83108,56142,18016,46929,50325,49820,74409,17520,19420,99398,56638,93649,75421,76201,21422,70043,52254,84047,56659,88747,48755,26218,69083,83925,72889,65431,82307,79985,28432,88007,13878,60355,45814,87961,50590,22076,16956,36350,48054,27520,72081,25804,11648,18513,34147,22300,51292,27122,53206,79335,87810,49035,61314,68165,32946,34154,77316,38930,80451,18323,58854,46395,52677,50757,24334,53244,46080,65046,19472,78738,71262,77590,22321,20016,37063,65444,52375,47366,32134,97220,36200,85388,84685,44081,14501,41087,53110,41006,11631,83497,32785,35056,48079,37499,18332,22364,34677,36503,61376,18011,90117,13646,71520,96214,51376,96240,85404,58548,43985,32406,68985,42896,24987,52896,83480,80975,39344,77718,72397,67064,27643,85533,40216,78058,33196,19828,36714,33708,69108,92098,45272,57687,69503,44188,51722,45856,75360,21185,57244,69865,86980,63299,82888,85726,25825,30942,84973,48763,18620,86445,82939,35191,93257,59840,82589,69974,73174,53712,50485,69787,92496,16415,52213,61172,89034,72782,89030,81995,20590,53450,92084,75036,53037,88397,32706,28838,84161,79945,83251,61123,92105,17540,84308,71150,35920,31169,15511,74867,51045,86156,42851,29301,83336,33309,95424,98377,89125,71678,88881,29146,36794,50975,45142,71333,79575,43135,10174,19672,35132,81230,16570,12679,41397,70776,20152,44749,49871,23061,62372,39855,95073,76494,29238,24452,83820,37770,83641,31616,39593,26207,49662,61767,15201,94024,67180,65159,88518,98167,56078,89523,36311,58015,18006,84774,95489,75728,64213,64629,30162,86751,37001,21774,19031,48249,83635,88737,79665,89067,35899,43215,46187,89558,56046,88331,88573,39322,67586,37784,94964,39541,18932,68437,41292,25547,83263,24482,51158,61283,11450,44333,24447,49289,12084,24273,83117,22764,21783,50562,35890,69765,25079,85808,59084,45255,66700,33645,92571,15269,38498,67532,71097,97514,20874,65578,17044,86678,46405,99537,49704,16257,67661,86171,67864,99497,75090,38684,83681,36532,30014,42088,47382,36564,33883,86376,64970,46257,38707,32825,41190,42706,25314,15755,76900,20798,95555,10013,65116,24019,48241,51413,97381,61458,84775,89007,80981,37004,93183,95096,71549,82442,73270,51430,33707,18921,73260,41477,58183,17036,24921,99005,59982,53898,86945,88565,58615,84511,87622,69727,68657,30645,98332,90977,34490,10551,29445,69290,68031,13349,40282,31536,81181,19735,10248,50314,49544,92169,63811,81638,26388,33108,71848,58526,13867,69160,95549,63327,13240,92086,88499,74276,15676,48373,13461,16719,45692,96897,27687,64413,29520,93934,41926,62333,15976,48416,48738,26426,46322,67594,65690,37625,48394,41840,12161,45360,97705,65846,57312,70012,25476,26976,61083,14466,14699,18051,24722,76279,87591,19379,33028,91204,60226,60745,78474,63247,53903,48256,74949,59304,72509,48534,54868,32865,49013,13792,88421,37179,73170,42756,80090,67357,81392,11267,47055,63392,68337,11400,88633,15418,98648,38907,28094,17695,46141,76094,17344,53603,88966,15115,45267,14307,60738,30570,74519,51205,52869,81825,80219,74455,79422,68591,75061,45728,60194,19254,75310,34049,10848,52683,33516,18940,68709,11262,74224,39646,47669,61688,80720,93171,67258,19197,67195,86654,37669,28231,81606,78017,50102,90077,44483,60683,90045,66323,29225,16608,57160,57579,34646,28238,93324,99312,27220,39543,73130,50402,91822,12426,20343,78928,57403,33502,56530,44468,99322,10384,63818,35326,22955,83794,24694,31054,15054,91875,40370,52326,98845,94276,89903,58426,17546,11029,29513,78395,49912,94373,14020,52265,70145,39760,97193,10080,75681,19559,75994,46686,27995,43278,88198,46013,37917,80589,22620,88251,45486,98427,39204,18032,71540,12206,67391,24191,89419,66624,65361,73247,26243,12919,24068,58901,74567,97915,94682,66840,15845,89607,84959,48614,28313,68957,53572,15211,24237,22174,41769,34417,15876,52748,48981,64328,15616,20576,11437,30973,58101,55352,75784,46106,23417,37744,89016,75308,29245,56246,27124,25633,47612,77195,91799,90751,88901,20927,34827,89987,41329,28602,98237,34365,99423,59572,62913,85591,49448,10912,69482,18329,29129,66787,40387,28315,67507,38276,81841,67216,83569,90585,88158,64080,34561,35963,21480,77709,36082,19428,44253,74224,41955,15341,25482,58297,90569,65415,52763,34937,53774,55196,49876,93442,93288,82218,74219,85541,82661,32337,96249,17564,72699,11503,23445,69381,84812,82079,67452,49167,15717,97716,70180,81806,43000,25212,22692,82516,83164,96721,93953,35980,87923,58202,58376,25545,66077,70214,50271,15337,57739,65826,30392,48556,56204,63465,90346,87947,32534,16245,82294,78650,49469,78819,73689,57917,70208,24527,32204,28606,83492,37892,50649,85130,28341,86885,76593,21357,41374,85625,29221,88472,38786,54730,39941,33295,57361,87505,14989,28077,88416,12450,42256,30568,12320,79495,26227,18653,44153,86495,62277,80860,98094,60604,50376,27709,57245,17513,94996,98731,42307,78621,17296,46053,35068,20253,10421,85189,60403,60416,36333,92456,23393,58863,78550,17090,78279,85806,11777,29085,61237,10328,16791,85259,64482,99054,33892,94162,90990,81717,99489,10863,64463,97684,29219,53335,36526,78940,34636,48815,38190,65729,70257,36771,94720,75236,48800,68229,15452,90749,31957,65246,24916,84989,89798,21927,47053,58702,97655,67643,58418,96444,86314,10386,74628,87799,88875,91719,97037,27684,74003,98643,50464,10014,42548,22586,96936,42666,20432,11150,50925,84035,12710,25578,14435,81476,55905,68198,64662,31113,85157,61173,16558,86110,28845,65476,23613,52108,11012,78775,39585,99570,22588,48499,46052,21386,67876,72824,67170,50716,62346,41642,96738,64752,92560,77146,65018,76459,94016,89007,33633,57601,54588,30474,89673,76363,69459,45025,90573,58057,64848,21342,49158,61856,41338,68556,88062,10105,28420,40318,93638,74080,59515,83528,35075,17517,76008,62770,14294,83751,12907,61355,58210,82672,46352,10669,84490,78376,81852,76999,49316,43187,23938,61708,89315,63549,36215,50444,98606,59264,35898,69815,38349,67196,33296,18567,20059,29452,72602,90453,10964,94249,89353,24735,56616,41398,49439,42659,21223,53154,40046,48589,65071,81159,47523,45806,34694,30547,27019,46608,77580,21477,17467,77802,94229,77517,70151,21137,62183,94956,92640,42955,48903,64803,29308,30049,69202,34496,63440,23468,30930,76948,49500,19869,41971,32966,97065,85174,57714,34865,16524,30926,74547,11318,21297,12628,74270,39698,23403,42142,93998,85839,63623,64730,78484,87960,60658,82098,23062,15264,36454,21024,24933,74828,21143,33685,82864,28151,53631,14358,52979,10521,56082,78387,72723,46488,76319,60689,89734,27729,39811,63615,42942,43684,78299,30724,87632,31486,69240,48065,64935,81548,70063,50421,60449,73829,12081,82026,30740,18661,90082,78263,93631,17490,76701,21079,80733,39649,82916,58350,92928,86627,95566,11911,96951,91080,91805,16917,56396,66202,63232,76665,65309,57160,82473,96629,43815,67111,14561,59175,83874,36122,32725,10095,36296,81299,42865,91318,61685,43528,46310,55249,66861,85422,18253,95439,84027,91178,47039,56137,99904,69817,10236,49604,58882,44537,84389,11654,35853,67677,55327,36159,28148,15416,96558,30187,34092,64568,83595,54065,42159,59557,57364,77441,66107,19866,76109,54180,41867,95146,42177,10879,13643,27101,68536,70559,72890,86789,98603,54960,91352,82666,24769,65944,51784,97174,32688,92988,58395,20109,24924,18757,52414,67311,79071,88651,10628,80915,67370,73170,64201,11350,13336,54975,62710,91025,56243,47871,26961,84900,74833,12562,11396,41793,97482,14609,72650,90109,29986,85797,76536,65212,38148,42150,54402,25097,26540,83122,12087,93182,72755,55067,71361,66393,52270,92854,24393,35888,66742,93957,61119,43198,86227,47183,29624,85570,20196,43971,65941,56330,28815,11831,91764,58951,52978,16414,56590,59890,45800,86869,22033,34131,36804,19072,68620,99035,60211,67749,69426,87562,23333,92625,77123,41233,64335,53245,31499,89886,57004,55121,69243,95573,91940,65376,14395,79866,78227,64883,44357,94337,42643,25705,32454,20151,88172,84955,70031,15610,34052,98383,96367,23146,82028,25679,51605,58133,48865,83861,76279,90268,47677,98653,73349,29143,90480,34129,65519,53871,35468,47391,42207,32168,55129,53563,22288,59121,46821,38796,57894,71228,81593,76152,74693,92675,33004,42678,62647,61185,28068,40603,80198,31391,50985,72446,78556,55613,81111,12784,51812,45110,80999,44616,13024,84528,14684,18996,21266,45561,35100,88493,24729,52357,23507,92532,43209,63967,82932,22178,87390,18334,58097,53770,93106,63196,84558,25774,60320,28705,69428,88814,49921,26037,71159,77593,32303,14913,36172,97470,36046,88932,79290,83790,55971,98446,66996,55738,59965,89797,33037,13320,86495,29249,60865,82543,47319,27392,57350,20443,42233,82638,13437,17077,63937,12245,18197,61554,13185,57662,79009,90763,11208,42159,83471,50693,57204,33597,65028,93293,31326,97660,52853,32320,11226,33487,84344,33999,64878,37825,27103,50231,39921,72358,28001,49173,35889,40410,61324,24998,81756,13603,16144,36699,49745,75124,80067,55497,34558,83239,87197,44477,89546,84987,75117,36874,56752,53909,69140,79983,10930,78186,32007,97380,56759,93349,27769,18345,71920,57497,56857,50602,89683,52657,10543,34526,35953,77673,61151,10282,70905,10434,20569,99601,30205,77456,61262,98354,54362,13154,27148,87242,82677,92137,84700,91273,36367,17371,37977,72041,18413,32228,75298,43678,79394,42224,58675,68265,70697,65329,82179,92757,68168,41533,84214,45711,96695,47588,92695,61760,83811,17048,92137,47992,71290,23254,52460,40604,36856,84854,74727,67431,28291,53864,12240,60659,80457,92151,58616,11578,43614,91122,53234,56674,25281,33339,86261,68698,78321,47970,18514,22909,61846,57368,86543,53427,81964,62666,44591,82582,24137,50926,66666,87513,80164,56345,77772,53009,30131,11929,76979,86754,17724,83105,40709,79514,13459,89053,26053,15641,64621,91474,38261,83164,62625,66885,84509,80083,40818,48036,22202,62893,65700,14387,27488,65388,81621,49326,38195,24753,43258,62626,99198,54858,81077,76222,67309,15904,86062,25324,19688,30819,60595,78175,74895,89631,60479,11247,31909,52043,52441,53782,13104,77469,77694,39166,57729,72301,49393,20500,45056,50652,91255,26960,99736,87717,99862,73585,66551,43881,99953,28072,35653,97606,35769,37303,46693,70621,32737,57924,16128,40735,55764,65058,14992,75965,85925,24933,79855,14850,44207,86520,22379,53893,85293,86128,79147,91884,90572,99791,48093,71778,86339,17731,75726,25371,58400,61735,53682,92715,47893,15920,74899,64919,45562,38446,77919,20712,55087,22262,62086,91996,21594,36607,33954,76423,43451,25432,44335,39443,21546,88929,11554,85011,93935,16909,56028,68796,81954,47402,72549,72640,46962,78500,44514,60836,44166,52716,73110,11124,86625,39840,93755,49547,95995,15632,22795,57843,66963,81055,98323,61189,93390,10622,93240,50719,86789,36775,23779,67521,23905,90755,57520,76857,22699,82744,27257,80098,67712,51682,93336,71594,77096,31703,18959,28160,44267,55146,24717,40283,76615,47497,45856,21541,83270,67853,85952,43020,85455,38859,53903,62648,56329,12824,77960,84041,53219,54590,66059,95899,85948,21721,21029,60638,69855,80963,88083,66604,58749,40875,90925,92999,10821,65944,30873,18015,12235,87058,36137,82505,37525,33106,53357,40736,13308,25372,75986,83943,64848,59913,27964,13253,24026,95531,90777,51242,61375,35764,30073,73857,79812,41650,26886,97540,98184,47696,49642,80146,85398,83689,71327,63771,34518,86265,49091,18291,37459,20385,95791,51225,63127,16898,14286,61689,44652,98609,29696,86775,18824,14264,62752,61571,51214,83766,21399,76510,58981,52186,15063,56961,85230,25530,61618,58415,67770,98320,79014,99620,78336,71485,25116,35717,15074,44303,23757,22210,60257,75330,98545,34914,81247,51577,96501,66239,26417,84146,81708,62021,11098,21943,37344,59617,15617,59755,39126,97130,35109,37607,51838,17894,72351,98969,58514,26925,48910,33227,39667,10704,31286,89246,27143,95505,64121,47222,38337,27903,26182,26513,38100,80864,76682,44749,20590,47701,25239,68529,14093,19750,35118,41697,49628,80405,86068,16643,98928,84083,57897,60933,16310,89471,50495,48208,73279,28591,87897,54989,43037,61751,82905,32346,49883,39114,46952,11914,26694,39535,17114,81419,16285,17832,13511,27875,19055,80437,45647,64370,41944,36617,21495,68891,17986,43616,78999,37204,12461,27049,55088,88683,88502,15433,88513,54326,87977,98740,40105,71467,71704,70789,66762,50995,86312,61025,27536,93746,65839,93463,95270,99367,62572,36722,51473,75779,46311,88968,30568,97473,65376,66321,41887,53428,35283,85952,31978,13234,39498,25397,27364,89667,63874,62560,93574,20595,40373,95718,90694,56585,36494,83371,41615,36891,90651,98731,70231,49700,44058,43095,48575,83954,95121,61592,48971,67922,31154,89486,45824,58955,12225,72778,84740,26070,56004,47771,39801,44046,94485,26789,36532,90407,32656,33889,52691,53799,33514,13201,32711,51353,63179,76092,60180,39581,33693,96514,57052,57457,90468,93542,43669,55070,27839,97008,50478,87669,50431,62913,34600,51366,52316,14264,73913,42500,90659,43649,44992,53493,29261,49344,77347,54818,61319,63417,13622,45251,49528,53867,91852,12839,24883,24710,85711,36619,28705,17680,20236,40307,27953,10082,77492,98695,98263,43203,33406,49335,44420,57525,13407,14576,43578,87965,93745,25628,83322,75377,48248,42386,25568,66057,49596,52437,49096,84205,42113,66430,42499,82868,31136,13243,14279,11954,80150,84828,81540,40208,17953,58543,75525,91131,90217,79558,46472,78225,64818,15992,22513,49386,36555,29469,69839,51987,50851,95803,69122,68184,28500,82549,26823,32336,34802,36551,37193,69095,57400,40438,16422,23231,95889,93539,39712,44730,51031,29233,99835,73140,65164,47924,33601,14923,77044,90531,95223,26547,21026,69862,40998,99899,16966,88919,98668,87159,90678,56043,55037,15897,37514,45730,66948,46698,14239,98169,66526,15576,33314,64173,32488,80024,99188,18569,66114,64770,84026,51737,14397,58916,87917,80203,48976,59380,90006,55743,26120,88011,93704,63545,19522,13783,48362,80834,18289,10503,73320,49957,42559,85172,10622,91916,72896,35054,70958,60450,12237,76711,24961,22909,24965,54613,25197,74896,38510,65220,53486,96896,72055,34361,80124,64277,68345,46073,52623,27912,88575,52736,46389,25181,33063,58298,82428,18367,80194,36061,22363,84856,25565,23805,17453,27256,71173,52704,92646,28303,34224,90269,41117,77668,29663,75516,13668,60951,14528,54525,55197,22482,37630,12950,38773,32736,86988,32061,47088,67393,85699,93737,15245,84337,76285,56271,12186,35671,51733,44014,69843,45144,86236,94513,77335,21952,20641,49947,25666,71689,11442,34213,25490,63149,29916,58821,52993,69434,99048,33467,78844,97199,52402,24953,62157,21880,62996,15651,81213,68113,37735,88924,32405,83618,38241,93030,51247,14742,54603,68086,54640,47418,82003,34340,29863,86901,92634,26497,12338,44731,65078,28773,51935,35478,22702,41922,56642,56801,45878,29545,82528,20641,25368,38003,61548,60200,77170,93558,63416,47369,58938,21791,59620,51720,26196,18469,24130,37010,40474,65850,27170,55451,33320,39098,15918,14093,51903,53289,82700,20883,56603,30922,69120,94997,41345,97657,39430,78715,99244,21708,29049,92250,72682,46151,44408,24769,49395,93664,85722,85635,89438,45586,97746,63363,17874,97855,11048,96550,70832,26894,42657,99888,75466,35197,46709,27514,20815,73789,29188,53019,96260,68088,85993,13785,36779,96115,91750,19739,70094,30661,64268,86784,55555,95132,14512,12276,59250,57519,20881,73749,94197,14736,59081,70247,34084,46339,88926,87354,88914,48035,88308,83751,85321,98889,61806,36093,45508,40415,86256,44389,86610,84440,46735,99362,22347,24881,30861,33084,47383,91790,35223,87174,30262,53859,97495,27858,62756,48919,47830,67339,42317,15369,94971,32310,37709,60407,23246,35474,51893,27423,59499,46679,13025,53493,84963,21998,50442,41643,63067,51278,29987,28778,10039,41976,93760,81782,22479,57710,75972,87810,82061,80444,77036,29360,82172,52577,28722,72198,29592,40886,51805,40915,95336,48429,20655,60068,69986,28326,99318,70291,31195,18341,76220,49929,89955,27193,38359,77945,38865,32663,18587,19588,83575,36296,21453,25200,35590,21050,35596,54923,73293,93336,55425,48794,23664,77808,92941,34835,28490,62548,21576,64409,11858,61270,58252,47609,48065,96202,98816,65267,61060,52890,92167,22460,15202,15853,78853,44190,23141,87200,59856,96738,50841,24658,46114,32049,74514,97600,23519,22311,82689,88617,13965,65752,29099,37534,41097,24614,64972,55776,34692,23099,88522,82470,35081,69235,58370,83004,95351,68229,54999,83606,48575,14146,72693,28397,35092,66120,69203,45195,42310,36227,70205,95410,59117,89486,11173,13292,58321,95163,52362,79623,21789,49346,10354,88329,43061,97457,22760,26087,69118,96155,22450,56480,68927,17608,25694,66030,57440,21041,11011,87257,43810,22470,94022,38290,42768,23511,22166,46268,99176,20005,59708,36548,81724,75014,13009,39955,32051,46936,80806,94340,54619,80369,85918,71728,72938,49711,24059,62069,86131,97350,11262,63909,23062,46104,74350,98460,92389,66861,44018,21570,97241,76336,87502,63069,51525,49661,58316,42958,39916,54718,64199,58597,57119,99420,42996,60981,16274,27088,44682,90829,41079,93515,86651,53314,66935,36920,10148,73404,95968,99118,80898,24080,12674,71908,98814,69894,34531,10057,84582,84910,38822,91756,64237,43621,86943,63735,19018,95582,67851,54060,65262,84860,64444,57583,26181,94881,87936,23427,45074,36667,96792,56421,14528,10692,44354,29557,63445,17981,67351,82772,90596,52494,12997,22467,67651,48817,60768,12949,90077,32617,64681,76483,58098,40058,76122,58722,19693,58032,97835,18399,93023,80557,17193,76242,11819,90087,40862,63957,62471,21190,94437,79050,85083,92050,21646,93065,28122,64854,71430,18798,68708,49367,29844,83186,85505,84293,79387,10738,88695,65986,37859,95977,81760,87618,98848,61175,42166,25326,13778,54237,33837,74106,55310,19153,72215,52138,42199,27879,34684,48252,58949,19904,60932,97146,47615,32348,22534,46015,68653,36889,46422,33100,92348,32862,49563,15443,53877,12835,23462,18733,97494,71859,87134,87664,11611,71328,92953,11038,71724,62200,99282,43772,61433,60964,22399,67871,52501,85555,29189,16938,99461,36357,55434,11676,23184,35487,35515,89095,13863,50469,90472,40119,79466,79155,25939,66348,27927,19669,85085,49396,81001,14798,35346,63322,27105,48988,27863,62248,89593,11540,71046,35793,34054,12015,83511,38802,13410,54737,59197,66541,94912,75352,23646,53584,64606,57573,42222,85530,27046,83239,88701,11749,31640,75959,24763,11589,56689,82416,24388,78849,80953,54290,39037,31336,18610,47164,74962,34589,88143,25336,26531,68338,94082,88501,72125,73475,56662,15211,68701,78307,16775,17973,41085,29444,31951,72908,19200,42694,45249,93329,85336,21473,60329,68068,99151,58314,60860,60445,65640,71573,41632,67413,13296,91190,18443,83742,48790,40003,28347,86866,94595,66040,99932,93598,86093,46470,94789,81604,93828,98744,19847,52444,17030,98768,42519,45080,67081,95483,28225,72710,63149,25978,34255,52096,69701,37762,88134,92925,49508,58559,12565,73656,95144,13576,85704,58921,91846,29796,87921,98739,30835,61236,54407,63215,57100,67922,57976,63496,28630,88824,75188,16031,71811,50299,41176,26443,32634,15732,32428,12666,48218,15873,60888,31575,75733,40117,66592,61492,64593,98549,42248,94487,90982,70370,66106,67245,78890,23109,30495,76792,11564,97086,27138,99717,87385,58610,58298,29259,79200,37657,90094,55410,74247,84914,67035,30122,30246,30634,22758,90102,16210,87128,97029,22216,49314,51430,77770,41397,23558,54741,54689,56646,55296,80343,11836,86463,74574,63138,17909,57733,45497,35732,55754,27074,78959,59069,79064,79552,61505,15257,72228,48920,46207,20907,63771,64155,97619,29778,18083,31916,35553,96870,44386,82483,10030,94662,49101,14476,43429,49813,25753,63492,94356,28089,88801,10970,34002,79326,53410,54507,29116,49038,17859,21203,13292,44967,73346,10783,84635,83520,22069,82000,54766,99823,72135,83610,40015,96900,42731,82992,93400,71860,91441,50854,94398,33085,54685,51077,87001,51295,81534,53239,52544,85651,49202,18559,55439,73363,29267,30600,85333,53197,65725,25163,49242,25272,93081,23908,63330,99674,92384,82047,56023,95074,54475,16233,22239,77861,44286,92835,85144,31289,41482,34953,43420,14872,99333,21675,44473,34044,14569,54763,43679,81215,74328,71903,87308,65153,48471,83724,91586,38290,84262,38996,82062,31006,26918,50317,81670,95442,54412,92530,29526,34190,46918,97285,19773,75081,79249,26214,87824,78186,79721,26240,65878,88283,54639,56032,30009,50784,21195,99505,78742,18488,20933,28789,14848,43187,21803,46460,25032,84180,68775,89182,34453,59034,15778,95417,13838,61472,37319,49638,92818,68238,11251,69578,62364,78795,52025,66386,78903,46669,78358,60754,62261,97036,89355,68644,63252,44438,65769,27727,24454,38890,97780,47932,16161,77771,24476,90187,61934,81870,94710,77364,44339,73875,33523,76006,72554,57661,24448,83153,25451,89753,25641,40957,74700,44359,29103,38211,66615,13874,35299,77914,97619,87090,45544,35759,83540,74982,90338,31323,29335,12396,31878,27850,86557,74185,22494,99614,84330,27606,10940,87326,22265,88823,69329,27846,60686,65441,42142,85311,70178,14120,61970,13380,16020,26095,28927,70536,71978,66224,84513,54208,81210,74474,93780,55467,58675,39256,29581,37612,97549,74973,21634,13720,65265,32499,84413,74526,61486,93570,38065,30392,40872,45440,59303,47811,75183,25774,30172,39288,63131,58933,41935,14845,54221,82034,22801,81510,65169,29765,35351,52291,38950,37684,82955,16519,81216,52502,59882,92690,72628,62425,39078,48808,31182,59661,38680,79734,65636,14648,33151,76074,73270,13215,83932,37162,22873,28225,54428,68510,19604,73151,28505,53147,83481,54787,98458,27294,55254,56140,85823,50244,87679,85406,31320,89664,25460,88783,92344,31527,28589,68831,79623,95659,31191,84344,69366,29547,24372,65584,43004,42368,42380,73740,83103,97337,15796,19745,89277,50735,41080,71191,34352,20427,98934,29712,28269,64055,71102,74187,33416,77518,57694,93160,70426,40474,96990,40575,52953,52691,49991,68114,46458,82430,54071,87478,92653,43738,70606,51280,95501,51940,43653,91629,76996,40109,22238,45920,27692,63566,29036,41483,19812,16087,71588,27408,41909,98110,58774,59184,97136,49445,27492,52454,33325,31856,47094,11315,76145,69852,89323,80124,95564,44882,99067,28509,12493,66195,30616,83411,13438,47051,97999,69720,42940,63334,84086,19368,25407,89484,83191,63668,18045,65238,92583,97112,62558,47124,22153,85674,64597,89287,56405,53381,50641,44872,82754,75682,54590,78800,68432,35626,59032,85682,15067,59906,78471,57817,63305,36257,97951,48689,81621,82132,48158,32202,98243,86476,34396,73191,70737,38035,84855,22926,46734,89261,51606,95871,64691,76514,93035,30051,15038,48639,64729,37515,23921,92325,87312,57985,84214,13984,55536,65466,73842,53249,88916,14184,64024,69057,84412,24510,96319,50532,47088,76038,52273,12610,48432,19307,23686,91567,57008,73405,92669,61012,29128,11527,72675,23703,19517,63059,99827,68891,95560,20648,15376,57752,60033,84270,64135,79253,13488,52572,23889,14631,24998,47597,54415,18482,96178,25922,41080,72012,15573,18403,42400,45403,47489,93131,94698,47986,65323,38166,88211,56904,96865,66357,20011,47442,57588,31581,77951,84128,32984,89225,24173,58916,66119,95387,65804,37291,88452,66159,88838,80317,76878,16339,62521,12321,98355,23027,21663,91759,26337,11669,94236,70391,75903,67078,78346,68818,40552,93279,27533,63970,90531,74840,38566,28192,60837,23706,89972,27848,67025,89036,51838,72471,72050,65844,70412,70568,27619,15458,61683,27088,47600,53331,82680,39115,54414,99135,74455,69022,60754,93828,12891,26640,55348,66055,87111,46810,72530,88733,61503,61828,75033,66096,92622,69078,97068,26445,53420,39862,77984,65199,71514,59831,59501,75359,59642,67210,97418,91850,26870,46802,80401,12909,57068,48786,38673,75432,72001,96249,35851,10149,83347,29474,61452,37008,50231,17857,56232,42917,54552,21180,81772,66848,56243,92195,64975,74703,75136,97827,85826,17514,22557,98667,74165,82487,88336,86371,29909,22740,12931,12910,49118,92132,22224,29595,33231,51093,61512,14798,39668,43764,87419,29059,59385,83283,83812,35124,37110,50055,10120,86767,41298,41035,57039,20209,34164,60218,63444,98903,39174,33229,92120,76812,24412,79839,70087,11006,14108,38089,43303,51038,45317,77652,17312,51729,14128,78198,95375,47964,99979,26724,80841,99185,28905,26737,62319,50077,77345,84303,35900,77175,60108,29987,24469,74932,46563,64107,13036,56013,11880,68798,48066,25631,24304,47323,86016,26238,48507,20174,66738,19284,17585,30739,46757,12906,70975,47871,64287,20686,99072,34268,24847,95483,55147,44730,84276,34710,68185,70003,35303,98185,69289,28072,91549,53061,44886,17885,38246,19728,47402,17940,32729,69537,76113,85231,89515,62060,63141,54532,78346,64025,97680,10948,38240,32525,19799,23583,36336,75144,97136,61486,92546,38069,64857,72225,83052,83892,72894,42477,79603,29880,75791,27636,52263,66063,40507,15942,11809,41149,63751,22637,85778,24346,21923,46470,21159,78056,20274,73979,50531,22032,56989,77856,30136,56978,61759,76759,89956,31046,51297,53816,80278,29580,37522,50331,19978,66935,44408,82219,84954,80105,60824,26257,30071,67828,58402,94360,22496,21076,45123,72906,55948,64733,29419,50343,10225,80911,78825,78264,35649,30618,68234,97847,75786,23176,31241,46301,35181,25574,85429,96672,63835,43360,36897,59844,29069,15041,76391,95696,83840,65273,72123,49765,93871,81908,53038,43472,75096,27031,63169,10770,63627,48723,70372,20470,65090,11318,31017,20544,92600,82866,77608,75053,41052,86509,19667,97050,93753,77796,64303,25801,75180,26855,35506,94998,46938,31082,78699,18765,53447,81981,53922,18687,18586,52307,78173,15601,26949,59091,49903,55892,12114,80065,41316,90445,47689,13089,67556,72880,55131,71642,90615,94685,80837,74597,35726,73118,81294,92452,78304,49446,38773,72774,69123,41899,71433,82543,18458,52145,30449,68224,93773,20506,67406,76355,60440,91504,19391,25242,69733,90588,40243,22258,97738,10019,13198,16151,72323,37659,20981,77277,43390,11480,17809,86135,19822,34563,83928,16691,60785,25100,44449,80551,35073,48491,46748,75514,86096,85800,35688,64612,81260,12323,80870,10404,45309,14898,46972,24860,42332,27906,44500,54078,40023,34682,21668,12609,17398,97728,48386,53076,20944,27228,94809,35379,62096,29221,64588,50909,81764,67712,92719,64636,81685,81353,54002,13102,68914,87485,58394,29120,48555,58240,96877,31999,72746,17181,67548,32702,82129,72608,96720,67178,30242,43966,51356,40846,83116,87141,45279,63675,79873,45213,29172,91085,99901,95680,34065,30422,42653,45245,36057,61369,27887,65637,53401,36525,39717,92396,61161,66854,41592,66318,47284,63711,85460,72676,63399,89292,13728,53674,50010,52165,93855,80985,38240,58442,98757,90039,45818,20342,91956,42543,61469,18572,98010,25161,93989,61674,76978,65915,80730,59742,62917,49848,84472,39864,84566,51158,63721,86487,57115,27605,24912,20749,64245,71497,71222,64674,74518,60034,22799,58805,24059,95388,36704,30663,38210,16517,20430,57052,27625,26782,93784,66278,24024,34747,84333,58971,38945,38992,28688,81013,92255,99199,33675,69093,52330,87430,48881,18855,21130,74499,70086,14740,71173,63949,64441,96512,12094,61314,52478,10492,25330,56852,70730,33369,65935,43907,59014,27181,12709,70576,92175,29900,75399,46960,14392,35038,92703,85784,90853,33058,80570,47369,68996,58630,41598,85915,36263,51867,76869,95438,32824,54967,42025,11234,32735,81594,65140,49478,57627,94279,55793,52611,95910,24197,73917,11888,50620,76703,39102,77571,25109,87010,16794,24945,65993,53906,77953,18982,88804,98468,20341,14070,83242,54934,50014,56186,26854,48206,13464,27511,30573,80879,37295,66339,97579,41124,11829,49356,59887,74905,83621,89228,96578,40576,49911,15758,88364,70741,48227,20059,59172,90094,41713,27162,14318,66092,69942,27420,73932,49294,15731,27851,91316,72448,78184,98184,65000,16483,11689,25008,70430,16408,64263,95666,36436,28603,86874,23668,34664,63459,99500,61355,32251,84519,62084,34495,10432,46404,49652,72369,87943,95796,97549,44508,59311,38067,60970,86202,68930,45738,98311,95469,57138,21361,65791,83425,71649,53305,72863,97909,88349,98862,60776,13769,55495,21650,99154,70162,69095,22592,41623,60097,59819,63001,80024,86150,10614,58092,46254,71899,74262,69652,36841,60448,94172,88449,10122,89350,24975,15376,93049,75861,23330,67340,30882,15444,28539,18096,95078,93293,89827,69211,18676,77733,70386,94216,91280,83302,94665,66684,60851,65802,74265,69954,60763,67261,73554,22640,89134,23385,84521,56498,95502,55861,11260,89892,66045,45548,40251,99453,94789,72098,27756,96986,87143,62673,43117,89771,82660,66751,90809,24652,52935,25966,72996,22069,97486,38018,66218,14511,60705,81766,60332,59693,62610,34111,85712,93726,74318,78098,16054,33220,49967,65555,76768,49734,70580,98229,94593,90990,56654,35435,95211,18799,88619,22742,50011,99674,50989,29989,99764,65268,12237,24151,75521,57039,38829,10430,99950,67671,35966,34368,21348,51888,76997,70203,39812,42199,87337,45021,79800,54358,17720,26498,89988,95670,61369,55175,78839,59116,31321,49864,82465,83883,24082,56311,66027,72985,68795,42772,15184,63674,92369,64215,60627,13134,49586,90436,89461,13371,74557,58228,10342,38100,41851,55578,38150,34595,39037,68627,24765,79658,36677,22775,29543,47102,24351,18646,68900,94366,11156,41281,21375,47871,97921,59125,35611,99930,31061,98754,63702,75107,27657,90401,77867,33299,70574,99078,31699,52955,24741,41330,78413,44352,30155,25514,23520,11757,39266,14562,12547,30131,37603,78262,53502,73979,67036,32830,70343,54887,84771,63219,91814,13715,81359,63329,60420,35318,27766,14860,50767,88681,18503,31360,59335,15505,41590,57348,44989,18774,56525,46382,14693,65446,70573,78200,51565,38751,67245,39998,35427,18308,66161,41542,33724,52700,77778,37662,40207,84764,93195,50420,51844,96316,38528,23267,37598,57044,52299,66024,49527,49144,11725,26768,74915,49126,83009,41074,69928,49494,34439,27711,16514,86778,23189,45721,82076,41063,13412,28462,70579,57710,37605,39278,63393,14832,55807,41369,96536,30880,81523,31294,74269,87202,41273,15179,48044,28218,27679,18783,98381,78959,80999,98975,10525,55435,37103,56491,65203,41813,43640,14519,61910,39455,51398,63133,71343,14636,96503,69183,24031,44331,47628,25530,18300,42908,43082,91337,18091,86034,50406,70470,31402,24512,90428,43547,25197,45514,73316,27181,93869,51461,30310,99124,13834,76412,68189,80201,50743,20997,55618,86548,84976,16779,48752,80760,29564,30883,44879,54745,58956,92272,95704,34242,71644,45577,94982,54233,51053,62450,37646,84441,27809,23405,54021,97713,77267,84485,18732,23981,77198,51654,96585,33275,68176,31088,90019,78108,95082,58111,94716,78422,84868,53800,57018,80012,45642,23549,81819,66855,32763,76955,54051,21854,78758,28409,43683,92261,94099,22177,69682,28492,46587,63016,25512,94649,30106,38588,39841,23438,36944,89830,38392,79964,93295,51855,98457,68267,21586,47404,31608,20288,60656,47292,24659,68779,61829,67169,53183,14152,98798,75078,61254,91441,89670,41260,58066,48365,80658,54340,91704,56524,73802,47441,88977,22985,32727,80162,49472,77038,39121,24374,36147,53002,12633,15121,93310,13722,54278,49633,15775,72758,22264,20542,86942,58521,32561,93947,32884,95787,75884,34377,80012,46710,28783,20964,62178,21112,87147,75380,13741,89960,92741,63250,86807,77528,87772,87927,74759,40212,80612,43985,45720,17822,47876,49646,18570,10449,96058,62187,87819,36824,21626,99599,42409,77778,55447,55514,18278,97591,39697,17269,90097,17381,28667,31788,81811,70896,16076,21734,21855,66043,41361,35883,16828,98014,89636,97979,90475,16564,77072,54174,34842,66254,27043,41622,16924,95361,60896,69018,64254,91218,46200,56240,83874,47153,75900,43800,12203,65782,86694,78301,91862,18430,30871,72480,14285,70598,37699,39604,31957,17634,13962,94129,44598,41615,11313,51943,60527,66999,56654,18456,87236,60300,85155,67362,64040,47286,87494,90603,13299,59533,52216,76470,92415,55929,62886,31226,18197,51700,60058,77567,30486,13945,40600,88176,23244,97949,10941,22872,37320,60854,18572,58004,86334,20362,36936,27091,75436,37618,36981,37141,72312,24419,70707,74016,27822,91545,39064,24339,82547,57032,31052,64312,48677,65337,54223,62793,55087,25344,86890,63333,55113,52278,59523,98137,63573,51498,87341,94623,29815,74859,49461,36321,58754,58374,78115,67983,11633,46992,19239,97494,97828,82107,89979,56957,13617,16508,18621,12567,44405,15458,41197,98823,97581,11737,21831,24509,19361,75742,15689,93783,96101,46077,35191,11963,91109,25058,56811,17893,76302,27297,19924,88262,13380,42939,75003,51193,80646,34400,38639,25134,17853,69449,16412,63999,24924,22398,25291,60155,55526,92628,76200,74400,89166,77785,99422,15970,66311,58428,98483,54608,60442,80420,46106,63189,76608,34081,38884,84206,43756,31245,61616,82258,12563,58049,93387,59014,88207,67777,96185,32608,98079,70936,40596,56679,30082,91484,20391,11576,89008,42713,73120,21822,53428,89635,78162,48874,91577,73783,33582,83386,25236,31133,59283,29065,22311,10043,79111,93413,82264,34893,38624,83887,70413,44202,40823,97440,15568,67028,89371,82813,49274,63297,64139,65238,18871,49732,70518,22125,96339,47049,47157,53102,30157,63305,97884,92546,30041,44925,26387,36324,29653,19098,96037,89391,44055,75716,57586,28744,53042,66211,91232,24123,67822,28659,99394,39725,99067,49750,14686,43363,91078,57980,39314,14660,99009,80774,18183,72201,34041,92147,54887,86227,21681,50690,61136,20936,43258,44521,29693,46594,38348,89788,40128,91426,18401,54201,86231,51904,28491,44059,54004,22591,23730,75784,19680,83826,70324,90746,20221,51973,84643,30710,98365,71499,36034,23101,43264,60450,86425,84762,48831,75774,85183,93373,79572,61945,49261,19147,30162,99061,36609,93648,48981,48750,20068,63271,40147,85642,19704,18471,83893,62771,94943,45980,87414,46357,40779,68185,18923,82359,25321,96386,99183,27836,21993,28029,48386,31432,85569,32418,59041,82874,77419,43580,89443,20986,47099,24205,87302,33195,61996,48130,39638,20760,16983,10729,19244,24941,88898,25387,42384,65805,56552,23316,17112,74326,32371,22887,84155,22389,59342,84789,99853,28743,34013,81534,40177,83446,99113,89668,35822,67240,95221,43410,61992,72207,97766,14289,32040,17458,92467,17073,19623,44305,84665,55665,29053,50482,66141,38290,41680,32307,35521,77830,93016,11997,55746,47989,62319,16734,90487,76829,43059,26032,79392,55136,60299,64673,25136,41007,14148,29206,55820,50840,97215,36045,82157,41743,74164,10981,30522,47894,12058,42217,82656,30272,82253,18201,87256,94127,35969,94792,79526,13040,80479,82526,21215,57053,13479,44809,29871,70067,82982,18685,96542,75859,89298,14559,90334,94149,74304,74205,10400,20526,56915,32590,57426,17824,43918,35669,61949,52369,23079,30596,29193,61231,43523,96527,69431,15878,97839,24543,98882,24833,60650,97007,49285,14758,74366,42692,77575,65849,43418,99419,85866,54296,51581,94820,75428,62509,92902,79546,58938,85390,50623,81442,92047,95163,56165,64995,35041,45408,75563,65571,88199,77498,32502,31433,97985,81782,76925,73086,56842,68469,83679,47591,65482,25271,89476,96432,70110,16267,60182,47403,40375,50382,58288,72289,24069,45636,25908,41124,94208,98920,41805,62298,25058,98324,52233,92777,76803,21690,97466,17148,34348,43134,67212,59831,91670,41148,59060,22298,12341,50768,88952,92150,23797,40561,87225,49580,53619,16402,70756,11499,31420,99940,67582,99070,59063,94815,12227,71026,44006,76580,26143,54331,73633,89264,43286,93294,80774,12348,21744,35853,56176,11314,39352,88729,30651,62704,49380,99690,63926,18680,11453,81435,42952,57862,75773,48129,79945,26980,87662,15759,21842,57752,67790,74306,98618,86764,98945,58877,58907,84258,21210,90103,98651,22538,30003,34096,75329,70489,72053,95378,74699,29731,90182,98731,15598,22910,50676,21659,58200,26358,93475,74710,34893,20863,10434,94461,23533,72145,63176,41112,70746,73809,86286,30168,74816,82121,71645,53080,61181,28752,78024,29101,34374,99507,62483,33402,29954,70149,43836,59859,26248,93485,50335,73741,48461,20976,61572,80831,78344,18157,98715,44263,22354,92752,65581,21301,64580,77716,88080,16249,87132,64940,92737,91489,89107,71714,83374,50122,34891,69462,59930,78283,95997,18175,70345,30944,26849,87452,47390,97890,98293,80874,52219,90622,83759,30322,82140,54877,79125,86666,49128,74705,53908,42923,51841,19261,41134,58548,73219,36661,41581,53606,40998,60689,13373,73378,91983,98547,27075,52751,87866,21135,38458,46472,64963,49488,58389,27427,10004,44456,47060,90839,22679,75831,65582,13783,81498,51936,55100,52339,79455,66749,68795,92603,71709,92382,31760,94982,47361,96054,71118,23147,14740,44998,95885,90584,54566,44697,74235,74282,68511,53908,89812,60671,19556,84018,20885,51006,78068,94902,24991,56097,18845,80090,14599,75333,69629,63394,22405,19510,51951,36936,91379,31195,61667,91221,90990,87169,87688,26392,65657,35843,98973,61633,80613,42033,10146,54088,52453,82160,58773,44791,53823,33337,30760,41649,16756,14758,61215,48673,20564,93138,51183,36075,67767,40034,47326,99779,51673,49444,51127,32289,42815,76178,65192,94460,15123,94509,49492,92690,57847,29384,98385,16723,82417,16460,66534,83448,69910,10415,75208,67887,30559,58424,81445,86346,27141,21734,60483,83324,52682,17857,59006,19831,51836,30331,62769,39292,45756,59054,53926,39260,99777,20191,67288,75580,92701,22041,74573,24471,35414,96896,59523,91959,94201,24284,52894,39746,14134,88983,72530,22099,37479,98201,77436,81953,26238,61991,85334,21296,27904,83545,13447,12051,15395,22134,77001,35205,91281,44445,65258,63902,23721,68481,23640,45575,81283,88024,10761,68869,47015,77644,15113,91782,27121,23507,67244,20255,60907,49961,87051,26703,31381,58017,41023,24544,21370,27566,58752,31557,60004,11916,53305,69002,57412,82328,35753,13848,77182,92407,96972,53770,15342,92230,43701,13770,71710,28814,13972,11652,94390,26863,35311,43049,39166,88611,22919,16204,49436,10604,70961,95135,48701,19814,19684,48289,12420,13448,83471,24597,45653,69148,18676,96375,93029,12280,46810,89219,89389,34836,28222,98733,29028,21121,20977,22017,34021,18898,11223,71262,25906,80070,60382,66100,38224,90646,76632,21466,62408,97054,96844,80530,82100,87446,94151,77127,63828,30225,45424,57379,58599,22476,16000,83704,49254,29353,49082,41918,79117,83962,93611,80285,52040,33860,10771,35305,61931,59794,97172,56502,87701,71577,31157,91285,81976,64266,45619,26362,63383,69664,19829,61841,65753,83463,76239,51637,41835,15799,17349,20904,49543,15820,35042,76318,14012,83406,27898,54229,11313,13758,27325,23938,87808,45654,33299,56826,54901,71949,60992,81088,70973,82256,86883,77461,93228,92601,29930,59074,37560,10802,79328,43056,75623,14810,79219,62223,81736,83279,79632,22702,68805,92493,93051,68290,74550,99923,64033,34875,32646,59965,25265,14940,68031,75458,25644,20854,70520,96903,90036,19107,35100,13076,14134,83450,88447,82048,26629,16934,58183,72097,52221,79492,79597,96137,45958,23706,89819,65660,87699,20127,55604,70597,12845,59748,14584,29036,34351,74393,52468,91312,70691,56323,32476,95807,55290,79906,81773,80912,14038,70969,88495,59664,82419,79370,48333,44505,69029,78979,98814,92092,70447,11170,63079,14649,26278,40981,94753,14699,55104,14967,18895,96787,74468,95438,74702,66754,89998,62711,88667,49847,25859,87373,67418,24883,37702,41613,65750,22426,30049,89467,97811,68549,67199,42908,14925,86916,49299,18201,52836,57463,11765,12176,66214,18401,13962,98901,49997,82535,11819,44396,81660,30725,74660,50398,12009,74005,45994,57828,30004,14648,77646,46261,91055,33685,18595,82148,75871,97202,82232,26713,61160,83158,41263,88782,11188,84037,39173,35792,68278,57461,76901,70249,28742,16613,88810,77970,54551,40777,21944,91137,77005,63421,76536,35473,94180,44440,44836,61958,64900,70375,60397,19353,30616,69333,97066,51087,88321,39067,35219,68822,44588,48306,77217,34319,36393,25705,57373,73636,41858,94289,35089,70258,49561,57360,86016,47866,83770,19268,77162,63604,11684,41362,84699,75105,38650,42968,39773,94870,80827,36669,78265,54670,97279,72363,83480,77694,27105,28957,14165,57784,35853,79679,92153,71516,98916,85416,23865,17570,27404,39673,81078,46747,95551,64547,86253,88486,28263,27709,29103,17729,96184,43474,22931,77122,20615,79704,70481,16023,68102,96220,81164,52933,42841,53206,98376,34156,54529,10795,95067,39908,46883,12481,25935,50200,83646,70058,44771,59805,17397,40685,13816,48735,41122,64707,93155,72594,99228,61030,95324,15041,30063,67492,34001,71341,54605,43433,56163,51932,81574,16048,94468,21473,43589,39346,32728,21777,32208,15760,97080,48507,15188,11491,64745,72365,48353,91351,77801,11567,88207,24601,47921,71862,67440,54844,54771,53586,89163,11056,11392,96542,86887,45356,67309,77046,76633,46005,19182,90585,10189,58131,99705,97619,34814,40226,25197,42798,55230,46619,12223,95981,52014,39923,85430,87286,61176,24607,47620,84073,20016,59885,17636,70986,63761,90330,78485,66457,12267,48431,11349,52923,71824,86032,55419,85683,65589,33674,95108,54104,36720,31971,40987,28831,18976,46772,44261,84173,83797,66327,29059,32852,70443,42869,62941,71945,18318,56623,52476,52371,32005,19273,94319,66772,82034,72755,72766,57130,60400,16315,82563,24400,99244,88630,12888,29458,60452,91615,21560,20461,17818,93815,20528,30544,91183,42169,14409,49180,52566,76203,54140,89670,50980,57520,78810,45827,81081,95016,19612,17345,13694,34134,96414,38262,82368,58483,68285,72951,87182,39089,84115,60102,45924,74476,12826,52381,77819,47860,55946,89985,54758,27010,35245,48069,83280,47016,59310,18168,77015,86483,71638,40683,42473,62844,27022,31019,14733,94317,96153,28564,59125,76168,17987,24463,54527,30027,38426,67130,35038,72381,26879,22892,55220,69812,94161,69890,58531,80129,67340,90902,51749,95030,27475,83315,52263,83648,60774,81070,79059,41800,68276,46285,39726,83895,66034,79976,44617,70074,89963,41002,60176,51335,23886,89717,90818,84657,92187,83727,27488,49468,38153,74909,47313,44023,44837,21397,33818,70132,87265,30220,40157,16222,53614,93921,41339,75784,26015,97830,20558,31897,83328,34131,15898,16661,59248,61215,12791,72073,89590,53513,64611,81860,79660,60966,97878,55900,60693,52683,94126,99390,63549,29750,29832,45894,68564,59241,83177,54421,77014,55930,46751,62932,54756,31317,61163,81373,26533,72709,22260,49695,84514,75920,37253,24623,62895,50651,89636,35711,21678,83364,70744,62886,91323,22056,21555,38446,90410,39968,42082,69426,28568,45070,60540,73393,49497,54404,15280,24047,63373,83311,75444,40343,28367,75066,96954,83452,41035,30390,17936,57683,67679,97168,75697,17785,87970,78897,65102,81221,19274,63454,44323,12166,60963,83958,68884,80575,30839,47250,27416,15412,69129,98653,43657,80612,27816,71150,80392,90049,20609,72866,42332,67351,75240,35190,45378,27177,93443,17329,78330,47882,96288,34160,80897,97795,31201,71310,30465,57829,46196,36921,34600,46759,30065,92988,50983,92418,78441,53462,50858,56382,76892,74322,42879,99315,82503,29428,94705,43568,74556,72264,13029,84310,63572,38082,67608,76141,92469,93048,60608,84537,79116,25579,34970,58620,81839,30059,50704,18118,92181,23269,46521,25274,44150,60062,90911,46767,29744,34999,72147,94155,61685,30118,74766,25434,13898,14190,45972,15884,88822,88900,55947,56367,20930,65656,44784,30704,66093,16333,15740,26958,22918,61807,63496,99955,36308,51605,19030,51239,15341,86772,52460,92167,82676,38982,48379,20962,58334,42622,59270,30575,28061,49606,64249,40875,28528,34604,82706,80843,47106,41717,43496,92820,77409,15475,85565,83513,68945,50498,85405,54784,23077,56307,20813,16827,85600,97962,19111,34940,54209,41947,62134,68145,24273,51800,57865,93091,14904,26779,65536,73604,73082,45086,97125,46657,94626,12130,12439,37576,59488,94128,46607,94459,70160,59741,90204,70915,75618,64752,32046,99656,72519,10066,98322,83180,70739,27561,13659,74052,35887,89539,91120,65388,64868,54044,94445,24813,24255,34058,80087,23073,33383,61084,65590,40989,47538,47402,39684,30418,85334,40921,30810,66230,28129,36417,60714,23137,86497,47575,36228,17980,19895,12246,33741,90259,40819,39087,37647,66215,53586,76336,39634,73614,44992,22647,90078,40001,97402,84847,23269,77422,11556,94114,24423,28525,78184,49639,34553,70931,52666,31064,19064,64924,93986,19965,60656,29017,82481,41423,30786,72306,11685,78573,31257,75101,68688,38175,60965,94344,20059,35517,39353,14700,71179,53480,84582,42979,13552,72061,47756,39000,68454,57037,85128,51302,76143,13994,69532,86303,56001,28750,98458,71975,22195,22310,83078,52030,77960,68918,84354,90542,54954,54971,91822,87708,26254,15081,64358,14442,54794,82691,30591,34362,47516,81027,15962,75553,54921,61942,98143,24119,17822,48857,71556,25441,81340,37896,12661,75968,31270,87621,17165,51874,84864,68830,84106,31516,85898,33229,71584,18520,94646,86790,35914,58190,90433,72903,22165,68511,24839,17248,22741,86496,10442,22198,29577,46201,54126,49295,50325,11870,30026,79461,20326,28880,31331,26550,14592,43058,20193,24045,64568,67915,33849,29176,39219,62738,37298,21778,74231,90357,82992,83777,87677,64489,74878,18260,32454,98748,51033,63803,92209,52785,16568,72914,49261,83466,97925,33428,49125,45368,32715,64154,53181,56425,82783,40585,48638,46561,67703,66059,96465,51343,81779,40479,91155,83976,21670,29146,57193,77747,10441,25910,95982,25515,58112,87205,91395,29978,95467,71187,30301,76070,10006,71900,58339,89243,75424,79127,20861,79417,38422,71453,44007,58796,49069,51896,56435,89542,42882,34840,11658,11347,79623,42406,28555,83570,28747,14633,53850,14560,87721,43647,62781,86599,18215,46703,57899,43363,40205,36289,59277,94365,60744,38838,69869,87660,55430,24225,41840,86200,16597,62640,99580,38265,83924,57093,90532,29302,93186,16192,71237,39582,71722,22473,53449,25079,12185,56984,85210,20921,96734,41791,72626,19664,78360,66869,66524,81296,58872,44142,60898,66135,19904,85074,18924,84763,94470,48085,30613,87994,77960,71371,34951,79097,24696,59263,66131,84764,14850,93271,83797,47359,80498,43306,44045,76148,44134,66333,10452,66427,42598,32004,42848,68786,45903,95510,67269,47705,91107,88258,82755,92172,57741,48009,30532,94742,96355,97110,91841,65706,91808,25914,43058,87376,99060,50866,20348,88738,22143,93546,67486,92449,10050,66265,28556,41617,72282,61257,96843,70126,99003,90745,34098,22809,77993,10171,53449,79807,30681,73912,97741,81035,58591,86179,78283,80446,28650,83855,19853,87273,41907,73803,66618,48129,89451,64743,30089,61379,82427,34797,62918,38721,52805,11973,23368,23210,89079,32978,19573,37697,52265,17711,10480,50897,51212,69111,74545,98621,15559,94858,46874,74190,66865,33145,87065,85666,12420,81228,13856,43087,97588,70165,71142,76091,27868,80256,82816,95500,11056,92438,31061,46516,75150,34266,82605,59816,72417,32788,92127,75255,33435,93298,95216,97905,79994,17198,34800,71358,89413,76475,25660,30240,52238,56210,81581,66600,71882,36800,95871,99221,51541,35691,86227,47619,26934,36656,66869,63950,10960,90847,84566,42068,15093,75671,34310,91016,79148,77905,36544,94597,12350,96891,83847,95597,57806,43822,52610,73204,29202,90875,92122,72131,99995,62024,77554,75255,94974,26084,77707,94003,94337,42865,88352,18698,28740,10926,52775,89654,45433,71738,55244,56835,36051,50767,88983,62768,47317,86918,42491,25344,23506,70953,34212,63973,44344,92797,58761,89015,39628,89615,23191,93047,98023,46158,90637,65496,94429,21150,37911,84279,27470,64233,53483,57422,74271,46056,90822,98797,94839,15973,88314,82380,21721,57164,82813,20663,71904,26203,19197,75071,60116,98728,54962,43871,48539,85374,74007,91781,29111,11401,42893,34136,81707,83790,82645,88639,29686,89217,31400,94030,31433,87697,67487,44610,77086,84791,85952,92113,84471,25104,64377,84269,59160,64237,97135,85458,12273,12177,15722,76889,54679,86956,22309,77601,46787,57188,25250,12555,55536,45084,88052,50335,42676,79175,69748,49274,98981,14253,64265,81824,26029,19052,92366,38854,18165,95172,76297,17355,72894,53654,54881,41662,56545,23473,52286,73611,68303,32783,98914,31543,72487,59356,95623,61328,71575,99492,89536,16048,68273,27741,42832,48828,56192,64345,40010,43818,98236,45150,98894,35193,65936,50523,84515,23462,28132,57668,95771,62905,41141,31206,17489,38327,21168,13113,76024,69302,23171,19849,35281,23481,15854,33553,59438,57542,39680,20968,78309,20510,72888,84949,15514,29225,28181,67384,33816,78477,37539,64363,81911,67664,93311,34453,75017,58593,97512,41537,15301,19857,23454,47652,64580,11633,91795,64811,97526,55621,96052,50478,18563,70791,55857,10863,21042,68220,38570,44461,56475,71989,63566,35473,12187,82691,77356,89266,47510,34666,34470,83510,56278,40376,36735,91374,78929,31400,30800,28397,32580,63154,99467,70598,96796,26976,40347,50908,66247,45657,69101,10817,88446,48317,27950,99150,32128,69052,74611,99447,95769,90518,18649,16916,94951,43411,82647,43644,47629,59365,71983,12237,12994,42540,22654,98478,79380,78240,23759,42452,77128,82139,78765,42958,96533,35227,13988,33210,80193,80450,70290,17510,45482,83413,28031,37497,89956,53066,20253,84527,55996,57855,25607,80332,71329,75396,89477,43853,57634,72606,90288,20306,63635,28050,12842,91110,76342,70881,73250,86029,74989,64399,11823,63617,27997,74128,93710,47786,68121,95528,30393,93339,39932,44619,81575,46584,12331,57074,87042,90897,52895,20783,55733,81720,20496,39922,29890,62827,55835,16082,19950,22483,29310,36608,62678,12342,85221,34737,62165,10026,34165,49253,24832,60490,74847,55568,11265,22254,81565,57122,79069,62395,31427,73379,89654,92978,12678,94746,46963,96033,54198,83436,28240,23360,49169,24793,72346,67484,89621,71047,72909,48288,52667,19372,97519,75005,58215,24447,89037,48603,61846,25150,42646,37490,19186,72141,89745,32307,32935,46679,69523,71568,21385,38134,46642,24501,97147,42372,59862,96789,80781,27390,99319,33311,32038,33635,37300,49235,43464,70904,78917,16607,52808,92464,86755,10142,75846,84099,72218,91129,44684,99286,44147,28430,85106,48235,49473,61701,51549,65618,41865,25851,37233,45665,64477,64244,28200,60264,98136,20441,53181,72857,94869,11219,21570,89602,44855,48572,95572,93887,16898,80769,14331,31565,53463,14500,17643,51909,19139,15059,61936,86584,57337,24510,46830,92576,45483,55678,50527,50713,51927,87415,68298,82276,91227,87407,61757,76346,14644,71555,10238,98482,90358,93921,76814,67764,12408,65090,60676,71153,88394,57101,87667,81861,77482,79880,99172,86350,89979,66382,63363,71794,93898,69163,39723,81730,54540,33092,78109,70154,86123,77441,46057,54964,12330,35446,96205,61186,56963,93935,92735,48113,76811,43732,18050,17352,54506,57486,60155,10233,89534,86429,41284,58312,26113,58629,75311,53517,36749,72962,75420,49361,95091,75594,91552,16520,70333,12117,99907,18593,12721,80049,32687,91241,31249,54178,33105,49701,20799,36521,33295,46817,31968,73416,94758,64341,29207,27924,37394,85146,84040,96795,82638,67462,96478,42335,95416,50762,81640,76738,44695,24078,10012,28634,71844,75679,14424,77428,77656,52725,32732,14757,70386,62964,47536,67327,66621,70415,24156,95098,56565,28278,66417,10930,24381,94229,19528,19977,66199,82277,77332,91078,52956,74208,18185,82132,88871,64962,24846,19870,90999,84950,63385,79964,50591,15479,17751,71802,80924,93161,73571,78491,69415,14999,27686,18366,95401,26128,75071,25325,52659,70619,90457,81744,40802,99098,59991,90704,44854,73101,46274,91847,97779,12487,70982,24965,68357,94934,78331,41697,58024,31676,48634,86568,88063,99394,15224,69921,23283,52783,62160,43985,93345,48940,10685,59001,73610,39443,67299,57752,21360,82804,56040,52595,14111,76907,27900,71368,32347,81443,54750,73161,98035,20528,87733,90656,32670,55919,43128,15182,16330,31761,64729,97880,80396,45334,75321,30065,45055,47227,52796,77361,34906,65540,93699,70101,64827,22645,90665,16691,48717,61652,91147,54378,19902,94280,95809,93099,55121,53820,83307,93597,99497,79243,65658,84761,91024,19558,24366,98404,78843,20516,90607,87514,82740,95385,85893,97054,88746,20958,29131,90778,19850,96512,18393,47297,14380,58957,21560,61743,47686,92533,98979,92466,89660,65930,79762,15257,28389,43035,44250,16814,11575,94118,29423,10704,77109,39164,87762,99778,82114,52160,82258,23570,43941,97814,47511,98442,99045,54971,86035,53027,48566,11275,34071,72254,53066,25715,28161,22421,31190,78826,62431,38344,92048,76871,23921,90275,13132,37832,27183,68056,61730,11167,48669,57496,63963,99160,89783,50953,19993,67116,32174,34360,90100,26572,68237,37215,16185,56716,87405,29386,61172,37979,21858,75414,68334,13133,42749,56952,22775,81782,72282,93760,24233,95856,62634,67347,28549,76008,98028,14975,60496,33939,10417,77509,86319,16128,87561,50661,28923,28355,71450,64282,44160,25332,51045,99955,35798,80219,63649,73598,96192,24774,95001,34483,94074,21372,30396,79778,98613,58914,81087,78176,18431,26949,53817,16223,41346,47759,26011,38088,88110,76756,84666,14888,31514,39271,85642,94448,53012,91558,34428,52807,66917,59828,41215,28682,73137,55751,36216,28683,32368,65072,68085,46731,98244,24641,22682,11204,26234,41606,75472,92429,58045,90250,31600,42786,69877,22145,46712,52628,15583,80828,44754,20686,38182,35908,78500,97954,68850,84420,95030,34694,69945,74405,85675,51877,40677,73941,59987,75630,15560,13881,18874,80336,38413,13890,86598,19270,32157,35484,40468,82207,13657,28130,68981,17354,31008,82066,42365,99306,31873,21524,75635,52334,28740,53117,84395,25999,15570,54608,67067,29457,80538,62112,30267,59711,76249,92230,27885,84361,78141,49838,86742,41122,28947,78402,55917,60779,53195,14838,97096,37248,39156,72367,73252,29282,27840,33439,24368,15862,78336,59751,54384,83933,99699,89205,85778,15704,72758,23128,87763,35366,82966,26841,87440,73960,77631,46760,53619,21167,76462,40710,20069,49961,31698,98658,83887,26350,92546,75844,66601,49849,29970,97358,27811,65195,48345,20824,18825,30987,58752,84282,88770,90724,71182,61133,65631,76318,56284,96150,93753,68513,55150,83846,37410,76693,15163,74361,70800,42751,39937,13441,24286,85600,73721,72670,90241,74909,96235,57100,15167,76569,15716,41454,98777,73637,27503,23231,54913,66180,96569,40625,72864,82946,97455,52729,55928,20458,81761,28903,59060,76505,15679,92644,91399,68534,81745,30638,33424,73190,85686,90591,13562,76547,90057,18315,54223,28783,93777,82291,94565,42684,72309,10464,65700,88345,77919,86543,32210,35147,48461,43544,59666,89604,14006,12073,10329,14394,24000,48367,74269,78264,47202,14828,13382,21287,24332,54578,78034,89711,42412,21083,26954,16373,91937,70155,81194,76265,63033,52181,86156,52276,55868,12169,38178,59010,81847,99504,63805,38888,50012,96226,42315,51139,69870,56436,70062,37095,74945,95573,45385,67678,79163,45729,39968,29944,15578,23183,95184,13184,98387,59730,39467,21946,52558,46303,77806,53551,41747,95740,72639,89972,86901,27206,30329,23796,26204,57058,79004,71666,70283,93472,82254,71319,88771,36937,35546,30078,80388,52390,53100,12566,83277,46994,62686,39564,91993,10301,25218,23756,74711,85946,52479,69568,61006,16863,86809,31594,48551,53369,42426,72187,20840,69218,55350,48160,30620,36094,88900,37832,11540,28653,38126,92224,11689,16402,82559,89553,97923,27725,54888,15155,27260,99299,91017,16582,13070,16167,54645,10842,90443,68354,56758,78191,47813,26131,84263,45475,42319,63699,65813,27470,90247,73363,51290,59244,13399,25508,81100,51204,39295,95669,43537,66492,25228,55574,48195,24254,62460,28028,22796,82957,11818,24382,65135,79799,22401,97418,17320,40408,22677,38228,11307,27177,67087,41425,91047,53479,21992,69013,63942,50103,79745,34712,89881,88693,92977,88571,39409,46321,76536,29534,74378,40016,37369,75484,40778,56365,46343,13463,91072,37991,25713,22658,41732,39818,49733,33975,21985,45768,25325,98363,80407,77956,33782,50628,90117,50615,25135,68095,78277,90198,41094,86700,55887,97632,10501,13781,96474,24094,81532,35508,19867,95055,83963,41684,78871,31688,24874,98852,10194,88233,25782,60819,10245,97700,46958,28726,91572,94285,13630,48502,96740,68510,67594,38972,60341,42811,99059,87038,66315,91623,89340,94911,86820,15200,16447,87617,64007,67045,91872,21404,46920,50373,38094,81977,79130,35862,29491,69752,17921,88760,63351,81207,29416,84935,80205,68253,60173,20533,81807,42614,71925,64930,62766,54665,28276,80154,24191,53843,68510,56261,32836,20272,84843,72605,20787,50811,15803,49476,70979,75404,74930,47727,37785,86402,44347,94935,91884,45835,75167,16955,47995,64282,10064,55013,16317,83804,55208,50378,64024,90775,83560,38771,61596,86545,94578,38792,57427,40025,78923,79421,74137,30953,74886,54960,98216,75148,25461,51510,42623,89406,82756,15921,31318,40844,47072,14072,52353,82789,19107,49464,29912,79511,62883,72482,56515,80700,35047,82317,39842,18686,76971,67079,87709,29434,60012,43256,98441,65336,19394,35583,55153,18346,65101,89865,23423,86810,74044,28896,46847,41417,43017,98127,86967,37010,24395,26177,96858,13994,49532,52937,83604,91339,23238,28041,42766,27920,20295,84044,73215,71964,39875,55737,82591,73230,99053,12503,25875,36035,12099,60959,32339,86159,69092,68207,44742,34952,86337,21067,18127,28840,31749,63784,47062,49261,81374,29123,57682,38253,26970,85475,35633,81144,49284,88503,26623,53837,26348,58828,50014,90123,67797,27341,99366,26602,15974,60549,26064,80421,66352,56981,93320,78109,77586,38289,63396,30478,23747,41445,23472,58025,56283,16925,84292,73312,27638,50324,98388,30979,55140,68946,31074,37873,15731,90484,81138,78969,52106,24691,34039,15388,61661,67023,46877,54176,28962,71336,98308,18665,54736,51098,66414,87683,75768,95601,45008,45655,76410,46130,81406,60485,45036,27232,68128,17955,60885,84585,37538,56538,64890,77170,83519,11242,76710,36943,86958,37029,89095,22886,98263,20457,44869,22245,12716,90152,35413,86560,43491,16610,70959,30749,25439,75958,55498,95632,47904,93403,25117,69621,64032,81410,12729,87042,38232,38232,67507,64912,57326,49958,18786,55252,11503,40179,38256,78076,18017,95589,61513,12366,42715,82776,77878,24359,39102,93587,20861,22091,67896,74042,32842,78271,44910,66477,12541,78783,92513,15571,96683,75040,34227,95797,98677,84034,11400,28053,16801,57659,86547,80588,67534,66140,91863,40861,62872,69765,94498,11236,25569,23689,19995,52940,30724,10908,62736,24233,39545,72740,75562,54871,61893,34217,37911,55742,30403,62048,41143,92504,67060,23546,94313,15120,36875,64176,46787,51192,31374,17697,15415,71483,95440,14556,67658,70440,41242,22472,79421,77292,64632,22214,12644,71738,20032,10985,46222,73190,52681,72280,79771,77718,52928,66402,21958,29204,30885,60168,94950,20319,34487,53421,29412,79459,11746,89950,33027,98912,83033,51585,11080,87062,13727,82419,10560,78688,55395,64482,46283,95466,45851,91176,45011,94455,59467,89934,77045,63481,11092,31303,17007,92034,33700,22070,33970,71587,51522,19462,24025,23897,45556,80448,59666,66499,31898,61973,56775,83195,26205,58191,20846,54273,51627,44072,71372,74767,25030,68325,43607,47140,15323,88640,70101,81914,41433,25127,71485,49406,93855,60932,81972,61607,21844,30608,89436,10936,42062,47059,25472,72453,57967,39842,15818,20545,77456,18476,85854,57920,27027,24734,65162,16698,46130,71174,32747,47661,52436,65674,40987,43346,42265,52078,51419,32273,90475,71238,57720,71192,62557,21720,38554,68180,39415,77558,48954,23420,20842,21372,45541,28161,50467,27662,43762,19688,54512,35641,95462,35782,55094,40475,52538,15935,44350,31597,27950,25967,41120,60385,13294,79097,85008,48864,58679,96170,97943,62889,67151,61594,95627,29399,49213,68272,76666,40548,26405,56415,24241,61986,30589,12888,39800,94635,86806,37037,20194,34760,65962,28569,62114,11342,26287,10027,47199,70735,87230,45212,21202,40242,59263,55423,17993,96813,62599,40542,23386,40780,74962,55447,50689,67930,55852,89166,83589,81082,70702,41552,29221,41662,66595,52536,63570,65383,97118,60365,84853,62952,54451,91814,15522,18083,73292,74538,99677,67172,11124,98541,63288,41458,30298,11111,91805,21158,47782,22249,88106,35713,89749,12634,96719,63299,54341,29585,35732,90146,12613,46592,10995,60755,18899,53776,58069,91326,28009,89545,54584,48075,37524,63349,70987,36207,38834,72776,91425,74535,14513,18019,23718,31821,37985,19267,83345,53676,58240,15244,97969,87137,31990,29688,82100,35848,70783,72941,40341,78361,20356,36903,41931,39260,14018,93209,14335,29351,69672,89959,66360,15632,97018,78501,50305,59119,56136,73952,42671,18077,53255,38765,12251,24378,80850,18604,64640,34529,83906,20073,69262,20871,63247,22041,34879,46544,39582,22398,64752,54480,41428,25423,57696,22540,45264,79964,74815,43789,86657,30475,72489,46699,76557,44554,28036,52452,76665,19401,37242,36233,61269,13525,27864,29971,84881,47683,83417,22531,15621,43136,98897,73152,72537,26536,80740,57417,20301,18198,77224,39579,47557,62758,94851,24378,51638,36844,70371,82591,60482,17497,14989,26359,55344,85003,76012,19881,34575,56372,74194,29467,83452,41873,28956,18364,73206,97343,83146,11026,77434,66282,50241,44997,47844,82039,52372,78769,76124,42989,16013,50772,10426,22105,77459,49373,98067,46375,34461,63261,35299,73662,55327,12423,41449,56417,22677,51714,47708,95682,51851,65013,12026,77314,53057,17806,91096,65915,21787,91708,10190,92549,23851,92524,53353,47320,72907,33124,71292,26902,48434,22036,83246,33660,23889,54889,51478,42782,22922,96383,22928,58292,97982,84052,80277,41977,63425,32583,10139,90790,30819,83828,83012,38506,36740,35995,48412,87786,99068,72998,97131,69403,30726,57130,80369,22432,15611,67320,96809,32779,31419,74690,17881,72992,50537,89679,53655,14170,82246,59428,53575,70602,61842,59183,53616,28613,39950,47961,16817,35650,35502,63065,98652,81907,57779,81437,19290,32011,44899,72472,95314,99566,77407,91116,66296,61514,36791,97217,47189,43256,65929,21617,93582,91939,12698,64685,64909,37775,67255,79946,80273,99603,76683,41306,78210,96333,42754,86873,99280,30861,48657,75596,72999,52969,60668,16274,93812,21024,86961,76481,38020,27920,51112,57517,97554,99566,81818,19380,50601,42769,39132,54591,35872,53154,92724,35347,73293,70411,60411,55893,98350,44992,43172,89838,54928,19689,51637,35021,81088,26965,44668,69287,81008,55934,59954,18456,72825,45636,28515,34013,21689,33569,55710,72021,55090,77607,36882,14056,51548,12816,90721,98377,94382,91222,96987,51396,93597,99868,93014,14955,28995,17049,35715,54426,32371,80795,74135,32074,85633,65661,39515,64853,87167,85901,51045,36911,66507,63954,16532,18956,29391,67036,75317,18129,42402,83940,74536,17506,32303,32358,57268,98754,79973,93928,31031,10506,20255,15343,82676,77418,39338,91471,29045,42449,43705,43686,91590,46461,52285,92171,15916,54192,49271,92489,92240,71973,15720,70784,84640,90512,16064,19635,95293,30966,69245,41300,61525,54101,22193,66796,39322,36624,24641,10268,83102,80718,62816,26845,69692,14185,77948,37231,67223,21343,15706,89631,31039,26547,72955,83008,28038,95591,44606,51259,82203,43494,68799,34420,69394,96423,83158,71687,36621,86027,69492,94684,86315,52575,55341,42817,79053,80276,33445,60893,87082,58805,26752,74308,47046,27525,98068,72464,42387,80555,57413,46333,74266,40586,74812,15400,39318,15577,75129,52739,75343,76222,67340,87251,79018,96726,58126,64727,87336,55122,15873,33178,87666,38424,81177,91841,16500,15794,85094,73943,59418,32797,81944,95737,41223,78144,62835,82079,15267,77060,10646,29813,76732,99959,25777,63681,94252,57933,29713,37447,30396,18352,69703,49906,68502,94400,69467,58383,49068,60850,62796,55435,24705,88956,49457,42982,30495,22932,77520,73744,20126,32852,17060,93103,23306,36847,95270,96356,16731,17601,56579,17380,86054,24213,94814,30840,92110,71503,72819,58777,86123,95119,81685,19312,65654,74108,68398,14914,60055,80817,63968,45837,96975,20111,82387,79331,77405,14336,46822,86302,75468,67713,40267,28359,31818,26256,34227,57945,39427,18238,57086,45322,48214,47535,42881,98842,24147,27407,40114,69644,90158,33660,17512,53643,69840,81882,56346,60172,68582,39666,54663,59533,79402,36239,60926,81550,80305,91042,20122,39393,18459,10349,90700,21971,28710,48274,85478,37696,74745,93037,82223,19619,98058,51443,40861,40091,45320,57203,31255,38782,42850,17999,19526,92158,68554,78025,18064,64742,72548,34100,20633,41415,43446,35004,94057,88872,34058,41255,27909,81706,72063,89245,47927,32945,27980,67652,93676,15878,56477,77186,72569,20548,75043,86164,32296,98148,34408,10396,70785,88041,53126,54889,29202,69030,99357,69808,23673,12075,14803,96341,61149,99688,46781,53899,43716,22621,40711,94221,15602,72758,76836,60945,96048,69512,28050,38300,45974,99145,57395,15334,14240,88883,70196,45201,22612,99720,77373,43620,46352,38131,88232,50238,78009,60128,14920,38218,51717,48283,58438,34373,73341,42025,76252,10984,35172,98086,37994,82168,90961,47764,56993,15330,41546,44296,49780,23832,76060,84127,37711,92720,76993,91505,85687,32356,62274,94552,92867,40655,13386,90609,75648,48546,64859,22803,22391,65211,55758,92366,94813,89534,78162,31457,32087,42412,63233,88486,55799,94049,64696,97364,12662,61651,98415,28372,61123,17975,73324,85860,35967,66622,65990,40366,68159,42647,56956,53138,23248,16076,68468,96683,19930,43102,19549,28796,18024,74324,96038,76049,46333,42993,92717,34310,90308,56502,13706,10687,83034,42271,50432,60423,47063,56390,78441,51748,66820,52897,18110,26612,28752,87604,12297,16843,29646,61544,39394,79697,63389,81493,59281,12314,99457,77426,41946,93220,48374,46895,14319,42557,62199,27530,79063,86478,94267,18993,53706,55867,72924,98693,22269,63405,57200,12673,37214,78457,29223,73552,68934,67328,47098,61810,71661,95997,57254,27368,30868,80022,38284,88049,54906,42744,19299,17192,60535,96412,86205,91192,35971,40094,47908,91374,68210,73660,71173,24387,32497,55771,64830,74118,46648,73380,55019,24589,26661,72280,11371,87685,35186,10114,47026,94128,72649,92116,81609,65199,73349,97802,96426,18951,38886,96543,51953,82530,42802,53231,64573,81967,36473,88306,55794,32465,36410,53732,48885,54631,94860,14949,23083,64567,99348,32120,45895,22092,95268,76762,98559,69503,60424,58425,72212,28518,47287,10109,76285,11417,29369,59767,42580,98216,71684,21007,13575,37370,45781,66114,73915,94804,46941,13659,70829,36466,87165,93836,64044,60944,32623,25789,92602,82739,69329,27584,90295,46802,41586,61936,53080,74177,97969,63949,59630,36176,40477,70945,75136,75237,53512,39486,38007,55206,91357,20544,37749,65882,74600,74777,31040,25818,90978,20295,24120,12847,74273,70529,97842,30419,67228,88915,78293,88440,44230,58282,44663,76839,76987,71047,96469,38069,92958,57838,64910,99842,24565,38479,13116,67131,42218,88235,30617,45947,91694,12740,75737,54729,91152,54333,14053,67440,19868,12073,42919,82183,67173,32245,14568,58434,21602,98748,37479,22383,65766,90812,79621,43729,11305,70205,42498,77772,20910,88544,52218,75153,36324,40274,54587,10534,36826,32626,42898,49026,28790,21959,26291,33998,78984,40700,70909,93370,84746,52417,23372,26566,87724,70104,94964,74856,35731,50890,73040,54815,42970,39068,93479,18258,16842,92693,32055,90090,89914,12855,40029,61462,10103,10961,26362,51900,78801,77951,43374,25565,40774,31458,97009,97026,30986,52446,92527,25849,96426,61249,97693,83002,11557,79433,75039,27850,57510,12413,55616,71198,60207,32473,63162,91602,36117,79922,52578,81588,52991,99820,16436,22576,62264,33774,63049,24943,88881,13696,55014,32367,36762,27179,93072,28858,56228,97866,24717,77975,45045,67056,31520,40269,99733,34210,95716,84260,94142,45529,96945,65286,11089,78518,10552,92858,71715,63115,47383,95050,11752,34458,47104,69724,72808,66924,62683,48346,27104,48844,96082,10132,55931,91965,19040,30852,11608,93593,66389,72474,10950,78934,14252,14021,25358,99185,58333,10277,92233,28165,83411,18120,21891,70642,13739,91791,52386,68893,31365,86667,33728,65621,67056,95253,92543,42754,84492,50694,20294,15375,77509,34462,67074,49611,55212,91264,54273,71079,49481,65492,42301,58851,47841,34858,71491,49464,16442,13939,17692,45683,89376,40744,96457,51787,94383,86111,45364,34999,39935,33930,12140,90895,11936,82610,99685,87278,42068,96796,77437,27221,51586,11783,81886,82195,35490,85098,85515,11817,39507,43884,75975,31359,11317,55764,26236,42190,50032,83028,52955,86434,24179,75428,59468,80025,56681,93138,51599,15459,11382,16698,71059,91573,80578,23639,75392,23135,70730,94162,17082,85171,20861,52962,44621,71330,44847,54593,46145,85018,74763,42826,16235,37994,14811,99552,49488,58202,77886,49715,96687,41339,54664,32028,18986,38658,19094,11939,18239,90452,57469,51936,30969,68348,91056,57746,70351,73034,77561,30592,67621,70912,20020,37629,76728,71448,90171,99563,15985,22183,27506,71507,54371,64611,28930,47776,45698,56625,89237,58103,45195,16562,41834,76869,75636,49945,16758,38132,77364,46283,71062,99523,87820,23420,68329,32886,28121,40494,51572,13146,76362,85708,91241,18018,15704,75390,93968,29354,54372,71051,50207,53230,86695,10381,56425,94904,43963,41024,13180,75453,96905,55798,58736,25852,46611,64428,99891,32029,71393,85043,79356,18042,41766,91167,51614,56454,69497,41517,82654,67675,83151,40100,92959,71744,94260,41761,74428,94782,25504,57023,86264,58927,29274,67583,47824,12333,17497,49004,42071,34294,71879,15327,72461,95897,30324,63515,94044,88826,85042,78367,78437,50718,84828,87057,22950,69115,87994,89594,66133,80320,59349,78738,75843,15570,69807,15217,28481,36991,91922,72905,96430,93576,25612,64729,90674,63130,54187,93320,44493,16640,42733,56232,33298,22561,10856,17253,53884,90007,82609,29561,68791,23067,66380,56475,34352,34973,79916,83549,75305,97869,76429,95173,90801,93615,24402,91472,25037,79966,48271,11721,37161,35889,58259,25156,77773,83326,91062,47179,80935,42370,59299,75657,90308,67967,34216,25839,79070,34702,19616,52956,90953,41075,25295,47498,82758,26093,45737,13328,49590,39000,40769,52211,78328,52160,96182,64382,39261,13731,83486,67705,40505,26305,80976,56179,48677,48439,51816,91888,90143,87645,95285,31095,23820,23449,63414,55453,86652,69822,44920,75526,89420,80966,35205,49933,10970,27929,50526,85751,28066,28998,72820,26487,65142,67232,75525,28750,32604,95744,84529,38020,72084,98017,51561,64385,75233,43363,48103,67896,45975,32828,10159,57503,42817,62587,99227,13670,61126,47040,79913,43408,96047,64966,44241,23777,92329,90277,45283,12602,48302,25101,24194,80977,96738,55625,59793,32624,61673,82103,37537,43033,42656,44988,52409,39732,76114,66868,15191,54853,90795,35459,50872,84169,54262,84592,50278,87762,83369,43561,59928,58306,52746,76910,11472,73287,47265,46803,43853,85951,72484,47997,24329,89209,75949,98804,54521,84192,40674,33212,88893,67794,34466,66685,30397,25973,20297,69169,20330,96300,71209,56449,67487,29896,69373,36932,66820,49402,25369,96947,67776,68149,63475,88391,64824,54721,76917,11476,51257,46983,57048,45188,96312,58858,45106,61116,81268,77729,92264,85462,98060,77150,92884,65192,79024,90179,88112,98581,13891,39126,51944,61546,20296,79766,83598,82409,73087,19864,28844,75208,70605,58493,61880,92003,49090,17910,17546,45136,22141,72596,80857,54258,20715,30042,26933,43793,11358,33490,11000,79973,55317,92201,95638,14119,36777,25455,76687,98072,58612,26546,57159,68133,31507,79884,10837,74193,31653,34341,98000,29531,84074,70368,40483,51844,52599,47296,20708,36326,31100,21580,20213,50836,52088,37800,11055,71980,33291,60301,85202,63129,85004,91976,90623,95410,95921,27582,55182,76507,19064,95682,23310,76781,47948,78124,20842,22961,57603,80220,55802,69516,16069,54164,29740,36768,40854,27527,82819,74968,55930,45142,88940,36084,29694,33197,32125,50218,11355,21415,37578,19517,34400,75765,50610,15343,10391,24074,16507,36723,65905,66844,48032,69682,87398,17720,96844,12871,95353,12301,92821,33931,82141,74489,40436,91691,69931,26886,71033,15488,53323,78074,78349,45731,71521,52559,67965,61043,41905,89248,42137,56216,58066,32810,86233,65308,74764,95645,70672,10244,81188,15432,33520,26648,28116,36949,12920,77617,43767,39415,81628,53391,68590,14644,46256,92802,87074,83349,71750,85000,85889,86564,68965,58865,11296,91002,87274,54941,46282,24346,59862,35009,80341,10260,58562,10950,84085,47728,74786,50389,30831,96632,56034,39877,52458,88833,75909,98606,55755,83650,28781,82907,32418,16561,12177,92221,23319,19843,93444,89279,17103,89258,50408,98274,93031,77734,31406,16895,16354,91106,84899,48597,63416,73348,89105,74417,78729,12321,16880,28289,95248,56672,80332,90495,40750,22905,63722,24824,25578,93862,90660,81282,67578,75102,57156,64072,75283,94151,72120,61536,58458,76661,82214,43691,10855,78445,92594,10313,19612,70227,77352,71171,15657,17919,63340,28743,18875,70560,87583,65329,13749,60134,85020,17126,34214,65201,86866,80025,39166,68241,68113,12797,30126,64714,33018,99752,18964,81420,35970,24505,93551,82383,65395,87443,44554,43528,36888,94527,46190,28980,18896,17111,85337,97374,85866,32919,24589,39896,36818,21910,18983,16681,25867,85004,58046,49204,98753,30476,19599,15508,45457,77600,26173,81755,83299,63556,16360,74132,45293,84252,45104,54840,85339,53559,68900,54549,18633,17444,76713,81711,22882,52056,12191,14972,79009,23888,23335,86003,58456,68721,28708,10489,88134,20937,85758,31437,58150,39318,75203,87926,57419,47578,29376,67066,59580,49474,70789,65631,31742,62714,45118,72251,43801,24076,58029,31895,18213,62302,63773,57966,30402,90864,27706,75344,61152,84578,99486,69521,16152,16137,38363,49656,54738,29292,40191,14111,92605,33030,87470,88841,17405,22989,46497,20183,44235,99993,73789,61211,51723,84851,10969,12285,92939,42732,52640,27526,59328,19362,22696,93386,42596,19543,57034,40779,47892,43470,17436,69738,81508,27717,54182,27570,47466,31112,12514,20024,42897,59842,48653,65953,95074,35286,51678,52847,44141,65960,96055,22842,78647,69555,19946,26840,42244,70793,56585,47570,86154,10271,56431,55181,68990,73798,12630,28685,11728,88345,70726,80599,77208,71738,69318,79696,25710,39339,88517,98749,58512,69724,86437,53955,47807,30003,27555,17995,21175,27191,63321,27693,75972,74248,81709,58055,96739,71280,41663,86799,14497,32412,97220,88079,66835,14180,67554,16974,60654,42752,23887,27619,28977,59331,13470,46989,18593,29847,38420,87654,12598,73860,24553,71227,75703,67138,49597,92870,89595,96022,71656,63760,22396,17778,19192,66363,32364,53124,92714,18558,10803,42726,30203,34673,37920,98810,73662,59294,96663,66420,62672,32009,26666,92809,78449,96839,67730,95888,10942,84292,25718,60168,32050,70832,17576,56429,79566,53217,47220,52753,13478,55276,38721,44860,37094,15856,69113,94694,95423,50371,16998,53838,32667,34127,89595,56196,90713,25489,61709,29154,51766,11760,64335,91656,68015,30078,55621,88254,56090,23107,86503,52633,66291,21857,76711,58514,54403,88212,95580,72795,29677,45392,30418,43006,56076,26297,77973,79466,40990,21894,41031,51098,74899,89921,53055,11403,29118,31237,15493,17362,39942,55519,79260,20061,10136,73212,55393,21742,57709,51007,63793,77048,81303,91166,72514,58744,52461,24487,16406,26755,95816,74192,78768,67703,97862,59022,17493,66962,37675,64556,89826,10856,24286,43038,75684,92051,94901,51952,54948,70025,12887,47459,89532,49492,12245,14838,36815,24291,59678,28643,56555,62961,52196,77311,82497,93609,12154,26384,80273,42478,68611,70917,76390,51151,33410,40280,30665,40676,34994,14249,42784,44049,55503,13230,66016,87203,20717,29123,78169,93458,90289,55809,95805,94901,20045,40171,57792,40424,60987,67089,60994,81939,89465,95787,31697,72236,74461,33285,40275,72097,46281,37959,69860,62593,36921,27120,72207,82538,11546,46892,70776,34836,94965,79020,78907,54597,13580,90457,53103,91920,85203,32669,98474,49348,95811,36557,63619,51635,33684,50265,39047,86098,72016,82179,12723,53964,27955,55571,45703,98414,45391,32580,46399,45043,48454,94812,21322,79116,79654,64452,94150,41539,80109,56840,55974,21770,49292,36220,12820,87492,13561,41333,67838,14742,26628,63249,23723,47978,80351,31073,43520,20674,47894,92800,30526,39751,24312,70235,42861,99607,42994,27018,31566,93368,14421,48798,39148,86034,32923,21164,18589,35807,10163,45750,48809,90857,19623,37084,15553,22238,35728,84774,81861,48186,35010,79941,95829,89399,90970,20726,79258,59295,54999,55977,39749,61491,53897,34248,44580,29644,27462,44053,22807,67313,20866,43540,46223,61151,46060,76117,75573,42290,33634,62142,43460,42555,50991,36484,55102,48062,68870,87214,69327,98402,46253,68598,53086,26848,73518,26310,10018,14755,19475,75251,47967,50918,50660,53147,22510,93327,70936,20721,11906,37117,36492,64777,81659,60730,96814,18251,22785,89824,32923,27258,66902,90051,48115,49975,32233,66918,76088,43553,22596,41104,55013,70769,58329,46954,29061,63061,19794,36219,64658,71588,85178,84243,96300,68211,59877,81978,85495,67893,77984,31898,75907,50185,65086,53807,43120,72329,82135,66708,48302,19341,75184,66872,91519,57572,36035,43273,90689,91078,99238,36852,68805,44196,34477,80472,26504,59754,69660,30798,90340,12748,58250,11662,13196,45292,22286,55179,10303,22675,91886,21011,67164,92175,84770,65380,60547,86866,98379,37750,85376,73397,83787,20140,64969,12849,70521,23387,93530,24691,35282,90871,90922,79111,37990,93452,76751,78410,98733,93673,85896,37572,68965,53667,84471,99914,52984,92398,32730,58027,35256,92562,84961,16669,57401,12062,73769,77462,98512,94749,84969,22769,27117,67832,19152,69927,85182,81081,64671,94270,48980,73711,22934,47408,44656,27539,31268,85745,84168,30587,63584,95838,89218,94963,45824,11129,82650,73975,79553,72586,30401,75696,95736,67384,88788,68638,17526,32899,25261,55275,70174,73682,99958,39990,88828,55595,54408,52631,50012,45029,14235,37176,15053,36076,65999,17607,25676,92168,20078,75539,50139,12898,15412,11745,47784,71211,16745,73481,79187,85170,65493,36926,33912,64103,67970,57972,50203,25276,86016,14272,94972,65945,91535,16691,48792,45806,72231,58213,31864,69799,50638,71592,46624,88562,19485,55749,89813,37880,58512,18962,47727,59205,96682,10194,61502,30291,23293,66302,29595,87973,70439,58594,79884,36763,37101,30062,35534,79387,71262,99158,13950,53850,99441,82017,35816,37442,61793,81198,67321,32648,31458,42288,80128,27402,20890,12591,71040,27137,35962,85003,60257,56406,49382,25469,27684,71608,25796,41867,46856,25635,67469,72185,14594,54814,61121,69180,31585,43677,79755,29902,57245,42406,80099,45637,17794,84710,81105,62781,12779,81200,22499,87417,88420,45900,44628,47404,12881,40104,97410,70280,51378,42238,79181,83091,82834,70642,88148,37773,24660,35426,59130,95376,88115,43881,71735,92353,14509,19208,71036,17573,23292,26975,53628,45457,82585,97019,96219,77456,62801,12426,71146,12125,76033,60686,38205,49921,76226,59352,14911,25002,93097,51816,19129,88062,14153,72847,22997,49057,79014,98476,58673,91935,62046,42405,32641,56317,84298,25557,19315,88042,21909,13210,33756,79100,87734,61255,89183,95517,26838,82705,16194,59533,54233,68516,73213,96856,93142,16629,84161,62703,51922,81829,87016,81164,50392,94377,38369,39141,23313,46488,84073,99961,81884,94624,20796,33416,49744,38095,31707,25183,94991,50419,76870,83505,26832,77244,52220,75467,72204,53726,80491,11042,15463,13373,94420,50974,76064,50335,22446,99683,21366,82674,43834,13170,20705,50788,91075,15018,12599,43569,59355,17116,20433,44535,72321,30816,62434,17280,73030,95115,38294,67933,25283,77279,59120,30088,80536,81867,99201,43410,57367,33664,20877,67607,18857,20784,13072,27937,57526,12896,51705,59762,76557,18654,21996,24116,31491,60036,19318,14468,14020,10261,33414,51676,97789,14232,64119,42934,71397,99616,68131,65663,45109,25369,60020,87243,88554,28661,73428,64115,29994,91337,58331,47257,38321,89566,15279,64558,24263,54012,58904,27259,55133,20254,53432,59123,22162,72432,89137,33209,61849,74079,69093,81448,92219,41202,72441,73572,63757,54323,28899,40010,12635,40579,83870,50662,44936,89496,74406,27491,50958,64730,33766,41111,56337,36315,34914,88999,92932,81885,23562,55940,73800,46527,24167,62546,82641,70288,17973,27817,85294,33927,61299,67171,67883,53553,43033,50781,18421,51480,76116,91017,85058,40650,23779,17887,47414,27784,17712,32344,54590,96549,52335,91593,19504,92876,78628,76235,70485,38051,48650,72337,29507,98608,32543,93606,14988,28933,34643,28875,95546,21763,95090,59899,40088,28558,41727,82721,23112,76018,78253,24032,89938,51484,81390,73205,67914,76135,32370,34632,62752,58173,43465,10430,79761,15247,84809,91246,37078,13970,58173,59576,81487,45872,99721,77025,31276,83815,40064,93984,68579,28195,35208,90671,78335,78059,82667,30540,11340,41049,34961,23055,37154,50414,67221,46648,14216,14691,10614,84340,68529,76004,53862,35116,32860,33993,98613,78677,12335,64680,16638,82235,37598,74678,71362,86961,69190,59066,82770,93437,84791,71324,91001,25373,81287,50115,32814,98683,13074,82290,49290,31012,41900,66178,16602,57982,98181,64922,47790,40568,21345,95367,10967,20804,80785,20590,42792,69904,26707,24724,54631,47408,43672,18689,11814,48504,10813,62373,14563,53265,62232,23951,32964,75081,20319,47099,33841,95883,56636,93319,84762,38512,98926,11562,47379,57360,19585,98587,66560,75702,58997,62279,17359,29629,83181,13478,78521,24592,28464,58955,49987,48075,96889,35758,81834,25667,44870,16022,13855,93867,73845,96819,72951,19243,58471,51749,99535,78857,72943,54462,70716,11064,18627,15541,53135,61602,37350,36663,16505,13134,56165,51038,31819,53838,11698,23355,82351,49588,89830,16202,66630,15022,71221,29995,42257,10441,72223,45544,71143,57014,15915,87254,18285,86085,59492,35771,64410,36277,40936,31354,40347,77938,51522,90650,31858,29970,50734,95207,48396,88268,47561,66728,65048,41811,92935,46114,33489,64258,10427,67952,65653,15581,69918,81196,86858,74313,79238,46202,65555,16274,38840,73177,60069,13759,62675,65845,11434,57330,74508,88184,15497,29047,77521,72570,48111,85192,98131,92180,67755,19243,14891,36939,44124,54685,72436,86797,68431,69130,60556,31274,41299,35685,50081,46537,62216,27918,26785,62165,83528,89554,13392,91147,76382,44445,88651,99133,20582,33553,96589,37927,49007,99498,38095,43317,91552,75793,23544,62816,96204,46999,48374,65877,37457,78664,75088,58071,31137,85442,61612,30183,88391,24520,41902,57431,39426,78394,42033,50011,52322,41332,83457,77223,28989,33270,37190,88079,40587,72518,76653,57258,64475,78287,86202,33214,41074,26954,72571,42378,91908,78069,98268,49896,88355,59403,85373,86932,94975,44472,90970,21452,66831,31358,75579,89779,73566,51698,95535,73076,29093,99561,34933,41358,91581,93314,25058,68000,55262,19957,64613,89087,72527,80060,81301,79158,44631,56763,62673,72743,45480,74446,30810,64784,77298,92572,46165,12421,27563,44436,68697,44443,20942,38340,38302,50831,21291,58600,93300,17171,10715,71733,72580,74785,88695,37435,87722,84210,60531,29085,17745,92837,10534,61930,86421,38663,18120,37177,19250,81891,92301,17756,27662,81351,20519,71365,19170,12874,43037,54137,96591,70715,21375,53844,16372,68585,79248,49953,86723,79892,71126,58646,16583,36362,99642,40010,10307,56896,99352,47416,13850,48465,57401,88987,65930,23381,15865,37621,67064,54131,57595,46887,39158,86140,16623,79552,68444,60647,69441,92495,72498,41834,44322,83184,80622,70429,42625,18305,82976,52640,15325,55329,84127,62439,81215,32749,58076,94725,15299,67855,32567,24419,72296,14482,13408,85729,74426,36928,25137,51581,27641,45534,72274,37712,96384,10753,90613,23726,84996,41845,84826,63515,33369,34822,60630,73485,72425,98465,83327,95439,43882,26658,85600,72496,32385,82737,90422,27822,12005,49289,95846,54457,66939,33484,34560,22509,15483,38393,55259,13266,83509,54439,87873,42858,57898,67578,95356,81882,99893,23856,53062,98479,44823,43982,30490,46188,23741,28679,55586,45485,61826,27276,58603,88432,62969,19709,17650,89207,96380,22890,52586,73579,72764,71618,22980,71165,26779,91359,17564,48731,85714,37203,93821,73840,57987,34302,29519,59305,44192,27748,44186,84307,77669,11771,49358,97215,11124,73325,60361,89146,61956,56665,49276,82754,53782,19744,18087,66717,46004,79974,51076,46516,97836,94242,66578,90992,41408,87031,40377,37192,98104,74523,90136,63835,16088,40099,73980,87046,94916,93390,20572,14952,45058,28448,90343,65101,47750,49929,26255,15818,83492,47390,56344,94358,98043,15431,37023,12929,29242,25661,54982,97939,41324,98002,52293,81309,34512,90650,80584,94012,90357,39740,66532,46377,19142,97203,67328,72930,18296,66073,30379,83921,11203,82559,36700,75319,86665,27097,45117,72455,47582,48610,93571,62213,33819,36492,39797,50512,60591,47443,15573,32676,44926,40845,29494,17963,71265,89979,19228,88543,41233,13901,29581,52550,30015,83223,83754,46897,83404,61453,33061,64084,84723,48857,25992,69428,52912,31721,28977,12494,36062,42928,21201,99397,98810,33925,75267,59775,93281,85202,55493,90982,92713,39557,56301,74162,75935,73760,43571,39644,14826,86677,36015,51523,57294,66415,27399,78045,89992,21059,50366,34236,14728,36698,54691,60456,23266,54847,85424,48788,34098,99127,16338,36723,65164,70132,90542,10085,41665,94204,78178,76337,93060,89483,20938,23119,54133,45886,85989,45477,19589,34275,81431,79059,48017,28742,69303,61454,35610,22381,94500,23648,86670,41603,16407,23116,71389,83858,88330,15838,11707,95080,52109,63141,43220,32005,70623,71125,10931,10834,93927,58626,42616,15284,31084,24005,25390,99493,44334,41392,84153,49159,56971,42986,30331,11794,75199,76704,72564,18812,11947,92632,58600,33209,21298,46733,82146,76964,13013,32744,38950,62372,81341,28833,13815,91829,22254,38701,47308,61028,11148,48856,95380,70523,66838,65231,91488,68471,70814,90938,41892,86771,88186,34910,80079,21876,74589,70279,21265,93552,57784,81073,51108,30630,96968,60955,93047,80108,91174,16144,21437,43511,48548,74756,34613,51775,14345,71691,28114,58886,38781,60614,36169,10687,33277,40793,45505,38055,11050,55615,92734,82831,51477,51842,70128,28739,29922,74159,10334,88126,85039,22718,35351,54578,32847,33568,10104,12303,29853,62734,56112,30211,63366,11779,52550,13525,85080,37771,42607,53710,40920,15134,97836,61607,16306,58160,99686,42876,50404,42327,27529,85202,73379,89617,83013,80974,36718,69759,73016,32638,99576,17398,25699,71159,42945,37346,66662,21573,83333,29190,89996,36832,59730,10412,46277,52333,30915,24142,50183,94717,53027,93336,64298,60447,74923,19101,53918,50649,78126,40037,18165,12058,27144,36345,97194,93838,28872,26131,15953,54605,80870,97896,16715,43924,98401,57577,97689,77214,34934,60433,76285,80428,15722,14304,79712,51544,61776,70286,19067,90745,74360,50916,56508,97609,34653,26879,80977,55336,22056,56561,40803,55708,93662,59240,57514,78422,16818,75617,97109,91951,97834,96090,63118,35909,72038,96405,99797,63281,65746,40886,64460,33788,26276,25712,64694,85140,35850,60345,13013,33930,90595,52712,68097,32528,78107,15135,30573,51265,29353,94012,86479,88933,81525,45628,97070,79525,77709,79477,35207,86909,64337,50857,83361,22908,78144,63688,80488,73590,66925,39469,68161,70434,94119,24885,11938,42774,98129,23469,92434,60340,53381,79756,64554,40645,19962,67157,35538,78136,39106,92740,58654,20581,83348,44943,59520,82900,99575,72465,20102,77967,28280,66838,20190,62490,41263,70697,74699,45057,73597,89518,41654,18812,71558,93080,34616,42153,95349,25076,88227,26457,33320,76988,15633,37879,78383,16311,40155,96690,67290,81689,25763,13034,36298,20035,62862,81962,77203,38200,35873,86617,51431,54568,89547,12891,54492,85225,26874,57416,25996,38980,35520,77473,74986,58065,74384,95794,54687,46842,63621,27207,27303,11197,19751,64185,64100,19613,96376,30457,26575,78523,32851,60991,24804,34088,89622,87227,34808,22269,19740,69019,31244,22627,68945,17944,48204,36166,50140,84154,58848,71488,87837,20523,55235,18577,93314,72928,42462,88311,86792,55023,36610,18961,39693,99827,12588,69929,52377,22082,54502,62593,96047,76387,96441,79773,17090,76014,30870,71563,38717,31471,74922,11518,59029,64772,97053,45992,40227,16693,96992,23937,54953,90946,62124,13187,59524,14986,98038,25441,48210,71612,54910,15827,24338,65877,15548,53462,76885,61177,23680,48967,15142,31514,47747,56913,92008,32219,77434,44322,93835,23485,72635,82396,70183,12480,11120,20677,98615,25955,76478,70410,94104,28619,58792,28463,41927,65341,71850,51698,70791,23662,33523,20273,20667,93049,17884,10170,62639,30225,81178,68115,34364,22048,38953,93708,66040,72393,62107,69695,26574,17072,72484,70684,51741,35086,59549,24415,87777,28685,99013,34623,11211,22612,76809,32193,86097,83291,16539,29574,66608,91212,48554,67837,81656,65643,49325,38131,65455,47553,49582,75630,68214,72200,73658,84738,28146,21825,68764,40822,90470,33489,60757,96652,62840,95439,68939,17712,84857,73189,92612,30655,26882,52700,17511,74473,84385,95911,19082,81619,71330,94773,36416,94506,92950,66388,14808,76751,39433,95226,91153,59615,87268,77152,32642,82895,13025,36915,53186,64002,90481,17945,79626,77392,12574,28421,75070,73550,67401,61658,48764,10823,55793,41082,63072,43314,61388,81553,84894,93830,55286,51034,22835,12749,27949,69796,98638,83702,89324,64331,97080,50378,26223,74634,40699,86497,76271,20155,52321,93332,41623,37467,83256,88211,15793,24061,57708,32570,72472,68258,33855,18142,12250,43210,68904,58560,35468,76880,50503,88358,56814,44214,46437,63444,68607,17255,11786,29978,41199,88251,11681,18321,18955,81506,99331,73192,70326,91428,85188,99643,49531,19228,84499,23002,54179,42739,39841,58833,85557,57278,59972,46122,58912,53538,59345,64423,56269,12156,87504,75925,39518,35172,16479,17528,14854,58118,58582,72348,76822,14670,19941,87583,31612,96888,13554,87125,13605,75322,25876,79310,13160,87877,50418,88095,21323,26988,75537,66685,23696,12887,47956,55130,46604,73474,71450,16252,38548,12577,44048,68660,68481,55283,72706,71839,75097,31422,11494,66220,19435,39905,19402,83861,67109,54754,87530,35236,22210,19579,27812,55002,93705,96117,72612,24840,66841,25219,88649,61810,12983,36499,60898,42093,33723,79251,44427,28888,48748,76433,40114,99170,68467,17106,34625,62478,37194,30530,99500,49668,78338,60621,85434,20907,97248,38079,54743,59936,75138,90858,60367,74924,86645,83936,65724,91900,20054,52051,27919,30420,37936,80282,41108,61630,24156,36781,36309,91874,48088,33791,47283,88687,61874,94447,41397,76748,35826,39364,89086,49102,76029,56224,19699,26240,56562,37198,72321,76803,97418,64495,98998,29651,44605,11051,38446,76687,15804,10200,40584,45849,71559,23070,90521,66440,73412,34872,55754,70862,53388,80004,12753,68563,75187,28133,31145,65576,62350,46938,97665,66152,81645,59447,60503,80336,97138,72879,79032,56830,84968,81790,86694,59303,34349,62870,52948,40810,28545,22052,84631,34468,91468,74269,76412,84014,92792,15402,28838,40194,21595,16203,86477,78802,81857,22148,18888,42409,20916,23179,95458,86831,65756,94326,50336,11257,36934,37032,63301,65549,77913,94313,19362,14799,54851,85144,69099,49777,15087,47329,97996,24164,33638,56950,66887,51834,44723,60898,73868,79881,38687,69063,26071,80475,84242,70840,37064,64539,17336,79273,77423,44860,19587,84127,53672,48000,62825,54274,13373,56402,58591,79066,70811,34887,40104,27761,13035,12188,47687,46650,39621,10869,74712,70782,63448,12997,49825,34424,29870,19409,69126,38658,98285,12810,48154,82683,91596,68563,95746,63838,54127,21327,60282,73520,70851,64810,93105,95384,72116,21930,89505,15493,82245,75104,58856,44478,55100,58945,15424,41881,67947,69350,93411,38750,46037,47311,90514,50119,56356,31181,38980,58979,75850,45025,10749,39967,71203,10913,45191,54895,60047,60312,97493,67450,87554,42580,29096,54302,52293,15434,64439,45424,25045,29224,75775,59333,97716,58514,93082,54611,61288,77048,84092,67874,16574,92096,45135,62746,36055,77246,81351,69053,14685,63887,45896,83416,42383,12109,10627,36446,72854,91143,66333,96474,27481,80518,42799,74613,10980,84162,91742,54545,11152,48219,66441,22331,36068,56849,41480,31343,44833,74802,32345,66591,90493,53998,30635,75358,66417,59678,63607,28070,21055,74354,45264,96529,63100,41638,37130,22008,86198,51828,79977,51387,38747,86434,34777,60229,39058,94697,83542,20772,34025,73837,37724,36310,77973,73164,15249,79508,29592,14537,32429,65335,40854,24432,32189,65693,96442,14069,35088,63029,36408,60271,69703,67163,48528,26451,39363,41499,16516,76094,79731,55839,46842,31253,44508,84623,87790,57371,69816,86192,77170,74574,16240,18006,77629,74341,33871,28796,52250,11986,93819,98612,66758,17015,54302,65706,31846,34490,42548,40928,39499,11658,99869,11523,36246,52243,86120,26726,36983,99513,94172,44772,76669,99114,41279,66369,60980,30883,70184,60885,16252,65792,72197,19145,15656,22184,50190,14838,66573,28694,32464,66202,20442,33042,18698,52305,92374,42871,88870,53147,82091,13650,13184,91357,42288,53692,96384,18260,99036,16689,57506,73099,57865,77482,92239,62534,57084,50859,17609,44342,55682,54204,18433,35208,29065,31379,93158,44467,29929,85836,94821,57019,48238,97749,17914,75449,81904,51032,69196,56460,68299,71597,59098,17521,89701,35048,64706,67415,42415,37286,85483,42535,19436,18432,14769,91132,12169,76295,27572,38743,54788,88198,99043,55378,42276,62961,49428,69768,61879,21564,36035,89020,94612,87551,54338,71823,92469,16314,86306,27627,59932,47788,99963,81276,61022,69699,52210,18320,24434,86485,47417,67871,73770,15422,86504,23571,35767,90181,31129,94759,51789,10274,29821,68528,65217,58275,20440,50344,30644,75019,80141,54978,51951,57127,45967,98320,47186,44130,87811,30782,85791,86907,71863,31414,95010,66416,96298,83073,89622,38952,87316,23535,22812,58865,31414,79141,88410,93624,42894,59753,53469,23587,87127,84734,82882,32270,25207,10519,27471,12447,80183,77544,17017,76742,73635,66480,35042,38663,65165,54447,50611,57588,70408,68585,51908,36276,27393,91239,36289,66176,38764,16808,76961,94646,76490,34634,63179,30567,52807,27115,81848,41586,18161,75616,54484,28618,41785,51442,66765,34867,99583,52933,39097,76012,43559,15245,34927,88426,29771,63223,98370,37124,60720,93698,72236,76795,12409,71199,26484,23059,90155,14083,65523,88918,16631,27679,87455,45557,13147,76610,75006,74189,16601,27071,39568,41479,76585,88577,27806,13793,52885,56396,28694,33223,45546,34648,42313,42765,89010,57435,38826,44247,80189,63927,88075,91570,52442,90189,54871,72518,62601,96212,50635,67713,14142,42007,73162,15882,57012,25092,99228,23178,55966,88364,75427,98984,89971,72582,14954,52236,57151,32644,90477,20931,16042,56111,64301,62752,22274,48143,67515,93624,68417,90130,41727,13253,37813,76048,74968,38925,48879,50734,14948,20605,33291,50790,74093,98798,87077,78323,99943,73174,14729,37943,13753,18487,26400,81650,93392,25701,46333,12449,84458,55488,70218,90951,51469,53118,70914,12611,11312,41618,69226,33194,28409,96173,27556,25326,17361,72424,72678,60324,36293,45072,88397,79338,57827,98111,22533,44465,32013,74396,60293,96662,15871,69479,54299,28490,16758,30942,56297,86657,23115,81079,92601,71770,84797,80971,30671,38000,83025,31533,57552,10580,49656,66873,60565,67390,72631,81303,24714,73453,98452,88220,82846,27610,36075,20826,88390,34666,72320,99697,29991,82182,52257,58449,29333,45584,34656,28701,38834,82727,45357,93332,63366,94472,41245,43245,40123,58567,32964,57288,58397,97268,71037,58219,44577,77451,75375,64890,21644,73739,46737,46359,12854,33132,15764,11040,51507,92213,54940,86366,73754,66540,29737,49320,54067,24292,75484,14140,68652,59816,38067,42101,52816,94529,45641,76054,87262,67791,62361,48549,94112,56051,36983,78274,18864,67841,99428,82741,36070,33584,46304,42529,24175,23714,97736,58208,41164,29127,89350,89305,29116,68558,64081,26477,73739,88063,42683,91583,14142,65734,73474,23872,89069,53147,40179,19492,93098,59367,73344,37152,89408,28950,31078,59990,53836,16921,67950,33068,89628,76667,59362,56758,94574,57409,21926,76251,14174,65689,99202,85742,52246,76400,61573,98868,28836,96739,77779,82367,23605,28168,92519,30109,81514,51078,39357,14559,30453,27021,95350,63606,81530,26212,70776,77652,66988,80197,77601,34536,34483,24101,52040,32730,97864,63743,52144,11822,56887,10921,14597,63492,53314,25265,54228,97755,95729,19735,58224,92175,71000,84208,83128,99618,16472,41408,59374,75836,90499,85362,62915,38509,41256,96147,51484,56368,80433,44995,46427,93415,48736,34398,36566,32434,67443,97531,47032,50795,92619,95501,52172,71894,90254,44295,87965,77189,86737,85381,59730,73595,66977,76163,31581,75670,69939,71793,31105,84098,43305,51365,44959,82697,83728,76378,73977,41165,31439,45167,82412,11620,24980,18892,36559,34216,38549,69539,89845,91301,30839,71019,56712,26309,21285,42002,88982,20502,60167,19417,36810,82323,39541,20207,96388,55555,77935,45036,52916,70104,63645,50008,79814,82682,98082,92640,76570,87838,15256,28393,49707,47781,22850,53763,55753,14573,45848,80480,21568,58271,11757,66701,98085,72282,62499,80721,99321,46456,99942,98574,66423,65248,81014,87049,84038,79522,84243,55570,42004,62551,69023,13409,51673,75402,34395,61588,23438,52358,64383,31541,49495,60144,29528,57560,88375,90041,12854,77115,20526,63700,16902,96601,35076,25901,71896,42398,93619,94940,60073,54286,86043,32716,88685,46799,99627,88713,77734,23104,25601,68719,25900,82998,26321,34364,55928,92579,87463,18142,28767,36926,10744,27694,25130,72055,90904,51746,32859,48763,70287,18473,31145,29510,93456,15278,94686,48263,54245,47340,70865,64986,69339,69391,83704,33136,72100,56701,45019,14278,30338,49898,96016,27575,66770,29316,15900,22246,69826,69947,71844,16383,70770,81690,23475,97395,14198,17552,19783,76013,56350,32501,15226,99106,63878,77606,66989,76544,18544,74046,35914,89879,62070,55679,35502,80908,12419,45659,46133,72271,33830,63280,37758,77678,61056,85540,79774,65393,65921,72035,23501,52349,12632,41376,31725,23715,82665,31382,70469,21833,54384,70164,74990,62099,42885,39250,40891,39978,12844,46935,47762,50432,74173,42583,14392,78531,44997,60511,96134,36091,70070,49875,19827,71454,60876,82920,11708,43304,32929,64949,64196,17325,17018,46953,71947,22079,23986,83777,70259,44166,55150,19595,59054,28718,78110,92820,22977,58537,63719,99714,34614,61440,28631,93697,57414,67556,67586,68772,79394,47690,83852,29445,63012,90582,39309,32288,18289,11181,35909,81695,66477,92383,28838,92565,54672,13011,37228,17659,71856,67624,56621,42295,90137,85038,44337,42403,85236,13494,83755,13054,45101,61819,58311,94316,34977,38061,13147,44352,21958,99006,73742,96011,54387,19705,84213,60224,17102,47319,77344,68544,92327,33597,33299,95176,25576,43287,74046,99290,52316,62015,27299,94292,11861,29551,20535,63659,28993,88834,45917,61224,23605,64036,29636,68753,42016,17403,74491,76224,34839,11617,83966,53778,38529,38922,25936,41212,72973,84043,53944,76455,68719,66769,58713,56404,79432,36316,77921,62934,28396,47155,23444,22420,86514,72672,97995,16078,23394,39281,98399,46300,73144,13601,92214,71107,17573,84807,31543,44412,95594,65293,31979,88502,57048,82803,16358,73589,59923,85863,30479,36557,94550,80281,70371,78486,57685,94079,63327,33173,40046,10890,43368,85747,72480,58907,17515,94698,10630,38262,44415,49055,66166,92203,75060,27323,63568,63881,93809,25129,62758,26976,53833,41422,85279,33441,50349,62086,66596,71980,24080,80857,23322,92291,86636,69839,57796,88590,82983,79577,19969,48829,59667,86819,99136,41512,48092,59037,72927,79006,98469,92417,94402,24505,20524,13211,27874,96191,30217,16146,74359,62445,86493,36838,42807,56039,63931,61141,14239,56876,39634,48448,33160,27996,73187,60149,85024,31756,33587,13769,87487,39106,12018,49013,62872,83919,21191,30486,53750,86240,13690,95811,99334,88169,13967,91435,41598,92900,25305,20248,36552,33727,80051,91327,68685,45313,29961,37066,25935,77725,53573,17519,62252,30856,37509,46925,60597,38892,47318,51266,97277,21622,62982,23592,58533,83017,24245,52053,94003,84494,29484,51165,65423,85850,40593,73035,50636,87399,96050,92239,33268,68777,11595,44285,73126,18069,74766,93561,81557,37482,89342,57540,81916,68738,50490,18082,79294,24760,35922,27936,74649,32622,68152,60642,18779,12137,93484,15693,72963,12112,15955,71775,64802,61014,13659,21482,30959,99190,90127,21982,89004,56907,26214,32957,71052,11245,62840,14552,14100,99339,41147,86491,18078,93337,64863,51432,70414,34537,39347,95492,70293,93996,26095,21993,25489,50476,90738,63748,53145,37801,15666,49660,96302,15309,80051,55327,71436,93101,16101,65113,69134,24661,55407,37770,55002,97787,34957,27155,90459,79248,10368,13233,86805,85098,15726,43611,18314,27184,98449,67635,26065,43940,96856,80896,35438,62221,15897,96774,14230,93691,46572,22331,24782,30480,43026,46665,19019,57328,87497,92748,56919,10395,60941,55449,33501,83051,54586,15077,28761,63349,26639,73632,35509,12705,90417,99319,91668,87813,50373,83427,78004,47325,56297,31845,93179,99081,50950,40641,28420,22870,74326,14341,85951,14389,20968,58654,63875,13931,53664,32974,98242,66215,64924,88528,14945,28044,47165,61092,87055,44227,72840,78710,58893,98637,77082,35879,22609,45391,37697,43891,37305,67538,17886,46544,52145,93576,51624,16123,44612,99438,79637,49739,57079,84089,54764,38045,74948,35004,82210,19849,99698,25473,97828,27179,12001,46490,25022,83672,34121,78082,87115,55883,86029,74131,98537,98563,82144,18441,70316,65248,18469,71844,46002,68629,82386,26318,37622,60586,38743,14752,44967,33666,29664,16529,33230,45464,56432,16652,10291,92491,66444,82018,76277,75793,45411,29048,53532,93226,40373,29714,50441,12876,88798,19130,66307,89933,68646,86866,32455,60206,77531,84210,65429,23083,70268,84678,14003,85346,88603,22970,21969,27482,19081,79934,72743,63655,88407,22890,77312,17964,13760,86862,56197,52208,11977,90478,64727,68938,82086,89387,15424,11838,56947,86768,23236,77711,77371,95827,88675,61279,71078,24732,20449,46864,96129,57524,28295,68666,94440,60348,24788,47220,74650,58966,76970,98776,28984,15676,33158,86684,65888,88457,14259,52626,46151,82581,31058,63219,53558,79221,20096,88008,48170,48225,86409,65828,28306,93885,98457,69160,36705,83249,70900,96085,20327,90832,42502,33807,17465,83349,12062,94708,75936,59825,96544,47870,13390,48379,48652,99247,72165,34959,39064,73994,62328,30629,90243,79186,65168,20577,64194,29858,56828,10819,38848,60020,80714,57007,14357,14307,96103,61642,80969,80413,58857,90056,66573,48310,68118,93136,92252,21266,87017,25217,39142,89283,90628,17687,59549,62334,67947,70702,42751,26871,10925,97566,36851,88776,59539,90995,49927,61053,54797,38764,51103,25366,96701,35061,63711,26337,57098,21805,50934,57884,24632,86165,76961,71142,49759,49892,31021,21061,38798,39169,22683,69401,86773,93740,98313,19861,31732,16688,56739,22166,23949,79152,65539,61112,92733,96991,65751,25461,45540,92187,92776,35979,24985,16562,12771,32443,90405,36219,48200,16111,45733,79531,62205,43479,17746,62074,14522,95239,90115,60287,93613,11229,37764,16635,92973,98620,36247,66707,16447,10870,48512,43935,92900,19217,67915,32845,79918,18163,33559,63006,59691,21711,68748,83732,63279,84637,52650,46760,15065,11356,99784,20082,76835,56980,27650,96919,81383,16508,14712,85720,20619,76343,18602,76850,97961,92395,56683,89379,64232,37792,89876,31890,28226,58661,41473,11619,42591,28941,29938,74094,17777,64471,33241,16461,34934,13478,76092,14491,52672,50400,14158,16974,67212,73282,75494,89159,21506,24422,11462,37264,89346,11307,49540,74590,82875,78787,34204,70008,94706,12858,71115,90698,49093,49642,77878,60730,72404,94143,13546,21314,66971,93449,85059,66453,42854,80172,12875,80637,57733,16971,16805,54906,60456,10768,88075,15790,40192,94948,38377,89948,35156,77875,52177,50151,41968,15075,78588,94116,21741,46948,59990,63570,19604,85687,75784,76722,91730,76274,77331,15366,45531,89697,89673,34796,13484,92372,36431,39904,14321,30410,78612,49517,10662,45260,74959,45204,20653,47477,77098,54145,79906,65300,38985,50010,80634,60464,36318,81273,51649,97317,34308,74039,22229,30717,81073,62932,98847,98599,62805,51282,92209,68562,80363,54737,88877,52995,83716,52154,36367,16432,84055,49032,91796,91381,58805,56220,42450,12115,25290,66574,18324,12899,64305,95297,87129,96538,85090,28600,27153,48042,34294,40479,42451,39228,73262,63913,86855,68745,90612,14352,61794,77197,37131,95448,69045,58438,65980,96096,48110,41262,66612,91322,57701,76842,26837,87786,78818,96000,12075,43021,32813,32613,24428,23509,76843,50877,31682,76762,90181,98882,52226,52168,93431,82280,26870,46499,89332,78235,46858,26279,57102,51536,63005,58666,25135,41918,13237,93920,34942,66867,61501,20130,35434,85465,51498,76950,14796,77263,10951,58411,31212,77583,88834,20206,13258,79866,74960,87209,29655,84347,63789,47556,95394,57867,68374,12598,68015,74154,86894,27327,11074,92451,92780,66410,74630,29904,62907,24234,26015,43732,46839,66509,88344,65285,80635,58406,63888,60986,68177,41816,61215,22566,59395,41963,71720,95725,22639,84016,70037,54770,61812,38130,38071,56722,80273,51778,55378,75373,20900,32289,65952,67396,54082,45456,43435,51448,68009,28957,61966,15686,21345,95343,12078,17104,87603,74019,74807,51889,47197,41182,46387,27010,20848,45981,28942,83870,75436,64611,97540,33560,81513,59606,37147,93384,85330,98956,44169,24711,85423,73008,88759,43799,20262,56132,90265,68549,61127,29107,60849,77827,10236,16299,64834,14138,57194,72238,40616,76345,56786,38047,52539,33602,68087,23734,28821,94092,25363,24252,15407,50559,14887,64584,92253,86341,19925,92708,54158,27363,55313,84671,95217,90833,41427,22721,29308,53106,12761,66493,56289,26127,80011,44920,85360,29458,66639,43477,75750,39863,36433,88368,27761,74697,65878,77699,59838,53828,72276,27691,78538,37446,89310,16543,32512,70134,56633,59561,79715,25527,46071,43010,76911,87382,78233,81195,93956,86649,13534,65148,63118,75455,52273,61500,19010,78423,94174,59644,55634,75742,88504,28074,79706,62186,27229,81095,13123,89572,52148,68101,21126,75509,51514,30503,14215,12337,16443,87142,58592,48561,11734,84100,60027,83195,91312,62878,67339,72661,34902,56561,18998,22628,82914,32063,53536,96512,19981,98558,45839,88618,30634,21792,93358,20133,38061,35950,67513,99671,99070,79172,92096,41822,85613,75848,86507,72871,84222,78426,78368,26930,34960,26480,62841,20644,13209,46501,92926,17929,96464,61155,57827,25802,61694,69617,21997,25608,17157,14320,53515,79714,45798,38519,11630,64894,53737,12686,44232,97264,78765,78761,84732,71575,54113,75182,81053,14664,62930,37935,17818,60196,30142,92369,58831,91007,18066,12622,72779,90751,90314,34859,15309,45668,15956,54456,30429,35971,45640,61748,29048,56374,79955,22401,26741,66755,71921,72759,31483,57831,12355,84885,37308,25571,80899,11586,24445,84867,60921,71919,83966,19560,10549,76826,84595,62667,35440,45924,70504,21896,41655,33047,62634,80938,96223,22271,62661,56396,36304,61202,94677,39888,27179,42383,37427,83390,32523,95486,90544,99737,38965,49818,21068,46594,90896,94102,87517,72844,39569,12867,44675,28452,35349,63200,25604,65199,17571,32894,16727,90480,89192,42582,83919,81974,60560,37161,77893,64322,50569,27585,31519,21379,89564,40849,73019,22952,74457,90038,11171,74143,81558,14065,14209,37799,93289,60990,65923,72775,79268,17485,34397,96818,19522,67147,83003,35716,89121,79210,59174,74761,32465,75157,77978,83578,66168,91053,82171,64548,93855,43258,97453,78444,47171,93852,30447,30363,57608,60193,65355,62618,95144,25341,87079,69130,33339,23299,31853,94087,45431,11820,52222,70610,61842,92658,95432,34381,75517,56084,19451,45795,82732,91774,11156,80514,48673,44460,52718,86622,80701,56710,39772,42768,95447,17593,67888,17958,87421,53930,64543,72652,58613,99993,43561,18287,70524,32708,46146,90795,89792,74923,31332,59665,10468,33777,24752,99369,55267,65020,73561,37705,37760,95396,68210,37692,99235,51972,65859,49678,68146,67848,10098,90870,25345,17232,15140,41940,67479,12335,82591,98650,97222,61961,52588,26313,43467,63111,17986,24724,34278,92762,42032,98510,69023,56501,59728,40306,71634,25150,55106,95849,54356,80150,17253,26463,47621,42670,61469,90330,63906,15594,46206,56848,23098,66928,28466,25510,35240,99685,64447,84230,88962,94675,33661,75022,51040,12583,59144,59775,35752,26045,85965,83782,26068,52068,30859,69887,32446,49533,42605,97871,10606,79317,80545,88423,64986,99195,10888,12663,64598,46100,56293,34308,82864,23043,43123,67879,56107,81923,47256,67189,64073,11723,47930,74203,24792,56639,12751,97578,62995,72323,44382,88680,83801,54612,12165,54556,39753,69779,36165,17346,64666,28777,73743,59567,72103,59285,78157,72960,63430,99870,30509,18697,82244,25788,46629,59329,55614,56061,20395,70343,37921,88292,56105,90084,46781,79832,17567,96059,19140,58569,55231,26098,62403,51774,93809,29772,44190,81853,53580,79303,34026,80786,94014,19512,92591,95424,92618,56650,92328,25079,91476,20233,72334,26270,14689,93617,48335,29731,42332,99761,12790,96458,71029,44214,27246,36298,38987,36447,65779,53669,38656,95949,48321,62884,93109,30454,36898,55146,18123,49178,20633,55040,85235,62374,88476,25011,31374,70086,26241,58639,47001,58123,17869,60485,36788,18927,94221,88690,43768,53022,85506,98350,86922,30813,73473,56374,10388,36539,89120,11389,77920,79092,71303,30187,22261,22062,28549,43878,43759,37842,58952,65772,49534,86798,69161,47991,36141,33032,20677,87409,19777,53973,21199,78659,72897,97313,79895,50425,41935,86236,33234,19279,97399,96195,75653,31876,55504,29501,85447,62832,35546,39726,79650,35310,68602,19384,20726,42807,56753,32868,71341,78883,10112,25182,21598,11533,99318,79492,19683,29761,40182,75717,88373,79863,79542,73774,91012,48979,51747,27801,88293,17284,99776,48435,48899,99674,90767,11508,64132,57910,60088,91692,36844,29652,14557,36211,67878,47685,50959,72665,12573,37927,26085,51950,23438,25637,62513,29807,45710,24687,33210,63046,26786,54569,51375,31641,25588,61816,67289,94710,93586,70204,24372,39589,59009,91112,64639,86098,52370,40018,45677,17660,17320,87191,54254,85074,89549,38825,12115,42986,94111,21328,59576,57482,11379,22686,57793,63205,11475,48974,36256,94144,12387,15261,50322,14268,23095,20746,37659,73116,84318,73958,49284,22195,26323,81434,69214,94852,51730,77150,31118,67604,70832,92472,22340,65619,64995,26681,11204,43582,61888,76228,28660,53791,63646,83127,59184,13514,99824,82707,30010,34845,44395,33413,34220,89242,65742,52608,91681,97857,63742,88974,72936,76923,52877,52585,58268,30028,67542,84992,16453,79722,20042,75119,24152,34849,13447,71314,50086,77575,22519,17056,14266,78204,45778,90382,48363,13368,42480,56029,76606,19396,29237,80091,36260,66797,93653,26004,28149,47410,58380,57327,71987,57837,95247,63146,52264,21643,62829,86772,81531,49980,42511,99091,15628,80853,43612,76454,54296,55323,79990,24556,77620,36343,34745,15645,67303,62617,97343,24101,11473,64360,62751,92531,48274,75967,19392,66921,65703,30007,57193,24379,63419,79354,81932,32414,13275,15491,77356,88017,87222,31694,57198,78504,25260,39636,40543,35878,59960,36139,82455,75806,64772,55949,59184,95471,51667,54305,11432,95828,77373,67865,55704,13880,12539,78914,33827,68730,12733,39307,12930,28509,25407,49335,99044,73727,81524,10866,94791,52236,83736,28592,76745,30769,33747,15683,90646,36294,91330,26816,86252,84213,49338,65427,42874,95630,98618,53952,60631,60268,40799,56119,33892,46401,65475,67825,33155,13011,39849,89894,18738,28631,19409,89377,86281,74812,79143,35242,80610,52919,24234,52271,95855,68308,82739,41934,60312,78380,89868,47859,30308,24429,94684,52874,91541,48068,83394,37613,75764,40934,44069,27365,79950,20393,82397,16004,86115,60116,32945,98162,75255,62212,60768,20110,11127,30667,61570,16608,61556,11219,96970,75664,27784,59720,76373,75986,49741,51419,36660,40299,13708,93924,95938,54953,75855,24943,86718,40283,66564,44078,87964,17009,64822,10681,17013,86302,85713,56841,76796,48908,62229,76148,79330,10760,36115,44517,66066,25849,29832,49292,60461,93041,67493,62013,36784,77852,81378,19100,22821,82563,51183,79172,32821,26961,90653,29599,84849,19192,95014,62111,96549,70038,41656,88024,82297,25206,96407,68607,66571,86527,13496,49007,67704,70669,63021,75333,81885,24853,95523,73538,57146,11422,49287,96773,97107,49920,34110,38727,32563,57518,67431,37479,79002,90873,31823,39290,50093,34176,21456,57912,24335,46681,82371,39820,80006,74353,41590,22424,63431,38525,22096,98202,77511,94477,20166,52997,60302,89656,47459,75488,32902,14844,57376,18971,62591,34813,41566,95795,12762,22185,81026,45900,66726,93132,89152,39363,33073,23560,95316,38803,28472,83900,70547,72944,82895,62550,73425,30510,88050,95766,17339,21983,47947,72722,66127,78778,67980,75431,25508,61723,95978,64516,39803,91834,83730,37346,25030,87615,82213,68762,73969,79992,53722,19581,35546,89562,91326,92324,21049,16975,52932,57071,21863,87411,27180,45282,34405,85172,29870,50383,63675,43007,28843,37192,37816,46476,95753,13622,37155,91188,47108,71924,22329,26792,81247,62178,85667,41714,31615,96453,43333,75807,54234,35768,83931,31134,76554,62537,69545,60845,16980,59201,36736,57752,81522,60379,34133,61365,71246,22307,54193,60484,56236,35284,35980,55644,46949,98794,53820,35502,71644,28330,63166,11279,84513,30507,15529,77351,48944,10095,74205,92626,43863,28363,81562,16647,28417,86135,24444,65431,72996,60601,19440,77099,39360,69057,13390,13117,75899,48346,40523,34405,88121,89680,63671,22118,46856,98205,10440,82217,96602,16215,97290,77827,18516,60790,61137,85160,19702,47660,10858,93568,97433,98702,49034,29539,93618,77927,85040,60960,51484,21724,11556,35823,22806,40962,66660,60248,45521,74760,40851,43663,73624,11969,61629,34516,62107,63945,61125,32132,78057,19718,58898,79881,81276,13333,76738,82453,28627,86661,23612,65781,55996,36158,32262,46050,47334,34567,55061,93317,69589,14075,28705,40309,85180,35377,30580,56346,87090,94803,47453,14278,48464,77393,14182,97234,66875,20286,84545,38248,23454,75256,65069,73519,83144,39142,43740,64768,18437,91651,28862,88112,11856,67615,41790,47248,99585,51307,95955,40947,60281,93623,11270,16758,74370,95642,71529,53580,34834,55574,76567,78804,20114,87581,93398,95525,78581,37299,38513,51636,96173,93183,51383,14476,21092,54450,29641,61196,99313,39424,56874,81140,15774,15047,71731,50268,61256,13894,25062,94616,76553,64640,77178,66199,58656,34319,61857,32103,84532,98381,25985,27495,33882,13202,71159,30895,79672,72252,87211,62940,87831,45124,70500,10037,18127,42000,23724,70618,26014,24929,64572,42085,29385,29859,37964,34594,16433,14012,19918,10739,89623,84925,19978,98543,93592,79684,15689,12031,55935,50547,86736,14474,36891,52224,16046,56752,24182,76292,74972,47206,29922,64471,35046,48925,97145,42599,99593,42025,16593,19090,73051,76969,91271,47936,64582,77774,91040,84395,71799,26821,30465,19476,16447,37813,67925,94949,64451,43114,70142,27966,59196,65717,67069,19979,98833,13196,13581,10439,29681,41696,30567,17407,50532,11710,63322,12273,36947,87594,63122,60760,80075,58860,67481,35905,26809,28749,79289,15324,95307,86522,37217,41552,13056,71493,94068,73004,57047,19377,66414,69811,86545,17067,89715,93342,42777,91863,28446,59851,47439,80529,98150,61743,17711,83214,15853,43844,91756,31118,86215,48998,44393,45055,57387,33114,32810,45092,81916,17381,79666,63719,86403,25826,38174,89083,59247,98169,35095,15808,94314,45755,12851,78894,49892,80261,58993,60222,75502,75790,25914,56160,63090,59305,17002,91620,76085,78237,51960,33402,27415,93863,43881,85838,85072,51843,65061,86540,28551,35388,71768,12361,18484,88969,67392,81321,26810,47036,43615,89589,27967,63558,73574,35215,74527,65121,43670,42724,14172,26738,36326,76306,16700,82382,85094,32514,97971,79188,42756,43102,21226,13099,88738,97607,43967,35603,91323,77301,35804,22274,73708,11416,31808,32330,86648,91401,61550,26647,79067,30742,76387,43704,21421,64175,62990,71614,44141,58570,15869,42791,67754,98140,67940,56056,50727,76059,92787,15226,32894,63077,14773,10148,33374,39099,36464,12680,84429,69721,71473,41073,94245,12427,27211,65667,62254,58594,27718,53311,29997,45082,42840,51250,50837,28911,66570,18890,11468,46598,22782,26885,33825,95805,52599,73076,29757,82217,56543,26720,33838,31179,71749,59044,59534,52350,93624,93035,36367,76478,15982,42381,53907,50589,89913,20966,14584,58681,39468,27778,78317,27998,13966,63780,21831,10801,50171,43578,62889,84457,61892,80102,27379,27191,56432,97414,21683,17515,69651,22945,56278,68182,68318,47013,12645,66983,19752,89525,45651,52226,77563,27416,34327,25376,87489,33407,20179,64928,83782,88215,59097,22265,99898,92140,59034,56100,76851,23029,64352,32319,74669,30145,59254,90098,80951,80612,84045,20033,74375,83634,13002,20902,27581,78907,66597,84086,21244,42763,84320,91016,18716,52831,55984,52104,51435,97428,41569,13880,60003,68584,64811,72189,11634,59596,51302,46327,91731,50635,50801,49304,65435,36150,86587,61401,32140,59103,52626,78827,87895,41328,20077,43093,64265,92120,64925,10770,95990,58472,57304,83605,27844,83858,50470,82513,14203,19487,65585,56132,36633,20300,12892,93785,24364,31885,92856,21032,17404,40325,10372,26783,56082,56250,35111,41143,75951,32477,30418,92826,37323,16364,52812,78807,36221,91364,31926,83040,55550,62905,83255,21928,94794,64010,59544,41269,75825,70400,38649,13100,93056,81432,51850,37712,70291,51741,92016,70458,80306,79858,79228,75346,59936,18990,51338,25641,50871,85522,95072,55293,17032,63382,37665,27764,97429,65605,90176,13792,92500,72908,73916,30457,16484,95488,28950,97625,85220,36169,22472,81414,20047,92639,75712,80366,72320,13836,98777,16580,42624,18587,46169,23259,88187,72554,18942,74867,68712,22914,50860,35722,26194,32272,99361,28071,42645,19753,86727,28181,17529,11409,61449,31789,84075,86060,87313,38001,23443,14319,40331,16162,50378,11110,57494,80852,12399,15879,87867,81021,90294,15921,84954,46215,18656,47080,21659,67037,38481,35638,13813,60848,79520,99921,61963,47835,75646,90140,80840,50632,26858,94328,70314,26550,42919,81431,10819,50462,31477,14778,99574,66394,36390,93154,39612,46775,88505,69275,44571,19382,61235,78200,91565,22221,13380,54809,25367,94092,28167,62146,56947,74717,55924,55344,71335,73848,28726,25571,97061,88740,20607,75148,62411,24543,30378,58106,83131,20401,25447,33619,88461,98657,58758,46742,87660,49312,73881,52333,40749,32298,99270,57010,70697,41876,95320,39538,76621,37568,51349,24452,92796,29622,50672,87347,33921,90450,61679,74564,52858,17378,45472,28684,63961,49726,94860,51560,64413,54745,15147,43056,73618,45616,51575,86181,26838,95629,82267,96123,68373,40811,25660,48616,44735,28264,48533,31964,29882,52752,66642,30020,62323,85561,14966,27481,17521,64278,22095,13738,85555,97144,75300,98045,65186,12921,58001,96314,59419,46714,29959,43325,10330,49482,26780,40636,28823,83495,66721,92286,56613,84329,70478,96093,45430,20642,40300,94398,46727,15280,30848,12632,93654,65724,19312,53241,97732,73156,86961,83504,43446,37429,38456,63383,56961,12176,90909,93244,31432,38924,54210,25176,53164,95040,47391,79782,44752,29937,61655,80611,51022,95121,22869,48099,34868,82932,53944,51486,99727,58770,31162,43446,81135,23787,76157,67429,87677,56309,57253,73723,42637,53327,76362,13483,87226,22626,25738,14692,64625,67952,42288,54020,44422,64136,44636,82415,77127,30350,61324,29325,37639,53177,12519,93513,19532,51754,49469,43714,62381,27914,58687,42186,21150,35816,76751,30293,85836,31016,32881,67252,59354,82125,23694,24278,77956,75563,88068,28178,38361,32163,26876,92630,96554,83183,98412,19386,19532,80665,61053,42606,26508,96400,34987,10719,11024,50900,76321,69070,45803,67735,24898,54113,89778,70824,66980,41275,77843,12157,32110,74106,24413,87924,95770,34713,33342,18973,85678,60301,32433,50030,18630,42772,31396,76689,93439,72229,59073,53236,46447,79988,17327,44307,81468,51440,89832,27974,64051,41384,21485,18069,90772,46297,83669,78187,59621,81771,12104,15034,73558,24892,68613,16743,67156,10711,80276,31994,89888,19081,20994,41192,23314,12461,94008,54605,59762,44454,97838,91410,85745,20992,36682,30030,18496,51316,67847,43008,26462,93478,73933,59873,38629,32837,48042,29527,41678,80880,60504,61456,76866,72573,50384,37896,14431,89451,33661,47779,61707,68206,34535,66498,28561,63500,48395,78597,81230,99133,19676,26018,13771,70846,24926,23526,78853,68164,75410,17626,89688,39460,25276,79686,74572,97716,91444,85914,58346,78560,91817,27793,41115,27521,31232,22902,81009,50154,56243,64643,69597,36715,34989,32911,97232,37002,45400,77737,81835,44957,97314,33062,73966,15487,26396,88686,55285,28221,19848,12744,46133,72817,62934,36061,83068,59974,88787,68988,43065,86348,95423,51283,36025,35287,39553,27315,71982,37731,88614,52261,93756,81425,64493,38271,13705,92993,51233,35315,35409,83215,54128,24438,79069,60899,73846,10759,33859,18290,79767,32740,18249,79764,90052,39007,21611,75884,37799,37974,40038,96759,68556,49050,97235,79457,86525,28087,48717,84036,96909,52322,90467,63727,47313,40140,21263,25723,28085,94650,39227,47742,31391,68864,19259,26906,16396,30346,36207,31179,41463,37423,73181,14824,69965,80562,43437,26038,36605,38647,47889,26540,92638,92820,13499,80990,65833,37385,59618,85388,29830,26924,34060,96207,13846,47059,28864,97398,52898,12874,51921,73659,22023,56908,98921,60305,47342,64269,67435,61818,13244,46513,21408,63089,99835,96737,42125,46422,93259,43331,84187,45948,14334,15832,49635,11568,95295,49785,87243,95597,34197,73585,91104,24806,16403,79208,25266,29644,16961,95689,54210,29225,98669,72442,18271,11357,47108,90040,98802,14275,87857,95135,63891,32151,30879,47377,55336,71872,59871,28375,33848,82410,61984,10086,51476,97022,31236,18468,80133,95981,55013,16845,66018,22181,98674,81849,70938,44233,39332,91177,20047,60178,14624,22006,42373,93574,88105,74164,90937,41986,74223,76819,67939,61469,45606,50580,84831,87035,60992,75738,67791,63306,40391,64011,18100,95723,60922,55182,35582,41172,87081,66424,26203,76268,51641,58484,13593,79178,49621,12317,88900,66452,24228,39664,49446,89287,99121,78119,74212,48483,35438,41425,72820,91920,75006,69855,22941,45477,53548,58295,93145,79546,25170,64147,41528,71768,20010,81483,52891,17405,61849,51137,58848,20276,85074,30544,89562,80051,73020,85196,54779,43171,57054,82070,38158,38712,76940,35463,34477,23328,62606,70404,60522,40930,67924,83879,94378,19812,75859,49742,34756,16341,64080,27998,18561,99383,75795,86537,24292,22908,56311,58184,52927,75422,13551,15530,24006,32028,43441,52890,40260,24805,11687,78259,16970,85743,35542,48738,76274,19853,46208,13516,65627,54805,65112,55947,16254,18893,16275,28108,15015,10630,21657,97232,35699,18828,68311,53179,30871,42276,60775,99856,18444,98613,18565,30276,34255,99694,15691,69320,46599,75417,19724,74621,69131,86784,91645,45296,85329,10405,86221,35305,41213,13869,33384,19100,82929,67924,49494,93129,96518,36146,83168,43608,23054,44798,43292,16925,47430,65122,32233,78860,83964,72908,84928,78814,61956,21273,35745,79311,96683,32106,30259,46096,83600,49317,98750,94707,69901,64029,81527,69438,69313,48678,34814,14552,66494,93610,33730,67763,31181,58881,93715,16635,50228,91837,64101,47660,67418,12680,28361,50669,62196,98286,64245,16900,40780,15562,69600,73035,54198,35275,73645,71558,37485,91531,81563,47777,27914,30057,99737,44432,83844,89614,23733,88864,76426,92842,79715,82076,49670,80154,75710,66677,85323,53567,93684,13116,55468,53260,60449,30276,75020,38058,78286,69686,94449,89271,30652,47166,20526,59332,72710,58777,72709,87555,67957,70552,87028,18560,15697,28695,70466,64789,97210,59589,35539,91759,31107,23856,68537,92363,13655,59022,61320,42688,20210,30588,68185,68779,95344,54693,30839,40366,64120,93632,13846,66178,41938,28631,91097,15036,86314,49789,36767,70064,14031,84353,65125,29013,12491,34606,50048,85189,89703,86586,31505,35934,36298,83641,38136,31537,31765,97994,70675,75086,71953,92458,39501,44376,79018,40952,28069,43263,99554,10402,21478,41709,13885,31618,44771,37286,82156,66471,92135,31156,87554,37675,51340,50681,83167,56859,34911,93805,18806,81698,78838,88209,50899,63043,45010,18024,44446,30399,92390,13533,22381,89693,14852,52023,92289,21354,67310,12534,92341,44314,85501,48568,25692,48520,23243,91650,50586,64164,84330,32955,93145,74965,41033,20213,17598,85196,18865,94869,22247,35259,46620,70845,89391,80173,86161,30717,18420,33343,86399,36165,18369,30465,58229,55455,53846,26047,80000,43130,12708,14638,33704,99714,59129,81924,56960,36891,81812,21644,78000,96681,46453,79955,71830,65110,60668,15826,11700,25172,57403,15865,23882,69016,44947,82394,93481,87067,14028,59085,39110,36009,38894,58593,58065,61138,34620,18979,51220,26570,63742,66466,56125,65087,14755,48067,43293,96608,81498,59522,84278,34691,97617,24403,79266,73526,34921,39042,85525,76618,98961,73463,37116,95615,78579,27091,73302,96270,18363,60099,49737,82383,84684,66146,62817,92516,20945,84452,28230,13580,84544,64198,99325,17350,63505,10048,88371,92386,19118,36662,44486,54071,70387,41533,90095,75006,43858,64640,21790,68103,48312,62178,91853,89293,67789,29763,78671,92663,71659,30535,61108,99967,19273,50717,50966,54476,72709,69888,64566,95870,99326,14870,37469,65449,98669,31796,34796,92965,77191,98908,72764,34778,73260,53606,98299,89759,61162,69484,16962,40654,93129,15930,83082,19762,13844,76499,94219,15951,16192,85091,44739,35512,80203,35565,92439,58536,20341,89419,67076,75544,64944,45631,12594,81058,51825,75191,12115,45241,30669,72057,48215,10482,56327,53277,94905,36844,38466,11278,45654,94938,73862,99528,24776,41042,85814,71234,40253,36742,18650,58106,81567,78589,75654,71698,85809,20908,37790,27045,49022,90171,84286,55328,14227,11865,81852,72799,50836,12015,26967,80695,36879,68446,82874,78754,94422,63206,13583,83401,79297,47650,59880,75460,72952,19990,44713,94667,46272,83757,45260,85696,70881,31457,97063,61695,89623,56906,41253,85715,82404,70038,58793,83748,98580,44925,94949,47070,55440,74339,69754,11189,94976,24865,46202,76655,14500,35341,18646,66081,41138,40449,45754,74216,53640,59697,12516,15022,44311,51919,14970,89732,40020,44257,34738,51058,40485,12969,49784,59769,15680,54851,33056,42414,73492,69769,48853,52429,35511,34359,84464,42934,32353,89744,60355,54113,89224,99008,62806,98037,18008,34105,99585,27327,95015,51086,19737,40112,77633,22183,27158,96318,45491,25333,72900,70745,12895,82469,39303,83364,96368,34040,98187,63200,41766,73328,11621,14419,92375,57564,68600,43386,26298,51923,14496,92839,18457,39940,80914,95632,88268,98818,37623,47341,17128,38440,96966,43433,12758,53709,20461,25406,86699,19478,73452,59266,34352,55561,58097,71208,57105,22952,14835,28350,16513,51192,71477,81653,80281,43824,35096,27990,22959,44580,51072,73414,94413,28091,89275,76258,61599,25944,68625,72541,20703,44360,47788,12104,28792,57818,74107,28963,87796,64618,99143,91524,14653,11020,92541,36821,61265,35069,24419,90489,52383,40408,69229,22814,34480,21955,75419,92349,22078,90544,62937,14545,33553,67322,93201,35543,54537,29214,34387,26335,35471,54077,22346,20930,84532,65067,86508,99275,63151,49276,41071,74293,27186,94771,86872,31595,92395,88813,32315,76777,55408,49794,13092,72757,67593,30920,32140,48695,19319,32647,84931,69395,28764,31887,37690,31064,78296,87114,55868,50385,17824,67783,49096,60972,43256,67803,13443,18480,15877,65023,11108,78400,13074,85231,21893,43053,34035,96556,69082,52154,99197,61931,13046,41799,71298,83261,43626,91224,58844,30211,30005,42795,35330,35538,74701,38038,72187,76299,17821,22261,37552,95606,53510,57983,51266,11621,57094,86844,18331,39081,52091,88689,15376,87088,59928,12041,31074,27275,95261,70247,62898,60814,18626,78892,62286,85075,82240,85255,64658,50634,27657,96076,33008,83414,67415,55347,94854,61196,39333,61015,34776,68201,63044,57408,12256,25949,39586,47199,66566,27924,93420,99752,53700,32296,56515,85086,21777,63578,80883,50895,48773,30125,93100,26744,65417,28128,36697,40669,66832,70856,41029,97484,12970,45423,60712,61702,60201,26067,89634,96263,55602,76420,57102,25179,44074,78866,26550,90093,70480,55301,90385,79753,30192,86244,80115,93941,40783,43680,63088,23650,94012,36263,72329,62104,37296,36168,33650,80143,57658,17169,52641,99622,58751,49584,72449,34122,68943,36416,50596,44822,25632,50507,23485,14590,96426,81515,87756,37304,28496,10978,22893,96496,79466,76196,49650,71427,37352,12227,63255,46744,59490,88281,94715,56507,38949,47080,66263,11172,93508,17767,88766,26077,62992,87527,37063,50524,21477,53294,27888,10991,47980,38197,15645,67965,50740,18827,83206,59248,48700,85880,35871,10084,97511,83369,54912,29965,79323,67979,10455,25488,82895,47728,75465,73565,63844,53304,85759,75183,45696,69100,13834,85478,33441,98962,20753,90190,30335,29079,42083,75056,29412,13564,96468,96310,12809,49171,78911,20976,16332,67390,20806,96905,60662,72641,91402,34921,32969,28872,39686,80834,56936,25715,36687,34460,73666,42026,52582,83179,45282,28814,64547,58730,77444,58009,77389,63695,37279,64182,86116,69122,67450,70012,71931,54057,85692,71953,99741,36117,48327,96197,66020,56546,34616,18121,47484,50899,47990,45809,76613,30617,37832,92381,19855,64010,25714,34899,11196,23590,85234,90425,40742,54442,17530,51408,47592,12860,96289,75220,56411,33780,23590,42078,28692,39595,14931,74340,89716,18245,91252,85965,31601,49358,71909,87853,80065,90988,62743,62632,59480,24989,86915,70009,37712,23106,86360,32053,42900,59001,70206,27741,91028,18814,90477,71358,97069,56224,73223,19700,85037,77994,89411,78233,92443,47978,96199,91628,44465,99781,29483,49343,52904,59751,12597,97713,82055,88593,19170,98826,88222,16181,88441,53793,83625,16371,20030,52578,23864,86910,99403,54987,52337,91760,27275,52448,57589,58716,80562,68465,71650,58961,86187,48261,87686,83655,33562,76525,34535,51247,49192,40898,17427,12294,90891,34426,97261,68601,16587,89295,94179,41250,91164,60460,37131,26235,34895,14293,77324,99538,47338,97388,69469,33075,54080,99225,62237,77984,96902,94581,42655,41693,32986,32151,97589,15393,80076,25171,96879,46045,82667,32222,49558,66183,38571,23310,50304,25175,50020,28098,11110,43795,31234,66124,14382,22995,68383,34289,96521,93506,52448,66575,34634,92826,65719,47227,76580,40339,45766,96443,17074,61863,36480,38641,96539,33627,61975,42053,51314,77343,44861,67359,13343,11854,46413,97374,11124,28448,72369,64279,77457,43297,11335,69066,29865,30899,54193,37102,37918,74767,20152,59609,63704,85911,65908,79873,40217,74838,33307,10098,22330,52107,64122,48925,37974,60446,68634,36550,38461,85529,28058,95369,36260,60877,43465,64590,98696,36157,72701,78353,45956,64302,76451,75246,89633,26275,94774,32716,92216,52715,94149,15289,90182,22124,93399,84569,30342,68733,87949,27865,29857,42003,46760,89137,84970,59942,37705,37209,75155,30083,80538,51160,52333,98612,23035,37904,43093,84204,89509,21399,28291,76112,82461,63191,62253,29235,80446,32091,65545,58946,99178,46463,62124,13353,62284,31203,82358,90586,47615,94120,34082,84609,58349,86348,64171,96622,24221,84391,74888,34938,43281,73625,20401,51874,67750,81850,97114,24983,49068,58651,90880,98928,51972,24472,53167,39452,45487,63704,70389,73821,82517,62739,37136,19529,25497,72070,71567,17887,64478,39304,73243,65504,92043,75529,69703,28509,52492,39063,55641,93475,33497,47400,95741,81460,76986,36846,83970,60991,14902,48922,83269,28418,73247,74963,17247,50676,92338,46396,35765,70387,22905,76139,51406,82740,52241,42307,75992,44192,12929,32632,47115,34466,19910,67636,56377,91657,58008,69839,45824,94618,77788,98668,97417,32022,60687,60169,88081,96715,15128,86706,84017,87746,98417,86865,95571,34778,49086,69046,33046,98189,90703,29859,76878,83916,19392,97690,58236,91414,47403,20645,84712,22096,93156,25653,41800,68040,39150,27888,75439,26329,29571,10345,50663,59838,25357,24013,21468,19848,31944,79902,62383,42628,62861,49684,61422,55135,19774,53286,66591,69566,27112,93985,22293,22783,17291,42466,51605,30600,48019,94105,76960,34829,98201,29145,82233,68231,52317,40308,73781,40230,25636,10812,87138,97694,41570,54533,88617,18323,68149,88728,55788,38464,34865,12810,84409,14712,23677,97123,41511,54614,34724,87995,29635,67448,33721,50426,59082,61673,56070,61964,89689,49942,61428,78490,25108,82977,83437,63719,32292,81185,45286,17849,45757,59697,78951,42101,24862,63020,20788,57081,45126,36137,36740,10954,11010,66679,77840,57030,71823,50439,12824,77826,20356,87623,45277,50698,90753,66199,45312,19117,57651,18179,18090,89328,28324,29156,52146,86674,11649,30897,93258,10394,98861,20307,42894,82379,21148,94844,58353,40678,69152,73574,68877,50807,84662,77254,31629,97507,83184,38363,35147,82411,95259,81306,86640,37823,76711,91925,40342,55345,11784,17508,24121,69189,38885,77633,48500,74125,76528,77016,92405,76836,33416,91072,89565,57577,61837,50445,61755,82656,21510,77465,67078,34962,59983,46570,94501,81855,34845,41926,37445,90938,23526,35276,18808,15638,71713,49808,55704,51591,47684,40489,60275,19942,41044,99948,95775,69586,15462,48213,87008,25202,41068,67985,70195,31174,74863,14918,96028,50244,14260,53861,94062,36832,85708,80237,43502,26913,83931,58085,10879,65512,64624,41431,46211,94603,14367,26532,48203,80425,26165,76276,13832,10999,59205,86123,31123,12306,23675,90061,52232,20712,61205,91984,51323,37839,54886,91580,98314,42896,80538,92735,89238,31801,85737,37714,94047,21762,93113,90244,22138,94494,66408,79251,25238,94163,34073,73606,99047,58183,20008,12900,89208,68289,28961,87954,38376,86689,40317,26044,56407,66644,19953,93992,68201,97740,44721,31866,81411,80767,80020,80462,25230,22873,34500,96008,40179,30035,25444,78085,10548,79175,32204,48276,60930,53822,97011,32816,11622,29601,32382,92874,19922,29046,70921,41591,66877,98968,99211,93473,81518,48705,29471,46079,27953,44137,54950,24758,94749,89241,82509,59875,17153,72923,38171,12323,59918,33886,17348,16332,48946,48035,85369,84901,20723,99418,99758,75866,98724,42516,54141,53513,81224,18652,50394,74346,84107,10296,23197,39901,77150,74393,92375,42895,96660,55087,32467,84328,43869,29054,42719,27903,70948,88722,92809,54011,32427,61784,39039,29364,76777,88827,85617,83108,90152,49109,31721,64789,89667,29589,36582,90827,78184,96976,25493,55736,51489,64610,99417,31965,22580,67336,19827,91502,84510,22759,13424,53757,32118,40479,93323,88589,52145,50538,38916,32856,86738,53571,24007,12293,34333,34461,49657,76398,59760,31974,18900,85628,29349,17277,81769,72706,96590,92333,10138,88753,34359,43710,51618,26173,26722,17470,73224,93393,97948,41956,74128,31683,99924,96895,18322,92471,77286,26521,54173,85334,66376,16684,60702,24329,24327,50337,89327,41092,19892,45591,22574,54250,32641,77189,73343,82731,79034,35023,94554,96764,71161,23350,58299,61698,79586,66299,44947,66181,40284,41914,97057,52614,15904,56604,24133,93956,66795,40392,11241,88816,75222,23978,77406,28836,97450,99693,94329,65950,41983,73189,49391,13786,45402,46266,23286,90723,42286,69423,21597,93010,80649,15876,13349,69517,45366,86720,89974,46703,75599,69987,42202,42742,68133,72541,62028,94035,77472,62816,56460,76874,89578,42465,56710,59414,45255,41993,20112,12468,43816,18736,25911,23100,41531,55881,28871,59186,77274,34920,38150,64515,87562,89475,63755,92304,24759,85824,14081,70178,69708,88444,28775,80823,46647,18701,65904,17499,83110,65910,25936,77406,46559,25384,60771,41841,29273,48546,26750,43000,57468,37558,76853,87435,29088,96502,72124,66230,83021,28619,25292,61769,10214,17327,82890,34203,24035,26951,61356,77482,76928,18145,15956,81929,44939,69290,42695,59567,87424,27575,42832,70371,67788,19133,78808,86161,51471,34590,11157,44265,25196,66372,82237,89008,41495,31326,37748,59109,96317,39842,25860,62063,95695,24994,79641,60228,61401,76636,82521,20582,43355,43852,67459,89961,52689,13489,97277,13763,78399,99214,68396,95779,65543,67601,13275,61320,27376,70607,51152,36953,22653,17999,60301,98503,69730,66289,55624,38654,68220,59072,50907,44626,94956,61120,27897,10018,19811,67065,80722,57587,77739,77497,57114,36369,38302,12425,14249,78018,93806,33286,24333,35238,39196,36552,40481,61797,28810,81166,98401,78670,35717,85191,39577,36188,80598,26618,88149,87679,84562,33270,53973,68508,11041,23244,46273,45611,75656,14758,81258,57633,58585,26428,69546,25529,58722,15958,77716,73143,95366,36446,97637,12002,77881,80317,43426,40946,19887,39919,60191,87266,61618,29092,27782,14044,31222,95375,15982,57887,48718,12319,27061,94318,69347,10742,97783,53622,37542,27273,27905,66816,24891,71734,63705,32993,11401,90262,69649,54096,17799,39341,58813,67647,73236,42604,67636,94582,17773,35273,40188,31135,32367,79982,83994,73841,89429,17123,80057,55767,17584,59233,18334,80938,86523,90628,82279,48279,93629,60978,11802,60118,44501,28083,95086,25431,45098,45652,11309,90615,36483,90294,58130,80058,38872,60417,33494,63983,78395,29312,14810,29825,39452,65359,92731,16231,19834,67933,81141,19259,37166,64858,92356,39741,95325,19772,90948,82055,69279,98724,67843,75334,36922,28447,23692,37464,47119,50963,54364,48208,88628,33537,86679,99245,92935,27048,53239,88870,27545,84301,13145,26628,26541,99651,47635,55503,38009,39449,65035,87326,76031,78328,38118,85895,96138,41386,15937,92717,56993,86227,43467,75263,67575,86157,73009,40489,37184,30033,97107,92216,64255,94783,82766,45819,47962,71957,21103,51563,59041,86730,58322,10102,26662,37228,77423,56454,20789,71604,36872,75914,25504,81481,77534,58610,23091,80784,33383,34945,93402,12341,96888,84229,51966,98835,78655,19439,71812,38690,77891,52900,69609,27786,89973,91225,79180,37847,94519,30683,14995,34645,89002,49680,25655,59810,19725,62707,68511,12666,90684,93983,42170,99574,72119,55105,54768,62939,93367,60886,56806,32418,53391,84507,42812,78647,42135,34995,44296,77271,18018,93128,70988,37196,40859,60485,18481,77016,75618,38337,16672,83862,49919,29572,98930,79819,47124,42037,67882,83952,87303,70998,52251,10696,74633,87912,77229,18592,36270,31013,83734,39051,48568,20059,62893,28759,76020,79747,23919,90432,43887,97953,10237,59018,50494,30679,44531,32700,43202,25543,85037,89025,71977,32142,39851,69718,79449,73137,14008,12246,57782,30010,71000,92940,37209,44896,22515,40955,78528,75286,76246,30678,15998,21558,19863,84636,42332,70588,68131,41995,83544,36415,96927,61906,96659,40621,22649,61331,75527,48115,92723,87506,22095,79479,30708,11253,97250,67295,34813,88054,85660,69252,99469,85952,66411,86247,10478,66938,15701,67526,51859,37092,37951,30017,45083,81420,99521,49783,83796,79237,84592,46503,58581,46605,85510,85953,40551,48752,62717,76990,82891,14725,44552,72630,75465,96997,22117,95299,90689,57002,80746,39409,76323,95317,60630,13083,39362,52271,71215,80930,63159,81549,38994,85879,37723,19018,28448,71924,76950,46742,25629,35009,38379,62487,23750,21256,26902,16620,20556,23330,63768,13442,97801,88173,65705,13563,13639,19074,39825,92651,46271,90214,64248,27685,51914,76286,37919,61239,64269,20017,42177,32199,93614,35491,13945,15428,85600,33244,76362,21297,52404,80256,20159,23546,33689,50019,26479,75164,11749,19947,52259,80551,97558,91195,46548,87653,68007,92135,40665,69927,92170,11921,94327,98908,46706,39012,78618,48058,72395,10643,33773,96810,53238,89946,45958,61875,21859,97459,65151,75007,29564,34910,17835,89314,82204,88073,86843,25015,17460,91188,33891,57748,94235,45983,92353,23554,71257,19094,33304,91124,45432,34794,23057,89960,88944,68693,94710,17918,52537,88620,54483,21471,47965,40807,62102,95483,80215,47858,58345,92466,92679,99201,22778,86271,81027,91767,71691,64947,73849,29807,50037,61450,65100,96395,22881,57846,70498,91653,55379,60332,93511,25638,54157,17201,95306,19730,30824,66968,88265,94312,67818,95218,46206,71301,32923,12899,81722,90616,87905,89115,65152,58283,56071,56007,36293,47468,42396,50832,80653,66731,70077,41323,98863,66637,67051,12485,33914,71621,18453,68258,47084,94191,32522,17059,96718,99483,59792,83040,95504,45422,79141,55758,56135,61718,67526,20751,25830,15008,63271,77171,93967,14036,16289,66413,15394,22542,50736,45019,43486,72737,32123,35037,70944,10260,36928,23351,12416,18718,94285,94525,57888,39052,82607,42696,33578,97339,51259,36254,58281,96508,69838,58737,11106,77532,60646,96902,24876,27103,93128,10043,50799,17994,22572,79611,95854,98011,80428,86774,50158,99322,68590,34700,57559,30014,61610,74786,17063,66753,91316,75942,29333,84809,49342,44581,45423,31856,40249,80743,29471,57153,34705,40406,63522,19028,28161,17555,76750,46063,58579,94458,35662,19171,67783,66695,27970,96298,11777,87688,91917,89690,50752,74062,35306,48283,83368,77970,25616,58468,24478,40098,97802,70793,12221,92759,37274,14220,87150,41590,44487,96628,62720,88362,84325,61128,71942,31057,84446,31241,24822,81375,78930,15380,62152,62075,88392,93398,18687,10863,56819,94200,80294,80160,89738,20582,63114,63433,26106,60497,81469,16797,69267,25807,71718,77862,67459,88668,74432,39223,58621,42417,71483,66652,15655,27751,50245,72293,11741,93332,34802,52331,63424,46348,72374,82533,19764,33334,29781,93382,46776,88139,82745,10312,73679,75204,43888,29482,37466,18097,45654,15579,19665,18243,49942,17658,69904,18274,65636,15054,12531,49637,84673,97987,84480,82790,81397,98501,88542,17693,12375,65807,35796,83965,12931,62138,34488,64315,29467,61737,52968,20838,58665,66484,35772,85910,33860,25329,61910,46508,38369,87226,33550,21631,98457,84304,87393,41734,67163,61267,56824,76432,94159,74791,39612,96303,65816,45692,81619,28609,97186,50135,54611,25482,92989,25673,58982,84020,88623,96997,43420,36583,91659,87818,79429,96564,66487,57917,10993,80999,83630,27372,74194,86490,70414,70412,14411,81410,69900,14336,19063,66604,67567,11820,40166,98057,39962,81363,45236,88413,99099,99516,47976,63069,17538,28971,57861,56827,57421,85369,48745,92392,35255,38966,29175,38442,37986,84133,63776,17956,17867,89168,30805,69287,83212,18260,31950,47022,68566,17464,37219,13192,22326,79027,81184,76036,97337,80793,13708,89591,99859,94974,46079,87963,43532,60792,86421,61074,25798,56183,17656,55632,15960,16559,19973,21508,78540,92981,59921,15832,98778,31515,20567,79659,94935,54425,46155,25423,16280,47044,50411,49776,91679,74794,85538,81553,18038,31810,96783,96927,19404,26890,46626,15465,45491,29073,25024,55485,76411,77831,87074,87888,10471,80323,92082,23005,35753,74406,98957,88204,47658,77513,34700,75799,97898,58383,80567,21646,96968,77112,30606,44726,25353,83914,91830,41688,26403,58483,80008,55884,19632,14894,47636,87798,82331,34957,35778,46505,19895,94426,92807,43015,62248,75425,91674,37295,86175,19191,95994,77278,53393,44331,27273,92933,68250,82886,12788,71981,19833,59869,52590,90446,23281,31692,29459,75449,81263,18115,82797,99699,83702,31802,52619,18676,65159,61539,89860,38631,92422,46768,57638,79137,43278,85315,76276,66946,98195,96063,76645,79249,50504,57762,30702,29610,53349,94680,31397,51518,19862,61746,41354,61594,25400,16258,77693,27421,48692,91285,91473,97357,89101,20709,14129,96017,59690,16568,40727,97490,57008,85516,21909,13995,95156,27669,47051,96110,39381,43696,14229,51711,42675,53066,32424,51077,93064,83118,83377,56556,78204,86553,44935,98877,90083,92323,78698,75515,40167,52724,40881,11550,27387,38604,22003,46860,66186,93251,84486,37742,25278,99945,14694,56832,27037,37861,15109,15007,52521,86682,63953,74938,41137,57690,12099,58124,82865,46177,62240,63546,98070,44994,53486,56854,72563,83120,98207,89094,53419,44118,60735,38123,96220,15114,14519,45356,10729,27366,44277,53930,98414,31253,43897,28559,46794,81635,66457,19971,25568,76823,81028,35838,84290,59766,86638,36694,42691,20636,98014,74918,32486,15884,53267,26949,90634,78689,95721,88131,38503,56756,64402,69567,84074,30330,70809,35640,17485,34314,86119,62827,74345,85931,32823,57628,59402,30715,27789,22502,45454,53898,97213,94815,49119,47000,66712,33154,41796,61370,28697,41689,50480,25696,57740,38895,18272,44365,83651,78159,46361,25160,48013,90632,77844,54073,12325,90297,72100,46788,10319,70876,18107,48696,63015,66534,50883,27451,95805,93058,13234,59009,71803,15180,28614,79125,35912,16931,61367,28356,85659,69380,42916,59498,70906,29115,59575,62142,14912,83417,66387,70674,59266,11801,69487,26992,66299,77977,87213,17728,39905,78339,78832,72501,85918,61319,43185,45988,53911,22946,35178,83530,44322,29661,92780,13253,85710,65593,62711,37206,31257,78328,58305,73624,50911,15490,22969,45749,27001,23057,91627,84330,56970,51871,13906,21428,61235,88614,53311,56151,77930,67667,26874,57064,80943,77716,55750,60889,12088,31132,60749,84959,25606,92371,38122,31426,43486,59016,38501,61485,14029,80583,15829,42424,95239,54454,58970,85162,36716,83521,21252,65505,91064,61977,97320,57893,72628,59697,26030,17846,25784,96955,75504,71554,26451,58512,30738,23350,13260,43881,86471,11057,55037,91449,69123,11971,89422,74732,41482,82303,96729,37336,62374,24018,80851,43343,32888,98338,18656,27771,77135,34248,50458,78568,16117,46871,65231,72231,25278,55946,47077,95135,25923,78811,79993,66354,57991,95620,64007,12561,20980,51938,97005,32067,32292,54576,86725,34034,61063,93887,53747,59445,12643,78207,62996,27005,37401,30210,84499,58758,85859,22895,70338,43192,59567,67589,43682,24472,21009,65351,94809,84146,60033,33632,19111,43963,73309,20837,11990,19492,41459,26830,64791,13283,13006,23811,14802,75540,39596,30768,66107,24260,32670,32329,83119,16378,70717,63138,57220,95981,79225,10716,15287,32458,54760,47839,63887,34850,42645,26335,80193,98676,99303,34567,23695,49867,31627,57821,30515,49198,77578,28240,74607,31577,60794,78188,70827,67250,71541,32605,70956,35097,74884,12592,82134,13614,97589,13771,67913,13020,52219,41065,41473,35028,70090,67740,12864,82599,85923,59263,46665,30909,86923,17127,67128,54563,15839,51227,17111,41989,26348,86344,16191,14014,49943,96813,11526,41354,94043,29116,84559,57512,39545,72298,16595,37559,92684,11693,87022,88335,52687,75793,20188,23641,96862,55199,24029,43089,18964,88371,25962,75265,84395,33737,40737,82554,55846,88273,40418,22140,59808,29674,27239,89181,67212,47857,26189,20747,58816,43704,43773,30205,53991,72912,42162,47407,35368,87389,39908,77264,39666,55187,69045,44074,81746,87373,57610,85514,87282,24009,76937,83494,31322,82728,98931,97524,38712,45249,17038,36095,40459,89892,70236,69235,67419,92081,57242,79479,35798,43428,47826,79839,37168,86409,98110,35575,30338,73660,84227,60883,69931,74798,60898,82922,50663,89010,24462,78197,80578,50305,74558,55050,95507,38406,25902,96871,69189,96438,19621,91926,13825,34224,72636,73827,26284,61436,38807,28371,28009,52254,37573,63863,43067,17924,92416,70123,50854,39389,17340,72667,50952,64079,81840,77264,74100,66801,23431,11430,94901,81454,24782,91441,66802,30916,46395,12445,86808,88943,77058,93036,85892,74858,99000,29361,21546,15298,82542,18343,62653,33758,40473,47026,75310,47268,65157,13733,50579,37862,33747,90421,76447,37458,16766,93635,28179,40338,83008,44098,68225,52084,33309,17395,73093,74596,28193,77334,42246,74979,29416,30745,54208,53466,67920,19157,33190,68909,32497,62195,90513,54602,47026,20741,25452,95943,12958,20278,61108,72219,69882,68416,25904,57883,34166,13116,18636,13695,63706,48013,50819,71312,17668,71230,86942,48412,72097,78247,87304,60343,68624,97285,59266,97500,18553,51959,94992,56717,53359,75109,27349,75338,78450,11402,90394,40443,54526,79730,37018,66352,99993,66388,47516,30056,95513,21135,24616,65790,84585,13078,25965,17786,83322,88102,89434,89955,38683,24123,44338,65444,62770,36886,54477,82210,82086,82207,13564,10698,89436,23727,25620,65798,90435,17357,48885,80183,46853,69213,64986,47461,54244,39837,68400,14089,65654,13519,52594,53342,40950,15873,49582,27179,24613,77673,61912,11390,53402,94919,83236,85079,51752,97586,98697,91568,61950,65786,56426,75214,91228,55755,35934,78122,91985,94942,14029,84910,16257,57583,14105,23318,60543,68536,79034,16490,71638,16339,43720,10156,59359,77409,89542,66303,29427,45656,11003,15383,48732,77624,63634,48792,70603,32016,54015,70822,14899,88030,69174,10240,55051,83446,97775,88867,73734,98744,63429,86656,60323,32127,70987,40572,51529,80367,87783,27120,29898,72405,24408,28304,77116,83073,65764,52456,48940,85611,59418,29362,84290,14515,34140,13532,12973,79353,92044,34962,61405,69046,31368,37707,54343,84041,24770,78666,83329,60048,88307,99136,44901,29905,64682,93051,23903,87393,98688,59280,84728,66569,20017,54724,68330,86968,78514,55540,41123,41128,32882,10487,92672,71282,81009,64802,91047,14292,90538,43330,59117,51376,98305,87491,88694,44669,52975,87764,45380,45355,41420,23713,45954,79656,85641,44595,18623,15495,76432,36002,81251,84728,54106,46728,34881,89814,92366,53871,21974,47395,82721,75349,78926,93204,71192,23614,36506,54199,90684,77791,92386,74671,89236,78752,61695,14645,10411,13882,44546,78227,32495,95244,30599,69483,89190,33978,37061,48988,78773,65737,66376,19426,54318,98053,67730,47080,24280,33155,51995,36646,19476,72730,91264,43820,80335,10197,64937,97560,63761,83355,63627,68259,45740,33622,16133,57175,62885,32567,12425,30400,88829,12158,23833,39515,33286,76996,10836,24721,80301,40157,71208,32203,41904,98852,28532,17727,47244,84374,12942,41978,19615,65935,63430,29448,33627,71653,68657,92750,82831,42643,47682,85798,26589,28487,44136,12128,23540,98141,33398,62680,33479,22123,99492,10701,64138,91202,41873,87508,19761,97392,60093,18351,78947,65934,25020,54549,18458,59247,38156,10690,44648,23046,86533,15393,34596,25316,21725,43391,60152,95443,40762,43398,79246,34100,30619,40978,74928,63547,75989,75730,16411,83570,66547,44514,98466,43378,53320,77995,43170,37080,23715,82510,67986,96926,49180,35537,30579,34999,74628,52534,61181,34690,78893,53744,97695,68917,45992,72264,23566,40732,50737,16998,79563,34540,82713,11250,81809,88154,48651,85199,68669,43182,87202,26476,50574,11079,29148,39303,27288,86264,45981,19436,87761,28523,20698,40253,48275,83281,19978,47237,85263,81898,25112,21494,15151,46806,54910,76275,54940,34479,15493,97266,75337,93450,77686,28865,70231,40392,84877,41902,57410,53599,25726,93914,60327,97864,17021,39979,45475,91678,19673,90894,35561,60775,95028,73321,52921,52151,45839,57562,40056,62319,96358,16215,57457,77195,46890,78450,86884,25766,59289,30177,24842,61999,26264,14857,33159,65667,24938,44698,11780,30651,19533,39031,60378,47729,46256,18938,51562,21267,78437,25109,44552,61206,53518,80575,48439,30975,16114,53121,35907,76409,31980,99157,56126,63893,50313,57557,94422,10989,47776,15989,47514,84842,25497,80277,27879,11528,69078,53492,18962,53404,35282,94592,74748,79431,29720,45025,97318,85863,60223,35454,44654,55897,40825,79444,62436,15728,18589,11980,77964,61801,54436,65328,70959,51970,88008,27225,43918,27394,97303,34121,47897,70313,40217,24792,85503,64472,98293,19754,56441,47792,39896,25720,64495,70986,75152,94692,53839,46207,67034,75685,90373,52870,18775,97465,80296,22390,85304,31832,87315,77360,77494,70354,14804,76557,28865,29323,17235,19220,43963,45696,13416,51576,45209,91849,79553,32736,41362,92648,55872,47475,30636,41689,11948,74486,13020,19536,33718,35558,15178,10968,10804,89864,22486,80109,34182,56433,47751,21197,60746,51010,52604,20747,33541,47103,63948,55108,86896,89706,13173,94214,59165,22133,44126,60790,65559,82177,66958,31928,97548,40215,29031,69061,97956,82253,29170,29469,38606,72375,77117,97700,67396,55269,50165,53398,40025,37948,60024,88504,81493,25134,43070,26236,53307,54406,72437,54267,55455,68523,90335,65665,14539,79368,33299,30879,96424,81647,64416,91101,54170,89988,96774,84102,70026,39668,97803,26141,97990,78158,48283,90746,13333,31200,86647,30166,60407,79688,23399,61682,60903,87112,46243,37769,41357,73563,27972,39907,43549,44955,95472,44390,80511,45706,18240,85999,27855,38453,61358,18618,67370,87105,18616,80735,80902,82439,62282,88156,42869,41058,88907,76557,32694,31218,39596,85698,10684,21824,57076,17186,33932,59450,61525,81985,78978,15513,93018,92181,60517,16238,73307,35078,36103,62900,97372,45301,92354,36330,19905,80407,30619,97633,64130,79571,63302,40611,25947,29684,24781,12268,20300,21260,11018,69391,51856,41400,95857,18243,56259,29163,83557,34693,91859,31573,99833,97351,47670,60242,19537,42308,20882,74044,80997,82682,60011,71925,73165,69661,99947,86162,83406,34393,61281,74404,85258,46761,29592,23312,37929,67555,32801,36848,61601,53799,62958,23148,96882,66893,42669,21537,50624,76771,24376,76675,81386,53821,17958,46017,42173,46214,58303,46879,82927,50842,27872,66022,83054,49814,23881,11173,11217,69434,37207,35862,50342,48152,76502,62783,34430,48612,11254,85146,64542,17317,77699,24378,61057,26993,43102,64661,37853,15818,92807,71170,34542,52687,95179,60612,16489,54031,33883,43700,29203,91412,64399,89673,16353,32177,53173,72125,39418,18107,89645,90307,83192,81964,27642,84975,78181,91913,47475,75920,16390,27614,97109,14621,96813,28459,25371,18215,37601,35011,89106,63810,61269,34057,64468,23910,15109,37819,43416,97028,61862,79714,86064,74578,46356,20702,10363,62584,91670,96609,43479,67200,61443,95234,86516,48347,84732,30777,76639,36214,35108,88890,66123,71168,40128,56579,44928,14458,70815,37029,10384,75294,14311,94321,22610,48602,40841,63489,68057,34118,20489,49721,43639,46136,39718,73370,88549,11064,89987,67895,47180,33575,84961,70194,91241,59324,31695,44821,39339,20469,26473,72397,14747,92877,52233,74468,17543,62160,75919,34670,36991,93942,88223,51712,28302,33433,80116,73876,92199,30411,64894,12490,67683,40595,27729,29299,72452,18113,53215,74106,13519,94706,25575,93030,39466,63354,79303,69954,73139,30081,93271,22222,64141,10290,78452,93259,73590,79533,80778,28325,25151,57586,86401,45828,86534,93595,31744,95792,91962,93693,52067,10985,48590,35154,76478,96593,17699,70034,72316,38449,71896,26473,11790,74709,88307,82986,91685,47605,98981,92571,70266,75108,77235,70363,41080,84911,69193,41204,23115,46383,84621,67819,44307,93046,44426,84734,29606,12947,74247,59395,39926,50191,42830,25382,48670,16732,13701,44902,35269,28859,74694,98610,38957,63904,64663,37508,94890,71157,36755,89913,19312,99250,18631,18767,10052,71173,45613,32885,16278,80363,40355,16194,78624,89448,15378,64793,49899,23428,35191,20272,55646,56240,29782,85332,97217,58353,73183,74111,67849,15726,21396,50515,17513,10733,45775,82959,73064,13315,13640,59162,73430,92483,40789,97528,26455,67229,84067,78190,21487,22292,21699,57985,42935,76826,67850,90438,50682,93735,92946,12079,47447,64421,66912,33125,93743,16676,74512,10838,15535,20426,94610,69159,59132,84052,94306,31504,17975,40224,33489,18598,51030,69531,86969,26342,75237,72247,75818,65965,77791,64716,30726,33517,86258,54960,44006,20977,30127,87902,47046,30023,65913,59467,15801,82686,44227,26043,17657,76439,38406,56830,91610,86301,61703,73697,77505,20996,85890,10283,53010,58661,74207,53469,98821,20466,37365,56184,37184,72174,84995,69283,58306,55883,20240,54096,94579,55112,29206,85796,57088,32981,20952,37823,59772,10883,58850,16724,89150,19560,27072,24657,41600,27170,16749,25961,27193,13906,65476,21352,94254,12216,72303,74766,96578,31820,78448,32851,81871,51670,59065,21156,50980,20426,45847,60016,39137,49979,60642,97959,49901,43448,42404,88922,34108,22565,80686,67829,66131,45065,99471,72579,63187,26192,42996,46392,21254,79500,66706,63759,25452,13756,21949,14090,90708,95128,96700,80189,81445,53163,95584,12185,97163,26000,58483,53802,10138,55350,84419,68768,12384,61329,14824,97336,94295,53568,45725,65619,17367,53706,44642,78531,18000,81040,35675,38255,24949,82821,89998,15535,31716,66688,49277,52606,47065,64241,54558,23466,46268,93886,83119,96651,71414,94126,97853,33415,96200,59870,38697,22574,79209,65127,50163,50014,69359,49222,23844,48399,58602,15861,21760,28485,83269,91792,10666,53193,10119,54768,88992,32806,98042,34679,87500,78138,60223,81017,28004,98862,71174,73149,56834,82370,32351,79852,20894,11641,37947,96940,51693,71672,87118,34433,93362,94301,10188,52560,13456,48230,51402,77645,85912,20642,95294,42765,72860,17011,44749,49471,66929,46739,95522,89622,55477,67943,61982,67470,64474,77372,47796,70985,97325,30542,75096,42568,13604,50304,20556,29719,10460,81927,30432,20436,15545,92645,68436,92846,46625,14348,80659,24608,93877,68526,38717,68218,37895,52321,95389,72525,31748,47803,84872,65123,28160,12794,49382,51971,57597,22615,33797,91958,52075,28278,46000,70730,29364,99099,86367,98741,54710,34674,52559,10025,33432,81278,43899,16704,12217,66731,17364,24691,92181,92160,78292,93996,39531,24776,60971,94685,18575,26204,31714,16176,17822,24889,50159,64277,59579,93458,94061,41117,35567,64704,58979,63305,80637,63736,65883,79569,94857,32654,51429,53711,35222,53610,25011,56947,42641,58559,16194,95754,79057,23938,85282,94536,42240,76860,69688,35460,14444,38745,30900,91666,59300,68711,56678,79833,42114,20898,33061,80461,26485,22640,17506,97069,12545,29010,72047,84898,47222,84707,39561,44782,77863,51055,94030,73766,82910,50323,26891,62704,81405,77677,51381,77113,39676,98319,55256,99802,62173,48639,89118,68701,68429,51279,23464,26929,52133,49120,70452,48328,61020,34127,82806,30716,13692,49890,17921,64504,22266,60705,96823,83474,14314,56141,33519,42690,19608,35851,71687,69733,33882,18817,19148,84236,48330,78988,61105,62371,50451,28314,23524,31340,24519,45580,31948,44839,39832,40005,52270,72268,15122,16262,32449,84732,81385,69272,25778,58835,65270,38251,44239,20888,70933,10361,75177,82779,93783,12550,77624,20604,11770,10405,17811,88385,90521,48485,93051,19673,68101,48499,27496,96059,17893,59245,33137,49537,99596,52852,38951,76129,21173,52995,20405,19516,15218,76812,93669,25372,19661,48270,44696,61482,21911,65027,64429,28401,82332,69219,17382,77260,18027,17188,26875,21892,44347,72665,57507,36152,93186,29925,49093,48357,68374,62942,29315,92019,83093,12276,52961,85611,88735,22325,21296,52311,80565,19787,78294,39337,37624,35657,96156,38164,66750,45417,63854,58788,86346,47106,12284,73422,41385,61876,18658,75221,45273,59638,77025,15476,43178,73429,81259,28565,20245,96710,87907,82970,74329,85867,17661,77317,53394,54077,23829,86907,39088,36571,87523,90376,31294,93252,57820,66424,24432,80202,86127,94137,17332,42065,17710,91165,44300,16027,73299,35216,87839,31662,98387,29643,45520,53371,88312,18650,86058,25985,95126,10407,73957,11202,98569,70783,96899,75327,82004,80590,56441,53033,63629,22889,29078,87286,85547,21477,72503,63380,93615,74411,25495,16867,69313,57940,46655,66718,25596,73570,39743,26702,75528,99953,16660,65901,93908,50616,29778,60373,18476,51978,96347,35044,52773,27010,46866,61952,13537,66606,48937,93339,26359,47819,76858,72828,53220,33764,32790,77908,60649,63136,17383,78955,96328,41440,98739,63790,66577,37037,15936,67926,43104,48913,14347,98461,92792,22324,67676,76005,73747,63404,97502,55985,37420,66786,82453,23987,48586,71803,87750,86307,96237,47246,10687,34410,99846,48304,84652,76333,70525,87538,43218,47362,10258,11094,36052,75893,75719,45073,52040,73984,92682,99281,48018,12553,16757,99801,35739,44221,36013,14782,16011,52506,66483,99461,92126,14476,65260,83865,72479,79621,51640,91572,82452,51385,45317,88211,44794,82688,81505,94924,29418,99701,96480,11837,38456,12220,67442,40965,46917,63375,15006,41583,48560,25365,82366,97154,23134,53402,98946,16814,37173,35518,38581,82386,33979,89783,51629,38187,88996,75136,95341,71144,99801,86589,44452,79481,65541,92876,17103,97316,67205,53769,19700,46910,30581,21951,82706,87006,24823,54964,51873,42817,93903,38886,55297,28893,65948,43098,56369,54263,66619,20398,25554,71938,20800,62464,61601,41137,18854,29084,11987,15911,77103,70412,25893,78745,92122,78837,54921,33173,66963,52123,95969,82386,21935,40047,69294,48212,34312,12259,98598,95477,74476,77009,57550,57985,95661,29598,20366,65030,14809,19084,50812,84418,41586,42923,30975,44596,30594,59766,32052,65320,22637,24991,97789,33531,30429,68891,53691,85661,78734,45460,11959,72866,68771,18803,10476,30823,62480,76430,75593,19039,44228,44968,87172,36990,99576,19915,95165,97943,75861,30060,90817,90215,73069,19909,26320,62157,24084,83140,48440,89827,89773,49291,17404,95208,13177,86654,86595,14849,50945,48087,20022,57021,18785,30451,64682,38076,33371,84486,30538,10120,17721,18897,15125,62787,44918,93021,90996,33505,68946,98737,23009,39299,28770,56228,57042,39308,51896,27705,57083,70247,47200,13056,54968,86026,84121,29796,19865,82561,78579,74856,76480,16609,57160,67593,43122,59935,92445,74394,65143,30960,17621,28337,31283,32722,30072,78397,99192,33570,57258,16210,30814,75144,53032,48641,38754,12908,42197,35452,82374,21455,88937,24829,13544,93070,25885,22240,47707,18929,77162,97485,90376,47496,42461,21508,66398,71029,83860,34411,62353,45046,21061,59003,76039,60138,20648,29257,12383,85736,32334,76347,30543,87374,91783,37054,50441,88820,51084,33720,35944,58666,23288,45193,43001,11254,72272,78251,43287,74484,55874,28609,91041,39238,87989,20785,89021,11099,89285,51843,78816,49605,10397,65095,46475,72552,95095,49129,26706,31113,19314,94133,44806,12855,84282,80230,41132,82971,60284,98051,72913,35653,94440,83504,66439,35932,85715,23895,63922,24953,39553,47490,16969,87561,74146,66368,20893,50723,87472,90858,72194,78003,32391,84624,28333,77859,33860,75316,49598,84633,95941,31764,85979,55820,80920,50467,48336,74906,17717,52633,64028,32373,86978,20891,32260,36367,71447,76630,93846,20874,57482,97769,58466,21822,32566,61917,20086,58286,47253,82989,47599,94371,81395,78335,34349,66684,40712,15249,56711,47180,74454,95391,26152,58353,55222,88641,27291,93417,33923,21609,57758,55641,32637,22344,15082,30473,70712,63473,59382,54021,29506,12869,37517,54870,76539,84617,56313,34786,66400,96770,24399,69306,61000,39287,55569,99987,98564,33627,98540,94762,38245,10434,17598,40000,60626,31745,72504,77212,24939,31917,61058,83693,36160,30183,30886,35723,12947,62345,52078,66057,26442,81911,66570,11569,94815,19535,54887,74063,15469,28000,30103,19942,51209,46490,76124,26100,57559,14123,32563,67997,85794,89553,75820,79371,50247,70739,51265,85733,57210,48544,90447,58855,69660,22079,89095,92379,72525,23714,66799,43846,31476,20994,82620,80965,63316,63535,18890,26936,32719,90353,60034,29241,51656,95437,21297,30257,69154,89575,42561,37691,44930,95151,65544,53350,27801,87772,15303,52055,83287,19725,40364,45382,19091,27698,64373,99863,27236,41243,54619,49619,65756,10984,53040,69083,14192,77906,93225,44885,91538,24837,51427,65696,50718,29907,38292,26328,44610,50046,96103,71945,34256,27943,62550,15742,68547,99471,15024,44818,52004,83842,90344,47457,34436,85506,69611,86461,55258,60754,41130,57096,18420,64380,42074,77134,76145,25980,25920,24041,46687,55699,86937,48884,56691,54940,92628,34731,76369,71919,85973,85514,20598,50020,35672,72429,59508,70650,10728,48020,98579,32471,54388,50786,32963,34016,75937,41130,28861,36045,89389,75473,67123,74753,34511,92490,26775,47730,71870,98354,41442,23892,32929,66542,26512,90224,25287,96627,14805,41855,77237,17777,29506,14374,21137,24470,45661,61277,56148,49504,61147,27139,28935,65060,13574,29157,57640,40922,94356,61393,20568,31037,11475,62652,53454,88450,79586,89147,73229,81297,12565,69439,84606,64453,55066,56655,11462,55159,59915,30510,33067,19803,44681,98989,65319,56855,93411,28967,30491,80274,34674,73114,20430,14368,25779,87723,87343,66749,90415,76014,38494,20083,72158,11329,87105,58571,49874,91419,53045,64809,46054,51484,65991,79871,77449,35006,21659,98817,78994,29718,50035,84390,36593,38798,98665,59525,93767,45597,23937,72341,73127,15012,72571,21430,77112,48886,60557,95871,15722,36056,67914,29000,68223,16421,25773,17725,56397,26089,57910,62677,43453,70488,80729,89705,81609,56137,16611,44512,77943,67436,63179,17019,82416,89075,79928,91866,91582,51863,78426,44087,36621,56173,82807,11350,42347,69733,95953,34987,71304,78987,21994,52012,66821,48036,52184,92509,87183,91607,13691,50142,47613,94097,24247,80718,82593,30781,80766,50787,90538,47560,92646,45999,27943,91055,88858,62006,50795,40391,93456,35045,23008,15120,30949,58342,97745,26921,42566,89903,15506,94469,54889,94141,76977,96369,78975,46640,24285,85983,15979,68581,82868,65783,88189,15070,54590,66815,56515,84566,38959,45132,78781,58481,65973,45980,54969,96153,64981,48790,11762,80759,56435,93188,94448,19009,86567,62878,25206,98808,32457,88976,20521,94340,44669,60244,18831,64274,85683,33965,90469,50522,69384,17248,77969,64861,60799,63557,59285,99850,55259,12756,62549,58681,66651,48500,26664,24202,51033,53401,48585,54522,37869,42707,46988,12631,13640,71435,65358,28417,75520,39665,34959,55262,83319,73551,47281,95602,73490,11370,21553,41527,65472,78052,18926,41540,43369,87307,29339,13032,13824,96833,74273,66663,15492,56660,50937,27354,23505,44836,26450,81891,99991,27336,94714,79373,90742,27592,17343,34087,97149,49101,97706,90939,86559,14927,69543,81624,76761,42346,94546,89665,74602,11906,25507,29881,18156,88319,65568,51236,52247,55494,44342,30580,58349,94634,24812,96669,98996,55079,24020,35094,99745,65569,38933,38371,91982,50653,38082,37016,92678,18894,25351,99538,50298,25970,46527,34737,75176,60731,82833,21515,69607,43828,25741,60069,45738,67753,38447,86048,81279,37263,57148,64824,12378,52965,67558,59934,72681,56122,12148,13288,34796,35296,15518,42284,33902,52323,80636,32399,90827,85005,92200,21235,60606,50989,72208,88342,49705,25136,46942,22674,12430,81819,18039,67007,43571,18297,55561,60222,70557,25334,18315,45928,22885,34241,56709,85327,36494,91864,23355,16689,74939,80166,31262,36849,88118,97987,85535,54788,89055,36235,52741,90234,24589,35321,40589,47968,78075,85904,93150,91760,85603,27535,66291,71458,65943,41893,68792,44002,25990,42958,22943,50509,20582,37987,10721,72187,17215,62393,15782,26862,47584,59889,95434,61784,22646,25084,27665,44995,82769,79932,28255,49500,62742,95489,73185,46785,73330,39594,97836,18797,97964,31794,98303,39820,82384,13375,80298,24181,61069,60593,80478,29995,58148,15553,27171,43447,47823,19505,21728,44988,60133,60072,71512,92181,11920,67825,78706,32518,29176,68595,26365,58860,88386,99115,78639,50532,89909,38515,51871,93152,33199,54053,94605,17837,69991,21210,32836,11024,65317,97602,40034,78155,45910,19899,37829,37137,59609,89845,34892,88101,60658,98329,86027,58588,71918,90334,49580,81063,24780,83750,63463,30511,88900,17650,94287,49029,55437,98451,11303,32357,84140,84862,54535,23051,78155,61543,39486,98349,86633,80298,64677,63520,25978,71139,24230,69163,73409,89439,31112,75445,99989,16977,22351,41139,64661,31188,16845,97328,14031,49179,13208,69873,37957,35962,14468,38371,64473,38207,35376,53928,22950,15379,54200,84258,70718,40062,91236,41061,92231,36382,74531,31035,47153,89153,76544,62984,33304,23680,13962,85401,77396,54584,18073,76931,98455,42193,80974,13033,34409,59553,62636,26375,46234,48385,44336,37625,99336,92562,31870,35893,83764,99045,82381,21524,87745,58593,10930,76121,44909,77608,41331,74020,28698,68740,88568,62757,42701,80256,17904,30057,78905,68929,48851,24305,90231,32154,73992,39240,67530,31199,23449,65252,36822,52382,21075,35317,43951,61615,55652,80204,97846,33157,98576,24494,14754,68649,29348,86814,61265,79188,23558,74480,99459,26823,81228,79476,42470,40146,68733,76185,62073,17086,41168,81851,20988,35906,45931,65463,34566,67923,35571,58824,49337,37989,66149,88464,42627,80403,13305,95630,99820,57780,72378,31494,89353,89862,68436,28450,36482,10665,15534,43998,58447,15648,78104,84822,16768,89500,76080,69571,55164,61104,11908,55371,55751,31535,84489,33200,71234,28641,16105,88859,61995,42495,44852,54162,60994,51188,30203,96995,43857,23471,98697,72859,74884,96453,43948,91065,87558,38929,12286,74019,82859,11760,76560,42237,88963,15548,43049,61554,89406,63714,81696,54497,67124,78384,77452,88846,47597,93322,45723,95141,47466,41058,47475,47147,41236,10546,86143,75234,63580,22916,87053,83753,90267,49390,26266,33931,61425,35336,19994,32182,47603,96239,23195,10736,86080,44584,82227,52155,31962,95006,44775,46531,17156,50498,15041,80052,50094,21395,72042,34306,82178,62454,99494,70999,70845,32525,67150,96041,30273,52366,35672,59731,96026,53237,25162,56382,48535,49094,47432,46619,33022,80630,71032,79734,73106,86641,59115,19020,17079,81430,26016,49294,67448,35909,73664,48201,45938,28847,39926,60107,76612,35236,35271,10031,38005,19538,24978,79093,92649,79240,66198,47531,29100,27807,83509,44321,86058,28935,72776,69453,24591,43732,84372,22526,64426,62600,84586,77695,73802,82801,96118,51950,88867,67330,28356,91382,44700,79338,93140,37212,79661,82511,41992,90269,56772,21390,85012,67903,13403,93999,44889,67476,68999,92428,37074,63366,62539,83154,82126,85638,20115,30110,21566,36797,90775,70957,31931,12383,86576,44047,31684,24360,96509,69097,55189,69349,44191,82929,13324,94315,95269,40738,83628,17480,75128,97417,99376,21839,92490,57419,97425,57499,94813,41099,79747,10491,13513,47304,46482,52001,40742,53689,50435,66798,16097,85907,41911,43819,47858,42648,95815,46422,90547,22599,84263,18290,63322,49343,45692,62457,37986,30704,98683,79934,21981,51830,28928,91288,64341,79354,54808,44362,46836,20338,95087,79300,91678,53764,66942,61831,23946,11831,78919,73159,38716,26929,14730,77663,46252,30366,47739,81876,63957,45521,44235,35265,92458,81771,32851,22794,16809,69733,16429,38502,90558,70528,62041,36321,52648,85038,68528,54108,89081,29056,77737,96530,75268,75949,40391,72630,37387,74701,29746,79462,40962,73847,16836,69073,57723,69477,11329,60718,94107,56371,27501,40541,39354,10723,42838,56947,59594,20317,34781,32941,10241,17876,41929,51771,63345,76607,34710,30130,29585,84309,14792,57625,39375,52488,14524,89237,24023,45865,91684,30272,16607,40602,48525,91368,47386,82310,25920,84146,20099,37172,22455,77225,92925,78426,49477,51946,85813,80415,94162,85461,63619,59388,83180,95931,25418,81026,38461,40071,75841,72706,57859,10906,98733,65739,23883,15136,48122,94698,99788,75269,30242,23185,52101,64292,89444,14286,13813,72809,25831,22659,53388,36226,52981,12954,98561,73795,78326,85918,82016,52751,59586,26800,45293,61044,46574,73872,99278,10136,16069,40083,47349,55685,67529,12480,29929,36486,96940,81058,57309,21360,97828,97905,72164,29119,72959,15724,56534,95202,15117,36080,89846,77204,43039,40357,59158,56981,69347,34482,69444,71435,12800,37707,44513,14120,69495,74288,71743,20350,20587,35276,50510,28846,28403,45227,54681,93415,49370,92724,94320,25275,12096,86584,19682,73914,88906,19380,15742,81040,74419,61553,47942,38097,68244,86567,27697,66696,51966,82729,21841,65285,28894,27098,47343,96147,66269,88471,80157,70079,42583,88900,58810,89017,73889,25109,60350,76293,14472,88340,91355,85719,20057,16750,71377,93090,77769,41640,94031,20180,43978,43798,33801,95065,37870,79376,70971,70757,42742,78073,66409,17338,22556,91297,43846,59226,71960,45403,36479,27010,58992,34014,84048,46605,27109,91452,85421,45754,35941,14267,66006,69992,38089,13004,45746,56079,61785,41134,96313,92541,36145,82179,93392,63171,22861,42571,45889,96029,31594,72068,86594,57714,82035,26427,29573,91006,99909,13566,95043,35393,46317,18266,89661,62399,12755,41408,12423,17048,86722,77941,58505,12426,18055,85717,52340,50739,40355,26407,39523,99597,30114,69208,27972,41596,69969,93611,69784,93849,31186,10551,37579,12368,34383,73533,25107,83066,36594,77390,28032,32637,67015,53665,48589,92177,41350,97712,77099,37674,30749,87399,80132,17761,63286,26928,61638,12488,22102,88531,62416,63553,38671,71532,49997,38628,18033,41653,63073,68581,28398,91525,50535,47041,37023,39739,20571,14628,54984,18377,48779,79518,73937,90187,78370,13717,62531,89278,14242,53499,78649,45994,34670,73134,48557,29377,34459,58767,95221,30896,31291,45198,86504,31743,37887,77240,26415,44195,24657,25447,75080,14582,42732,88658,34495,55303,24725,74855,82237,52831,24211,28642,47887,42718,58207,96436,25460,84297,69036,41670,46559,21709,87888,30735,95105,68012,83606,76969,93586,59000,66144,88074,61802,26938,62923,73536,37690,51512,18030,24968,91663,85347,12272,88863,53053,98153,20062,95205,44161,38216,31338,53755,58925,96377,62757,87754,21379,10528,71314,63035,41571,62726,41835,72902,94891,74454,74126,92310,91179,95450,28906,30338,89792,87033,36099,19746,96835,33871,56221,27413,48077,34287,10951,87803,65815,19479,69787,61808,80125,31492,30743,64217,46970,73881,59115,81067,32054,35215,22895,54340,73579,97630,28670,30055,10956,60111,15977,46842,26098,53661,89631,49750,33984,95984,43631,49404,33162,61296,68762,87727,97301,73937,62834,18456,56434,99844,91263,57108,21887,43960,21060,51190,57322,77942,33414,98721,21964,54177,73582,99352,26183,32617,20062,35597,61158,87268,44050,59995,32306,84607,45470,24676,41834,73894,58716,15043,25404,54822,24615,86400,78841,88379,81173,28444,10781,36114,39689,15024,62231,78096,21913,68731,83022,79251,95316,63569,97029,96169,62617,31909,12200,78019,14568,32164,44278,79226,93264,49472,13567,56647,52178,95738,93454,76017,96761,63118,69945,66930,59175,47209,18101,16964,59297,56608,18145,93086,78313,73906,24338,18059,23435,27052,59823,47291,41271,96837,47357,26226,71944,77374,84404,83783,18822,24932,63979,28027,99989,51335,28591,15559,79088,36547,40182,50132,76454,34825,30219,28888,77476,90174,64409,10201,17973,14342,86504,60373,90638,13344,31726,44267,21776,24681,40839,11270,39369,65885,85786,35719,80384,74245,22714,25465,50728,61975,73436,85884,33430,17337,84528,61489,54382,15484,73417,23282,89241,98122,57202,36892,32822,84259,37411,12275,50483,70766,24242,32356,82901,57492,69251,88884,21494,58638,15248,90987,31024,86462,89320,66860,59749,55576,79933,53334,10818,99153,22092,81442,57241,14979,28225,22421,81927,99727,53045,68139,41959,71334,39238,79333,67528,77561,72956,32241,77932,87132,15625,83595,16547,20408,20969,79967,76158,15766,73399,93359,76162,21533,44790,86830,72520,37540,96516,99467,32640,15891,70507,75422,24463,29810,51099,75147,20344,75990,79671,99579,75055,54970,62951,24994,55447,41100,54011,23676,84978,80070,58887,40923,47466,36278,38925,73761,12986,67556,27568,62235,18797,66488,59058,10822,70927,75569,98786,10355,30458,63070,93230,11696,59308,46158,49050,84524,77468,21881,72543,12787,64463,61367,78596,96658,54082,71672,99934,95772,76041,54839,37149,39204,88056,70799,58926,71560,96138,28744,86539,98665,37670,27986,36456,40960,61811,39330,86087,59878,79926,45114,68802,97477,77864,54531,23439,22828,62576,21594,52113,11932,73746,86307,46932,35417,19896,48676,53472,53447,72570,11312,44978,75725,67872,44804,58762,65112,91321,25126,48528,32335,24955,37648,90462,14085,71821,46423,34627,86412,57642,46960,36387,55658,24182,29266,34926,27430,58282,41379,65720,49733,64663,25219,61015,53163,33395,35825,35339,83062,95067,75839,40793,71110,65269,62561,60803,86230,78376,95891,21583,25345,64311,26539,64731,49451,94906,17237,51800,86729,81520,33245,13697,37288,76268,20672,61200,35620,48075,15040,72935,43833,49413,77358,88731,38300,30680,38723,41469,55206,44551,12482,12193,75182,56064,72900,98158,27326,13444,51718,95603,44640,43393,38487,13672,30143,63396,41467,57861,56601,89610,69170,94288,38611,43344,28567,89461,99810,49452,16682,42427,73531,12479,59324,52910,43508,18982,24045,44004,35162,16065,90072,72338,77660,74886,47856,65216,70284,55754,80585,86936,70256,29001,17300,97268,19047,97307,99641,80169,65253,99415,61649,59167,34412,48251,23023,51578,29473,91698,89775,57712,90935,24094,74505,48961,75554,21729,46826,79882,36958,12316,14878,85602,61495,96892,76206,61833,32822,32674,35218,12899,31658,77095,73550,51318,11787,65170,40436,74695,77218,91852,69611,90585,37171,98509,12338,41513,86306,33249,93429,95963,88982,10027,80605,89281,34933,22850,93152,42595,82081,81759,60775,12143,13231,86697,44679,61695,47657,42963,14938,17618,54896,74536,23968,48440,63194,99031,53574,42207,62200,23674,65974,62509,56391,20535,78883,86042,66495,27800,24441,79101,15673,72555,62179,61911,72831,88400,19806,68384,41663,27138,98254,40649,16867,72508,85952,55042,20121,26345,99317,95772,22785,12820,52720,24155,40021,57796,35328,21875,62706,98887,42016,39605,49701,24191,11805,21396,57386,86025,45143,91455,91511,57155,78542,57664,68689,29629,22661,51614,75014,62131,88477,39492,92883,91534,38581,41742,76520,82179,34883,70556,91852,66224,94429,57603,63303,63457,16861,57497,22571,95831,36289,64150,12657,75653,50895,59741,65695,90874,41505,25188,65614,18033,96117,22624,74111,39218,56689,35166,29641,57361,76289,55296,84795,32892,66934,85504,61525,25439,62917,71639,98920,97924,25938,74415,59617,18907,94796,78088,94848,45018,88314,13548,96653,60772,12575,84905,88690,37403,84481,80079,84644,48003,58972,52316,65062,90102,22076,46535,66230,90354,46182,20445,46857,59131,81037,37305,55462,26356,87283,55075,39804,97130,14792,60754,32306,48796,83714,36229,67922,79399,82897,16374,88060,85838,59649,99855,30480,29224,58207,47009,84343,94291,85653,63886,89932,78121,50383,19668,81071,66848,78794,52181,46960,88202,45888,62228,75801,96390,42247,46027,63849,95824,30303,87644,78184,73035,57705,50241,62296,51218,73332,98668,99670,99658,12519,81115,71309,45352,28558,13227,32770,10859,15222,61963,87669,95162,16428,11601,95204,96092,68617,88455,15793,96972,86913,94843,60575,40692,36559,11825,91201,22794,16600,98183,17147,92796,57597,12924,55206,21689,43843,39572,50431,38317,62829,54536,91659,54360,12818,32918,54477,45987,39699,45736,10731,12172,90087,55057,79415,62367,80371,96070,20727,84850,54439,39893,12462,27275,76089,72560,98194,49760,40007,12534,50151,21057,94169,51154,10515,12405,52153,96319,36502,44025,39208,67168,82016,92816,42201,34553,52771,42560,35837,29325,35765,89786,51797,10370,35554,24403,91796,89515,17205,56104,10359,13823,17379,46633,61562,42887,89494,40867,52837,64220,98379,63289,17753,29466,33189,17857,33842,76518,32536,40687,76141,19230,67263,73702,11666,73410,18755,10627,59542,88606,79427,99402,29468,80325,52905,54976,69674,66931,86526,95548,10907,94128,90236,88296,15240,32525,51640,18262,93756,42720,15776,72518,12487,78043,76846,10892,19204,64524,34362,12614,32436,16641,52728,28567,64792,25393,74563,96658,51464,23236,91934,16677,22561,25451,22476,56655,49980,77724,37758,40531,84029,38254,58540,83694,67919,78744,49887,96920,38545,56560,73092,53074,97114,85262,92399,25242,71876,69940,82865,56000,85637,20045,46979,97897,92138,37530,55904,17175,80151,53543,75125,50317,35234,10740,22821,84577,38134,76230,82187,22980,73313,66655,57885,56132,34656,18205,20123,99601,25266,68712,11934,29912,60956,56259,99442,89764,80831,68743,54950,14275,23026,30737,23906,93467,13916,17019,25363,87453,33427,90625,29722,19618,68910,16640,28008,34302,76375,35580,61003,57114,50361,21505,46561,63461,11929,82362,10087,48746,64297,74989,91725,52560,24252,37876,21748,82310,63724,39383,42609,76559,75633,70753,11472,75019,86753,30204,49604,57110,54270,13745,62918,98809,77236,29378,80308,35892,23662,46102,51467,72015,27416,35418,47056,16368,72224,85505,75050,27206,33461,82354,56379,76160,56675,13793,81609,47623,84679,66293,15012,42657,81070,11427,50939,19998,12736,52521,22876,43925,63758,67797,61979,32185,94382,18570,85830,42936,54777,57752,13864,67354,20378,21984,82620,35572,54301,79712,89623,15517,65326,44701,44062,90863,32312,46672,11267,32609,53226,57019,33098,29556,75745,16229,81389,85699,70791,24604,53337,46829,86700,71547,31447,55414,54539,47929,77959,12557,19109,61766,81173,51845,28968,46963,28040,90753,72712,94313,82728,35124,20200,74771,51245,51452,27369,38078,25201,68204,22713,78454,39732,51123,36623,53122,91970,57568,69018,25648,44928,68261,82124,19816,20363,83566,38951,50544,37242,64697,65811,17844,37373,57081,79334,45487,93348,92128,45470,27063,68186,29367,60902,20323,35101,10029,59006,84927,86228,68052,25878,87201,21581,42449,17687,84837,99932,57601,10301,19344,54355,88378,82783,50849,70961,81810,82417,51911,68939,56212,77031,27371,66780,97079,71357,20232,63885,93213,93665,36138,43679,65125,50942,21771,73805,54837,14054,77702,48460,21452,69632,63034,39682,51340,20326,51441,70840,15145,36112,35281,49150,81356,54891,58154,91865,24887,76263,12712,32722,70762,77908,52235,59326,50772,51646,31867,86141,27294,81593,45375,93143,50088,29235,79112,83320,45504,55819,69565,78218,77806,59581,51260,73632,48889,14973,29141,44347,26608,18935,62100,66952,21442,22013,91437,74001,69935,59264,44357,96551,99464,95987,14092,84568,68185,84734,89084,44738,28297,25656,79687,71144,47142,15864,81380,47754,39235,47445,63611,50075,41673,15068,20504,43667,41169,22021,87778,96290,12779,92812,11720,58138,26318,24194,10935,89357,45404,34620,51534,52541,13920,61757,27473,21972,72011,82067,37289,62434,74164,48746,73170,76620,21803,37808,34484,30991,88282,32026,83105,54353,68333,47773,67961,84345,16029,40072,77934,86111,13899,56300,60870,42570,34073,60860,82787,31220,87356,56893,67229,12727,37172,19025,62275,49486,43019,97236,87567,61091,95050,38245,22456,26513,10160,80500,99796,23542,95080,83602,78582,56032,71136,74367,81112,66886,65759,43195,98623,75059,82837,76469,54899,88088,76273,21643,77629,61455,47287,61453,40503,40823,40412,63048,36492,24796,27546,70332,46789,10281,12240,99090,31340,62522,10513,87310,30300,40921,74276,71629,44835,31220,66347,68695,15925,44259,97310,56636,51095,62678,86230,73214,50522,26465,59506,85829,70014,11404,36406,45386,23723,66162,92381,53712,52336,12274,60774,84188,62805,18225,27499,31880,51675,39670,63370,48051,87290,98700,12630,96390,69262,56435,26912,75368,32487,90593,96508,26736,93315,26245,28373,53991,65021,18139,73447,81627,56472,23427,79579,37913,56556,47339,34458,79408,36485,32031,37307,53704,67270,62456,39444,86076,90977,90145,34864,53893,55387,84490,57001,47532,79687,29198,19891,68460,67909,78450,33967,12460,62318,95106,28937,24624,47822,11104,10771,18751,26240,15009,15807,94809,99568,27314,16116,80928,73514,47948,28305,31925,46510,15855,41841,70792,99286,65235,98683,33401,63460,42170,92820,51527,42953,90675,94744,37569,48347,81677,68926,76663,41823,69242,96602,22815,71919,67407,92232,51511,41572,72524,68315,95400,34630,30992,50058,66355,36458,48128,44153,15588,62497,84063,80480,13389,79784,28744,45630,69251,93082,14736,29022,94237,55097,19402,54279,81782,70996,75620,83839,70342,91344,20010,36365,57482,78245,93954,55474,97865,14221,63211,56188,22638,38117,19384,16368,17336,10877,89272,62601,94642,78853,78284,85190,98704,14737,18254,39701,52156,46228,10083,81626,44043,71084,52515,27070,11141,74432,54468,21151,51662,63648,43566,86309,93558,76592,59869,50781,56041,91851,54714,10698,72967,10122,18743,79227,41355,84060,26956,32125,43503,59258,83417,14828,17080,83595,93514,28082,73586,28289,82234,65782,66200,61464,30962,90347,68480,69590,66651,72574,49459,81099,19853,85449,93955,93884,59506,96242,89960,64942,40521,49268,10888,57080,69824,53680,24324,28394,96933,66364,46882,82685,22472,68465,50710,33832,71014,34406,84210,92986,51198,39339,72367,96799,95790,84736,78986,67387,45912,49191,14386,75764,40374,83654,74870,82948,11052,39738,99893,10680,16962,26182,62784,39936,55881,92504,90995,77853,91108,28861,75928,80356,65262,84731,84129,26991,25718,26216,36481,33926,35737,34664,16801,80668,23219,64435,80859,71419,77492,23836,52418,58061,27047,75019,16836,92807,76427,87835,74136,66483,37416,46972,98787,72562,35189,77183,74166,90907,11665,83792,73063,70750,26482,54747,61088,63604,80663,28666,70182,54024,14739,21632,30564,58501,97079,70296,59258,91652,43891,94656,92690,32768,40482,99379,20282,72389,57220,43736,71551,28882,35632,49075,58864,99665,24736,17013,49469,25591,79652,96726,64220,62409,74164,48634,56799,82245,27540,59678,11596,79368,66269,59284,41592,54021,33465,81823,46167,13143,58895,99640,40045,75761,74160,72246,87479,80247,64611,42354,66167,24678,71034,37382,83862,91850,20177,21475,72894,46394,87220,98175,31419,84749,44170,67770,21850,95280,85868,69030,65490,40350,62898,59694,85493,22825,66047,84683,66200,58274,41713,56438,15732,90113,60506,50908,39170,11922,75551,44917,55526,89938,86332,76453,57356,46800,17248,78101,20464,79573,65866,76921,95733,96439,27293,46331,23898,75394,24408,54357,92083,62269,35199,92260,80414,72343,49235,90357,54759,22674,25838,29840,82457,49896,44224,12124,70466,12756,62046,30825,31535,78083,18969,51503,18689,22501,91273,82500,75961,37624,53435,82750,38442,48090,90852,38437,43540,53163,64254,20560,45251,13582,15957,40236,76285,32181,29619,60139,53813,36822,52322,62181,38102,35672,88034,11372,25994,21730,97805,94601,29514,47444,13500,12135,75442,12820,81819,26746,18352,38505,85182,23543,23592,90716,55577,77075,58020,63145,10517,63390,62314,86427,85245,87748,55465,88134,35772,25315,76358,56143,41377,18498,29326,43820,83404,60023,83021,53551,68400,46868,43246,77273,55124,14179,51078,42825,23511,73516,12940,12391,31203,11301,94274,82548,26273,94011,54673,25571,46777,83646,63765,41693,27000,67740,89976,36675,52539,47915,68689,30919,60010,46722,98245,75552,98091,43631,32659,97480,44960,18251,54375,41189,45711,46625,54219,38666,31822,53646,30783,94397,85171,87919,86716,99891,44510,79490,33278,79479,22015,43339,29946,38861,52889,93726,42682,29561,15142,47349,52699,74434,36043,70188,52279,54811,61064,97527,76787,89082,31932,74440,52058,24288,61098,21913,31328,51204,70641,14797,26870,77960,48471,76127,25773,83078,89212,86966,62157,24653,10283,33710,95357,67038,14116,92838,47715,16582,76850,13221,93922,58415,18759,67373,17595,83961,15237,71551,99531,51832,40976,48238,71987,80384,30969,12791,62150,35784,77619,50726,37678,34597,85823,83354,72318,36893,94659,46263,98585,61021,73241,97006,50707,97954,45288,15398,89153,14768,55328,84053,46563,25071,52562,57592,77977,97948,36371,28648,13833,49627,58100,55207,40450,29274,56220,28002,53200,86769,50494,83817,12506,23941,74229,24549,72131,60976,38048,55530,34338,41928,41612,48657,53747,74824,15956,17678,16621,43120,17109,74627,62381,78845,94436,51414,20610,51629,26292,11336,41827,11215,57200,60640,37212,44431,99193,70953,90009,91618,35704,96474,45486,73505,73114,17722,38445,93218,21263,81936,72043,82833,64373,34777,21316,61840,36112,14628,20348,83280,60864,82354,99188,44273,44487,70653,83445,48280,19122,36690,63823,56031,70395,29318,24539,84346,50931,93820,33220,11075,92063,52263,66927,75341,46735,31063,40867,18681,72849,47645,77877,10702,98446,84444,80118,27898,84492,41789,79734,88854,86251,85313,29040,22258,63531,56841,69787,43999,85506,55840,80459,62291,36606,53666,23669,59931,80936,53319,89922,89292,55984,16814,37475,60507,22628,67079,91367,25016,62821,65911,86325,42860,70060,48445,63117,18265,58736,88665,67603,54432,61750,63350,66627,11406,81238,25710,99157,91843,98002,75051,52049,93743,81279,77017,71690,16997,89317,86924,36570,16528,11580,22465,57929,47976,47066,17143,27721,35774,70763,43082,69012,18930,31547,21426,67277,38992,58845,44818,12100,17222,53893,48057,46690,60420,51048,27020,52069,86764,70498,57900,36914,58721,35922,32638,80895,52024,26141,13207,44119,39897,35294,22443,99885,91233,62880,95664,86332,11474,13132,33652,57121,13403,85519,56964,22748,10754,56758,73257,45954,40031,96849,50712,34925,60502,45024,45069,26447,59650,69731,89169,60915,86539,36302,58664,54682,67242,53907,44913,13736,46297,87969,61136,65646,43846,84851,44574,14281,56506,85380,98408,38428,89912,23618,13647,64860,88171,72114,13195,51408,56858,36344,97369,26170,77835,52135,30246,84230,42546,13377,87661,69720,87876,65800,69668,62127,60245,27405,24521,73489,91389,65868,51477,49742,17318,12615,55196,14710,15678,62316,37489,66958,63942,44420,32355,83732,22976,29406,42150,36727,39592,83720,42330,75684,98408,73072,62848,36388,36469,44171,87171,33037,99825,59872,63109,37785,90551,49248,43223,48074,86626,49324,55155,49254,63179,35766,65286,72334,18108,47149,27104,80509,24345,84006,50391,68922,35623,28223,65743,86856,10204,84266,34615,72760,72644,40975,69990,90394,27932,66728,27594,27050,60653,46480,71556,45046,16074,36980,98391,22140,88112,85663,79738,92852,11860,91718,47784,84935,21338,43398,63758,81322,32403,78203,44970,87671,57336,97143,12392,73782,82297,97351,68159,73889,66228,62247,59884,74291,39947,64542,53315,53580,75678,75801,24188,94210,65619,92030,30119,23920,79515,67262,69002,90920,76714,35191,98676,11982,45459,36636,92561,37396,40694,53274,22547,92662,88002,30509,54379,95725,92243,13645,15080,32363,21817,35206,20972,54102,63390,35127,76002,15730,12639,64231,24773,76769,51375,43612,67222,19511,25123,32370,82989,71678,94638,95632,55340,65146,61067,60000,53028,80269,80349,20631,42387,62992,91779,62224,89965,64803,57727,63589,88095,55777,49655,31507,47926,44407,16636,83285,50213,18274,24598,21029,41708,61498,84862,47304,77018,60207,67846,55044,82103,17693,98027,50111,78051,10475,79767,81878,67288,15821,15527,65139,50538,98159,59000,98250,39293,15363,57861,32918,75964,72468,92723,53888,54101,26453,62071,23648,90949,73546,93567,32896,89056,66533,15145,29428,58575,39048,76948,36868,62191,86966,31024,72351,97788,25441,75351,54709,18630,29598,31690,10981,82096,71733,96415,75124,25342,88297,31911,20854,38135,81543,65407,18846,14033,84359,78096,35555,46444,45075,19050,22158,58547,35601,77754,12257,36768,72950,72710,68746,41618,99261,74291,19246,61146,13779,17465,19147,76484,61587,66472,16459,56957,59886,64942,82904,71842,57630,41597,65105,66587,29600,11233,51195,91123,47701,41295,84166,19824,64315,78537,25970,93861,40896,47570,59655,16025,45104,54394,39879,73590,72719,79178,60486,92851,91403,18620,73960,16453,37469,13219,75727,34074,89827,50910,58996,71426,36250,54171,97639,65896,43165,85616,24927,36295,56980,30700,97736,43707,77111,63234,36789,28697,37962,70998,58924,68013,98171,46440,91364,25659,86871,20266,87795,12757,10049,73874,12903,57597,96532,11559,20627,20889,54137,14500,34787,23679,41996,20221,60210,42376,58818,87781,28493,65190,58852,14342,61744,60170,62110,29647,51422,27004,59466,83608,30713,88587,82888,79407,74275,63286,12082,36261,13569,64525,63158,65006,78642,41741,22475,54307,89309,34855,13147,13627,92751,17363,98475,52422,80165,66863,39652,35446,90123,85220,55031,39959,10946,85515,83238,48038,91043,35326,26621,80318,37964,65701,62466,23063,37802,75937,10892,61660,31357,56679,36845,48238,59362,50837,85334,18857,19048,83013,86905,42700,67862,95456,52520,90683,88341,15871,41095,89809,41648,39461,27292,17439,39542,44251,85630,80410,36405,10737,40392,70285,34447,70350,33955,56495,55447,24861,36031,88078,69340,39643,78700,17267,31321,58502,34588,27862,38989,61174,74294,75471,83427,73970,56537,40903,28860,50567,66336,67676,55676,85070,53032,41631,55661,47419,34258,73156,22421,39185,68929,41364,20390,61821,96660,32216,29564,48588,74831,12392,78250,67889,78668,26674,27405,16713,98535,73448,73290,71643,50854,55154,43206,13552,12472,23073,41864,45048,49726,15951,17203,25980,23679,50814,78418,35151,54103,26213,90006,93319,57407,72938,82174,27508,31420,50346,90873,40732,56254,16320,20463,10204,53290,56897,24048,22962,59494,58519,13540,16684,65298,44898,10686,35788,75359,19467,54209,90452,11770,85140,36579,28716,17851,26305,68114,83290,59155,24066,96403,33170,65176,16654,53676,56848,38671,84559,95040,74339,41334,93481,64272,97159,77358,69164,11259,67103,87949,87963,57032,22767,93255,91627,44919,96523,19398,29214,33836,39561,25049,85987,11936,56272,88643,31282,34722,61109,76868,93146,99194,15644,22100,55078,25721,15800,68623,15938,32659,80143,96312,87534,62287,83404,94011,58362,64512,91613,60512,11665,39869,16093,85373,27834,50845,49890,35081,34380,68606,63476,26219,44417,31337,32872,91601,21925,36731,34826,89319,56369,73523,42070,19207,71226,38651,64729,41848,20832,65338,29464,70870,10154,62380,73086,44268,97026,10102,90280,91120,39804,48377,61201,60804,44094,95632,32423,82434,38488,25188,90783,40867,86186,47021,94978,82360,11830,89022,43706,56310,70474,88047,56196,95688,22594,21731,36775,85684,25758,87716,56435,34805,76572,17168,64950,48781,75150,84763,50844,81052,65057,93854,92735,15151,62103,87704,52985,56581,12780,17814,29985,42632,12036,82249,93502,45946,36487,41282,91927,16439,52574,98428,72349,15461,81209,25014,51389,58619,61411,46017,78177,28985,29030,73374,13479,87874,88872,87931,23481,90176,87012,25910,48310,80221,62581,66671,94896,32875,98554,29953,46327,40742,66469,88796,70026,16674,56178,66017,88409,75053,76766,69094,69519,97969,73135,60931,60506,70314,74339,66167,57314,42234,76900,86011,59978,58996,54076,74991,47199,94289,70142,19130,84656,76074,30465,36730,82592,85952,34914,62800,84638,71355,73727,27057,52697,80835,80298,13681,58353,31883,86780,74198,22402,90494,38091,98464,80948,79323,76314,59283,82180,75415,35546,57084,49894,76106,73355,17090,17387,61942,62149,65366,85040,92830,21003,30014,93596,97469,65247,48521,93261,85779,26896,82818,93841,63884,39050,87432,66087,66919,26069,30725,96079,98172,12327,52812,19488,64577,51485,56506,13552,10572,25538,79684,26172,84523,34067,51279,47154,80516,96504,31887,61132,25851,80092,75174,21904,70713,94160,33439,75259,95045,58638,24738,61306,44909,79108,14622,60199,20022,96997,83029,49719,53728,48346,86081,48508,92726,43063,53429,13203,21320,59705,83308,55108,73899,33053,28056,66843,15128,59237,14986,77821,83092,49042,10634,47660,32737,59790,17431,44421,43796,90846,49952,23709,35226,28789,38961,64625,79981,11177,54605,33514,11189,85188,65395,57829,92271,68781,28411,93595,56382,50212,32620,37769,64008,25502,74723,99603,56931,92336,36815,29807,51361,91821,89290,97281,92984,17988,32104,14779,16066,16409,87329,77850,44697,66359,90118,17431,38419,61693,69602,32485,13754,66331,83688,89624,27528,95688,76202,68223,90756,54615,31805,26173,74108,60432,79732,25386,28641,40674,31994,55042,31040,15162,94094,87317,33899,79551,50012,63565,43105,15622,55918,79364,54548,15700,93238,55931,32036,30473,80415,79200,80448,31196,97954,33404,18872,14629,79824,22650,13915,12990,16498,40128,80257,88972,53704,51219,97160,26565,53020,73504,19255,21542,81595,83338,15999,92585,50745,22204,16784,16885,76602,55508,67780,12769,62175,14688,99733,98540,58408,13877,60654,76211,73335,87265,12356,91121,56248,37431,17604,94759,78097,70173,79872,65267,47946,38555,39888,77539,61446,58735,97569,72781,90060,76302,45803,21875,42505,87132,78501,17803,11168,47476,37004,63877,36094,79834,78080,56245,19636,56563,84593,45432,14717,43153,95604,48293,92205,58241,62880,55193,84227,74791,85778,73516,60919,62193,94354,84741,74398,55986,45948,77694,75446,13230,79381,87649,40871,59594,19859,99866,26681,40565,26317,33010,45882,24215,99776,64732,78970,86244,74517,83800,66261,16711,91252,92094,35156,15549,93889,77738,56501,84296,10945,74044,51299,93948,82883,37494,72571,49288,30249,10120,85367,26925,74476,17977,15235,96832,96063,24116,16360,46162,67957,32794,84995,67638,64343,50739,42225,98584,47078,47528,18313,80505,47851,28574,18468,38419,96396,82529,66140,41475,35850,73283,95426,51440,72844,67778,15843,89840,43345,63970,18359,40664,22846,14242,14298,72208,27176,47791,21658,58790,23139,22162,89248,20492,52485,15377,81140,85012,38569,85012,73415,48990,55380,15247,34752,68453,32346,29897,79247,46054,91621,84729,71877,28850,45102,58472,38706,77290,35278,34346,62396,78785,90343,19130,82307,99644,56304,23431,19935,19272,41824,19678,52469,86706,52468,55508,78743,59194,13100,80469,61176,94700,44660,87047,66181,34889,63978,49017,76142,41056,12077,72661,98039,79388,29729,13978,38002,38264,74753,66900,38921,90467,66172,75636,67519,61043,16916,44856,15682,45859,83679,31343,35663,48983,96313,46846,45483,97686,14418,83416,15646,82681,35878,36830,36099,87905,66771,28083,96292,70221,25890,35585,40234,35120,84128,71070,36488,41718,55841,47816,19534,83341,32890,72939,48120,51970,15425,80307,51562,79412,82180,66344,91215,97338,35331,78513,67412,40850,37201,90774,32410,36697,83417,16522,52812,36169,52475,60538,19800,36674,31119,39777,51289,31176,77012,18231,89860,74200,99761,20146,41451,83433,48196,39909,90478,22885,53795,89744,81386,94182,32946,89098,66672,87820,47531,28999,59812,15088,94914,34260,12847,42020,65186,36577,88071,72859,21473,21900,85930,10713,30287,65228,24277,95440,51730,26835,77710,29118,60579,83565,29252,20994,94338,90541,68467,68563,41559,22447,11837,23381,56987,31782,94711,73993,49319,80121,50834,21444,99164,72250,20799,44929,51417,11309,10427,92523,52330,92393,58790,52728,74462,89847,87941,91376,17916,86810,74876,84428,85041,79063,76840,71134,84354,61192,61930,91593,26080,77174,63154,27233,36772,84504,70041,41694,13844,75631,82621,83085,20735,12120,55863,11469,27339,73278,84577,57268,14864,47669,74506,88609,51610,30349,86337,53637,39300,87267,50244,55356,31663,21232,94970,77520,99825,12182,30928,91400,97006,49985,84140,66036,75064,38780,94548,95148,34713,76794,90020,53016,55713,17524,19115,50814,54646,30772,77928,85275,46638,41225,21588,35819,25365,12113,39337,29052,73207,70332,63650,52319,68487,23502,87150,59627,74115,95007,52436,35946,60030,99325,28810,46109,64958,88435,98241,37420,74267,10969,97117,17826,23776,12249,42215,94616,53174,63368,31767,32995,53453,43841,86666,87510,17892,73643,88775,40218,94555,97200,40987,97843,64048,59098,88010,43013,29136,29577,39461,69422,94156,98702,70262,23349,61138,97864,56859,10711,24852,93224,68271,93039,20583,93905,48251,55959,23183,50991,51718,42534,35280,81344,51720,13213,51082,36409,36975,69152,95921,87999,87514,21840,96550,24544,64052,76638,94202,22977,35771,97422,19506,52087,43782,52542,99735,44399,27833,44663,74868,84475,98260,43457,55321,64469,93968,98400,59845,97013,35611,62999,95357,92988,73629,80412,73266,53627,86819,41855,71547,32134,72219,10473,43148,44666,58552,46805,17261,28180,36616,85187,20252,34891,13688,96765,84515,29690,13240,52125,17637,19881,99511,51717,78382,44608,46518,77603,42703,47897,60548,86788,80649,27367,57215,96027,65212,32903,59958,17334,76525,77168,37637,32607,96336,32846,47763,87139,32947,87622,67608,87267,99217,23434,84552,18677,35690,40193,51065,68715,86035,37585,98590,54485,12543,59543,31225,74564,12786,71829,68697,64976,48549,73879,68363,47974,18426,16320,54394,23356,60648,77592,41469,55719,22958,56091,38515,67128,21132,60926,34628,62982,62322,35192,38462,39451,27367,91107,76834,92788,98024,48948,67983,67302,72674,47903,41296,78891,97921,53332,37211,98022,81050,10055,67898,54766,99970,95684,59659,62917,13540,20997,10104,48033,66192,86488,55363,91826,20801,68215,88350,42154,30484,97717,97333,85380,30243,99795,19481,90037,82962,51521,13492,50722,40734,55837,99852,19891,10109,71364,40000,34074,88672,92153,32133,46671,29418,34409,17843,27021,98785,29827,48622,60665,91594,45258,12528,94939,27204,61165,36081,30612,81496,78158,20040,25762,26530,36581,27574,37055,36047,76587,72555,60858,86919,58071,11154,13855,48660,81257,24437,14470,59024,64282,29770,11996,10790,78391,62635,40761,72422,62083,79023,36961,76718,78107,41738,48940,41835,26643,69216,58058,16530,31527,68264,88511,13168,67588,84961,60406,60600,48359,15616,30824,16433,18300,19009,51409,46049,83251,14547,22394,98203,50443,37874,85465,38699,30325,31760,36117,93579,19109,23940,30895,57626,75326,43053,76532,60001,66308,79341,57668,20024,65129,40724,32118,68272,49651,93947,67491,14278,76149,84085,41978,54947,84805,37442,96902,95841,56057,80683,29642,74985,63777,14486,29472,60300,58037,67878,48242,91716,11426,17698,14009,14050,56656,18163,97778,23722,73824,60582,72823,57003,79730,81000,98246,52123,27191,70292,88660,10289,71520,59942,22390,62532,57538,67743,21636,89914,53518,59331,61150,12973,51713,43235,52540,61063,52331,33627,28625,81206,65842,66536,86322,89922,74537,56997,50202,83443,87043,66176,86537,23893,70239,70073,46869,98199,83860,28046,52515,98497,57890,27691,23498,12904,95930,72610,73528,24014,14963,54094,16546,93270,78856,73471,66951,72113,67980,40989,72387,33072,69084,84236,45282,18997,68095,49788,33168,66722,12996,93242,67183,24320,51584,17567,49018,51487,53874,67810,18605,85621,53212,95227,16597,65684,97268,43777,10257,80205,54537,53025,45841,16986,21621,58996,51778,93294,23143,72673,66653,75912,96855,65207,13362,29605,46865,50148,12136,93391,81652,13615,84809,54998,33882,36076,73918,85476,50665,32788,42707,41574,18601,96789,27252,41326,36531,95621,83881,14082,70537,19806,94203,63421,68822,11679,60446,60106,77871,81771,57588,17049,91535,25721,87582,61983,85655,72091,76052,82766,66481,45515,37789,93960,57708,45159,29043,64701,62162,25899,86669,41817,62672,74106,58541,54937,52393,24053,63456,12504,20742,87118,79054,14855,85630,36497,47330,26759,19192,50458,79622,41145,87050,61657,34055,60592,53705,22422,88586,17325,33067,42754,13351,73412,37745,51131,37345,52737,61469,42628,79731,63181,20299,46697,47100,54454,77087,10457,65076,93205,94657,14053,44911,41492,19562,70821,83926,51648,51110,58152,19380,33847,97169,27217,85499,67447,55557,33440,86022,62866,72752,53547,85569,67026,41713,14092,94093,78116,11498,75742,44512,50189,98546,13308,86063,23290,72687,81096,51482,24087,74628,81453,18737,83963,37596,61156,62278,50564,59080,11833,49739,35577,59011,35086,59523,51760,14780,55099,27804,70563,24493,72409,46724,84522,22237,51303,71961,72230,73951,29748,31274,84780,46180,89247,57989,15813,16834,73114,14485,46015,18409,43165,74736,49979,97020,22643,27837,52663,15898,75499,18431,10746,59580,77251,10734,54431,73649,81225,19845,91576,32418,26945,97080,53595,47454,70339,83530,53189,16207,89671,96191,95031,61988,67076,76160,98293,78543,92687,71457,25429,75098,13227,62882,88096,20811,81639,11727,22796,91555,47752,77600,11913,81283,59612,24991,42585,50043,41630,11241,98026,15671,69342,63220,54035,91093,58804,74088,82873,72691,14467,64012,95248,16688,98678,36661,23000,16403,38503,25879,76878,37784,69013,31815,41291,86718,31413,43329,86215,16959,26807,31030,29705,57876,58523,86136,39112,72825,36635,50467,40843,42768,79251,33177,56340,59338,36727,65237,21666,70789,42175,47335,66348,16139,25641,73094,70958,97135,44997,91207,59625,59685,96030,57989,58099,15590,71702,99402,71443,16443,43443,26434,63106,52534,58281,42972,35420,96151,80140,57188,87471,37876,94855,33894,83512,45921,57613,63891,16384,99757,45754,16543,15409,89620,61239,10684,90113,84886,58018,87476,54623,65076,54138,94048,36666,69670,76168,81500,80052,52178,91558,96766,80071,70963,37159,92393,75008,28357,28748,94160,47595,20576,73905,63828,77144,39751,88179,20500,66269,39643,48980,80674,99101,92647,79258,16939,48851,97215,54189,34044,60679,34904,56789,87964,22885,50966,74151,36686,98667,91095,62200,20625,83076,57303,57856,67576,52050,14605,33712,99756,45685,25451,80246,44408,24950,21206,10658,98482,26699,30586,97207,19337,92691,54840,26399,48901,92817,29378,57064,98268,86611,29378,83711,59319,66134,28835,86393,19777,98447,11104,60021,75743,74045,89313,93315,40680,55555,65260,86386,68736,89158,64722,54130,62131,62114,54496,56080,73564,72948,14886,86672,62009,59945,83495,40069,86215,58516,33292,96334,86787,81365,77939,12927,10723,80294,83144,51530,42827,27769,86207,96066,25799,91712,21226,85092,94583,74476,23377,34646,44945,37583,53355,13168,52706,68444,94543,50055,52427,82121,36343,81397,34592,80192,74091,77999,45129,93494,96603,32348,57283,37122,23997,14545,61058,93475,66164,15296,97422,31293,89401,21122,12933,84345,70422,33292,43118,57074,90627,75921,13323,83949,26264,84018,98284,29649,33136,50332,39818,15693,63760,82551,33256,40687,57574,59568,36894,58133,19659,34358,90983,99921,81926,84844,14848,94186,96196,54517,60406,20454,48173,10237,86400,88121,91473,20808,12863,42122,58848,32214,67942,97100,82167,80905,14666,22669,18703,25401,51936,38331,50529,92853,78412,67289,65012,39840,42942,57373,95501,68953,22414,36840,68807,47782,83215,99430,81710,47691,26308,74191,61947,77836,62189,56750,38451,23888,44690,97693,53448,98560,78926,57017,10648,11033,53506,66125,46071,35666,30159,13673,15743,57969,38858,52124,59509,70667,97289,52010,73659,49726,97686,89622,40413,76528,54505,74078,90413,15508,35590,45911,29638,10544,28059,93651,48192,14840,88121,59405,42512,65321,62741,71743,95529,47576,21733,59436,97947,79474,71001,55839,35070,23576,48810,93498,35497,47326,60134,45939,33839,15745,71258,35256,24292,52944,38147,70491,61243,52192,74550,81764,90199,39263,19404,35016,46768,66116,80730,60881,50980,90373,18121,70644,25388,30876,31190,75545,77335,81459,12641,21650,20985,55993,59959,77442,31724,13652,95612,96599,27826,81613,59136,98663,34452,76851,99982,27987,89876,57685,40661,82811,44984,51624,94280,83459,11943,25267,55555,79638,82530,50798,29492,64492,56804,79213,66889,34672,16382,76612,66676,17054,65225,70087,82649,18723,36707,10957,41148,60316,37414,59774,56246,83529,65583,42074,29811,99764,53091,33435,90644,87668,38929,68293,21309,94178,85289,85962,22354,69173,69966,33248,33672,89945,27897,40150,23334,27389,42684,19681,36467,98408,50348,45269,59011,38448,48328,64953,55284,48693,50210,77812,85582,51905,74938,86234,51922,86995,34546,84054,33735,14743,70351,39757,20240,13247,58421,24297,44740,13182,65006,49486,94761,13760,28966,68901,81242,69859,97045,24588,38053,81900,27482,86070,17563,74857,56085,39733,39959,20043,44067,50150,24882,84965,57153,87632,39396,31049,87954,80489,76610,96005,72138,70341,92872,77376,25336,27513,40934,49397,61412,12428,64607,40903,32168,78644,13721,26476,77738,89834,91331,78794,50450,84498,65555,40166,54459,35250,71111,60691,73679,21305,70244,69970,17976,42204,99016,18636,16987,57641,50055,20773,89715,19497,32041,10575,14356,64099,65988,17617,17887,48066,95568,93472,60841,59307,88886,90132,91903,90807,52980,99528,66187,29621,52145,76258,98404,39856,46143,90683,66276,44527,14953,74458,40073,67376,94934,60198,16106,18483,27524,43194,66544,79680,10992,54207,94625,59624,13340,54934,17698,45224,36153,91006,61557,47104,49989,48059,83855,45359,55808,92732,76566,46582,59526,79556,94192,60443,26642,64900,66973,43376,76533,90814,62944,70074,49205,35550,39821,37964,58658,76978,92387,74334,88425,53786,89350,81820,74104,62013,12858,19365,94498,89377,55548,44908,80580,34361,71540,56922,75062,67116,52730,59373,29468,30924,59890,14495,35847,20253,50191,83547,55825,19542,96029,22166,91335,86278,16360,84564,44931,33923,61874,19309,22309,79659,85114,75480,56571,14264,38722,84921,63170,23680,76509,19560,31310,52113,76651,86483,35439,15825,90453,80759,26292,18697,64610,20847,76047,68006,73107,31778,18981,14080,23177,83479,35112,91705,94537,38872,34915,95500,69407,15297,38831,24850,91248,98080,22227,77101,59202,65918,97764,39888,89845,28213,42508,18546,50505,28293,34154,87523,87058,85522,54147,75036,37162,94881,54002,22479,42376,86838,89443,95743,26352,12472,49105,84605,56009,64354,92773,81223,32041,36462,54254,33742,47374,17900,54804,92067,54858,15877,60176,70062,29903,25505,26700,47698,27007,51926,33043,53507,99442,55578,13488,12961,30405,27528,85061,30218,48192,21996,92416,83848,70745,20222,95918,74140,26046,45453,16171,55617,45784,61889,74135,28650,50425,98829,30885,38098,51386,85450,70253,47053,81336,22218,40239,20261,72118,75955,26871,99425,23822,40386,52843,39717,99611,18764,60712,70849,45275,55262,40147,84850,52756,63020,51448,21845,66050,89235,46454,10225,30468,44274,95989,12269,35291,41199,33698,56362,86566,30587,45408,85734,26248,43539,53839,27019,33351,52689,97744,51493,86710,66224,31014,71431,49001,24419,13756,97124,89873,56071,49043,57866,73472,62309,33957,98033,68218,13972,18502,74285,78145,62520,27196,90307,62823,97528,81836,14972,80873,15256,87873,95667,47042,65668,17594,34829,88129,87082,56954,38500,59813,42555,81909,33270,76665,51552,99281,20359,63537,91701,35133,72480,34876,25036,61351,74366,49345,85340,28686,33252,57216,57547,17005,26080,59702,39900,45822,84113,27156,48341,72427,14009,44391,28042,98439,90121,15665,80868,26263,30285,36365,23194,98980,95750,68281,18326,94435,20420,51580,77676,42326,52042,82780,95623,46935,32075,37323,21240,64213,27240,10316,47857,85522,28574,56164,11501,80147,88750,39276,11376,84690,89569,36725,40465,93866,92725,92935,48385,20866,13710,89495,99604,13871,16419,98896,77592,20091,22196,34983,44870,64961,65104,88944,82632,65766,75574,86409,29822,27568,94403,91091,68968,50769,28723,83259,11244,70150,27551,61560,87546,93088,52300,48631,51140,49186,64509,40730,29428,92360,63477,50225,70805,57283,27465,61083,54435,18018,41946,21310,17785,78090,38906,71284,34348,43330,96734,41860,17610,19246,57589,26616,29155,32171,49405,56704,61682,70768,48110,72369,63016,59948,47496,77326,98167,21779,88047,89100,45620,64896,42270,30747,76811,87168,24773,74455,43897,51071,91480,49795,65043,87237,59946,59947,46356,25352,93437,69723,26298,98638,68246,22160,65006,94534,89970,96088,19399,36840,85936,33416,80309,72004,17837,39561,65990,50405,80688,93007,82623,39075,77396,94736,99990,69856,75336,31858,26943,17762,46108,76714,70269,50566,93095,75013,63069,51042,55035,27346,61236,57395,38329,25910,43708,94065,51788,64938,71737,43841,54198,12333,49084,30085,92729,65087,46241,76120,29282,87043,91873,57423,34085,43108,74801,44057,34619,41563,10651,88313,23620,93262,32366,14273,92671,13590,78476,99963,49593,89915,57369,34790,73126,85810,10956,99936,32051,64206,57951,75373,96255,37418,26496,38936,43410,97505,82829,83614,67280,52300,28233,70576,26839,99713,81756,22995,22209,35198,79167,69225,88655,49767,65592,47752,45814,27788,70775,35332,36881,18680,57161,34085,61873,11874,72769,65316,59762,54365,90206,23713,79091,86818,23683,54264,51865,27790,67571,49652,25260,63591,19713,32940,61642,71773,53460,63578,49985,36279,20866,29167,32468,91616,85846,24904,68500,38998,89779,67695,76524,30918,65378,57529,33893,74413,67631,90256,14662,43281,96025,61475,79243,74132,24759,38925,29068,95498,99529,58607,81980,12311,66990,88415,95492,22496,42784,89028,19180,35895,95993,81761,25803,37425,69563,71834,79467,55096,35542,98580,79884,81515,20542,19275,76863,36208,61309,83213,68932,51570,79488,88343,88050,15664,16144,73043,44028,74757,40012,15082,78915,41436,87271,38025,75684,92425,20323,48123,92801,11456,27329,89295,25442,67953,29242,91514,69455,17038,56010,71727,34574,32761,36180,86999,59125,46064,26062,28814,47575,48478,87947,37333,12519,71928,82367,19897,35055,67187,95584,78460,54238,17814,34404,59527,21016,62021,33493,14741,57299,35547,58826,42190,89721,69801,64416,47468,52984,15437,26094,66262,64023,17928,54564,25950,27130,71918,16693,62275,48208,10164,72824,46825,46293,18371,91251,27700,66001,32584,11015,62870,77568,96310,84804,60885,40805,22527,94483,39995,81319,90148,12277,92715,18923,30983,31187,78331,74674,30796,67322,27115,61017,14438,99825,73476,79894,45133,57569,26986,59889,88873,76802,75806,38472,42038,23618,16693,22912,75328,98198,93887,83700,22205,18646,16434,66868,90598,46711,92259,80313,24317,60055,97097,75079,41483,16984,19766,19773,60609,25924,13265,52601,55429,34029,67385,65041,26745,42226,14067,94724,58884,76157,49094,55285,29087,56254,97787,12078,72878,63046,42363,68494,37957,95920,58043,47016,74839,58014,92467,38838,53973,53016,41468,69505,21009,55057,19935,34646,15729,15742,89187,14495,13499,84617,57689,64978,40587,19315,83094,87826,26317,87419,85790,77538,14124,16554,54869,72577,66855,75621,98662,96844,83554,68427,83573,26322,11487,67633,13801,66031,60986,93092,67343,52583,57551,89957,19665,59614,88385,50298,79661,55051,54575,48638,82012,77271,52721,35831,21024,49894,59501,77604,28510,38899,87314,20781,27665,90608,55474,23856,39180,15467,72107,95715,42975,71130,33607,57412,92345,77283,61688,24600,14976,33814,58896,10380,47145,94305,25968,88325,18087,45845,58261,71547,84439,49280,42759,56978,94667,49502,51342,63990,39071,62136,82519,89048,62443,12885,78011,89503,14633,40070,28777,66315,47393,20141,28849,21426,23154,53578,62252,16113,61084,82228,65049,27486,41625,59225,29781,34774,64909,62539,45667,86889,23583,15687,27780,87241,70129,35304,24420,73442,42504,12231,73150,24655,54085,28583,28170,41597,26795,63173,88315,37133,65852,50997,54181,56350,11687,75975,19208,75484,27165,42999,10629,32597,16295,88502,40524,48440,99587,79577,80229,66135,45808,77398,83872,23929,92216,77642,21287,22788,43495,27458,57971,86009,63151,80309,60788,26274,93392,49321,39744,96329,59864,76292,52941,22772,13263,94357,83751,99859,92454,97132,22341,63215,17173,70944,46366,53592,51004,87006,21927,87475,84019,84883,94807,95865,92070,38397,65903,22425,61997,20317,20436,55295,56616,89878,29123,99307,65901,29761,67151,15004,10181,60780,10805,49151,41326,69106,63981,60838,80425,60599,62206,75755,39780,98174,95535,45733,62554,52254,70974,87471,91181,79664,18341,52844,23794,33293,39371,22818,38877,42103,48113,27734,65316,64372,61050,34759,20184,28482,20935,21582,46496,78981,32454,52386,77823,27379,71348,22503,55304,50326,70998,85988,78519,40624,71537,99485,32823,22259,45869,27674,99523,74462,47506,86355,11653,62299,70974,19225,24479,89504,10876,53092,91079,57528,99801,79201,33388,24848,64455,13643,11847,93656,66030,90043,11626,37733,21490,31390,75047,65260,26466,39054,28518,30757,40215,89180,17256,67675,25923,81269,67257,11506,18379,21703,31841,61047,67724,87752,33006,80631,46364,97863,88895,90585,44723,95030,75981,63569,44465,50882,85452,77062,67988,90911,40709,12719,12057,26782,67969,39230,52188,81530,52004,93253,12123,48689,40548,41792,29004,99542,35609,67752,39262,13429,85428,80054,46763,52101,82462,98377,48331,91757,52929,75232,15783,91906,44756,88073,88233,82000,26026,95668,69718,86764,10890,55816,36144,36653,36057,24846,56861,72770,31923,30855,95979,23431,24430,94453,42013,42173,46113,42437,69086,55449,60411,29519,21855,53153,19652,96638,19480,41302,57273,64910,54444,29215,77761,35804,64817,74679,47922,86026,99108,73344,28855,82508,30842,97360,29953,98483,96651,85278,84889,42888,19406,23620,17774,36143,95723,83286,70996,93343,47973,96297,95557,68596,74306,83773,10850,66576,74186,88144,97430,53095,31602,19408,93838,25333,49619,64356,93454,29428,33353,56132,48495,24239,93865,26701,42572,87849,68361,30979,34265,22339,42402,40117,90563,67879,24965,73068,89649,44580,80004,86797,55287,23643,59263,80811,11658,46688,50135,78482,73698,51969,86133,25949,28596,52892,19963,17547,24071,67681,89555,10786,93037,81901,36697,81808,76602,88408,21711,76206,78506,81959,20339,17665,33560,27170,42515,74979,68841,97428,57059,13670,10148,61119,51475,87639,52912,49004,79134,69694,76418,94712,65038,95586,69262,35596,92236,36193,35209,78403,95306,20643,18271,64173,50307,48088,42518,61171,79107,66259,56958,93464,62432,34333,95959,92852,31923,84704,21031,49619,47536,88228,37973,21987,74191,92519,66581,83179,88805,13457,22672,94022,54776,36350,48228,26846,61397,35727,35882,96180,94170,79063,43003,30098,46912,27599,24075,53029,64879,18214,44953,88957,59951,38773,30566,96714,61315,47204,30169,62984,96287,12271,38553,80863,77803,97002,48830,92884,61150,20979,94819,88850,38834,17562,75811,25496,62742,44526,98277,34210,22019,50374,97327,99077,91547,76669,98877,90410,69615,80976,84148,98024,12001,66580,49277,56047,64875,32547,40923,25222,22856,96260,62258,57048,85293,15515,10254,83277,14802,45111,91754,93241,34941,76677,51971,10081,74324,47783,93935,82239,36582,38638,64463,72142,10378,55158,53115,76369,69372,89545,41408,14917,62668,39828,69079,31024,50965,24187,58677,77244,47127,72886,92321,58744,34054,48095,68836,70282,98307,57781,70737,66594,87491,59567,71236,35981,50372,65045,24572,67728,43667,73208,62411,30212,99813,21495,18773,99303,57373,81994,49879,34072,65659,87874,34785,24806,38371,52187,82281,76570,85613,99360,64551,40135,70242,54100,38935,77497,72401,18740,45143,28029,84884,48617,94074,12036,98892,55212,98449,44324,62878,11131,36160,66908,63601,52104,51697,16876,53071,94871,50003,33437,95990,78245,54618,89837,85665,66654,53509,71311,30659,77559,69580,50574,48517,84205,15479,20136,24626,89969,11375,86137,90570,24703,92161,13137,69079,93253,62857,28589,10744,74055,21444,44016,36482,14172,74665,37667,91349,42774,60490,43370,27329,65734,47260,66648,38386,20434,33224,55660,36202,34582,90613,21666,88084,33349,99612,59193,89208,44327,69176,32149,33920,57273,51888,28084,29799,14707,30676,22297,52095,60142,31907,21526,65469,81115,46738,18759,45526,32792,68671,53655,41516,90858,22017,76525,21406,38138,40653,92748,46270,89026,65050,46812,70322,51320,93663,37255,35261,90198,30575,31983,82444,69509,91406,22126,85634,79266,22614,33660,67469,54350,18789,93097,70520,68631,26450,68048,60516,71072,11931,87257,66984,81372,51931,56035,40314,66460,55098,35454,52309,74060,97097,38021,45594,46415,39258,19456,34565,48164,97170,13595,66890,15455,92009,83452,75360,80516,53868,79845,19568,98355,37417,45936,78560,92000,85092,85212,57737,45294,45088,90077,58085,94226,42386,51863,57246,96778,19956,61194,44857,94217,28680,66774,18024,65047,23030,29044,68656,54231,95525,74445,29326,83810,73289,56768,93975,44504,13859,74416,88271,31681,95529,82442,35820,92409,98454,46041,71260,98205,67652,67870,15455,28791,84078,67265,59618,40239,18013,84652,99841,41737,34558,57760,74297,46894,40017,33791,28470,72537,83455,66942,31092,16205,46568,54927,44877,42200,70804,62866,39946,87035,63866,19853,60981,76331,70783,33250,49799,69366,50982,37840,69355,89271,93296,37463,29612,39125,23938,42101,72945,87439,97065,69919,69715,63677,32358,36949,42442,83028,63530,94614,30962,44061,29233,44871,95678,60192,91598,64037,13172,33934,42029,94510,94303,28563,68613,51193,88449,19439,45637,47463,33427,65826,56436,61976,28983,76352,24733,21345,20929,82291,73569,67432,50400,87324,57962,60996,47960,90397,19993,72635,31540,71261,97183,18269,32734,73206,96387,47909,90910,97601,35797,98889,21579,41947,83785,57580,67748,84487,53075,28305,34225,34123,93346,91142,62493,29004,63505,78944,82563,97131,70774,91630,70632,72173,91542,21355,38741,92622,98576,36143,31024,68029,79805,57260,17340,57080,39229,69833,74651,81289,97569,43953,67291,35641,76909,44465,90761,86262,63481,99068,56927,58806,63469,81174,70281,82594,46738,23708,26756,44147,14218,67543,56646,56148,80782,32454,30339,98774,52589,41964,52078,85984,50189,55764,63414,36133,93235,91279,69385,91104,28242,99719,68137,30896,44050,69121,54569,62376,65924,15203,47223,81573,38689,13578,34867,16501,23167,30210,90284,79051,71737,89790,68587,94463,93383,87331,17299,29309,29787,67890,71253,21447,12832,78800,39384,22485,45427,79135,44746,16632,88867,27980,23278,55281,71209,77265,87681,57780,59140,30719,51240,55816,53874,80547,60945,81011,12333,51721,77095,50100,43121,90380,80244,50405,83474,56399,31751,78621,80572,36361,61708,90338,88178,89964,85635,68943,19546,95225,49608,95574,46937,21458,60115,17031,76789,90199,23541,84164,67067,39709,25040,75000,13600,90148,32808,80658,51782,30126,14137,35181,78195,11411,32314,84482,64239,11101,27276,53393,64625,87945,26370,54741,45768,54661,96300,83967,27676,97397,10199,50949,85641,31705,69127,27033,63695,44903,59456,51596,49762,44474,81871,94000,22391,83311,45387,73951,39668,82317,47822,78952,34088,80197,63350,80543,94256,44014,10740,17568,22156,78392,40610,80615,80162,65280,34048,27365,32943,33098,21926,50361,87958,76750,81245,79990,95382,13218,62826,47185,91297,88868,75147,86715,24826,97345,51647,32152,78338,84105,53687,41436,67809,80863,61753,43295,80667,65241,17741,43121,88248,10653,99407,86301,80269,43904,35533,14363,69549,90317,66335,95215,87357,29343,70793,75975,30182,38921,69199,45843,55072,67678,65585,42742,62987,30871,38399,39898,42310,71973,81953,25892,10699,84550,98985,40833,22620,29463,86456,76189,45332,48960,93026,67084,90798,91186,26630,13228,46401,44350,15286,88077,34718,94648,56785,32646,20123,36172,93034,84319,36462,51858,76510,51553,93963,85180,72472,82619,71828,10775,10606,41301,83925,62111,35488,58608,89094,47982,83895,30991,51882,62639,71737,94604,26170,50639,79447,52921,55615,56998,79382,37171,80131,94778,82633,42097,73313,41460,21758,39429,69712,40918,57325,53327,88855,92289,69741,46033,12667,79797,24622,40513,80094,88243,51191,59304,43449,34654,57606,71613,89970,40028,40248,86289,62673,54280,25856,74724,45635,28830,68915,75124,98053,15154,71576,40139,53981,36654,88955,22348,62076,38309,95444,21965,58578,64480,41989,82100,47810,71379,41130,31839,41129,55183,66411,36142,49668,59426,93094,62451,88363,54486,43157,51093,90601,88805,98954,39885,31872,22471,16936,96783,46645,90374,27696,88282,72723,49617,85008,84047,87147,69019,71722,24588,95888,24720,24134,23027,75107,22632,58818,16376,62254,57522,77069,76575,20571,68409,63713,38381,84494,99034,20746,51847,65673,23359,20844,43635,20540,48597,47502,81805,36390,57606,44866,75179,73360,28132,36766,13990,16666,59567,83427,94565,13162,71454,96974,78582,88915,37389,73593,35113,77645,31753,48934,16597,99314,60916,28575,74658,47634,79671,22141,90164,46554,20728,77998,71483,68364,21240,29190,31811,84361,52994,15473,15425,90647,87869,35587,86522,67369,99578,42636,78121,46039,94800,68127,96825,99354,19692,92825,13417,52486,60601,60369,67002,68697,28443,36376,18935,54867,97143,84083,48521,78572,64675,97593,65136,19732,13845,14487,74463,41749,55590,15349,84596,79390,60138,94807,81853,14455,89483,90624,72793,61649,74344,26102,22345,67265,73795,65836,52995,22370,45473,75946,33378,27697,50663,63827,50872,73322,68380,92183,78222,94336,92624,54097,68580,79463,36270,97995,40136,78509,19492,60881,70334,27308,40918,94515,27366,72792,36201,36149,74280,10945,85876,33296,88483,74649,13629,75953,58415,23919,38591,85617,62411,86436,79434,58688,79130,93512,93310,54573,73614,52808,46203,17253,28742,55216,61170,39868,24195,36482,57247,40743,79849,34375,40772,56043,61074,24900,97550,26041,97347,74075,47238,19433,11566,42442,55283,65086,15383,42872,22408,38432,65519,66396,64532,47325,29741,86983,40247,18496,69528,35062,72869,17355,52025,95488,90179,21339,99473,87000,21004,59586,38702,39559,58549,24544,82983,15243,11417,27445,55472,49141,85963,15800,81366,36323,86317,83401,64804,98864,22650,26871,92624,51899,88085,45966,28749,74780,32885,26052,17015,52599,83120,81881,93282,98372,88110,88943,31537,95395,20819,45812,48837,50443,94982,86127,61487,57452,43970,94678,44557,26252,58368,63528,45928,59076,62038,96553,80574,72915,88505,97980,87276,75747,38120,50150,79635,32995,29571,36156,68724,62284,71681,93642,64984,28084,94478,72052,58144,75385,83173,90950,43451,91576,79143,58447,77176,91206,85034,42342,24052,79196,79115,48131,19338,82341,54786,84508,33740,47513,29520,39950,99940,69332,85787,56739,29076,28218,20430,85742,20158,85558,69894,62083,26587,75693,74230,33413,12801,79256,43406,93101,61686,57946,22166,23440,95731,35144,89959,74921,46790,91913,43179,58932,75507,22824,30021,17795,22846,76476,47839,68908,48293,36072,11984,73125,56127,62922,59530,40922,23644,85246,38838,11608,49736,74242,71861,44506,19376,86698,89578,86846,70227,28808,46300,11113,78774,54776,53297,60495,10397,71727,45264,13244,12747,81401,85703,91346,83471,24468,90665,80734,62064,76319,72394,50117,40789,88733,58699,74155,47827,44358,40506,56322,23632,33872,67315,47799,14946,99437,84293,37704,34316,68147,50617,85026,49338,24264,44950,18574,48431,17386,53355,84034,48695,27485,31581,33079,90286,16949,69861,74593,31035,64093,17720,15761,46099,53201,18553,49123,65038,98952,39625,61462,13799,83378,64906,96023,79714,48640,14580,69410,60971,29611,34909,82695,31392,82016,89816,34582,69302,67125,23747,92610,22458,57163,97254,25050,19211,82912,42059,14936,10793,22234,86228,17944,54362,62543,69927,95919,22929,30511,25728,68801,77951,18009,21924,39843,47535,73500,81991,99181,67446,21655,93070,53360,98439,46805,62292,99197,52488,11545,70322,56948,23166,91576,20856,33371,10173,22015,85564,57308,44924,11872,11076,86900,41877,25414,86645,96872,73148,73038,61924,31712,34394,51158,86695,82815,59439,23699,36073,84191,66040,75981,77504,15477,80739,15801,12951,46328,11733,84869,38148,57033,12756,18408,42555,80384,52773,48280,86742,29049,86519,31069,56192,17021,23454,73567,97886,90503,75221,31671,87727,99059,62795,71713,66214,14176,30180,24793,18886,11751,14147,96239,44086,81014,76502,73833,39808,92942,90328,41337,45908,50129,31974,85685,40721,14460,41993,92062,12901,73655,90829,49978,86391,12814,24185,17924,60428,26108,10894,27700,63451,77383,36956,89338,85240,30129,76940,54491,11161,66224,51533,28272,60190,89559,31019,62043,83070,25085,55787,28068,28791,24100,94693,16827,86341,65935,73875,22994,48590,53759,75547,41014,75503,53216,67358,40249,87784,73515,60722,90858,80647,21066,67409,88413,66063,88739,13138,25380,81129,40638,87656,65660,29870,35363,55434,81421,53971,42540,54216,50325,20556,93760,93078,80281,66808,48394,77775,67315,73362,54897,51771,90820,91617,49232,11108,78855,26766,56224,98160,84139,92401,18946,97948,55962,63040,46904,35556,87525,54885,22183,43490,54500,61449,28012,69668,98733,82084,83893,52086,37471,45411,72169,91577,66470,40696,49726,24789,93737,14303,35315,45524,56364,77402,45135,91641,98345,42819,65264,11245,60132,54485,78153,31793,73023,27732,81457,67600,11880,69629,17306,69490,74264,57333,62897,85266,97361,30087,47214,62868,35796,82686,47711,34342,65015,92566,86648,88851,40403,58153,20925,33007,93989,44323,32728,43382,53784,85257,78160,75294,64825,15990,16614,38014,21820,13181,65086,27505,54492,27746,45926,39871,54601,76820,15582,85272,31463,78650,95908,10615,66041,66293,33990,97740,56920,32887,68053,64674,94786,82050,20737,46882,89094,20334,89929,17964,49938,80674,51424,91472,28333,19996,84055,72230,76491,36063,62721,94590,45780,95219,45486,70446,40791,33868,97408,14813,92450,83613,28920,37917,26747,99035,25344,82683,11121,67437,53821,71342,26254,59563,53798,37724,50796,47890,25883,67594,83229,38361,39936,49164,62452,28216,55290,28938,84796,82439,65244,37975,30524,45615,61743,73978,12522,85094,78202,17448,58930,51258,96424,47286,53806,83310,33351,83286,69066,47562,80489,66286,97119,41905,26133,75506,46035,30221,24526,15028,23136,84143,70072,20091,20620,45033,43794,88117,81313,27923,62605,97373,37477,88130,57637,28482,74025,76489,77275,17815,45358,35088,93511,41101,15910,36482,45233,40175,61572,15730,23605,30449,65228,17860,50461,26561,24422,57047,31398,95868,93677,72729,23334,98680,92530,71900,24742,48690,22202,58032,76453,91026,29979,52850,61705,50464,58115,59820,39745,75435,93444,91843,15589,58171,51007,59403,17799,75498,40443,58279,22776,81291,28296,49939,98937,81388,36552,49903,58790,24069,10696,51165,54532,59424,90881,16870,27142,25311,71188,14385,58531,31954,54028,69464,12885,78672,39220,32054,19316,15697,33780,86686,59586,23221,17297,48879,93119,59139,64946,64963,18248,55914,20547,68687,12350,90059,12518,13468,76060,72764,40073,13440,10611,73714,91513,58693,18809,59420,50466,32674,91446,68073,64434,16988,11283,19647,92475,23625,53826,23311,53374,31128,35667,81996,89319,40014,26719,45256,65963,57277,87823,58370,76045,13960,55537,76834,96426,73625,85540,96910,72526,21280,46368,38364,23663,25532,90354,73399,65259,14720,70950,66651,16479,85004,68868,65995,92758,36137,29319,10316,26039,75776,39832,86742,55638,50005,20109,26701,87553,57378,21626,90152,60647,61860,48955,37348,95905,15473,22190,36275,80069,32219,97114,87912,45378,35015,11225,73734,82314,99244,47480,62878,83159,72953,21336,24300,72329,52636,89707,23135,56224,73312,83680,46685,82504,24073,54068,31959,84563,56818,85597,29093,90931,38882,19148,60838,51209,31972,45920,68892,84380,26903,59992,25321,95503,64542,71564,69212,47873,19900,10084,61525,73769,81344,77064,82843,56626,12866,75606,59732,18837,89571,76877,54147,37778,68475,90004,12851,97791,28220,46204,65451,62732,54708,52092,90078,84304,91915,29640,63300,17728,19943,50806,72331,44727,27668,92765,56537,11098,80888,53169,36840,81589,48934,66823,92383,69303,97297,39511,88369,78332,85379,35936,43798,74928,30871,63349,98941,10470,44367,77545,65140,34406,63467,43202,97572,71814,42002,29854,95237,53703,80345,78778,49657,10325,14642,22043,46527,69530,34001,69583,60007,20938,79235,20607,18951,60809,89373,24308,93185,29806,55134,89517,60980,13728,56362,63274,29779,12952,85234,21001,83568,34329,72108,42790,28739,69417,77631,42825,52815,24964,24055,55992,71467,40824,78479,62197,39711,85758,82585,61989,63020,79802,11621,66089,71927,70139,64108,50541,40809,63909,38738,71755,18302,30410,71934,35576,65876,38985,20827,88998,57832,81636,97904,69370,12565,44186,78999,49791,27287,43122,37825,57018,12145,48021,38197,83782,22153,83345,96707,47169,20509,34154,77645,46572,41433,99446,59121,31558,43761,16094,89429,84875,21084,66124,34259,60929,15812,32669,71381,15512,75946,32730,27718,39024,55532,22641,67635,17618,25404,97773,87189,78295,79294,81467,10074,85818,18887,94691,44736,74064,45622,46279,71189,56088,31781,74858,52297,64377,72217,31857,45298,84358,30238,69041,14782,73858,45795,44689,62170,59238,51278,50268,86224,31259,49656,63509,32247,21240,67329,63082,84346,12923,42228,82020,80666,86222,27744,94637,88092,52623,48290,62998,74500,52092,66295,97724,84221,96015,80529,56816,33010,50577,60991,15541,56442,81571,49409,53915,97043,86230,81015,10278,55562,25621,34581,42865,42159,98620,52474,60738,50007,17608,53249,80195,24130,53302,63157,59091,39481,11964,41562,26824,17626,48219,50388,43434,15851,90450,71743,82715,60836,43611,55593,36595,82134,40981,17640,23625,10851,37465,49681,90815,29847,57147,94636,74111,47541,57714,77909,33724,87197,31356,16089,13115,27797,61828,84743,94398,53832,12780,40850,78800,20249,34093,41192,16859,48390,43034,76382,33588,83795,13267,38764,49285,53722,53055,33210,31970,27744,51084,61381,99413,82786,92687,21752,33407,45291,21734,46276,29500,48286,23158,85021,90344,96409,18503,70695,75446,18288,37651,43258,12904,77201,64060,18175,34952,44463,65451,61376,23248,99989,77134,43079,77216,77890,61299,94650,12425,28067,75496,19637,85165,96948,20706,54114,59609,54460,24087,49194,63722,52013,99786,26890,99499,75541,53571,25911,39180,70627,10509,64325,39709,97063,10776,61150,41105,62663,22289,57020,76470,66982,92413,52210,39537,26750,65547,69573,14710,22165,77851,61523,61104,95194,70626,66417,38601,61486,90425,67905,19848,59352,36819,14087,99271,49219,54869,10712,91228,77319,15327,78319,12776,83983,90633,97545,83250,30242,17432,11680,36638,21021,65249,13152,75593,50542,90938,21645,70610,97288,15046,93335,57395,77274,68187,15768,55591,98571,25344,36214,60259,26191,55532,17503,44843,77914,28631,45377,16866,52811,64739,82480,50723,72930,21404,93993,27764,37235,89508,99274,33067,39100,13181,43749,89600,21651,54121,99550,91187,47168,72839,15834,79273,83575,22089,65904,15154,62197,56786,52469,78478,66714,38088,31056,66273,76055,38635,35362,51872,76283,21253,60416,33585,93571,73878,96031,91128,17244,53943,10788,95987,57761,45206,93524,56853,40904,24576,48143,85715,11168,14958,63470,60919,84376,59559,41562,97320,45590,86930,72189,94844,29967,38409,31929,65603,70315,99159,54130,85531,73099,64223,67849,14827,99446,20692,73684,22467,15174,74557,78327,24592,65159,25728,10257,34851,17060,87913,69305,51419,97930,53127,42556,37521,72860,46836,63109,39891,62922,46714,24360,30297,76924,75446,80171,67254,96280,64670,88760,44447,75278,34333,28681,43829,72458,90976,19952,73517,36956,57499,64843,58592,65902,93637,51414,50014,88124,82298,76663,19080,57417,13971,61362,77467,11815,65742,76721,28906,25852,89269,46852,44340,10987,53342,59771,46428,23537,92436,49605,18735,21296,29207,48246,45035,89997,89070,19951,14042,16757,22555,18624,96452,85799,23470,81595,90013,85492,58025,87635,30689,73784,95325,93601,48588,93493,28252,15034,60411,90732,58644,55337,99943,86864,70169,74412,52073,80190,61321,78819,45266,89090,27737,64514,10496,38955,15604,30569,57761,83573,64954,52665,97066,71315,32536,39951,95139,37079,59005,13587,21729,31094,28947,34143,35873,72893,12120,55750,53570,74260,61060,27487,84741,23155,22614,17593,45463,15969,16335,61144,67313,84739,66510,28951,98588,31366,79097,42210,32477,82387,77128,47724,28510,17129,68539,47747,58499,85273,54981,70490,88022,53915,71229,93682,30437,12501,64156,54661,87787,63607,88346,50097,62316,65803,19026,32769,54649,70515,20915,68549,96224,23977,27668,67887,89679,39874,67841,95109,99681,79512,12129,83179,38956,66768,77408,73536,78883,88422,30238,27553,57443,54505,47554,13077,90488,72696,45540,62729,20523,18633,22086,37911,78800,38398,52779,65988,57819,91862,16045,98252,91064,48404,62934,89794,43395,44250,73318,95364,92051,18114,23149,31171,57755,89790,47861,43914,61245,96438,80475,19120,86410,35935,98076,66399,50853,53329,25617,45466,47649,19317,26544,77902,35414,58697,52302,90676,26152,88669,18768,78236,55247,11197,92634,74438,26733,41992,93293,34557,57038,14342,97482,70698,70162,56208,27027,49518,55754,55513,77171,23452,66072,78329,18070,73346,68934,97204,71311,87457,18569,21275,41772,28844,62169,92154,89008,47521,82515,55883,37659,23862,22290,81253,31170,17841,80058,21660,12291,10713,59776,98677,66976,62152,94557,64642,33897,79286,37475,20131,64960,81787,10711,84457,34430,54890,84937,95498,54113,24226,22070,67097,62329,25687,21469,58966,59083,77702,85106,90965,79788,69411,28806,43827,64733,12238,41999,89581,18345,14999,37455,39846,50383,48288,17668,41278,70467,21074,16567,96396,20036,55653,60837,47202,72081,56007,32266,86179,34897,66012,80421,95292,33871,44510,35194,19357,92355,88455,58789,39234,24691,58313,33366,79421,30204,47229,36586,47986,15575,61377,94932,69921,67179,58929,44203,95795,21661,52566,47593,58133,90922,70427,99569,35299,28705,42677,62890,51173,96021,24570,21082,16085,52117,74889,68764,66355,96156,44128,88527,87625,41668,46140,35259,90703,85854,75839,37334,99708,38657,89127,79385,80824,68105,80632,38527,65268,51448,41519,68623,70092,34405,82794,87270,13191,51446,23121,65515,50162,99873,44183,56273,17368,47504,15890,68290,26478,51389,68139,42165,85744,51027,78408,39356,43332,29853,41844,11110,53222,93781,61550,10492,56556,62995,58350,62695,62391,93721,17882,27564,88358,85807,87057,29387,51917,40916,85933,52843,62177,97900,78585,54596,17624,51201,75120,32852,54272,26568,19532,90735,31529,68090,97032,27950,86822,91738,53258,87955,29386,96901,98809,72721,59331,72594,84681,10180,43309,46362,84618,30330,46811,99881,52471,63842,40808,55918,53424,84554,66933,55589,94817,11143,50025,95947,44922,66558,40709,18214,62383,92031,87179,53423,87886,50924,56551,18860,98327,22380,24873,72942,13010,51311,49327,25719,99056,23919,70626,69958,11957,61800,12764,30585,20142,55281,18646,84518,75848,45634,14324,71371,28307,80530,43301,23319,53754,67551,37858,57774,51286,64966,97604,48536,70079,43200,34071,43251,71119,63565,37905,43011,84201,48435,15917,47356,20340,99081,75103,60502,16864,38365,26337,48543,42371,56260,76954,20795,12867,97722,73710,88888,84117,78731,47029,29392,96560,90098,25441,90125,19008,29257,52037,23745,25183,89896,35574,88100,92913,30906,56969,80722,28527,27491,16380,23673,52540,45050,14898,58295,99942,20562,97603,61739,70826,39865,48467,57568,74706,80180,81351,63789,23060,43834,69782,64030,79086,28793,51414,22416,90413,51704,16482,16777,11405,83799,94002,90393,77608,30883,93211,96010,32548,99368,58423,47220,74973,85761,27934,25985,89813,99888,43484,53310,53864,37616,30296,96394,15316,12300,28911,28210,29793,64757,45854,23685,59599,18276,11271,84324,41441,48435,38800,98167,62858,81707,19555,33741,65929,80200,86483,37311,50954,31741,77278,43402,74216,30368,22070,56211,52952,13686,70714,39687,81863,95027,43576,36403,94984,61238,34087,52264,54369,12452,28322,76879,19651,45290,84381,88486,98083,33288,90438,80820,76107,97607,88202,98123,27132,13043,31126,39028,79823,52510,24422,19717,41625,43728,30467,65728,17444,66956,73644,61569,65608,11577,51262,82851,88186,77465,62486,45028,41160,12902,86497,79453,50130,34200,52097,27424,36546,52581,15927,34864,78329,89904,31915,65544,66215,61293,73023,22080,63584,86354,74376,40248,39554,42570,98043,92605,42238,94745,47614,45959,49828,15744,22661,93081,13970,99925,13313,93219,24782,28534,62201,84119,60960,89971,58273,81678,46095,62607,35696,36753,34505,35929,88767,72213,65580,42522,72906,70676,60344,25402,95235,68971,10071,38462,71700,10130,24705,43840,91246,80545,42929,73720,87325,52980,76191,15900,17496,32982,94466,77203,91937,19932,32330,12274,90079,73468,84815,61496,19897,23857,91012,49433,73310,46132,74703,86030,60197,67627,51441,78173,50412,21059,64812,25494,69407,18184,97541,66888,21917,22415,92421,53974,93938,68738,58853,94457,97040,36492,91276,38109,39031,17835,66218,67051,22425,89343,26084,54641,33106,52281,21516,37973,91018,36299,89176,42859,63562,34057,96309,23129,45748,91353,68942,19591,70681,35350,98436,61742,20253,50075,39138,24170,84004,92947,26359,18950,19926,57049,72106,78774,97069,81849,90823,55488,95560,17332,94892,73387,63708,95130,13575,86689,85001,93948,80277,49361,49757,25323,88062,42686,61095,15301,99500,30699,16657,51069,82766,80076,72105,53500,78211,74176,71223,75423,26062,12312,69792,51656,96062,43868,29736,47111,77028,77866,66147,29032,56260,44348,80437,61915,61521,83253,87481,28827,14248,38859,10943,57874,27014,71438,12769,74317,26955,98700,81136,11901,72951,73640,88106,92652,80717,32926,96802,97290,89902,30613,45833,57606,75249,38192,59987,92134,17497,37443,19656,58563,24069,24852,16977,99062,61037,57284,62714,39512,69866,47088,79500,43389,92579,79733,61979,32224,22117,73895,97552,47817,69037,45472,78392,93923,29503,98557,12831,91570,47562,79509,76090,66143,72218,52330,69899,89833,37659,50049,40875,97569,21981,10510,76399,29113,39051,57604,16895,32737,68415,85261,53137,60802,50182,79769,33255,84623,65585,83009,10988,26605,35273,67943,75288,52788,89230,17958,79722,37329,90237,80302,99875,41833,81221,30731,62757,28184,90801,24044,76556,50258,35834,94414,32936,11965,55388,29717,80527,66586,96008,43727,40347,74812,21210,90662,72634,35107,56981,84524,88713,72094,11763,87723,17773,75039,69123,57065,45124,10767,18502,82968,62347,96306,86551,42472,18648,93888,49292,90910,72444,33659,59319,56545,96961,44734,98309,68130,47012,89414,21621,26495,33676,23050,99352,74633,71874,15996,64089,25782,72764,37732,93075,31428,88692,65234,49124,37376,53096,76973,45091,65733,72845,46389,54149,48134,87153,34747,44089,80424,25349,80998,53435,24921,95276,51667,29792,44284,42321,92436,56007,48618,55106,75323,35378,84961,68400,70840,38548,16816,75508,68477,62699,35166,36641,68026,33997,66974,13648,83654,89180,69146,99283,59313,52986,99838,67044,17359,89284,82371,63096,30468,91692,41511,25398,46795,18544,62147,38724,48596,16386,45743,65322,66335,33295,64673,93122,89639,29788,49416,79729,52194,76699,36236,53843,52039,22306,45623,14383,29476,32699,81643,27547,48631,31107,79647,53252,35836,50773,94029,50545,70755,87721,63169,55356,35518,98823,80695,26211,26797,51627,38339,77187,97113,28174,98865,66714,45449,70057,22290,99102,89136,64090,39755,42985,40026,50637,36152,54062,55302,79286,19323,99153,35568,75082,34543,55731,63948,35559,12596,98778,86171,94458,85315,94765,36500,53440,32047,18166,10376,27398,28580,10070,89876,39815,95475,83543,84751,52804,65061,95612,34800,88600,94440,21214,14046,87894,86181,55471,36182,75663,35216,82169,32341,82187,15724,24246,33842,99020,39721,95439,57433,94869,72163,58423,66095,77976,83260,73637,89417,32072,42531,92883,78428,81673,57169,10438,65762,21125,91516,85416,66749,88717,63769,67457,89913,40912,82578,28559,89647,74686,49547,48634,96164,61443,83583,28550,51490,40604,84183,16614,25526,15962,11887,82362,49820,63063,21420,62502,19670,90255,43919,41897,27693,44258,87897,90835,46150,71843,80615,86003,75800,90220,94591,85573,99652,15494,95191,32868,83243,96339,36877,75676,81942,49234,52628,47709,22507,48518,39689,18969,41610,23870,88735,64752,67775,42079,21223,72101,43442,89493,51094,34157,51534,38627,24914,40038,37412,59923,17831,46650,77325,82452,40556,98967,42828,57924,57612,38750,50658,65547,98355,49364,13218,87608,15986,44867,37147,53790,25691,19656,51499,23564,23476,47472,67484,67316,16787,13181,41626,62478,85108,67448,72733,48239,64929,91819,70982,42031,16571,76505,73151,20160,55236,60601,51905,62723,55564,31185,34724,62270,80170,76900,88756,62132,46519,82809,21419,80972,55130,71974,17552,92508,27995,76504,32653,84625,32654,24799,19062,66493,21051,49402,47628,80970,59002,14489,26329,94716,22668,51589,90230,75613,67313,41305,89274,27876,12819,59656,28160,27621,77556,28706,29584,63018,91331,31016,26372,30999,85511,77990,15382,12126,67101,52669,84181,28209,18262,36594,17787,66778,93897,77827,54657,67714,82525,54106,38802,17363,38699,12147,35723,25538,15727,80498,99526,60468,17615,63417,81099,14311,47116,23886,57011,84694,63765,29157,96116,86876,33461,64921,87480,17338,51783,20550,41310,38164,21119,97989,26236,54175,40573,15825,26309,32557,81292,39041,99591,21233,76520,46673,64973,52110,32726,53260,53229,75100,47185,82079,79107,34426,62747,87301,60718,32020,29789,86612,69115,63224,99729,52876,22401,34241,61285,85389,67715,17733,25508,87937,23895,17906,23732,39536,77233,46482,64065,99343,32910,19825,93709,26558,55708,44094,29957,82040,21495,38347,92004,51844,49299,30592,82811,93997,33659,10317,57971,51774,99513,27899,19096,37082,53028,58462,53132,73531,65349,16232,93029,30467,49749,94405,24808,29344,46422,54897,23208,33602,19348,96430,98859,49389,50099,26193,89594,91197,28033,78978,33984,65816,10741,54349,61916,69660,83371,40586,30107,52347,35773,64122,87910,32422,12861,76220,25231,48543,26515,50974,33442,91966,55232,85022,61364,26835,47440,26437,19298,72299,59824,17084,86201,78627,11308,28017,45104,37182,66945,77047,41897,98829,74605,10306,32072,18781,80463,91711,38760,24888,49622,77134,34270,26848,29766,13919,79120,36725,82378,63352,38919,28721,64925,29899,18398,13344,40988,62236,54031,19863,78233,20270,89144,54457,81941,92352,36014,11076,17962,17046,92270,75557,82701,75970,54740,35127,58132,82173,69467,82914,78406,91594,60742,96339,94099,75651,57716,77725,67224,62327,63216,54392,20782,36128,51880,72239,52118,43766,76000,16141,64396,42834,47560,49987,33777,56750,39803,93334,52786,55765,59324,89414,99514,86412,33499,73416,80044,60308,46341,42498,93246,92936,88129,28199,94005,57189,63475,34908,71881,39462,17036,79598,50360,93552,69686,15906,47511,61685,77546,36854,41368,40220,41013,16691,77362,96477,91285,73591,59669,73814,35550,49884,73099,47821,88959,17022,64816,83329,16301,20432,30058,80180,54930,10700,70614,73417,20998,20509,46700,38964,26395,77920,38977,87769,82783,37111,18509,22955,50901,52432,62769,78432,37449,55502,24389,54311,63237,54958,65398,81773,65731,20110,50107,83480,67018,47672,31613,56050,42880,74931,37665,46371,25085,66929,69384,66107,24239,45462,45980,23841,11236,22215,75212,93090,38260,85460,43109,85494,19079,87081,87594,59905,38400,13175,94776,26291,47195,73544,60738,85906,39804,28276,29782,95803,10651,68275,92813,75658,81993,58534,32405,30826,81817,54070,28602,93477,12461,30993,32550,60352,39836,78898,34286,97411,45218,85625,95594,30995,13039,20864,24681,99265,64903,14053,19266,98052,14365,86693,29271,48421,93294,98453,84511,62417,46851,15954,48689,56903,91710,35239,71733,16548,77521,36824,34652,13653,75103,33560,78650,86698,76587,85288,28990,35607,36200,21335,50814,53980,70512,18642,20856,14263,33048,25372,38335,72438,50375,29858,66052,53332,94631,23952,41676,34391,87722,26637,28164,84060,34125,27359,39966,32509,78463,62593,26091,49153,49617,92354,63262,46384,99874,40837,49164,58744,32292,30961,63889,43706,37091,77605,11829,67850,98256,10486,10947,73047,54673,34857,29487,67356,23008,41204,90762,15986,41901,71649,96913,92672,79939,46738,94711,19734,21490,56811,95304,84198,50143,14500,88443,79144,10218,32503,95638,57447,70946,80397,88893,14785,91850,71480,75941,75053,41454,99962,26119,20379,31543,61068,61980,10929,59292,99942,16044,69514,62285,15999,16157,28849,89941,17016,61761,71746,48807,81689,71133,25348,84309,79520,98583,92218,75251,14039,54875,41588,43603,60764,91963,56356,69090,80531,25292,60194,80205,64760,56830,22340,33332,85428,51328,18053,69199,14579,49223,81238,90658,20066,42865,64967,19121,77930,66260,30917,61170,52623,90954,31577,15447,19146,29333,54401,63628,44265,55037,88868,68388,31784,45326,84068,36977,52750,18850,84154,94891,53275,94366,83780,91339,99644,57381,38787,74872,73588,40622,81533,77442,77311,28099,12117,31974,64795,21609,91483,56593,76412,72552,88677,66284,70650,11412,38468,35898,17904,26420,97774,54668,67155,60360,57986,30450,42354,33094,23424,15798,16782,41716,50290,22744,86372,33784,26604,90002,77021,86782,99086,34206,15243,35774,56918,87761,38942,10929,28896,69167,45346,87989,46823,21034,72619,22411,25244,47587,27628,20832,88217,20368,77956,59366,56958,15824,26372,33797,10517,70282,24163,64266,27052,68090,98575,66658,58525,27312,89239,13198,61726,68345,37470,68259,64660,66553,75201,25096,44714,67731,67169,30058,85861,78324,29242,62641,69579,14511,67921,77369,57959,24221,26993,74054,74521,36261,25044,88979,38113,25309,66337,40243,77787,53129,36713,21702,94807,66800,42165,53679,92810,59330,54230,59309,85650,64763,72011,44295,88541,56766,88305,60374,10082,12425,58783,74471,86428,29517,12355,34469,12660,61345,75040,26088,51192,73436,56032,71624,70459,60989,66186,19771,32261,73390,53648,18016,59694,65174,61298,40337,45139,89447,98327,96135,81715,18247,89993,93629,66734,57995,58843,24115,11062,95829,38973,34925,37722,32157,25463,34671,87840,15836,30924,87061,26641,28718,51368,17217,54814,43598,49931,18292,61516,41457,91296,47167,66533,25183,80777,24291,40780,28861,15749,51528,17420,48999,12180,87739,98220,99493,92622,82806,18719,14528,62986,44535,88187,29859,14427,26316,70683,63328,99373,58740,97915,85761,54315,82364,36288,43384,22389,86730,31932,51434,88911,70514,86224,71627,62995,91737,58081,46132,79136,41295,50536,89804,93409,74650,34263,80850,11871,65713,32588,84983,83247,96758,61483,28575,37821,66550,14645,28804,50637,58690,49549,50086,55123,62801,81579,43230,97638,41889,99547,73857,52177,31230,95243,12895,52278,11100,57496,57138,74058,68479,92469,98328,91666,97143,16338,69940,76320,23557,26279,76796,10441,48096,31621,20139,45335,55568,86090,16003,69903,22368,96267,58375,20189,18559,83780,60743,34354,10141,38971,53584,90550,99594,21495,25117,15518,99809,61600,54741,46507,95040,49425,39589,86821,65524,69047,47132,67383,67044,93433,19855,27560,21635,49026,53568,80905,70648,76816,60226,50539,14839,76433,74331,22293,44092,75939,65824,65122,10603,81313,28612,25082,87082,55730,64070,24799,52386,17618,55534,64760,34220,80699,61757,85539,43491,91268,39967,31591,45423,22552,80263,35961,12483,29699,24559,30877,26563,87677,53625,31096,60199,65751,86512,32934,69800,50595,91259,90095,53214,83088,61179,72113,74190,54089,52025,48069,27542,93254,85297,13581,60584,65090,77095,10998,26590,34330,35416,71041,41878,23787,67498,99538,18924,21254,57951,46085,10201,94928,63638,73904,89368,78358,96231,51056,14212,98384,58744,86907,37344,81501,27528,52133,58502,16984,34209,22367,96903,48652,83998,24144,76018,21918,63212,70230,61049,77098,92878,88418,36803,24278,21240,59210,85246,24046,93519,77250,94689,41356,41725,28588,49369,98567,29034,91629,92623,70949,48460,30523,65050,97699,96514,59499,27612,68498,25595,29572,95642,33685,28268,86837,14060,91220,81273,19454,64267,14539,86249,78048,39814,48584,91103,99834,88873,95450,43363,33229,91924,57090,69943,70765,64931,55358,61072,20420,32170,40271,72199,17251,42058,33369,60282,85616,76262,40535,57231,47183,39862,79981,75563,23838,36158,92944,47386,12517,95152,61873,43221,30787,10822,10928,43707,38864,66180,83349,63822,24142,51453,83655,88164,44689,57694,80411,41859,40738,33104,69973,26575,95095,92723,61413,94040,86787,24223,57525,56701,95628,42049,94682,44747,91643,21180,29997,91776,33477,33061,55999,73101,45652,57247,99300,92981,78402,97944,56170,35448,78691,71415,13680,60187,51889,48497,30070,65702,66148,19790,22046,59048,91558,37995,45179,33124,90656,48283,44259,12763,84646,98707,27566,44484,49349,36617,19271,57085,88618,36130,55103,43800,68692,21647,71334,89591,50503,78448,55345,43350,33401,78460,48626,65687,89227,74582,25250,19316,80553,30433,42268,46530,93749,54882,30461,77770,74742,10824,79962,80832,97715,98300,54146,27772,44366,58473,54339,16091,14063,64109,36544,71122,43208,14694,42544,78208,29602,52968,94649,49934,39960,10807,24538,14083,65282,53372,79913,45220,22331,63598,64756,20803,27126,69163,55723,78852,64542,79735,70993,65757,93143,73184,59840,62238,74848,44406,57848,59622,42456,20410,93262,17484,38848,96086,38045,44006,13139,16440,71472,67808,22068,35231,86492,45903,63629,63638,53516,26204,54724,23827,27367,34669,84540,61713,39084,75293,89746,89709,10429,71146,52226,88694,96656,25140,53585,78396,97653,43554,57597,39402,26444,43066,72994,24798,11624,63734,22135,99796,77343,73124,51946,92994,90207,47440,10511,82327,24336,62399,89451,90650,22929,93971,59040,73129,76923,59610,70647,29609,33908,89934,49858,34757,53630,39113,22733,92827,77509,15913,27207,87841,90937,46350,82035,23712,39763,36785,70305,40952,14783,71278,11534,19023,89794,85706,63655,63328,82007,81186,16029,93922,61182,43281,40913,19002,88162,10850,33082,31275,70534,98923,66873,88152,61417,26638,90150,34255,40493,32250,37678,68828,72852,31494,85125,30582,43926,12310,78263,10671,23216,68245,84222,40206,66949,49817,74653,76151,83576,50068,80076,86652,50755,97079,86463,50604,83557,36083,34349,75989,39102,60235,39070,23235,34236,49132,23378,36760,39419,97076,85180,12089,55769,40463,35084,58791,98853,75116,14551,56018,89484,60021,40469,79486,22341,58083,87913,74165,55432,66949,13180,44217,14020,14793,33697,13810,21936,28087,15882,19589,65231,90214,66370,41592,20723,71895,24634,67271,60207,38257,24487,89390,73220,26161,80879,68734,86104,12390,68949,30299,52601,90913,79137,94306,38722,53138,14132,78839,19264,16378,23635,89426,99495,63797,95742,92657,53500,76372,63377,51821,56573,93303,79843,19442,31814,42982,71268,59213,13777,75777,41567,42564,53405,19453,45568,11260,75731,68762,63568,70541,97233,10392,98675,75463,95288,68223,85772,33884,86401,38859,59679,53660,70059,33215,58546,28061,21161,84472,51911,63059,24414,95407,40266,48171,77371,51409,50137,23511,59248,18408,42585,10377,11901,28773,13749,26169,57773,65778,17174,21696,37776,42569,68427,78962,27116,61465,69064,81009,53996,36322,70507,93880,86345,74596,72853,33769,89703,80288,93493,50577,29974,76459,40466,61704,93779,22626,73520,20085,38629,84582,58573,16939,97195,25594,94362,78710,74907,29696,30324,71907,30235,83085,18896,35037,66322,54745,62610,73453,27366,95658,82039,83028,56482,57234,93492,93155,42316,70577,73484,31725,43728,46955,12534,65161,93500,83335,37460,66104,13686,22469,19951,40476,51647,63247,15956,58312,65595,63665,81508,28205,14636,15066,85881,96214,27359,10251,38959,73536,34911,99553,84789,88390,81342,38081,48927,86777,64188,56841,34731,77684,47297,26358,28614,94501,34118,41732,34690,99079,44872,27577,61752,67133,85731,52373,71670,32258,49352,45379,17158,43893,24623,82110,16400,81258,55798,78129,28167,37934,85664,25222,38759,33207,20660,39650,57336,44605,99855,46940,64327,28425,22858,88321,25158,48680,93041,62517,22867,44705,24689,83340,78152,24634,58450,94263,19317,21435,78948,21194,80100,99675,64456,53835,47617,45253,12230,22322,78457,63535,53773,32020,44939,80101,80578,48417,15322,99142,91048,87599,82126,11627,62462,11337,54783,72589,62531,15182,19847,35503,81211,97644,38306,45622,69548,77316,26995,56612,61473,79314,72485,62314,55685,90734,40382,39618,90668,95874,60607,12215,68556,63905,54147,31559,58261,22528,40373,22052,10604,94440,68486,71051,10374,74926,95999,14877,17197,81141,57545,59092,35030,84681,98780,46165,91128,79336,62429,23199,87196,81199,25848,11720,70391,43779,53723,16071,81088,91084,10694,27690,46311,48201,96476,91933,21023,48743,45128,27981,70794,93263,55799,18465,17323,22465,43412,34244,19409,55333,10389,99283,62066,31515,27586,88559,47764,81708,93262,61427,95149,12551,24420,61903,29188,49929,35457,83602,90660,79655,65668,89438,96691,86022,92415,64877,76932,65130,10844,42324,19035,87231,95593,58076,19407,27025,75732,65098,34171,14984,22133,21292,88229,45592,97099,81803,62916,35707,91831,19949,58189,20763,78462,96691,87914,12128,82740,15346,30712,96133,18932,28126,18080,21395,14260,97854,65168,88455,86702,60984,99048,60735,77418,84153,96625,43487,91865,57909,63438,99453,90698,58846,51994,60155,97063,55989,52406,87216,39871,63873,89183,44208,52793,87430,65588,91409,40930,35232,91059,16349,12160,66058,14259,59101,38517,64848,36134,96518,83551,46397,54917,74902,98236,82937,57823,53900,58262,11075,95193,14491,28705,38108,91460,16313,96403,17823,24574,69020,71033,32489,79126,19213,58078,30952,66467,48078,39303,60516,24205,89020,42593,63656,30647,93042,95330,75385,97356,99021,20436,10017,41139,80157,60345,90588,74983,19355,35840,19180,52760,56479,89584,90159,27728,64297,98554,24634,54978,14202,34334,96982,96622,35274,53541,21756,87242,42896,67115,97970,45958,33879,33403,21627,80570,78000,62211,78277,94838,91243,40963,86444,59317,26137,20791,69433,24152,90043,78337,93454,66528,23625,24937,43761,48578,36630,56487,99760,91571,97494,69948,89179,42942,57087,59256,18509,40597,25465,47064,50940,44122,13954,14137,53553,27595,23680,62232,67111,81883,56843,25854,28174,37585,13450,29929,64484,36471,14471,36190,36704,68932,56052,11856,52389,26268,90888,34306,10087,59884,27756,59768,69201,50790,66492,55881,33345,72299,55276,59298,28206,64476,94323,47843,98822,71897,59794,74622,72671,25604,25223,43795,29644,79493,58769,33279,83663,27408,59771,60130,79867,53436,69069,75852,18841,97822,18615,54161,80806,34392,89557,22905,16688,22542,85700,42148,14079,70894,88283,66950,51033,35879,81506,12728,68210,83849,27248,41514,40743,64513,16028,18224,94104,19889,21215,36367,42562,33525,14584,40578,58363,88207,42125,51130,89397,69660,54228,97349,42667,68510,14950,98475,18152,83335,90364,60606,43476,83083,29533,58020,31211,99611,38621,39746,94817,90490,15674,62142,60422,16673,65996,14301,74025,58499,96985,84248,89766,16205,37008,22821,22000,72366,26545,38661,98240,55308,38273,38924,44716,23423,58835,25884,83450,77279,98625,27230,56870,63955,47996,61057,30058,60711,84840,52779,73364,46697,84401,39539,78665,81945,86751,21571,51423,70519,80966,42265,39559,75312,46848,10609,18032,77409,25271,89217,27293,37867,77613,84113,78330,31813,56705,50066,10670,79492,17682,57332,46845,64475,80857,67165,26996,66530,76441,78893,38453,72590,63514,12132,89254,75057,91489,38790,62723,17731,84213,72055,98124,65782,50251,73368,77044,71985,45874,97127,83640,98320,64552,89199,47159,47750,93633,89263,83113,53983,96454,58214,50526,68567,84230,82221,62150,88191,71621,50282,92574,47814,57648,55864,80509,80474,63352,87975,38816,87720,19508,94227,51141,22210,90826,53062,92984,86509,70291,72598,74101,54379,25834,51933,81655,95989,78710,69913,25568,42258,49446,67019,39357,91142,73775,72137,26317,71241,43687,94120,13565,79273,93021,39411,29613,44169,22799,93140,31990,61434,50491,83273,96578,15480,86650,59220,30065,17796,18493,79549,57162,38532,91575,36166,52412,29806,40833,89978,84597,68546,85926,67755,50227,11202,84418,50613,47533,99836,93209,91382,56454,67635,95955,53003,46485,60477,63032,38035,54168,46348,72918,31498,91815,27907,17611,14149,24013,88760,85209,85066,90429,69286,29993,96933,39413,66974,30767,52195,17994,31195,13166,25578,24904,58457,51967,21915,75739,20564,50832,58853,76468,42235,95852,56688,48615,24799,94758,44962,39441,59768,41183,99141,52071,54753,85587,65704,59389,48817,68175,16720,95617,31984,18347,56195,96884,42885,79541,87464,25606,83912,29640,55191,83761,57760,49959,49458,19539,79514,96741,18252,21372,83188,50946,40025,48275,99972,82402,49418,46897,30322,45611,98568,15903,50195,95186,97702,76903,82587,11201,43665,36818,16019,21135,80024,42056,73596,76925,25939,42320,40061,34243,72010,11702,45957,69117,57710,29365,41015,19462,26192,81164,65514,82516,17101,15464,91380,58983,97807,17655,25301,73750,56413,59621,13392,72835,57588,95345,79875,69109,25420,97298,37043,46416,46359,92546,56820,68515,98268,23186,56819,76009,73275,39349,81403,73036,31408,37422,95460,97204,52520,20465,88151,55471,43311,39004,30810,57863,14925,35356,84789,97887,90921,46347,40074,27110,51562,57487,73991,12724,23639,56975,63684,14538,86611,20105,49741,45065,94348,96371,83493,16207,60539,22279,83094,58579,24697,48228,60074,80379,37719,97553,46546,23682,22398,58083,72172,31087,77221,91575,77049,51969,47595,17384,15276,30746,42236,71317,31166,93307,70989,21539,32567,57218,88996,36141,12964,41551,60791,57779,54187,56901,84629,78134,66600,81965,28953,81553,33059,85934,18821,35028,90133,66745,58422,34104,73784,12571,68737,20368,53929,23416,79077,11692,29443,40381,88693,69899,19599,66121,63266,16983,79337,80603,77806,87495,89761,35872,97618,22516,67718,38116,73858,73766,90035,66167,63365,39703,47635,79505,96217,84330,36780,64465,38379,78778,67907,97281,98911,81126,90604,18157,92498,88966,40689,19795,38516,78546,88854,65024,89607,82843,55283,45150,87987,14959,75819,82134,50131,40965,91385,93280,44799,14801,58421,19002,88082,44657,83266,78714,50836,31213,73161,24097,13816,16810,44581,24873,44539,63939,88813,30826,90784,38245,97763,14732,65868,60746,42750,54274,52267,73557,32404,79222,92827,51817,59326,41401,17755,63349,39024,98665,41195,46202,84640,19993,67935,91673,47620,80105,50421,48399,46809,91535,74572,82249,40489,50247,79842,99316,80704,53569,66284,49969,13483,78920,32604,23168,51169,10799,80389,91950,17705,63588,50920,95296,86322,70143,86555,22165,86572,31025,81162,88042,58219,71989,27954,82173,28645,84411,41452,16033,53983,64488,59656,13229,39049,89035,61676,89123,50101,37979,46034,35225,32946,46751,77631,86186,22910,76315,55262,34711,36300,74456,99534,15721,73961,95747,23529,95648,37892,98581,83573,65686,75969,42955,85605,38746,67790,96480,35072,74206,91821,72541,65582,14862,36400,62384,94057,97523,94360,16124,15642,34800,10655,19957,49550,90159,74692,70801,24992,60833,24808,40185,28902,47260,23350,10456,31860,38570,62261,88499,20353,87037,79944,47849,78688,11477,53730,79120,85831,97640,77205,71317,83654,16019,45545,82325,18298,44104,69667,78702,89309,47948,68328,24038,69524,89628,30956,88019,41246,55605,65453,55403,36912,36750,44704,55606,38733,13062,87195,77341,97839,38254,82258,54321,64857,52756,77395,70858,70580,62984,56836,36040,65382,63116,24652,51327,86072,81504,81482,41085,70057,70777,33998,59550,99756,25802,74553,45322,76629,14991,94792,15653,27234,28272,65246,79961,10220,75589,14643,13722,11960,41258,76458,64534,76659,47894,43834,23438,71810,52086,83013,73904,68069,80384,33369,76460,58244,37078,57684,52511,23282,12396,65564,15974,65100,37352,59885,70574,93305,49303,49977,81344,34102,36606,38457,17014,11184,94208,11662,84596,86052,10260,40410,21645,88659,33027,75271,51247,66060,32377,58552,52781,21674,46880,34947,91724,81851,19887,91017,98642,25093,53211,83743,50261,91445,24057,73317,47561,94670,52153,77357,66304,84648,84529,88356,78721,84423,19792,36217,97742,86445,31278,34315,36541,14774,75694,87947,52223,24505,70314,44144,17402,91790,32095,22574,55049,94958,47209,13636,97624,60638,67917,31205,84444,92697,86101,47885,95420,73554,95500,77252,52832,44617,71113,26038,91021,81914,60235,89606,66048,86046,12600,87511,96874,65604,44225,65133,14736,66114,15133,91827,34705,52850,10931,39010,49214,42680,36536,82996,80153,93726,53244,56346,91869,62650,17794,88024,84215,17289,80453,37756,73166,27071,44232,85587,72401,45200,91904,69478,76625,67613,20320,95549,16380,30560,43827,44972,36793,91924,91350,74341,74660,76783,25848,81336,24165,33861,71368,20170,42209,47464,85186,73130,64081,87821,68475,55528,29174,34840,56871,31909,46320,84226,35599,11559,87251,91613,47867,28521,83583,98116,77729,20338,58390,86861,82190,49695,45966,61652,88846,95113,11156,10730,43147,49064,13551,91032,54886,65884,98200,50839,73586,34730,34289,59813,37714,13707,74709,83948,17911,93076,13832,37379,16677,70129,31481,55375,29982,39532,84589,79541,88266,85545,21032,91943,98364,93612,52552,96556,91853,99264,17909,31577,27838,29066,98895,96777,81974,11230,17673,46761,27600,14675,67868,57852,46033,71531,47941,84894,28286,30295,36585,99053,97224,41757,91115,74448,40272,22548,53886,61246,26818,36294,53976,49894,58222,20273,94042,45865,89100,18675,93149,29647,97130,75075,95354,83178,37008,49737,49409,42540,50045,19414,95935,96841,84386,49791,90626,39075,64974,84450,95780,54503,30975,57620,43776,39214,83568,19744,96676,35024,60021,59484,33203,93928,25340,23811,64474,55449,93790,42982,82010,66754,30879,16221,46432,29864,42905,83276,65311,64053,73975,88534,63221,48010,44548,26280,11814,87772,91966,70434,36792,88456,10368,30237,36043,18506,64919,59714,23595,13646,71224,61540,55422,94162,21816,74645,56840,67961,32485,30398,94086,39224,34316,63918,10068,13136,12282,35739,52275,37433,95291,23772,98031,56250,35709,80414,11908,92194,35619,99238,14107,60257,20537,86080,24693,28301,98119,55744,91118,38883,28827,50917,24839,29745,56055,10314,80641,76669,98779,45851,87613,36569,47618,91761,37028,99505,74946,59215,31438,78787,73429,64725,82469,93332,90155,83652,84974,24015,81936,58087,93308,68445,73836,83237,23041,37445,50371,13569,46453,68204,94266,62244,95209,34490,76525,79209,86545,88730,52576,67154,90433,46059,59987,52623,16210,46109,44005,69675,30625,25545,86126,22949,10130,18480,55723,46323,14931,55813,19275,61326,56546,66828,66288,38606,83766,78650,85305,84725,98550,76643,85650,21116,33825,11376,32992,95227,74525,87212,92570,39576,71246,13343,53039,37402,48459,85333,69256,75395,92601,74141,79322,22056,87303,67649,74717,90780,97156,48625,75074,14178,26280,29250,97811,58244,87772,11612,84616,52898,82912,25018,31846,94962,34010,30723,99322,86820,85412,41123,88083,31779,58391,18039,52460,46341,73157,95280,39998,46433,93777,63211,62722,48648,66717,54553,50312,14445,23540,95462,20306,37852,90084,64565,85834,97177,24718,11714,60230,94993,56733,17172,63320,40413,31163,66165,81254,69647,16700,12126,79446,59377,84362,75388,73924,51104,79436,20555,65623,76829,37382,73860,69838,45889,77665,71110,60108,73454,89457,69540,80953,32822,62954,10085,92480,53306,47275,42157,82767,77733,65659,79840,53400,32112,24193,30192,79974,48730,37991,96980,10425,98046,55593,99341,79451,19045,48803,25248,97028,64323,40209,52730,98745,14060,70464,34336,41275,55866,69281,74407,86998,28363,44806,23138,53586,87699,44373,52546,27168,78089,85516,77212,21195,82452,10696,70991,92915,90904,41981,54099,43314,62088,91270,60102,84565,41091,34941,90118,93207,73725,62410,16391,55206,78464,80566,29779,21007,16344,83109,67579,53313,81896,70026,38768,56669,79416,82779,80935,52089,59132,87140,84961,56213,86782,49862,83115,13807,63687,50772,21305,73961,99322,95206,11095,96226,29572,87526,14804,44932,26881,93524,26046,11665,94136,55362,86977,97297,86333,88689,41954,32483,32369,86123,27738,90449,50308,54670,13447,40439,88640,31392,67276,81363,40976,78775,37463,21736,10795,12474,18231,79465,27982,95693,23606,88222,54046,98377,52732,47555,64438,94825,62451,98599,23544,48456,22116,58006,18471,63636,37542,65837,62091,23320,88424,40721,94820,31567,92689,36278,51886,60927,55859,77671,43987,68723,13676,92128,38216,54932,43498,67255,31149,66204,92039,56084,15374,19314,92139,11939,78889,98214,35378,74213,74280,78051,70916,92616,69673,32832,43371,25164,51186,11250,54192,78352,22730,76275,80766,59504,54268,86401,72056,28109,72150,25625,23012,76550,27649,64119,57679,12529,20005,12769,16318,86504,36205,39233,25596,17873,91090,16115,41333,20541,54168,20480,56031,74267,62569,16657,35568,11421,66376,11320,55682,93260,29219,45071,15668,30526,57007,31651,80886,59562,44311,57544,34635,93284,60941,81590,75844,41157,87563,89789,11942,92211,19551,89213,65557,48785,87798,97853,34681,49579,18524,49074,85619,37416,93141,46941,94989,46885,73731,44575,62626,42261,98850,84833,51923,15101,28442,18917,96912,90121,20507,83366,42412,34401,27366,15133,82720,84496,73002,70573,85426,43960,80995,49679,30662,98558,45801,64707,55207,36226,99815,72034,26604,76538,36232,59855,76234,68088,59616,85360,88722,80428,92419,95946,69830,11870,87727,97121,43245,45135,55794,26142,52916,56153,88281,21025,74823,40495,31466,28726,35879,64374,72997,90208,95549,99296,23375,43227,43183,88511,10655,83769,91739,28112,47743,94669,56082,50516,26934,61463,73541,97392,22041,26218,37663,87673,73746,61340,68911,21629,33900,38689,23612,95608,62911,21921,83701,52847,35305,82265,44728,28699,76355,70448,97100,30224,91981,96793,78655,50094,40846,51987,90501,99066,12585,93710,59508,80129,32852,62028,70357,46567,33135,38587,50543,65378,62296,15620,23704,29334,80585,91106,50074,26470,96713,54159,79316,98777,93767,29339,48241,84860,70395,88178,22607,38135,29455,47977,90055,16575,99818,71404,22595,14160,42228,76627,73814,37059,55007,41730,49831,93535,28995,58792,94426,58402,91319,99774,50158,67255,80313,80394,70483,66603,21836,85968,35729,16184,38727,50905,73553,76650,10649,17767,95023,33590,52634,89607,29112,17315,61666,46779,32401,82039,43588,52759,18029,19026,92411,65071,94132,27123,37450,86016,57018,85603,12274,11268,22690,88886,52014,19733,83573,35957,81718,33859,87232,41333,15593,31808,21866,49328,57079,84727,97692,38440,62950,39516,69051,98847,23115,39201,85314,29738,52390,62466,55140,27156,96326,35642,80490,34175,43142,53097,68486,20030,38626,40777,73079,35219,44409,52021,71531,18318,18184,51100,49080,95462,86718,88781,61253,69664,58169,63364,30811,20202,35087,59809,80827,47366,57817,75458,24216,81774,52411,19645,81486,92113,73704,41319,81169,33343,79141,44835,19914,82985,27651,22737,25619,55317,27216,75496,95162,85945,65499,32057,14137,67346,88072,58637,66400,44957,44768,66758,66379,27391,18632,73484,78341,74824,10556,72759,82453,94254,44744,73228,50453,56670,58518,15545,35830,94329,17272,80046,68731,63906,98506,81700,77674,16062,92906,60920,54290,95560,55093,55569,37488,94693,35082,19579,45172,53863,47248,16733,97160,67347,99640,52944,25972,95180,51726,69899,97918,95407,79606,96009,52997,91954,94851,56337,96193,26798,45993,25137,65640,92503,92496,88735,57925,76625,16983,75597,92232,18343,90832,56918,72792,11250,95577,35195,81222,45112,77490,51784,26702,21436,26252,25701,96300,15536,52231,12916,69693,36981,37199,17096,33661,37112,59788,40898,83446,55719,70833,29699,72127,50734,55872,40920,39247,35440,64688,88582,58648,86032,51962,89012,31391,60651,54599,43714,66106,56956,27373,12546,58843,40232,29669,71769,22792,85461,79365,41130,12250,52170,60609,46014,45913,38105,87035,57528,86649,18770,83525,64934,84107,36576,30052,95436,39134,89523,27087,68910,19426,84270,23752,56965,70303,57217,38991,13261,92469,81242,12955,55339,20036,60879,22427,63108,26474,39696,84570,35286,18485,26873,65307,42543,56849,66925,46593,51024,32564,43631,10072,15577,16221,75567,94371,35083,19627,45003,84787,27552,78611,11733,10049,80720,73100,75450,24840,81922,63939,14440,83347,14915,90606,97975,24007,41698,78775,89617,85798,29394,87032,57122,28288,42389,94000,85536,48173,36724,39052,29971,30591,63725,31809,80650,65885,38604,22447,72851,62295,68486,75559,32135,61176,22950,54295,24720,83581,87506,67188,83173,10031,45859,76913,93139,78220,94059,82011,19730,71587,26837,11656,91268,28627,10534,16604,15666,63287,81354,68708,74476,38682,34706,36537,29500,77127,21809,79325,46611,37682,54735,47149,78366,39032,56874,86253,31585,84834,58382,52761,43343,81798,25782,24780,41499,94249,13423,66616,34270,40599,63337,76666,60476,97226,89552,93695,52853,19832,11031,38995,29901,89936,49291,55774,30121,95506,94276,14196,87249,41801,52639,19286,25936,76652,75965,66968,53414,19959,55983,82872,45716,31994,49136,88748,73454,96186,18797,15447,38310,97727,86847,34216,61487,14357,15784,91525,15080,20476,10418,90154,59437,88630,77637,65176,26635,13595,62016,76777,21769,13621,51826,46069,52160,10118,72954,86351,98970,42348,84210,70379,18063,22644,17401,38113,54376,51414,41504,78473,48743,29658,42734,59747,25486,26090,56764,35944,70225,39208,51073,58206,38222,70551,29411,96541,93088,91950,17097,14065,19296,58656,80944,36165,83860,50509,19068,33523,56854,67809,95322,11037,25076,37944,97949,76496,14841,57847,14657,22724,95434,22273,94089,94480,24524,89083,58240,13889,65026,79115,30200,12759,37241,41032,97212,21141,93024,82785,37708,62259,46610,88412,84624,81106,25343,52315,54306,15169,59840,15657,31706,23810,35832,46925,98357,87818,94921,37439,44879,63796,72147,72363,30205,52999,40325,57287,13168,89872,66727,20147,21959,16272,17043,87955,47181,90469,13081,78254,22558,15643,14770,42663,20206,28697,71699,54438,39614,51746,77116,60535,53530,12599,63248,70246,37467,15428,56058,51016,92568,39448,58367,74588,87482,28683,71159,65429,68053,10459,61195,98724,58080,94546,77841,53195,49641,32228,27438,57552,71765,94021,97418,29163,31963,99813,28628,57044,92978,70104,99188,11941,48198,92068,69247,49996,75785,46217,13847,40123,67944,66114,39709,17541,37180,92938,39152,62228,50824,88567,22398,11221,24821,93435,83129,74120,65898,93545,81577,38800,58725,58662,26802,30599,31282,84373,71701,29098,16289,18454,25715,47695,45205,61392,24237,38898,46893,13054,80037,96401,38753,32766,51477,24324,89133,66388,10958,52153,44353,12009,48822,92875,28561,61936,41128,83749,73390,21931,62864,40672,17231,85782,61001,36496,87992,11613,93974,35460,60648,76878,89398,57564,37838,28686,68336,92378,72618,42925,85005,84670,96195,88479,31634,84372,41473,16857,60650,58495,97051,82806,46370,24877,48584,51495,72083,25654,17242,74698,43472,31089,18724,46814,65529,70774,29008,15616,98221,73496,12145,31755,58656,91578,13565,41357,81817,30471,10055,69887,13005,79786,62175,26785,22501,12570,72109,22160,60983,32949,30586,52025,94263,52343,13531,98850,75198,91415,69607,32235,14919,36844,99706,13438,83270,46429,80928,93455,34848,50227,18147,67555,31077,61237,18950,92004,76977,66285,63818,70539,20331,64772,93715,63923,20375,28406,43940,49699,77481,69761,91933,43042,59034,31730,71995,82125,99195,99479,86219,32492,12678,46978,38729,67755,16049,39048,75741,48390,32162,64833,91881,67585,28750,36499,87593,32434,62409,13291,91223,26132,50759,71503,96724,50094,98235,19447,64835,13304,24798,84858,52964,68608,68566,43180,99400,78886,13860,98730,49279,50928,95899,86966,53540,11009,58739,46690,16979,16605,93522,98426,30814,22634,10433,98114,46935,48353,94996,29678,58544,87245,39257,40130,98592,11363,92587,81085,63663,63388,70691,82523,81674,69952,23571,17021,21511,60709,52284,64081,52927,65219,29262,21142,63476,31080,47960,62430,60410,68781,59167,55412,22809,54510,63812,80596,66293,37627,96521,35556,80985,91014,48963,80057,82908,42993,10208,64096,31094,52066,10333,56372,97738,20110,63515,41324,65578,57504,48402,62816,95053,74466,68802,58351,47091,11177,42344,28486,20021,17694,70674,80899,45353,28105,82345,93016,56518,31151,74466,41650,28246,18360,85094,45843,64630,92759,41613,47454,30769,65416,94000,44702,35855,91109,41581,30433,80712,65120,58445,16011,19476,41397,89838,33439,90576,27447,38364,30579,18057,38209,24194,19248,37620,57962,76290,43170,56260,64262,45746,15328,41951,99114,38259,92185,21429,93103,79533,83447,34268,34853,50922,22173,39947,53501,70518,59753,38950,24115,73992,25142,63508,92174,59396,25342,44585,99577,49321,18812,67742,43328,35855,52688,61076,40748,90253,41692,86114,17423,13555,24013,63900,67646,89417,83571,55382,28490,49478,61287,11073,78062,44881,35475,44814,16908,12629,73565,40344,22757,16471,57634,54075,87201,22838,88445,25716,46726,90593,90920,72087,56396,45410,56063,19750,80241,22351,87415,10370,27362,84852,66615,49220,52173,23797,46147,55241,34639,28392,35432,55116,52746,24017,69690,38932,51846,91897,47656,90959,19010,14530,32098,46181,73933,93618,62822,22763,48074,54425,28855,39854,11768,74135,19921,44457,76423,56750,95414,78016,88428,23439,45906,97407,20417,72233,90815,78730,29569,76370,87102,26413,98881,88514,64876,32598,65753,28104,16537,44698,82179,36386,32115,39373,66900,32079,81915,78973,11526,26204,61398,99633,52629,30144,31381,54125,61379,84578,12716,13978,48553,22581,94625,51571,50097,81127,40344,29422,27121,48847,66249,15163,25426,73675,69677,46158,30063,99100,38403,19436,36976,26806,49304,72773,72556,42994,30386,47798,47963,70558,30489,99647,28199,42459,82945,17653,75004,92926,58029,11770,23742,35853,68628,42965,96668,39111,39453,12470,90454,73935,60375,12460,99299,21487,66641,85531,80620,99369,30456,42116,84750,36640,55038,54186,15584,84878,91782,26698,79629,86150,56059,90908,73720,33028,26252,15772,75304,29526,76017,63161,71778,97546,73472,78240,20644,77005,72159,45566,43187,35066,93892,58125,21525,80654,62589,84325,62820,36618,13557,79920,16155,45886,53292,89420,12906,45254,69437,24542,30944,47279,93723,29867,30071,20750,74231,43293,25054,85819,91119,80409,13058,82095,83956,87533,12636,83603,29583,44924,89559,75232,20792,98150,37203,75644,58515,20747,75036,53067,24370,87100,20307,44962,43530,16215,17730,60990,74143,56325,13508,17098,21022,62294,48352,29931,59423,24938,83323,87661,46082,83214,40601,73998,68305,92958,26244,39899,78972,51800,31056,76396,68507,55562,75638,96976,14383,26542,90449,82902,38614,71221,59844,70534,26200,26055,53058,71421,50360,83752,84070,23637,61651,36956,46104,38921,48913,83348,57096,78828,59806,46397,36552,81597,93160,77522,94611,93349,46917,47193,95762,41268,89420,39144,48292,69481,43936,14662,47987,63043,48403,99860,39349,67962,22655,96678,91438,36051,40498,66710,55102,75491,36243,87795,62453,90266,35196,41278,62418,77814,82761,32723,98880,20011,89569,84696,21423,86082,92797,79775,57631,23649,34647,29682,78212,57362,29553,12017,95109,97058,38142,35462,40934,30252,95881,73111,59345,81243,16297,92862,61455,79573,57299,37982,65586,92766,83088,43770,46494,64314,38845,94627,48347,99557,37927,75609,12675,98076,35096,54313,79111,96189,39653,39280,13780,11263,74153,79151,40655,85962,20240,35684,81637,55617,93832,35882,32769,89521,16561,16670,61740,29670,95842,26214,33932,37450,53057,92620,65958,29233,48975,58649,21129,16588,58659,19675,37891,11713,58129,46614,88656,94979,40308,93335,72494,48721,59421,54508,41815,93972,80425,18705,58239,28297,36722,64466,15019,81091,70213,38395,55941,42700,52649,75093,86061,92719,63493,83881,91127,41579,74719,49594,53868,82750,95369,70157,53009,34422,59246,96591,29765,91371,45606,18609,80295,45056,82757,32474,88772,71764,77057,67156,44864,81787,76887,92925,26110,95517,17086,10733,22424,82830,65791,84972,33002,86690,37135,96663,69184,14901,53133,97576,22834,13464,22464,98964,20063,13603,26698,95169,82611,15936,90915,22879,65541,17324,17179,43275,43110,81136,31395,94378,41855,56783,91892,87589,81939,10745,19325,52642,32075,72802,33272,94549,45217,54058,99669,48280,98163,32475,45304,22717,21385,17813,19950,81825,81220,68593,93876,12320,92439,14547,12149,33141,93258,29868,32904,66569,41236,72957,32922,22826,74307,39991,37889,26752,70135,35571,45788,20415,88972,73772,13766,76123,98866,78413,31151,86291,47162,46319,73362,10297,38565,35977,87652,50916,76015,87343,75188,85287,20095,69821,99399,90629,41717,56813,12498,88677,56510,59966,14560,31657,71505,79600,59336,56906,32607,42344,42005,61098,95646,88838,35813,17571,51940,20535,41692,85311,45057,34631,42843,36472,65336,51793,93460,78733,15944,37485,70113,80330,34422,12346,90360,15067,21145,69117,24664,73152,89946,53496,86442,24956,83733,81232,69427,13291,84421,17675,24398,51357,10408,11249,11799,25995,33519,14151,30323,76321,89063,46044,31270,84300,24628,52090,73850,76209,71784,70356,69588,19894,39069,52818,97217,95790,84967,27643,63369,53845,83535,23814,73767,21850,50058,13891,11161,87424,27694,32473,60250,86789,54859,83309,52146,36871,29767,18014,87351,73060,87883,39493,48228,86956,80907,41448,36627,82035,87899,20373,89309,13524,32380,92968,65109,15077,39085,11284,60624,46134,99632,15920,22908,88697,42054,88878,97842,43920,41351,74196,49837,51075,66470,12826,23860,74522,24652,51101,72678,56631,57097,98122,75307,85319,42321,96534,77345,20200,91412,99753,78591,66451,67949,46242,45137,69708,83303,54462,28860,44603,50622,54350,48409,47981,99313,93397,39738,30377,65729,52820,52708,30845,95555,19669,24863,72605,20072,40379,52278,19105,41239,42598,68912,24756,96579,80027,64344,12731,94846,89182,68893,34175,10272,57179,88607,55647,59078,69136,39710,12752,20537,82950,41487,32772,63395,39634,68997,95468,75314,52153,67251,57025,71875,69128,53517,75877,45370,65880,48872,58712,10560,80323,45536,83803,31823,87540,31906,54733,37285,59233,27161,14111,26240,21949,60148,97990,20832,39633,17958,71327,78254,76082,32693,14621,95700,73388,97183,57363,62932,86304,87231,41347,76820,58821,51682,19452,43476,68497,57509,25476,58009,20475,51029,83849,14292,78624,53402,30915,81161,77725,49129,57408,94153,22305,51545,76102,21538,27024,16374,80403,73324,73280,34944,68594,93542,13200,33455,23686,69245,80392,62482,62016,52008,41616,40931,83254,30998,46373,32754,52609,41004,35958,91015,69700,77346,24275,55470,90906,51861,68777,36652,74267,21672,93603,89146,35091,36483,13957,72078,80043,13723,78400,20524,85807,53093,24389,16304,17153,67359,84958,87715,33138,37730,42258,49962,95381,50339,33085,45154,51486,16434,41453,60489,56365,58288,46058,64421,34565,67009,44422,28259,24968,68389,86800,48088,36160,26731,23870,66905,23895,63357,94011,48169,82863,59521,84400,68858,73372,22999,73379,86729,67740,37766,54673,10065,12490,32391,83948,26886,20158,95109,72489,19647,49122,57715,76259,32766,39848,74164,84897,26296,62907,19829,77699,28500,78856,75225,71724,67682,18545,39980,25043,64339,50831,71247,42357,54377,16178,84733,10605,52598,65454,48882,73423,62289,36413,20702,90820,48564,81086,10158,76017,37649,49905,51091,96763,51242,32558,94754,81512,23937,54847,62370,94724,92323,95891,62890,25096,20595,11950,57040,51137,61125,84041,73830,78718,46623,47759,10165,76225,82585,46310,14625,63289,40189,73431,39361,96871,84831,64335,52876,88186,33702,36746,23534,38059,41853,10799,10607,93704,65118,93406,20888,28244,48455,56310,58439,73997,36625,34087,48467,23614,35078,35420,17910,94928,69271,22700,41168,83928,57213,33896,10257,78686,27037,65100,34910,32002,98867,42692,31936,65496,52605,84845,80130,95900,63191,67744,32536,37939,47233,39766,31269,18979,72988,50846,50386,96240,66413,76199,95807,85563,10015,98218,65425,37418,39210,51700,97352,28852,94620,61033,90393,13865,79418,33641,79298,36959,76315,88960,31273,80998,31894,42592,71143,72811,15683,91124,38691,88898,36131,87193,80492,45783,72103,51601,57774,56532,30038,88419,34145,67995,32367,81610,13477,65176,79821,54447,66243,27491,67966,40379,33134,90378,98493,23089,72586,15496,26039,32346,93551,70991,67751,80059,89116,60595,47285,19674,63858,41093,37405,53290,80661,53692,92917,91047,86246,86306,68812,59146,38662,64909,97130,26850,10088,41517,10207,10336,88881,87118,23105,34346,13244,38199,53226,68672,68355,62371,91519,63361,78053,72380,19156,50853,95696,33716,62348,61495,52282,41242,16428,26888,63674,54459,41027,49948,75414,91920,73124,54300,72464,49677,63127,53207,76704,88810,82057,27398,47075,49828,77906,46912,97912,93662,10015,90271,14194,55821,92507,77843,78436,87473,35750,55359,43718,93321,76269,99380,90613,24737,13964,46246,83903,13583,19473,61444,96042,41928,53735,38949,50684,31424,77030,55158,87640,76292,51295,54122,62179,77609,30435,32449,39126,11521,53089,86870,92926,16995,40930,71811,21123,83149,66313,55648,81604,90896,52180,39363,27389,65954,46060,23209,93186,50319,70097,40902,95473,27445,26951,90464,57291,13787,69949,91830,91729,31389,24841,95423,65402,57291,66880,22471,91829,66934,48356,75688,96951,29139,51540,76590,76154,14346,98690,95671,94747,95318,74827,40951,88984,65736,56361,21623,34857,89601,82154,50996,65889,25980,22728,27214,61719,47860,68829,42352,63606,78038,17728,67116,93541,95750,16680,78704,63537,38174,44265,49877,24644,13533,60910,62981,99040,69344,35475,30305,75952,87576,92885,94539,91347,23640,74548,89581,46739,99978,25712,71270,12287,29491,60910,96065,66525,64405,80498,34583,38686,29012,11298,60179,96274,37576,96406,70926,88768,90463,16063,63176,57837,79578,15116,78487,30693,12648,93385,25573,59569,35821,52091,89145,13414,32048,72418,93465,39578,69567,44974,56961,13182,85312,26849,21676,59538,70883,16480,47312,22153,22251,79537,25193,97379,96796,53575,40559,39790,51070,36384,38921,53422,56996,12615,89739,66739,90061,46030,98414,66790,68808,75538,66769,50739,46224,82692,31616,93048,76174,75751,67904,51142,90225,29260,87059,64844,95701,34303,23522,92662,57539,56827,83836,75856,13573,23824,89975,28981,35285,17491,96209,70247,22307,96935,81967,57581,52669,47498,78438,46978,27041,11377,60436,26637,25348,56764,26486,85110,28886,55554,80170,96743,42617,90859,35241,67761,72452,50494,84644,52786,41987,16013,44120,53100,10667,23460,68680,59958,98815,30008,72333,43938,96942,39821,35224,49733,65388,14119,33168,77464,13354,67012,10830,47865,74580,25393,55682,12346,79619,14578,56409,90828,56924,13848,72895,81465,92705,33665,32367,26367,70850,94944,45540,20033,29229,41204,97642,22605,79268,69084,26913,77699,41783,25650,60621,34429,76319,53716,47816,98391,60482,45581,38902,30854,80346,24793,58651,73761,19598,81220,86078,61266,60225,54420,90525,23052,13058,38628,11459,74211,17936,40295,97982,99760,83123,47800,34063,47143,31307,61804,44385,95259,66914,57964,33172,21086,22695,79235,82899,45689,29187,99006,57708,31149,74563,52362,95951,15154,71505,63915,38250,12539,39626,61754,39756,26048,30632,98623,11859,41089,26367,47929,68997,10916,79150,15658,53546,15680,87110,64370,14196,22603,62468,57987,90299,81954,71484,53872,26758,47640,51124,99268,51444,93628,52231,94142,33056,46347,49739,28262,99483,27903,28768,61751,13800,15774,28939,96662,11113,88934,21802,65036,19864,11932,36652,67091,93048,96419,47445,40077,95255,58569,73640,86759,24482,76284,39782,66324,86692,80834,75595,97351,76452,44617,81377,66438,59222,22239,64944,36446,54773,55476,89198,71528,42300,11965,38991,52167,22646,39842,61969,77690,97812,43548,98422,15072,65286,20197,11648,76302,57355,56824,86747,72852,51783,75553,22318,57842,67542,91279,11940,83340,99901,40771,87246,16684,30530,97379,89593,66883,54874,39547,22546,24659,38829,70216,71170,93242,32566,84763,76606,32949,62238,91037,81655,93109,39476,96489,99715,62952,80191,72808,65836,68328,89737,77235,91272,75119,16517,45292,46419,64394,68252,77243,87273,79974,50451,35297,94953,87879,93025,32090,13469,21574,26768,66023,24195,97824,44013,61260,59025,16990,18813,96162,63167,12555,53523,65130,30436,48926,65486,65772,27658,58734,51168,23917,57807,28224,30189,77589,20737,80590,35144,56671,38020,20803,45364,30090,11035,27689,75590,80065,61067,68202,21826,62784,83756,75028,60983,75928,52947,50545,17480,78621,67690,42774,67462,16501,19153,52210,16888,27613,16734,57646,77012,55474,11362,42296,49922,88280,39336,62862,25595,36116,73634,22553,97928,65176,82248,76531,17315,75196,82398,49926,72278,14777,17441,25719,98068,12356,65492,78303,74358,18820,29118,57891,94338,71381,68564,85836,91793,59363,11014,24208,82910,54426,22360,94490,51863,31854,67891,76186,83788,44189,88584,76097,23333,83427,55930,40077,83866,10566,51691,24091,65615,48408,71478,62676,91507,95175,94243,98540,82387,79792,68067,53125,70006,24843,62452,96665,43342,31266,45147,26580,51632,66603,55217,78893,17236,72237,82281,26383,43690,84092,22618,20677,92161,32163,46018,52616,45613,12216,70410,87418,79969,88171,57817,82939,32696,70076,27178,95486,57014,31711,52680,64309,19042,41759,66904,54125,85114,23034,68465,16549,78316,35038,32338,64909,16385,23752,14942,44428,31551,13206,63172,33130,43136,24550,19666,10199,52968,54207,47380,11690,85126,34404,14142,87818,65198,39836,36621,41996,28612,44032,35039,62408,29280,45949,55520,33867,92827,64826,12444,54986,51374,94297,97674,33251,50818,28210,93037,68070,99506,45864,58641,68027,98113,76043,51817,14401,38301,88554,24500,81033,61550,25960,51761,38840,66999,11912,45718,15164,11302,34078,56770,45464,82487,49869,56758,69871,90347,53209,67912,60507,82778,18070,37369,50635,82281,21033,61991,54831,37775,37081,61375,23828,55807,22494,41461,90171,94129,31216,32915,38414,99804,43404,69305,50758,56409,36036,61884,72787,43082,58009,44628,67914,86797,24441,89387,90147,14164,31762,15165,35889,68080,70939,34257,55001,35777,86267,57999,29272,64641,25234,24150,70571,99849,35604,69240,42911,47400,20366,58368,82102,82866,32005,99762,44884,53610,25124,98187,29246,31580,22557,46976,92181,99241,43151,39617,97899,24307,99947,34907,21433,97884,10105,71946,34639,28211,33778,37430,73857,81442,77514,89783,15166,83905,69241,78899,49556,61252,78461,61244,52391,41562,30332,71242,92565,64766,24736,29670,30776,83423,18678,32556,51646,49162,48495,16967,52875,20837,47070,40679,40605,53135,99082,85604,52778,50209,21988,10311,85497,69995,58426,60513,91560,14805,17252,15007,73905,26940,43240,21711,39026,51485,33685,57379,15901,82965,68383,31151,39668,14392,32526,67476,60254,46988,42887,98480,72181,40937,16484,72420,42263,55290,79841,67536,32104,38594,94563,99321,44356,75366,57195,44367,98047,95533,11897,87338,77428,48848,95136,88366,30738,50587,17875,52533,21866,49606,49179,26698,68207,94474,86635,72649,13661,94846,66123,87045,87123,65008,79547,39409,21074,78045,72211,30786,55636,78752,40436,47350,40380,74748,44132,45107,33415,96786,43403,32641,27590,59714,96370,24580,15899,41219,62623,94807,47190,60230,15893,70185,87647,68200,46497,99186,11137,56463,70349,37893,79121,27674,90544,55364,54826,85446,89226,99942,61809,90477,83378,33835,68316,72945,76596,14947,11815,29495,23090,76042,39530,44037,83704,92374,80002,18860,52434,98525,62809,65977,72187,69036,92410,54114,50093,32301,42931,37999,56913,41814,34471,13796,88739,75704,56128,16303,53000,66496,50897,33090,81495,95721,86813,58992,30688,99964,45776,76321,32586,62683,55828,77031,20518,96089,34620,77873,26491,52831,91116,20826,65237,28429,38721,88630,49580,60070,37074,11673,82168,29034,55697,75620,13153,45005,55104,82743,50840,70117,66568,65405,50195,75401,33856,95359,61012,97102,34376,42606,61009,83378,34723,47525,83095,17450,59045,50085,99341,32160,51112,22035,28887,79072,68191,21622,39392,21404,92989,67611,15646,70796,76045,53410,36619,28704,93211,21131,13319,25383,58122,93416,35832,72188,60974,58565,55457,63044,74667,82191,57058,65101,58349,12459,94424,86041,49364,54077,73029,24697,65789,14910,68671,49603,83025,25937,66194,42127,78366,72270,68599,79288,50395,88749,34570,79517,84132,76876,95737,87987,49468,49965,33456,15875,36161,89037,53913,72479,50830,32593,52005,23034,84130,59070,14541,89151,23886,87122,56389,99252,51395,53614,17795,98828,22609,42124,42214,28205,25104,88459,28450,11736,55850,68748,42431,41188,84034,43392,48669,38513,47785,39243,16125,15501,52873,85959,71572,47019,61201,77087,26789,68495,92837,45207,15698,92934,98204,50058,73388,82894,95788,92470,25914,23065,43485,23024,59220,47338,15172,58587,95791,23038,54449,30231,70810,27052,16454,76410,44006,41807,82076,66328,27717,88589,29840,52646,17520,38136,37580,84416,26217,82796,99886,25176,90237,53264,28799,75504,97087,84634,69132,40880,55393,90990,85210,84246,89743,44418,23544,30034,62956,47131,73717,37441,42898,27222,52608,64765,31087,86746,65284,28660,19612,58425,34948,26035,98474,36048,46232,70441,88106,50891,27702,54709,94482,93134,87327,75205,55212,77531,74589,32994,40024,10982,89616,77336,50325,62408,73575,35212,48598,52337,47079,34927,55545,70444,66856,28765,86541,97904,65399,37955,73352,11340,20756,95232,81417,95495,26389,60438,49809,64527,57228,21072,35583,33861,39705,71888,81299,22511,54052,17198,44721,68110,71342,65992,41936,88799,77596,47452,52317,55490,68068,37618,53420,17108,62172,93056,97910,82833,55375,60235,80480,61911,67719,72949,43428,86842,46589,53368,69714,67294,46317,68531,62058,85383,98958,54524,19308,52964,59950,63995,13738,96152,34357,36979,98408,66771,41189,59661,10685,93007,63371,66427,48687,33094,40711,96321,60186,58218,75499,62197,92185,98052,87956,16397,78943,54513,66276,19968,73161,52315,94306,36889,63669,56842,56752,94057,35586,50839,29976,69223,83483,19232,17737,91310,22435,33151,58809,80594,18272,40186,89928,22913,63277,60167,99791,24422,52308,90899,44770,76120,97055,13987,11548,63201,13488,88712,65031,63862,37431,61847,79588,37122,59247,23870,86745,22257,62638,48799,74511,25204,42093,13384,31223,95104,58502,94011,18877,54054,81130,64105,68605,97989,20133,59968,15256,52233,36486,24533,64510,17050,72083,52626,59769,40761,83518,78665,99976,54606,53557,36211,91981,51066,92683,33360,84844,59483,60340,45441,70845,50637,69683,71146,46000,39344,12352,46330,27944,67527,42290,20324,82400,93771,92867,55622,66747,66851,41230,47151,84496,98536,37020,92219,74467,93047,85858,21820,64750,54250,67687,54870,29000,36910,68713,56689,62319,92323,57037,89286,86281,21429,57158,75292,62648,42266,67486,71699,90653,79954,82675,57707,96988,84250,86428,62947,10423,86354,90391,95168,92901,57900,24887,51322,34985,62793,75636,57967,84453,38620,47847,37069,18000,93048,55495,77509,39253,41926,75370,49002,77114,18357,31882,58337,12148,13649,37666,70438,34491,65505,30267,74567,61526,78879,80968,57281,66099,15538,11375,59466,78368,72250,68261,52019,86528,18088,19844,10413,53474,22965,37343,46679,13501,53031,13876,39888,65850,58143,98715,15775,25422,27727,50297,94835,59803,83954,39926,43086,67971,18470,21439,17965,96054,37580,67860,85840,81727,77555,50384,21132,83176,19227,60402,83094,87646,81841,26043,17420,37688,32744,86187,30111,66960,84572,85537,44067,75143,84942,62265,21857,94675,55073,44452,36576,53568,46673,84674,41708,98723,32658,48374,69291,16868,28527,70602,70998,63841,81459,75106,10170,96918,61272,45692,59741,68443,97558,26624,17207,47736,66522,54079,11941,41079,60403,67563,11141,63377,16122,49830,68086,94537,32062,14479,44093,98829,43156,75089,34731,14760,62598,34386,69443,27007,89036,96823,13221,72372,83163,45933,33865,10432,99577,69891,14854,49135,39566,80681,67915,67927,91563,26211,32762,21403,74407,11504,63710,98695,35470,61748,84087,56569,66429,25043,55529,46489,19353,54762,97487,64485,93976,92076,62803,61505,16163,97729,69131,74805,49141,36073,33761,64488,69168,22634,87138,48863,40051,77066,25756,29584,68282,64349,92297,14295,68970,93143,76053,50181,36305,41130,15716,72462,57600,27651,72591,48322,83668,31657,77105,61595,16748,96998,45735,42335,91650,19715,84582,21746,47764,70883,34330,99934,43616,21631,15636,36807,11371,53551,60563,97218,22233,55731,58423,83194,71190,83249,94949,67850,68118,56499,35683,57467,78155,81029,98596,46243,75333,45559,36258,38590,30955,35678,19158,34078,96490,64946,54319,76446,18421,63428,89616,97521,61551,92435,84291,47852,22609,84694,34440,88048,53404,78696,80376,99836,46085,97365,20292,47098,99185,63717,89249,86212,37943,29965,11299,87581,85777,31418,32978,81021,31777,68568,64569,82890,41669,60056,58908,35426,88668,94714,10819,87632,59557,19781,13546,63918,11996,34174,98128,27923,60944,60100,98020,98593,96148,75277,50890,22870,95453,93302,56394,62098,88970,77701,10428,28651,22797,53245,38041,33751,59497,99275,55396,79800,40574,36251,13214,18941,80285,54165,46620,57592,46565,22021,50568,50230,91484,39044,40379,25720,14492,21464,15053,78153,67840,25160,32897,25474,59978,21283,67168,27231,52640,67141,50965,35630,69847,27008,91668,46648,35526,27468,47573,14370,94482,24861,79389,97813,84490,73402,79711,86590,29987,61832,91804,30645,68139,87737,41498,65496,70707,49976,12648,83914,83942,98451,69947,78565,30581,70732,38141,88048,83757,64842,41974,50142,84423,71313,73584,48706,45941,79684,45836,76835,68505,91890,83116,32763,58756,76647,79513,48695,72567,26871,85688,17965,11438,83409,95480,16033,94482,91145,26000,60354,45081,48657,82231,62476,82542,83188,56285,21733,11349,75500,72823,50815,55978,14642,50492,79182,45136,84438,49379,93124,98891,62731,20874,57841,49928,22321,61355,75329,36689,61326,38042,29568,29347,36208,54763,78251,22061,78316,73658,60256,66152,77590,50126,31992,21978,84470,28604,97675,29647,51336,70805,96050,41462,74792,45554,74944,56103,86381,32113,98333,99164,34890,17494,42636,41180,55711,63964,16531,88196,93486,78662,87552,23213,25494,37538,95809,58215,95226,48716,55022,89087,24421,46780,37995,30447,32311,23898,57108,51029,22914,95433,65459,13811,88644,70628,83357,46005,25803,90329,70395,85125,65735,18263,62815,68809,41401,64379,57847,82561,37577,98365,70843,35797,47419,79229,34349,45531,62708,35260,52470,45895,57060,23202,17124,12002,96283,29281,47293,37175,36097,48946,15070,60323,82414,94182,22619,84250,51082,65395,52180,17928,82039,97778,75976,64256,45552,57188,49487,30125,39569,84705,86273,95672,47913,56163,79647,41473,60910,10455,83672,89121,88224,32656,21691,75205,43442,27784,23277,66439,52137,62395,13158,32258,60203,60860,41802,58341,85688,33785,71771,74362,93389,96230,41984,11085,83357,39820,40233,25563,21479,14194,23666,84970,88843,67697,72898,42737,32212,14257,63626,91867,76116,93301,30673,23087,73904,92772,38276,46544,86749,79339,23127,33237,63366,58245,10638,59461,25231,82909,86417,58609,79551,38062,10726,55461,61499,53369,29087,31936,98975,58649,68841,49792,19989,15214,57406,75550,95110,39067,98581,39303,55009,77882,63418,18963,72766,26072,35601,71420,46698,65001,48459,76210,60792,79051,42579,28723,22547,63902,87020,12619,65821,45846,51015,85758,46869,71716,62825,22128,63977,92774,80361,83261,79055,45308,90052,33272,87117,54580,72679,58993,39441,53849,99880,48529,33967,76011,36725,90546,55471,71803,86587,17408,88505,51925,36184,50192,82970,15781,92000,62073,14027,58351,53513,91243,63528,79774,57103,86848,25528,34525,27678,88044,38859,83265,44484,59340,48623,32671,60536,96265,98903,24430,93197,62539,96042,80233,62053,12694,28988,45713,65195,72734,20379,21626,23789,33260,84127,53424,64212,60709,45786,16137,43844,80528,45090,85146,68308,92095,85648,59824,96804,40306,66951,20214,88279,79951,17709,95061,88658,58472,13588,13162,15885,78439,53030,97399,99568,56662,94664,87491,70483,78898,24943,86856,27773,80015,54453,18161,96794,93873,87626,83342,47563,68153,30136,90890,71680,81378,45152,66760,20263,52305,67629,79766,32773,40778,16932,25328,97968,31216,82611,70588,13245,65667,88466,59765,63562,58746,99247,88712,98420,95553,78507,97077,92504,75397,68789,64077,84426,18236,53301,12463,70041,28058,73888,61243,88992,24085,63403,49804,35710,81928,34589,40625,17872,15710,40802,79151,13411,49700,71566,98873,20073,42417,23858,63432,35291,56302,58047,79096,29833,99200,92292,27838,39590,46526,17323,77753,82883,14401,13057,26598,46961,27944,33297,24293,49876,85772,86539,30787,79928,79607,34612,53414,53021,82725,48964,80421,53818,33172,86535,84878,73554,89837,12601,28162,44527,49780,83155,19477,72512,74253,57619,18649,45035,38678,17068,37244,40292,20013,40574,77784,58450,53696,14167,57263,12999,87729,62653,69056,36765,75459,12627,12081,35510,58540,12307,62079,19541,23424,63140,75953,13919,23286,21948,97030,32877,88915,18234,10295,97401,15687,10719,52144,75798,50893,90611,39793,73122,25906,96811,71582,34511,87212,79947,12530,22438,28256,86548,35137,39234,25449,75272,71440,10470,92314,49569,27727,68519,16917,99950,38342,16624,85895,90669,80318,89790,29415,13968,56278,37573,84512,39084,64564,71551,88112,80103,83446,66966,26340,47665,99164,34154,16314,14475,11323,26249,32104,98547,17412,99946,26051,35440,86398,26407,87951,88761,13198,48704,82608,14840,66900,87706,93425,66217,56948,77855,60130,26496,23252,33456,33216,93020,86320,98519,80175,45071,81758,25567,89979,19383,21190,14140,55849,65441,78088,19606,24289,22525,28279,89716,47315,49908,32429,14325,99630,70761,88826,96138,81898,16078,94819,83343,90711,55410,82823,38428,32914,36492,96712,53834,61546,32354,72241,51377,34539,19661,29864,49207,95547,55055,66733,23266,75103,19709,53479,74238,55799,91536,80615,43141,45454,49966,51499,49499,95913,59981,27417,50575,80190,42430,72041,97283,70265,54218,57067,60557,33704,70980,24862,28604,13560,40535,41283,92971,30352,77330,81634,45051,44275,53472,76660,50629,51082,40290,55739,38424,17941,82447,98888,52924,69005,55041,58036,46344,55252,22074,96509,25784,39141,89747,75276,37525,86127,88699,93668,97170,50989,26149,95561,54664,84586,84311,33085,51573,61439,19893,63204,84388,65033,80607,18933,48772,85445,14309,68344,91868,30134,62596,34128,15032,47968,48278,87696,87886,17955,67487,76550,91601,72924,87677,93885,80376,97835,12468,65328,94552,83282,19987,91813,21258,95199,63847,90114,50145,13256,56856,80184,10505,13033,86872,34290,91298,74083,49279,59831,57916,25144,52028,12476,59633,96404,18589,77656,55315,80721,68333,48423,30272,14623,93933,68911,29025,36015,45550,61210,34127,71280,77885,32167,94508,12109,82928,94216,48600,52635,77136,32294,43618,25258,39723,85799,60114,83280,12372,29234,53807,15732,11630,96918,70495,12630,82148,79867,36056,11933,36949,65510,27025,91896,28072,39339,66947,52102,25416,92456,90543,70624,25532,78778,43872,58227,11802,21771,31827,59686,86474,32596,56597,31143,38893,68851,52353,36453,53251,72812,80807,95814,19760,31698,94608,29960,92851,27094,44524,99548,33127,36949,99586,16273,87158,89652,40412,83931,15933,18909,20066,88878,31898,50511,50174,63819,65097,79374,25116,68364,65171,14813,17247,38805,49803,24971,33787,70337,55963,24910,79945,82321,23724,96817,32782,76892,88637,43407,56193,95446,24709,14473,44065,42567,98229,30983,76853,12874,12589,30067,31782,94447,94695,50156,66977,58694,15782,60717,60549,80830,85245,38343,20339,26212,85574,97658,37635,74307,99105,90303,39551,45727,10959,85185,49663,80333,86774,50239,98811,10449,53255,32361,65406,87638,64584,68289,12395,56889,50234,74516,79904,10031,89883,31296,90613,87697,69683,39032,53552,10221,73336,56249,76018,36471,77479,27696,53545,96632,90680,62927,24595,55815,62321,49353,12429,62898,77430,95057,90975,98835,48967,29909,12503,68335,39109,28258,56028,87556,48316,81734,52013,90951,29721,73276,19928,29423,20470,89749,26748,87345,35349,80847,10811,66125,31706,10165,66479,45656,68246,54920,46698,64387,51161,57747,25688,13497,53712,81861,84235,49755,95929,76240,94601,11705,97133,90153,58262,27397,81016,60262,35567,57046,21132,44810,48082,24822,74250,68142,47391,89032,37970,59548,92284,16869,63805,12690,28907,69146,57733,21187,25580,65118,36912,80295,72060,28544,10509,88075,93068,20002,78723,53208,89209,64271,16585,61295,53593,59570,89182,45670,85331,54700,89968,25876,85117,32839,21360,76099,30170,45268,96161,13887,80118,56099,91266,79349,29647,74804,82703,55644,66431,74352,97056,56881,61406,35959,34885,90247,64347,55207,19141,91196,61821,67616,36543,30509,67501,56269,67088,61412,84309,58700,29310,97268,90364,38469,27019,56125,78061,17744,15317,62093,35678,38767,49086,42896,56926,24753,64627,85328,30895,14980,79733,45313,84674,63433,96184,64715,42404,78080,39418,91004,15609,82549,12688,57888,34504,11527,48568,76840,88332,86641,18325,20206,92353,92682,10004,82804,97947,17652,88847,72917,47031,18411,85459,16613,29559,82848,42032,27280,15207,85720,81924,52117,48675,77249,20177,45857,59311,72093,29172,70619,54975,55084,62984,54735,39598,35326,65830,20865,80985,44815,66545,96382,30319,20540,95572,49523,51355,97946,23976,73226,43324,92697,52763,81092,49052,72978,41015,10023,76766,73589,90342,69618,10179,34818,76967,24262,25468,16851,49028,62494,63371,75152,30358,30170,52696,20623,18623,38026,93891,25187,37310,92520,48911,87087,22883,65494,25833,53060,68333,19142,72833,23479,78784,96690,70919,14697,88615,19609,43523,60286,87301,38817,45933,90534,61106,82926,19196,35906,87875,49541,98774,82363,74546,26410,52125,73758,63427,12526,57829,57057,72252,12492,50665,27570,66193,34352,96283,29349,37807,63883,26717,14585,98597,84677,10096,61702,86937,63417,57441,94144,15386,87955,10525,89058,82888,15468,19332,31577,95065,34104,12428,34842,11346,19034,38522,68547,59034,55709,52498,71685,17438,66305,40765,59008,38226,75704,63967,70418,57186,60529,18639,18983,77158,54355,31502,67877,72809,55237,30770,38501,85953,93325,82068,26900,33606,43429,21903,56099,57036,83617,58756,32482,54569,69462,39404,97168,18224,87768,25343,45589,99746,82904,53305,60365,82360,36039,48782,37113,96422,18415,99479,41690,64927,80950,55076,24446,14061,41197,73437,64710,88616,75026,13136,48039,90033,12135,66797,90512,77652,29619,61693,63138,16777,58659,10928,45823,43230,11221,80253,36122,87271,12515,57491,10822,60940,35055,60234,57851,23722,54266,67516,28173,61070,50304,82874,43664,78482,84673,39125,53579,26516,41603,44689,74927,22315,79045,31075,76016,65746,27892,35543,82250,68964,26781,71124,41764,39734,45896,39372,76108,26451,73654,40959,60397,76305,90247,15358,62207,79653,41227,44220,89027,42412,54801,65184,65148,90309,15814,49768,20673,36106,69733,21843,68237,26969,13640,25991,84564,63240,62121,65422,53411,68591,55512,83895,30112,90477,95570,15116,42012,21240,80638,73438,13767,63763,75715,72061,32055,46600,12886,62964,38294,79550,64914,15122,92091,29081,69554,45521,56795,70481,38154,45000,67802,27342,79916,47327,71628,58305,77344,70407,89811,69981,17568,36186,63201,75193,59676,81540,77670,41515,98668,95465,44784,89198,16363,47933,89719,56987,48897,31111,58654,54568,73106,88238,72066,89145,11523,55410,67953,11405,87305,84642,49713,50240,95889,97883,19344,45201,26257,69859,47350,33314,41163,90808,29630,36502,75423,56192,30148,44194,73133,94802,10496,88857,88683,99083,29492,72974,70299,37487,88270,57535,65157,66441,48079,63458,90136,77559,56161,89688,62920,52595,12669,27138,65360,99790,12524,43560,91723,94498,86219,82275,82215,45296,84186,86075,89148,24968,74737,44987,82460,51504,16929,71411,22424,48656,33928,17234,60227,70514,26660,31528,66343,69647,70860,82294,79584,29520,65158,86640,56609,52280,38743,42914,47408,86065,63840,44170,64399,51877,31555,28035,46209,48356,86255,51920,52713,56998,86435,69108,24929,35806,75979,71828,41190,41803,24992,66136,24449,36454,40750,52183,68837,72258,64150,45851,10307,10801,65551,85773,97145,17969,84168,56145,94218,92605,47907,71810,86695,64316,76529,94555,11874,79133,52272,64783,52660,49345,29935,20432,97994,47771,71397,31075,21259,78632,42537,82523,19880,55749,99946,96779,15497,43331,99571,28950,89164,39153,11400,85910,62228,56485,99616,45882,49072,65692,44361,12602,92918,11614,37797,73793,41769,15850,89006,45436,19016,68202,69255,72325,84561,55005,77028,91470,29176,91873,58664,64119,68323,11898,55250,80808,29361,49597,15549,76881,46563,16598,30130,47031,96707,27341,55130,73867,77378,54710,40415,73676,40573,32078,28371,88996,25734,84859,68607,26531,42576,72280,36592,13684,52312,95783,82804,70423,80700,74330,90690,81815,48104,46414,65290,43719,42937,78818,59376,64564,70607,77763,85507,65236,63802,26622,29995,62831,14089,94854,50793,41525,33738,37457,68833,68851,51139,65120,44812,41649,10585,27180,41309,70551,59611,53012,36288,61523,29698,60141,33304,18759,28742,57981,25365,44137,49106,74249,16476,65066,56839,33011,48795,35886,70365,98376,55850,45009,93152,35981,27076,59140,62983,16290,22746,86194,37857,28255,95441,37109,82631,11189,71861,26926,63103,31548,54339,47272,65489,57058,23066,72554,58729,59908,51242,79297,70862,31737,72403,35039,37196,77444,26290,94760,56959,93613,94661,82307,51432,17191,90552,25462,45249,51275,16397,16733,97368,18861,43826,20203,87444,17188,71752,63796,35217,96945,93675,40871,72250,32678,74213,79794,62657,61175,24232,87639,95627,15081,67779,10748,70502,37868,78203,68483,57124,33388,38560,12511,96013,17115,96291,88188,93245,32993,94523,85342,26650,47767,30327,73607,43560,79715,69434,28040,70074,80686,28680,13333,87373,44949,93788,50280,44484,84493,22629,94116,84861,18085,64295,67399,83553,25348,92458,99499,60061,98362,74949,19481,37010,30403,45567,81785,96486,62836,41833,12553,60108,57904,11696,22431,57319,68935,19035,38458,94299,76678,79365,47991,30073,40194,81610,51135,97024,62776,61821,57310,79255,87752,37440,45528,45944,91579,83548,24813,43230,24189,73643,66048,19932,27613,73464,74947,37613,62008,46549,17709,88389,69929,63569,64770,14108,65325,99973,32312,41218,93176,86092,94222,64746,10598,57765,56533,47387,91773,88895,82007,52040,91641,89451,31883,98368,61293,23070,17746,82826,97845,78330,65456,60831,30436,29222,61597,44295,70488,35174,28856,40296,38866,28573,43981,22011,54553,55989,40288,62347,66818,84981,80501,91630,31274,42848,87677,98892,52044,97082,81433,46026,95373,21097,77645,16410,91307,47736,21776,39461,80854,72268,20079,72403,67137,13752,31320,87441,36623,79204,41728,79970,88462,83066,11625,53987,76451,95913,66909,50987,11726,61661,51857,77747,34736,46088,41305,62197,52190,19864,80248,46935,98297,10650,31352,41673,82061,46930,46343,82755,24860,14175,98602,34134,76938,45987,86971,13149,77998,62223,23837,66603,58152,36613,15478,10595,40751,42670,16962,13665,55031,96904,65324,66785,60554,46447,26936,56168,80819,11629,81813,47077,11849,53895,70176,47912,10930,96961,96544,74099,59603,55273,75445,97804,97216,69273,95645,56828,61789,55001,20031,35940,55366,58581,31346,88352,17287,34703,73666,76754,22991,47830,12454,57409,18517,41785,32059,96559,95175,29630,60273,15219,43311,23724,52271,30444,34082,29346,90520,82399,58953,83138,17075,95421,75650,36540,28523,44294,84826,80884,91616,63512,41498,48305,66614,83932,42215,53788,77632,50193,48452,37176,81282,99114,94289,40058,36806,51569,45878,56746,84903,97104,52668,76693,70005,20165,25619,55934,41127,52946,56990,97113,49123,56435,77881,75624,14649,37131,98457,64664,94858,34794,38934,72818,19630,61879,75525,25629,23517,42622,37609,10195,61603,76273,71923,46450,30954,16831,82348,42928,42055,30076,91115,89614,36469,29425,31803,90713,55081,89171,61000,56432,80045,34391,13684,87800,70635,10250,78419,66813,40577,50679,82812,12588,72784,90560,68778,86835,93320,79517,30244,37055,49866,47294,26691,15456,30364,78513,68112,28193,47467,77946,81390,62823,34300,18995,31029,60733,66287,86366,29736,89084,73536,50000,77759,17025,30768,12855,39339,84656,74706,43638,10112,49278,65034,36297,71606,55187,30431,97504,69073,14864,80921,36522,52224,15513,54476,74276,26653,50646,22997,36256,16501,88326,30557,36801,70216,74479,34917,27081,33843,92585,83043,57679,73512,76816,93450,60350,81470,94229,78104,34949,65920,69226,20370,95855,44462,66742,36554,45684,84437,79477,32961,87085,28127,25118,71072,62276,38884,20400,34063,27302,89300,90115,89068,91501,83242,88684,86738,54528,80350,40024,13341,45206,31874,78425,56932,18470,12867,23520,66197,30792,30839,43342,41790,32444,85491,45573,84040,60150,18322,55978,75492,43918,62316,32916,99255,96550,28141,19339,62899,86147,50106,64425,20157,13623,10674,55420,60314,99043,50845,29422,10931,95919,61526,91998,92336,20781,78976,51298,21541,32167,64469,62435,68318,71701,23177,70766,77084,27407,50246,59704,71883,37888,25900,26878,48842,59385,39775,98340,62277,58870,74432,78828,16767,48860,42096,77493,95610,25775,12955,59329,46206,36753,97172,22585,21853,13297,32334,37562,99448,59920,36944,85732,28586,25844,96624,95679,30338,92203,15049,35776,79320,99994,43840,26237,21743,30526,46677,98721,72869,33887,47405,15358,24141,22370,92701,86525,53874,30153,34568,27513,64130,32509,10099,39114,50354,57120,85178,34571,29084,38579,89198,98688,78051,85779,62979,35440,98613,14819,96189,75072,10678,88392,70974,61448,15844,87092,43737,26674,40081,46798,11901,62397,81510,25593,27023,41267,61493,21642,47970,73477,78969,30818,77369,98982,48552,25687,95469,10728,57991,42951,46361,83833,66205,32505,42784,56950,38855,24885,66997,94080,66967,44411,88190,69412,13576,59597,15310,67899,81185,23932,59358,64650,48038,91738,34403,94744,56312,76756,69406,75469,60721,21640,91214,58757,97245,38779,65053,61068,44194,48058,88818,68766,12624,72944,95696,64621,75605,62529,36882,94504,36542,25592,37426,64512,67032,87344,91616,99019,94612,82404,10732,57995,52117,30914,59748,57254,96386,56485,80753,83185,57613,34674,11930,10976,98433,75763,84583,31673,46344,41849,75849,67462,12597,86316,59978,41574,56491,28930,79958,10877,69641,59490,52587,52445,61583,11042,34407,71935,89530,12521,79317,89475,83501,19281,20042,96630,78177,74937,95137,87430,12007,96321,60226,75193,78536,25242,93735,75299,41730,12804,97861,85560,37820,95795,16987,73744,88671,80296,48428,78911,63664,15060,29926,60176,21511,32365,29343,25945,91523,26223,12556,89441,88366,27353,60294,21046,63386,17693,59048,66156,51599,55143,93555,19275,14913,49046,45402,90520,47740,36204,70393,40326,80570,93194,74941,18733,71572,48557,81471,16311,88864,29912,52094,93301,43943,76630,22664,79669,20270,76224,47674,36060,34208,12001,72453,49396,84662,19002,93330,72695,40252,22644,26268,84118,73569,66929,46567,49933,44950,22277,83693,73449,80953,72505,82680,20266,64960,91521,22257,40507,89487,23244,94639,82415,72631,90077,40183,51464,11590,50546,47392,76948,72580,19681,42273,89204,68721,32359,96017,39112,50945,57878,68135,69514,40549,19872,40131,43141,42479,87122,56922,57325,32228,31178,62402,13660,66813,61131,81103,29373,61895,15475,33699,58742,49313,50690,49369,82171,13725,27859,68981,58948,14934,15427,27401,67154,52044,59180,64590,76715,60503,59799,20851,95271,74962,83462,62014,25089,65240,45172,95994,17141,84842,40371,77466,95821,18815,22921,11449,29380,95411,97853,54134,29218,57270,89796,78988,86311,55181,63185,77511,39244,82238,27799,40323,15179,84100,73867,71774,63482,87557,80495,41197,27211,46804,36228,62394,48319,30228,77848,18953,18110,61681,33716,24196,80073,57908,88631,29533,37513,27727,88428,60570,36755,10397,22222,84761,69315,63399,60855,31456,20828,14979,11342,15442,92922,76170,63740,62621,79273,48274,56505,98682,69746,95047,74085,89768,68364,18036,81663,84432,34627,20748,41584,13335,81748,31415,43101,92753,68813,53175,53706,79743,56206,10746,91965,14033,37228,23771,13130,48118,25601,31868,52008,90312,51458,19195,94186,62521,71184,19797,71234,69184,28744,21417,97220,27665,89995,23141,89908,79469,73982,14222,83493,87162,90400,15682,37375,73682,90884,98355,79828,95675,31882,51065,77095,80557,97778,32620,75932,22144,56135,23453,23747,62826,15307,74333,37979,89295,71383,76946,65315,22495,38348,60514,67413,18451,44328,15171,34586,25154,97660,27571,45341,71739,73744,24704,81096,35979,20756,37772,35132,97605,37663,15781,12536,44328,83424,32692,14177,99538,93845,70485,58589,69555,46157,37693,21278,33693,39366,91864,96722,75279,77358,68855,36647,72838,45436,23663,78546,77629,62129,80357,87262,61314,12772,48659,30826,92830,46373,85000,19665,33964,21283,38477,76763,76599,34932,63242,11678,59619,56275,99324,43006,78149,87061,55553,18696,38653,74912,87787,73253,32073,33586,82007,76730,56493,55004,13228,87836,25694,31727,14573,14066,89165,85369,57754,33604,65430,85535,87797,99766,84328,28178,22967,84922,45120,21002,59979,32204,88591,10727,10134,75255,13275,22880,93045,17512,16025,27216,95429,94157,18487,58569,41681,76314,80738,67813,80203,75787,58490,46017,29904,65916,22790,34823,13430,25463,20068,74133,72141,79134,32712,89252,60207,85471,83917,67995,97057,96556,42073,27260,24757,25871,38563,28129,94181,40494,33261,95673,74431,99478,55074,87399,52182,78520,63681,46839,67316,55756,52140,19725,75642,15269,41630,17448,69746,24487,27836,20754,56507,88382,21541,51478,26992,75884,99373,70002,77693,93992,78103,58968,17432,65842,44202,91042,29075,80682,63257,69478,45311,71577,23808,31021,58079,23332,55439,14729,72585,54743,24114,75246,46572,71937,89869,16211,75865,79173,45073,74165,75295,60247,55432,19184,47274,83154,58200,22352,76745,33883,11591,75367,89430,34189,90016,80647,36193,95289,77128,87852,57293,65926,66258,35515,45499,98028,53195,82604,48145,31501,10653,99893,51430,73245,12444,77876,27637,90463,39985,29298,88608,84555,77621,51374,99783,78480,57689,23166,43327,47186,42970,76331,10556,94913,27734,76631,92812,98079,32518,26743,97487,35849,28606,50232,45879,64228,67397,17683,75016,12940,94641,45714,36339,47735,81384,57440,32145,89042,39643,95303,53148,36574,78472,24549,20785,86458,21578,81731,26000,94316,60354,49826,11589,25637,94103,68919,53808,37469,88116,88827,14738,62777,89991,68174,97163,29841,78287,14333,39571,82561,70234,44345,25772,39401,94197,48856,56019,95903,22415,94186,69836,29798,30113,27094,92321,16570,38161,97792,25809,73558,19780,56751,25961,73919,95157,77120,31347,89250,10385,24289,59038,52104,11481,86574,93116,85206,21494,13306,55077,91134,26466,16597,95373,57618,83947,12680,36994,74951,60812,87102,65432,82008,76000,15998,49993,69108,30665,21508,58773,67406,37154,36318,32833,26679,40203,43434,82648,32076,73836,63548,71986,63758,13102,77581,14852,48874,26343,66360,46159,52988,75071,40272,49516,48807,24439,24859,41302,47894,82971,61809,40088,58387,14344,87272,17317,55977,28342,31285,36598,53000,56348,88825,11892,54950,86621,12487,54369,55505,52341,34441,78486,68166,52369,43927,65006,73985,25238,62332,15953,51926,81863,82261,36526,41741,91632,98570,86499,87131,64885,60775,65807,78020,14752,50410,13345,70942,84924,56650,37886,23583,47189,96421,34307,30134,74334,89927,75317,99731,97194,86200,63245,27387,25191,37162,76582,60594,11571,30327,25108,39216,17552,81029,23365,36306,68742,89007,11495,15740,28932,56779,90489,13159,34695,55077,30014,47257,66063,41251,83192,71930,73289,95362,70620,94997,74916,66704,57292,26002,74580,79204,29650,21746,68489,20960,43956,16526,49965,33396,44970,81873,76790,21169,50649,17952,20649,82161,71371,98932,18340,77148,63604,80478,89175,80447,18419,28279,30205,63295,98634,22073,51938,64207,55050,41425,74203,52627,29419,58592,94295,49805,16693,13179,94107,22074,16245,48862,60404,97156,86244,61425,31068,55096,16058,90770,98251,69990,70836,97599,34615,83641,27726,58520,49325,72025,29236,43308,53020,87256,57632,61020,87740,92375,43724,70995,39004,12147,66695,71068,71040,71760,44884,48886,47267,57775,43580,55345,49411,30559,47661,46689,46874,73767,72500,18263,30323,93852,54220,11149,60047,33736,37540,45443,86617,63777,96608,80965,69807,16502,47659,85411,53584,91843,21229,57448,15610,28158,62008,40133,96362,72820,67522,52613,50820,17425,45460,52422,78576,65156,96946,52775,58222,78416,32363,14395,82977,80239,85515,90878,62660,92121,72030,20271,33370,76929,10098,43235,77762,92802,70953,76739,65157,57056,96546,21189,34062,50840,17648,50108,71050,45759,68422,37305,68440,49815,48289,92131,61234,97663,81223,79092,88227,84299,35393,49080,78630,66888,33379,84085,33510,27185,27909,87044,71785,83952,57012,46214,10071,20787,72635,47261,99298,70309,40178,29028,77806,25193,32204,93438,87044,84933,34127,16438,23952,71202,98633,88328,37859,32316,79934,47733,99393,74914,70647,65053,53207,63712,85403,52787,35427,33912,89023,32418,53612,50376,76867,83823,72130,33347,12402,76400,99230,85714,23495,11997,56842,14393,17972,25835,74151,78307,61817,71275,81301,77626,95214,93602,24217,41023,32521,56692,38937,78697,55415,24363,24664,90492,34669,11847,65283,16763,32755,54371,20006,22589,90631,20284,74546,92017,48892,78701,70409,39071,60405,29779,24569,41138,16110,74051,29850,33793,94075,50530,16456,33715,95160,42923,29292,67284,42554,21328,81064,98818,12097,31424,12668,67870,78529,82152,98027,47465,15694,36094,67747,66120,58701,50694,50794,74735,92088,66854,89555,55527,15984,89158,47719,19921,18761,49729,71963,68560,99942,33220,66476,66341,15984,98636,73060,53830,11442,28011,62581,91984,41727,28196,95610,62887,72026,42046,57099,64081,36347,79253,82538,52022,26902,62544,80885,67395,22693,27719,38635,73020,19214,26365,19794,28251,74078,57484,23431,76940,52356,48785,53157,53840,73021,51134,90897,65709,45910,69072,67482,28513,92304,80803,29399,34106,65963,40104,59152,98821,14235,58961,85396,69470,38519,18012,98937,85407,86221,32960,63323,18181,60947,92155,58666,35523,25161,14719,76066,34997,87556,31358,37728,56842,50938,23616,39997,66903,84787,31942,14280,18827,95071,75045,14071,80697,56922,53017,68598,27990,17579,99077,60916,25308,96722,69527,78144,68261,51416,56791,11237,51317,54042,58830,50734,49707,78565,46170,87329,22253,41072,78821,94472,29764,35766,27356,45049,41422,58090,34465,82146,50253,37682,66417,88747,27624,69797,92274,16596,78540,35317,50239,75798,71164,46955,49289,61899,97598,62543,73317,15289,22722,36092,31226,35779,91737,73307,40651,58011,49570,85395,20218,21896,12303,74802,54631,77750,18867,61713,79733,75673,72472,73117,17414,81675,51736,90373,27641,41045,85888,38488,57238,81749,17632,91113,79623,12436,95150,20125,50357,58774,54813,33311,66183,11221,95644,76656,65574,47566,92141,92065,66277,32251,34792,88166,99174,73640,81205,83104,70254,34529,52727,50952,55573,94016,69055,45342,65394,88746,62713,95311,35437,42811,85576,72529,85656,87077,16997,69988,98303,20397,48622,33237,16024,74194,50682,41738,80733,86089,72949,10490,78158,95981,96546,98333,65513,64316,69322,50127,99983,57607,16527,90704,36409,58341,85922,85172,23805,24957,33842,90214,69639,94095,43039,14076,67587,37001,13133,66829,31061,92369,67022,32318,94707,44826,34636,66848,68531,20157,50696,61923,67959,68564,59911,32634,67017,74105,49729,62566,36204,24814,22731,25614,16308,21146,18133,94636,19843,25564,57695,30496,45819,93490,14436,61252,11293,40363,25739,68033,30835,14711,61963,54884,34172,74245,80775,42317,99872,31657,25934,17473,14126,19109,18151,99864,32292,38261,27988,59112,43694,72965,95287,97812,77347,17775,28736,64759,17013,79284,73697,93193,15978,24225,79492,44761,11396,67495,98598,71714,27760,26277,44406,94766,76482,42883,76895,38072,72788,21532,61752,61688,85285,37404,74021,11921,34504,53678,73078,32107,91773,78123,55615,77917,19472,65704,14576,75331,69414,44341,11608,34848,22471,79172,90730,66682,87924,54998,63623,48221,57247,14632,50944,23298,21065,44962,24838,34723,79361,88258,20957,61087,68705,15376,40258,55944,54213,84772,58667,20564,94622,18122,42630,90834,47402,59165,33681,42499,51270,72222,35111,14273,66381,11777,75274,11837,12949,57317,68905,45294,11563,75467,30719,33478,63906,22729,40537,57832,91761,30229,25663,57576,27930,97058,52426,13505,59426,99909,97561,95224,67842,94813,13145,45340,41064,75238,74257,40787,16996,34468,37925,65291,56204,72196,79175,28201,20359,88314,52367,31182,30707,70827,49724,82702,62232,10060,15525,38589,82406,13275,85280,56598,23734,62384,72056,48044,33484,42753,70281,89944,62257,48394,34106,45223,91216,47032,52443,41375,13972,53452,90761,84683,65011,36466,41387,23517,75779,38823,52147,49972,48288,78011,20129,66589,60848,94157,77118,20904,99681,60879,66205,76926,66833,87148,62207,65932,99319,95539,20766,95782,18160,98313,50446,54214,27904,42628,25802,10247,85041,62313,95779,14001,84717,56681,19508,43973,19921,48130,61615,10070,38225,31631,10017,22113,90967,28023,73829,42187,27775,15344,30441,53315,95501,81302,54827,22712,56427,61174,68685,39727,57872,12496,14357,38546,89131,36205,56007,87041,72973,72752,54080,40748,49066,56448,94720,89944,31425,19845,13877,57156,38913,55672,92143,17837,58415,86042,84519,81498,82899,47413,34808,84939,17945,74001,50264,58223,14003,81726,93743,47693,60791,55084,66955,77991,47408,19587,62171,59933,61548,60196,75892,60511,84809,99131,85766,16480,46243,70889,11264,65311,10665,48700,12099,72494,31016,86850,14665,71638,21559,26282,68254,85994,34449,89539,72362,88941,98462,65330,10239,39551,90777,91725,63861,37187,60656,91610,73648,90129,20845,76738,91457,81007,93740,38018,74223,46193,48653,15004,78470,26612,80079,49893,74153,17112,75046,77030,81340,82373,81549,71633,13631,88753,61651,31666,13256,35114,99797,31603,93111,82639,57282,33706,32045,99323,86511,99579,91799,82157,97636,86388,87688,21679,11436,93621,36467,40624,55811,52785,89669,28520,86506,83383,34409,37028,79114,32516,89655,74448,58116,21899,20559,25354,24646,54827,45606,45247,15184,60730,11040,86467,38381,19092,50660,63279,64412,88718,89995,27389,77511,46612,45620,78151,10872,26856,28566,91997,22631,22354,43848,98557,12319,90120,13812,32088,14922,73222,70017,33436,25495,70134,67048,51736,42178,78905,63633,46821,42972,95609,85374,71948,86665,55983,77262,52041,30954,39312,62861,34503,45018,78060,90507,62966,77407,74959,35247,32142,74188,55735,55555,90157,35230,86963,26248,12530,58896,64555,47708,20076,15701,27801,76467,82979,80304,62805,40274,74757,40313,59528,64002,11424,38241,76310,66114,85086,92019,88434,89865,40183,37092,97431,52186,36976,41359,97064,62966,43824,93876,71715,80355,78336,90325,90252,49581,76600,26410,63935,64508,45721,95400,92225,47663,14044,53422,33164,52318,86002,64412,31329,20269,80348,20120,23016,50160,27587,59901,56375,71560,68096,24083,58937,98628,31896,92344,52577,19356,60295,76802,36132,41664,99636,66731,37379,40939,80431,69053,97648,39473,12513,65442,98622,21928,54287,27095,74555,14146,34989,76583,42354,68800,62804,18907,44551,87277,66511,35494,83911,57077,56377,76750,72658,23943,17867,37167,68069,40906,89726,13084,62875,56981,46517,82682,16084,71154,35297,45944,55190,40350,62774,38022,28906,50284,63025,77495,30657,13917,91184,30512,90558,34736,78453,46777,38451,93517,32292,18955,82383,16966,29608,29600,96484,58567,50790,26356,40420,23700,48656,97542,38911,70545,34141,75717,94747,30038,83529,86749,40209,86680,71823,96351,16406,45390,79078,39422,44711,44550,63136,41197,36591,75213,63249,39223,53978,71838,97548,72040,30393,29661,24400,42864,98394,68633,79316,24312,64961,41887,19440,11136,83471,56078,57107,46064,58100,74063,55889,33131,11019,83644,47727,26161,17136,70009,60185,14143,41126,42095,32812,54830,66857,58914,18832,57511,75041,63381,52898,16616,24132,25480,41418,56029,29020,80580,16389,60825,52601,67552,17580,96352,28898,78250,51231,12629,98472,85826,20105,15240,81889,45360,55152,86940,72946,52991,54554,37223,50624,78054,74596,78737,20672,27542,84065,98718,12485,76691,50187,72539,63969,84267,68874,88053,99086,96019,91538,17431,16212,19070,32575,33432,91531,48363,90665,66730,20472,41205,45387,55283,69271,37343,85145,55824,28515,10088,92727,71551,84489,69354,18708,92231,81540,24087,42998,18267,52683,51347,50211,93985,19272,91212,59881,59967,74827,43033,36463,85774,82604,86936,44698,41224,48554,65347,21297,34397,12786,88739,51292,75207,15719,14656,20298,36818,12060,62980,40571,54890,46710,74756,98151,31098,32593,43090,84444,39664,84132,99035,93834,49181,57774,58160,80280,39703,61091,58843,40767,45833,49032,73854,49031,20716,36809,12946,75497,96934,55725,86959,71255,69869,26083,59348,68121,34146,92623,55036,20104,37468,24401,46684,95757,35350,28966,65071,42213,47495,22465,43429,62809,66961,71548,82205,40640,88427,92363,19438,88838,19931,56844,95506,46108,49637,16586,75544,31333,61802,44832,73470,10835,22723,51017,14921,72729,96277,32330,68653,43172,19485,18716,56148,86604,76945,51779,91972,97169,85975,73245,13510,37262,54882,73195,78899,60826,91310,17766,14958,73955,58087,85002,69491,74660,23249,24508,27880,89182,72608,79304,94131,23250,82655,73110,68935,13437,68004,56128,30675,29961,62841,50123,24919,37062,73120,20731,96967,61155,46990,97762,92331,60645,22689,80148,37736,12606,88919,89548,48164,94093,16306,21229,77442,14779,21038,76793,91706,80566,56858,71097,37873,96601,52890,42210,95123,88217,13812,43286,64066,12504,43260,21947,79596,86797,79411,95373,16617,65779,28325,24169,14512,50843,90064,32137,55172,12086,91774,10819,25682,15035,64508,17845,88646,22385,78676,73342,43206,96605,58400,95947,80044,98611,54538,83330,89566,88889,79936,86224,97566,72113,34951,43902,29428,99184,60083,16120,93369,95569,77133,97455,31526,75077,15929,66547,79453,17620,91591,18710,73857,77310,44785,10528,68510,91602,94689,92337,44283,73902,37116,66783,72901,94411,93169,27202,56362,25898,50338,77047,23873,11643,25434,79516,74854,82611,35343,13017,47270,42351,82451,38898,95088,57343,54284,76148,36127,54413,57066,28152,99981,12113,70336,62455,90265,47825,27075,84861,32243,60513,60412,48801,31419,40072,64321,24699,88296,36623,44753,91224,56580,92065,51356,73028,45247,54398,47338,86637,30927,96034,95327,16632,26507,69503,40218,92881,11210,91758,17942,65732,10361,41968,90502,71918,15392,81362,88185,44406,29686,10669,81594,67309,15331,67731,43042,10911,85662,85438,25466,34119,16721,33506,59312,68409,36680,82939,30369,42517,34852,15627,10533,82680,51489,97267,43383,64178,77087,66027,55495,99826,62436,90250,62328,62196,69912,10937,94504,36445,14005,22184,80303,97445,84926,75909,46183,79900,32459,48082,85846,71180,65741,83216,17693,60048,42168,12701,29738,73188,58276,63459,87605,47507,26146,87428,25628,56530,67700,44788,87585,64069,38010,96350,74582,79951,25972,47899,91175,49209,27238,74455,46921,35865,25016,46743,84141,41123,73732,95828,82382,35610,18681,75604,15202,24800,80687,74298,16123,55977,25790,71085,92529,47644,89496,25611,24233,55827,52950,28725,91363,52081,92930,19911,65012,23900,54864,15056,79247,97020,91578,30389,92713,55484,43624,15699,14830,81180,44265,82453,51774,34672,57540,93099,78556,96047,16706,87651,72819,75584,52735,86800,69587,53289,90120,72174,27004,34070,18726,47901,69266,93095,97146,55211,18004,36943,67750,10027,60958,18393,74520,32630,63332,31054,38283,43972,86216,59068,74848,51614,75640,41704,94850,52912,46602,46545,53321,26998,59032,61198,98225,41482,11215,45956,16548,26371,79469,81216,14854,87662,79742,12088,39036,27543,99506,47708,68375,41924,69806,83242,17335,48979,48235,74136,76848,44240,66004,45581,48884,59532,39325,98875,85992,50024,76222,24425,47682,16151,68453,76018,52590,65852,83469,58893,37002,23035,63402,72084,37670,21162,38487,40166,96379,27238,70378,27156,60619,98439,45300,48857,66867,65243,31478,33217,35097,13973,94779,51273,92936,98789,15402,20623,47849,37672,38681,72522,35216,57837,29547,26206,81083,98944,99541,21296,76897,52570,75814,81251,71911,83000,86343,92263,86891,21484,65400,17380,23121,89065,94798,90907,82020,90450,48925,67045,89592,91324,49064,81769,75534,60336,24407,88081,74380,62470,49324,55938,47328,79173,11002,32628,36611,37787,16965,58968,97883,91445,34587,36177,61856,92300,50099,36705,85387,21884,27306,12078,68712,94088,84114,87348,97585,45125,94993,13933,13757,66796,19260,62533,66231,90431,95227,56678,57309,89373,69123,74958,11812,23760,94269,44717,26658,40063,14476,72937,34805,56804,28517,23314,87567,18227,23840,12622,70641,60811,65164,85230,37707,66290,97281,61161,20549,14817,71704,91193,47710,50445,26471,37353,30910,10205,31252,79530,66630,61235,38310,54629,61868,90121,93224,88719,22744,35728,88414,55199,76216,67696,40659,24126,33328,52070,59212,72131,46032,19213,35845,35936,35331,29251,26368,31853,53151,43500,94785,67385,28114,89862,96786,25503,85833,43035,33993,30341,40116,88934,61068,79781,32350,93794,17496,67714,36820,57752,77679,84598,47044,97681,92592,15606,61153,34244,52554,98533,19295,54250,74094,29830,68497,19868,53806,43654,54975,52129,30221,58497,47096,85994,33832,38978,64488,72270,89243,71056,28486,38099,25318,83428,80424,72584,67102,35014,24979,16432,87706,59530,96794,25995,20189,55583,55271,19234,93221,16936,40706,67137,71019,85936,44650,39850,70998,23134,28293,44758,45348,80307,49863,61909,18291,75550,76003,37116,68912,28890,88934,37476,86962,80784,53169,30703,74763,48844,85584,94691,74342,37958,89571,16537,44878,70380,14067,23571,40645,16583,56110,65188,15661,70378,24104,69236,12956,16941,67686,74610,56587,16738,67522,13808,68052,23181,44629,86708,77482,12697,27935,36359,61344,55611,42740,73926,14241,41154,80805,14815,82553,66318,20118,70521,38880,99594,99663,78948,30318,86188,59527,16666,61014,28919,78555,34557,72940,93299,73474,93543,61501,70482,86404,15082,24534,78426,66475,46507,50586,47734,85308,63370,72594,25762,62752,66778,67122,21631,40128,21620,97406,17764,49806,17864,60365,97844,19314,13171,71122,24346,32819,23618,76907,29030,80518,36640,60913,92207,32990,10817,53659,67066,30180,52853,97338,54404,82546,91972,82897,90869,92867,63627,96735,56661,45117,76579,80139,20555,18991,39829,22612,76479,53406,70163,50830,42196,22759,58017,79255,43073,25237,76161,19655,82306,53757,46783,93910,83226,38275,75926,25294,80148,22883,61278,60316,82194,71890,62607,61057,46544,42660,50502,34420,31296,21602,32256,55978,85706,71428,82375,73487,90727,51775,14258,12797,25384,90921,12512,81758,24614,98011,43435,73444,32987,40341,96021,21686,21901,70828,55511,15560,61787,83921,96364,44616,82734,11151,44073,17772,22421,66137,42411,34670,65044,41670,34560,99440,56947,58662,21364,70888,27242,33495,17076,87394,59897,29437,46171,49257,93015,30446,28758,97224,16557,43381,10655,11770,36038,19474,43094,77397,36264,88247,49079,51380,23466,36544,89929,79870,47879,74511,64832,11870,66847,47811,25028,24397,64677,58462,66508,72653,45980,77285,10898,22343,41702,46989,28464,76038,49233,75778,65831,85983,14734,10702,90308,74731,14328,89987,57270,41096,93956,68392,58955,40392,27769,69333,51049,44828,87131,76476,72786,78012,58245,36638,40539,10711,99758,26217,38007,65698,44353,97005,74308,94406,42368,45473,93332,35370,42521,63528,64685,45220,21669,84239,23368,26409,78486,48508,48303,18832,63382,57340,37602,44157,89973,93539,93934,63752,18537,79113,54130,35959,34356,72547,80202,75067,11130,63854,59934,48744,21879,11641,96149,99308,25698,11191,96141,11548,92595,75876,85392,53617,20661,10934,65415,43775,92282,29145,27229,19958,14676,47461,20806,76244,60719,82376,70449,31148,83846,53204,16085,36345,78669,53153,99725,31413,31435,40944,51517,58240,89177,65988,35429,87469,65794,79428,48523,50069,44403,20669,82677,19397,20165,59683,40672,14732,52814,61326,21187,61580,58686,29442,50731,75201,44668,75881,80956,33826,40634,10936,97166,91212,22615,42787,58143,33207,62950,24112,35956,94035,61952,85700,39941,39842,46308,46685,42396,24325,49502,88342,59125,64105,19624,28812,79666,12310,68453,20845,31648,73212,99162,42048,31409,40966,79433,16822,14548,90859,37949,13711,51975,13090,75248,62549,22225,78667,19877,77437,31775,53680,89389,27330,91412,84231,44815,31998,94780,96880,32310,73249,29852,56102,70166,98280,10929,22638,69178,33978,59509,82363,98747,56544,85190,76337,23947,48154,60801,96318,63489,91254,47814,52248,98859,29813,10446,57773,57378,28604,55892,66300,42494,90733,29176,85444,30317,74207,25082,96009,67441,90804,32191,68680,87206,89896,52453,26984,10712,89679,50135,69537,83126,89348,33436,98091,28824,21193,59891,64694,96374,10217,53082,80123,14100,57182,60832,92324,55130,59155,52194,86624,82160,36230,49226,41776,18656,67166,94529,52538,15643,21675,57841,45508,12665,92909,59229,55166,70159,59064,29004,42916,37892,53659,23800,89487,26117,62402,29909,48407,53264,77304,39314,98534,78575,88867,72914,27926,40897,22738,55684,12887,50231,72149,43511,73098,14920,74216,76435,59710,66271,13961,40070,49071,22723,88484,88560,53988,74012,46462,88716,75444,26894,28159,90413,88346,22368,87466,84590,14804,48278,67581,34024,72592,65327,83004,83437,49586,81163,25450,31985,45702,12947,89194,94899,11965,44502,91996,16322,20302,59971,56517,92459,38393,53449,55143,70755,44721,30615,32354,62543,24867,63202,35130,68959,70926,95092,15396,76956,56087,67952,90454,25060,45687,95930,27695,27889,94313,80255,45230,88310,97548,85398,64066,11446,72714,48120,46138,58668,44741,72110,47899,33103,27106,77714,43393,76906,83198,99309,76070,85535,95564,64142,39724,17426,33674,90956,98869,14042,55573,71839,21222,44313,85510,15763,16510,19032,98786,99715,64298,94074,23852,84905,39383,52728,46801,75014,36567,80630,92597,40751,68209,96738,92133,71844,32778,53423,53680,58770,92238,35144,80244,71594,30754,36952,61558,46838,15813,73951,39619,96268,51325,13674,38105,72324,70448,32745,63084,83004,39054,48010,50678,26523,15102,75096,29027,37737,36915,80899,20612,52287,48681,55443,98086,23790,75709,44099,73671,75122,92067,16590,33817,83814,42264,72861,14034,58447,19470,87794,25337,63577,90648,31226,65232,80964,38445,35194,86371,17743,19016,10261,73137,42061,92242,40340,14472,51427,59956,87211,25986,96591,20983,34417,93733,91304,75564,44150,56779,90091,66074,88131,99806,73946,52367,48007,33974,49188,95953,24101,54413,39119,57844,70216,63532,18419,19485,12893,25472,63974,19326,77649,87637,43362,62182,35560,61043,25618,69482,64793,66140,88701,32681,34751,74789,27555,19797,29197,17997,54864,86692,46158,98075,93188,14667,81971,85324,73729,89568,48230,24697,83780,88571,38104,32289,21996,21532,56937,22283,79164,10867,96100,84109,15525,84199,35119,24897,94061,23548,94465,78967,60363,38796,60924,28711,86203,39009,53656,44869,85602,23388,16715,34090,16195,68618,21050,83123,19129,78018,68139,74956,95837,23410,59973,80528,27958,11393,39343,94239,42843,67013,90897,20740,89402,67933,90547,80617,24925,45589,69930,91299,16573,35906,31924,62078,29934,86920,26599,35898,42488,38084,48132,25076,60884,49183,67858,77671,22027,50569,21858,14931,54763,34928,74624,32876,60346,80633,69049,92384,89802,56376,50272,40054,38466,69141,22626,37766,46971,90156,98247,75147,78338,60889,72145,58789,44950,62890,90658,48394,37167,17524,52179,69840,79125,29916,29249,15138,78952,33893,42902,62759,26008,82772,91917,89498,44768,68965,65446,92573,30172,16085,82718,75253,66389,82153,32744,74487,73887,25262,89589,54619,91927,73313,89715,24112,91206,50285,63445,42526,65655,23819,65384,23304,92684,77385,98755,43790,96650,80361,71131,71375,78175,50686,49031,63462,33531,26750,87590,61383,86759,61239,57183,65775,94783,36978,17586,69736,47395,25342,42261,94454,45080,47521,48778,93649,33721,47366,96072,52665,28696,97460,88819,65115,95684,91043,60428,56660,90851,14333,87366,61020,40259,20673,57067,61650,48182,57023,52058,89649,85652,20706,45017,61008,69216,31561,93561,60369,91548,58116,18485,81686,76464,92736,57458,33179,27613,21495,42486,85586,80227,75346,28797,80759,73098,34016,21514,35064,82009,56658,32636,48587,82791,14651,49823,24250,80027,97363,43565,85203,68073,83864,67984,88397,31391,78898,77228,79683,82955,96858,24461,89993,70725,44840,49288,11935,34484,47670,75017,46320,17142,54657,26778,99228,82092,72166,48027,92882,35448,22744,86733,54330,40224,13469,34016,25865,34831,13608,19624,61896,60335,81912,19757,59124,33514,61005,10803,95760,60316,68688,60358,85594,77595,55646,63937,79139,33041,40334,20989,79136,10630,75052,22632,88072,16370,27015,20133,68651,21912,45242,14967,98919,60461,62288,47968,63168,81235,14578,89247,67886,75973,23596,30624,18535,70224,53377,61566,39044,34152,54907,23357,84785,45673,57188,54342,80727,36126,20487,28428,24784,41706,74556,39077,36888,66012,55589,27837,71073,19456,15997,51611,31256,45057,70446,53414,35777,35418,49019,91633,94922,34557,79280,40546,62579,24743,71533,45610,59503,86116,70415,62511,15061,21417,67350,83154,84980,36434,61182,28278,11761,86071,83503,77432,90868,50625,94533,78098,19209,92297,98981,96950,36942,46752,35122,70425,95401,27400,92286,46157,62545,17035,30163,38096,55357,49139,54915,14793,77216,96025,56685,86313,97783,90949,10390,80986,49190,25649,35842,33631,54510,59443,59054,87966,31028,55259,66201,88592,30698,46180,40003,76302,92233,21181,99295,75733,27638,35028,85618,47907,92222,89776,15644,83964,84014,96137,21670,74139,55497,63572,29629,81062,29436,77603,62001,61424,56226,57054,86072,31817,94304,53579,35994,24266,62667,24238,90576,96873,52729,43638,66210,65118,75315,74827,93261,17737,25563,33660,95038,77384,55165,50979,71691,83330,92028,61337,95611,17013,60933,96148,43073,37605,83096,89613,97919,59536,12426,92273,55957,32958,25944,24959,90445,73976,20053,76941,89416,67579,48042,23045,11284,21082,92041,45407,95403,30057,37733,82522,27248,31068,50647,77278,11295,97992,12992,61151,25574,33569,75026,33240,82612,49692,52042,68981,91266,16039,48447,68497,73107,85439,67427,45411,65766,36596,88833,11354,32217,85988,56394,95944,57265,89089,40202,35216,49354,38703,54763,20180,87231,69026,94506,41460,99495,90241,31184,70510,16433,84587,81656,25789,80925,62052,44574,95848,26325,80944,84158,17448,60724,93701,33629,52074,94421,50639,63078,14339,70671,76295,81331,36544,87288,23112,48148,12567,38018,72322,68967,22058,56256,12287,38570,56292,52061,21014,30670,56393,50535,46191,23292,37072,70922,36433,55955,59786,72154,36106,31169,78116,33153,54324,47775,74484,94330,44659,65918,81436,58498,88066,39231,71377,12628,38056,67635,21270,40122,50534,23427,44637,39764,49132,14744,82481,86632,91873,58082,84398,71091,93625,57442,68595,42391,19175,32476,62180,89901,45691,79871,96181,72368,19292,94105,85410,35818,51638,43666,85120,82128,53336,80132,77925,92238,94135,88398,69324,29768,72706,46710,55200,42989,82972,33228,98711,19451,68003,51419,50413,41639,99363,88729,31192,22022,68370,78965,52968,62137,17024,97958,56226,79097,96507,21507,20883,74793,25069,76273,62387,69881,97129,53817,92626,14038,91860,70744,44828,11320,96297,57388,57243,67190,38817,18599,36366,36628,34117,30368,85479,22246,28176,63327,59200,34568,54515,86685,21738,27554,98982,52072,35878,49011,69162,99369,23117,73843,23199,53503,34177,87702,35143,21766,69367,40993,29717,90035,41634,13532,54130,84678,17134,29324,18180,90800,75188,45910,95435,57740,68571,14853,20272,61601,76611,72457,72852,42153,31963,20145,14740,59058,88553,35005,99983,30931,20734,27375,64966,80837,86075,11071,82153,93731,17007,17506,93259,27345,46573,30387,38290,54903,97645,69346,22364,59362,57279,95528,82154,77252,95946,24006,17935,52035,79647,11837,27440,69170,27990,99716,69250,26015,46640,75853,47987,87005,70009,15323,96760,10452,95629,61448,91353,31582,56792,10206,14192,94275,30501,47284,60686,25977,11426,31396,72472,78984,16843,59530,29088,72281,78530,92929,44648,94245,83207,95298,74325,82943,44543,65243,93060,32857,18429,52972,97840,73559,44177,29811,96480,48903,66029,16553,41927,39815,81180,71733,36326,90087,80192,50671,88793,54224,94597,48239,82472,52580,66988,88097,93626,67798,77873,59374,22253,31250,70778,54075,37715,50479,25153,21907,63272,87407,99444,16300,31086,18819,12936,81114,59764,87300,67273,80952,85266,91171,28583,65855,81749,28185,13783,34710,77765,24638,44305,42508,94309,32008,60133,92196,66515,96075,43324,92252,12237,42724,64170,93044,75458,57369,55856,46708,38698,82992,94603,87609,20391,24000,54157,40719,42710,78420,52045,89869,89243,17414,29099,12589,23389,57678,82978,16990,79499,20078,71980,89176,13563,56197,98108,72163,37474,45602,45456,55652,53615,11273,55946,98029,24118,98444,75621,13298,75022,31684,61953,60927,79793,25540,95213,72818,21322,59736,28875,63059,33538,15626,78728,28055,84679,39954,67887,42149,60084,94172,58127,45170,62563,85648,58778,74185,30050,72062,80823,64492,88217,53280,33805,13204,97395,92819,87133,86647,89347,78061,89348,37658,56807,38968,79201,35067,88980,55777,75694,83409,48473,35740,30218,64620,71970,98967,95823,47309,13237,51106,97507,22117,50221,77297,30109,55554,22233,61917,51145,37382,96230,65305,67558,77013,55655,99729,95372,11092,93702,31642,80105,15251,19992,70934,15324,96729,40485,31553,77813,57901,71303,21347,83113,17642,35232,47786,27366,34187,94700,24389,28909,91661,70548,76968,91285,49526,94972,92419,25316,81381,12924,76958,54361,20484,22481,86815,30339,65582,58009,24829,89265,58225,49337,21161,66876,61539,96771,39647,79215,55875,83155,16667,44253,51488,26477,48575,37536,26998,70851,23718,39080,74389,83277,16495,38587,22793,85777,40368,54561,72398,44954,98347,65937,33206,11293,35816,51047,44483,64505,46898,23203,58404,25130,19940,11623,39215,52406,59816,99729,10121,82582,66617,97834,67933,49057,34325,67921,68941,57909,66853,37440,99554,26887,78001,96365,15733,43805,60066,14003,46027,77362,75605,18383,93999,90149,76486,79357,11880,54398,90058,80015,65826,91172,43609,59479,19568,29291,24407,51625,55542,51831,30790,30789,27485,81892,53152,56756,18653,48391,53795,50839,20556,24022,12445,91782,30884,87652,32064,55586,22638,59592,45875,75086,61595,21298,84077,32739,26467,12232,72921,73365,87272,66709,24196,95098,97479,28440,57460,47316,60339,68039,71551,39591,14610,52990,85559,33572,77411,38628,63676,98023,71108,89222,76930,35680,39099,67708,83131,45696,80639,39096,30048,69261,32315,83084,33667,49561,31186,14361,64919,38452,86245,85387,81977,53946,12323,33441,95330,92001,31766,28883,52269,81665,68646,15314,97820,68350,26464,17379,87915,99390,73764,10369,45070,28852,14958,34703,37113,41838,10845,94834,16852,48906,23228,16677,52358,15355,62577,12253,43636,88297,69062,89750,43749,73194,18144,37395,22386,98330,33936,71802,43523,77956,90250,19794,59793,48270,30229,14256,22397,97311,43771,72205,37579,45605,42240,33531,14533,62350,75330,16086,23938,56687,29305,56859,63758,37078,10060,22889,41038,52149,94584,89337,39399,72358,98356,51013,69594,66029,46007,31165,12064,55205,34594,49611,63157,12624,25351,37521,54006,74674,85229,94060,93783,19338,52973,18216,13692,72286,20794,85375,85921,51338,23860,81904,91112,38334,20727,24546,90174,25190,13698,45310,17442,38382,29971,22317,14960,49661,75801,43764,90857,15533,78736,92848,29855,13407,63419,66013,12200,27296,90197,44074,62912,31195,96142,96972,53635,47429,35865,62165,74557,23847,40154,80129,69104,85028,47916,61730,79274,88202,43206,82870,61592,61150,95469,16655,41406,31124,17874,15565,97436,79434,25446,49781,64085,81684,81023,19733,55626,90445,34862,53851,53873,49546,61023,45137,67545,11081,53421,17681,60599,96061,91584,95258,42437,73602,14017,71705,67826,41305,74283,67206,34800,23083,52458,90452,56268,97608,45608,81180,11179,69863,14141,64988,45294,36439,92238,35261,19550,13674,41710,26719,62087,60174,66060,11172,65118,97115,35473,53347,81695,23268,41412,45021,95988,78688,61323,89844,67443,32510,33317,21788,54758,94927,17899,93613,29081,29383,76276,63763,12482,16375,90049,60597,30980,47283,89767,72631,24312,93408,89618,37275,38763,24100,26524,32383,65048,38989,29018,54377,89964,85059,92667,13498,71557,90019,72127,20832,71565,91363,26599,92553,28619,91751,74099,16664,59335,92313,74974,38736,92698,74272,69625,21451,14384,69820,52302,89380,83667,98261,44297,99095,60668,20496,52033,23106,31314,44519,94998,36926,22945,82398,41558,87885,26902,51842,67874,36909,19422,18890,62919,64184,72845,65620,86914,96730,12881,23375,58245,54517,95280,61066,45438,61096,41934,21897,87746,28119,39638,58361,22321,92000,60417,33896,52468,65950,95208,88770,99239,93215,44468,53998,44775,54239,44226,69620,81696,62200,13433,94385,29669,85054,27203,18786,92342,35872,64539,15402,41832,79112,65992,72376,99895,89054,49466,57375,72133,66803,52836,59827,49701,67271,14544,43296,72188,32784,74715,94017,91952,83750,69975,93981,20119,55186,33860,94061,70348,32207,82256,77004,97516,72955,69490,83362,63313,81255,16461,72513,22416,89492,25540,21867,42386,75738,16518,10527,59132,91859,50459,24524,79467,72716,83537,93718,50514,82269,95763,39313,45056,21292,98551,47090,16504,46955,37068,73809,92426,10622,39764,16222,56594,49166,26628,99468,33951,60399,38256,25877,55488,54577,80320,39463,57497,40060,35725,14690,39677,25533,44415,16865,16659,20455,73186,85346,28814,99426,82305,52636,58526,65802,50326,95593,86590,20141,76463,72718,40588,44574,37196,61612,10010,68640,86781,54918,31296,94388,89185,62573,83787,46789,85264,47245,37801,61664,11781,82264,53396,35626,92238,43262,68858,41116,48977,34344,88513,42868,33172,64699,43822,67607,18104,68606,92577,10955,11893,58919,56199,41018,38492,86397,85344,91497,89226,99358,93866,68766,59297,70451,37449,15078,14904,90677,56748,54852,92101,58311,35267,68378,78942,66414,22227,40465,57656,64381,33751,10249,52288,53531,42458,87180,77663,42185,35013,52865,41297,44035,46192,73107,19081,48661,48099,12826,10451,75487,96725,85773,48278,14196,38974,73997,29317,75998,27530,36753,58791,29601,18971,30456,16406,56889,25191,43755,82819,76698,32452,72460,39790,18605,76302,40737,30142,90510,99078,82289,37055,48776,51328,85319,11060,96911,11700,87633,72733,52961,83123,52465,74310,12213,25869,92769,56357,83060,39933,58345,29963,54624,75462,25235,72762,19082,39058,40053,88076,27122,76597,17636,22870,36094,96067,33849,25478,40409,13731,96913,93894,15898,37642,74323,28092,33064,39882,58022,64677,85594,44858,60896,28850,74100,54108,61284,90840,26839,44089,16278,83597,34141,75575,58408,72556,14522,66304,41769,80021,61408,68134,62432,93754,99504,36156,64612,29793,80069,46465,71483,35630,84266,99710,52941,32460,55795,39935,89894,66224,16353,74028,30739,76235,50247,88218,51783,88908,31281,59913,48227,31239,72070,82418,63200,43049,43744,87622,32114,81553,79110,38936,19120,31979,18755,20339,50670,95994,11801,90021,77659,10284,13934,65886,69503,46230,71178,59457,23583,47559,37150,83350,70904,73519,96859,51160,52844,18738,31610,89413,81667,45182,69753,45765,70310,29193,20739,99986,95685,96756,43650,92763,69266,24509,24490,14251,12636,43809,87161,83561,43099,72846,27281,25044,24115,29457,69127,61429,48818,60889,67102,69551,15466,77858,72248,76804,65063,75200,15034,74058,68811,72781,25501,31816,74177,14809,38013,78148,94409,54356,43579,80342,90683,91991,96991,54141,59610,76517,43016,77305,46736,61321,32330,29912,26987,69671,63754,58501,35301,19862,37341,40711,71722,60179,55444,87402,98977,75693,14886,26770,64865,67997,93758,77029,90628,58780,83148,69784,41739,39791,88284,24631,91982,95827,61255,25704,79164,26662,51123,29741,65450,47844,50329,18416,29124,27981,19202,36194,48363,63674,64176,34421,67224,19875,37289,94891,79440,34883,73232,42587,35728,19235,34690,29904,63946,34419,81486,15864,67883,71885,95681,22527,97212,40335,60577,50201,18824,81807,36895,78443,23654,82827,46150,57306,43970,90993,11822,28730,80144,85998,75690,58379,65646,75314,43490,25437,89330,15014,29211,74058,88056,97525,45343,20877,67129,41250,54112,99221,98766,60442,45949,54819,29171,52911,56570,55621,72262,78746,90186,24309,75283,12434,22427,53937,70709,84890,95147,90022,70962,12711,82599,85065,20159,84093,17429,89025,60177,38703,48366,54762,62868,69116,68473,85678,88929,76342,92738,85698,76865,70112,61994,87800,40346,60694,71660,63429,51714,54180,89424,68603,94461,42347,43756,36698,44289,51172,89285,91420,31412,96400,38886,38259,86263,56616,80406,92547,37083,91239,42517,38727,17163,73317,97239,14081,36465,71667,45109,75185,17427,19371,35643,33597,48700,51691,53604,63433,99205,18860,42967,47972,82758,32053,85852,50740,48769,14876,99019,50235,93611,89868,27628,46667,94035,61406,12840,25428,89466,27857,28307,85634,47370,21267,53736,20058,80183,67089,89961,98067,36550,99759,39987,80832,85009,18941,32174,68075,20919,33563,11730,31275,92283,13344,57992,68781,83580,84824,98536,72187,54028,14080,50208,54154,53605,48521,73300,36902,54759,59631,22777,76376,89617,18719,63848,72322,88532,96842,77782,88766,41041,42264,49711,88454,21005,29975,20775,76321,41524,38147,54479,60779,47780,44509,30054,68116,56628,96175,69084,32225,69921,23395,64436,44422,40898,35145,95280,62583,64710,20894,72326,32053,53562,83809,85918,77219,95913,58504,29225,16832,80627,21177,12351,38943,59786,94752,65831,94301,96931,17075,68939,45733,50544,69628,95896,45383,65562,16481,69182,67415,17116,20804,22415,90350,10629,59598,61414,25464,92778,51536,74622,49983,18972,56114,56966,33717,86235,54924,63681,18946,55531,51869,40238,55924,44131,17534,69480,41754,20519,60253,32547,20166,77492,11048,74662,20504,75787,49457,56419,11269,28972,39727,91121,79448,46690,53064,92718,51578,47667,12905,64642,73054,84127,33500,10211,61398,83811,73225,77047,77784,30410,25402,96817,43302,17067,49982,12114,43623,69688,28427,16068,62087,14038,47168,99717,13782,57627,41254,75920,72830,25524,60704,81476,21402,25182,66829,74905,76622,35538,78472,43691,62657,96484,40108,24666,81443,24832,78128,53883,19698,16787,26661,95227,71016,64803,83052,49621,63216,20784,25465,66747,41944,54033,17779,39482,58988,81200,92865,58794,68023,69945,36468,92506,88735,11908,49729,52485,16930,59679,79177,35857,13523,83700,86312,88325,82578,64370,66302,54186,70552,49523,97628,43100,20176,53682,13904,89222,50978,54343,66344,78545,94071,84129,73659,91807,72934,32847,45978,99412,15367,56329,83865,60185,80043,91646,49276,74070,88355,32513,92814,96695,20680,27918,45980,78265,31570,48289,87521,90123,78770,49303,73493,51092,16746,85004,27722,55219,37791,37187,54430,57079,34551,63613,89542,93992,62499,79462,22855,78431,70305,12901,69602,59735,37161,20319,13539,53400,42883,22981,73061,78410,17426,91948,86652,38573,25582,20842,42514,55183,76210,35680,93271,68542,81006,70263,29136,57999,76963,25836,63401,79952,20655,15215,50308,74698,64090,25482,77089,92954,52267,20822,59002,52882,41172,30390,55102,31554,90592,26693,23358,80442,25209,85839,24266,97060,28140,38163,15494,50007,95113,18018,18078,43591,84810,76367,73579,26772,92193,20129,56950,48015,68579,95858,69901,18449,86854,31911,59908,93401,67368,82433,45317,91541,73075,84408,94523,93098,77494,17270,74002,38597,57959,73433,85075,30336,31087,35195,90223,68125,44879,78190,52624,27909,23925,86566,40090,49886,28426,88226,99530,48406,13537,19510,64427,24805,40835,43068,70306,61107,83811,94265,72364,19110,25160,85681,54641,40222,48245,99152,46001,55416,63026,67924,64439,97385,23181,70348,14005,81126,12508,66682,28310,13230,58421,80284,13000,57122,48318,70037,20315,91506,41236,47301,36285,94454,41157,74165,70309,76824,95312,29255,25603,64920,86310,42431,24887,78097,50545,41529,83867,90663,85801,50264,43326,76040,84636,75997,29264,43968,57394,93344,10706,90663,95729,66331,23879,46328,55759,62695,94888,46009,92723,46137,62653,99806,23405,39167,92041,99351,57342,65992,89130,91649,78559,26325,34521,85600,78606,32054,23108,90189,40165,10538,53983,81937,18345,46166,69342,13537,79573,20935,48649,95881,71817,60144,80784,66467,86394,76228,75383,32556,24181,52532,29414,55492,84409,72528,49697,44932,37780,54891,39601,60641,85801,26584,27018,19795,74748,71034,15796,90568,56758,93454,17125,50590,31653,47877,86326,87388,33098,54397,76567,99926,59167,62418,55276,22487,13400,72752,11249,41062,83354,83418,97097,99781,75545,28599,59927,81721,13971,23914,36738,22891,47584,10643,16123,45505,67869,59386,76745,57080,35399,20515,85158,86715,55762,24824,10699,56053,31382,61500,55311,59973,42923,36455,10436,95541,67843,78803,33841,34589,57321,29113,19758,15398,28579,46204,20750,65683,35998,12874,81028,78183,96181,89951,61938,23963,26100,74029,76426,24096,18335,57621,56185,67912,96676,46014,59374,73013,68120,95517,88354,27536,67789,56493,57974,76354,60241,62015,91949,27629,25000,42419,18832,63814,37344,82102,83976,88690,23156,90412,38445,92684,31284,96245,65950,46954,29749,38831,50231,90020,83350,85483,34112,72366,86502,69341,71563,33551,98364,25624,32307,46450,29069,40248,89761,44887,70027,51343,40698,52974,29588,67095,84331,57655,61828,70254,77080,38627,66992,44579,44317,16787,76743,92730,77295,39767,76437,90712,37296,97398,68802,99215,14653,38586,76017,56062,20212,87366,25359,35883,22943,94895,41952,87736,92559,52890,23162,75524,11138,52423,92342,61163,41080,54391,20144,93006,29237,98802,60078,94069,11671,13965,94794,90392,14991,90201,74070,32991,54662,70815,48719,78605,56094,13567,76171,37796,22288,80007,51516,38315,88552,71931,10586,31733,45780,91964,22859,71067,57706,48451,83132,73370,44365,66099,93912,20110,56539,77058,68528,59585,92789,63824,68128,59756,89511,36120,30347,33765,15235,88696,11822,89840,46142,11707,55257,28656,85447,51720,20289,76536,70416,57221,84554,12492,72753,18611,79141,98311,73357,10537,87973,55004,14368,31375,51861,56457,93996,70022,76922,29257,79517,98053,43409,32496,51397,36279,11956,94481,41486,59809,79106,80655,23322,90870,71785,52203,98390,27520,29146,83784,84408,93445,23988,36230,72906,10574,55567,18044,11729,55004,30859,95636,17412,85745,27852,12888,31649,66380,54034,22271,81311,88090,89418,50762,78329,38850,42660,79992,96988,18258,77724,17022,69700,80530,14884,64947,15331,38842,49185,46704,81297,33768,71931,63554,92918,83922,91904,99088,52281,18527,20814,60251,14457,93327,50938,58743,35930,41204,50974,81290,26354,86710,25988,71749,64558,59298,91528,40917,97345,46242,89165,28394,15417,97622,20329,52565,23219,96921,26204,49044,45431,31897,44960,85102,42151,52139,50644,72119,70874,87017,49666,34882,85366,75471,69662,15367,87466,64072,34816,12777,29867,56383,32898,61294,40573,81444,27482,60035,20911,42298,91702,46908,97185,64115,80370,11501,56427,87236,24733,74774,92956,91788,14476,26703,59008,58847,96484,36349,76620,47820,21210,35684,25586,71682,31179,84416,41967,77261,19519,54268,62183,77466,49819,48235,52919,19802,84469,21634,95507,22028,32651,72801,62048,62843,17945,13642,63174,92556,56297,69613,53989,58884,90003,83546,77249,57030,44786,73789,84948,99284,95293,74636,46696,44846,37550,16449,66044,74462,46071,41961,60672,41498,45458,81308,56396,14068,71956,41801,37540,94386,62408,37377,47982,26171,52829,90225,62729,81511,29611,37975,61180,35589,49123,27712,47213,46627,77454,79436,79445,80700,17848,44965,75348,79900,40925,99291,27463,49994,56571,24133,99763,44294,42208,85202,86656,89312,42951,24938,14953,23573,17510,93079,85438,58618,85652,28822,60412,79618,43937,82154,31250,30039,27255,74148,87263,13694,60862,91793,30717,13265,26655,72746,41010,17504,93476,91282,56149,50883,54114,42875,32804,89273,98891,70176,95934,99219,58284,74982,82272,49609,15345,38507,34167,62065,44207,93687,95519,53581,17353,59919,98050,61981,39778,17709,93218,59784,67009,57003,19124,90746,93742,51344,95012,34354,75755,89446,55373,42254,83492,95843,83534,39263,25667,44587,81233,79460,38011,78429,76213,69653,11181,43284,81557,35789,34180,65322,86014,14318,70704,57263,44653,32487,65801,42278,45882,81020,74232,23272,1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73,67950,82244,12001,15574,90089,56853,11291,25416,48310,71310,82258,10966,43005,95610,75175,26295,65761,32997,49936,89999,59866,45425,51675,94526,13078,50087,51724,80338,88958,73111,78133,43986,10871,31780,49880,32985,57943,52168,12959,62983,44481,44230,39421,39714,21811,79361,84038,46618,30841,79247,93540,68857,53423,92668,48939,75050,76404,58050,65006,31441,78897,77615,46146,35405,65333,75857,90047,12008,76652,79389,77714,53420,97318,97299,48658,28356,69529,88228,92757,73182,46276,75335,26133,36275,80519,34028,27832,25925,73425,84176,75308,41224,84505,41772,42945,81028,92197,46303,98933,99877,15931,18844,10924,86819,82971,42393,46691,40373,72956,47980,28340,81551,78038,93519,96806,98366,86370,18631,28080,77311,24747,28580,16835,27406,26632,75791,66729,11779,65471,12288,90785,64505,53877,88529,15877,18081,40417,66831,24230,94104,51717,10256,85103,98642,84255,83498,53696,64345,45571,52495,62160,27035,70991,39992,62077,58214,63049,11738,37458,80993,89243,44089,45103,17492,58444,85627,71851,20320,39448,17618,12348,85035,14956,98023,13121,43791,33686,43570,93936,55999,45272,70570,13542,85953,95507,40285,11192,90692,32001,76855,58927,93817,78688,39273,20786,23889,14413,27289,11485,67303,91584,52986,67204,56041,67246,11842,24411,16900,44964,76463,74199,14809,30212,28959,98737,92186,40945,40579,77321,97791,97999,78138,23340,19188,25093,93123,14166,51202,11206,78304,78265,64534,50392,32402,30907,22036,40123,33922,72124,95004,86392,39448,46719,29548,52985,92685,46672,23929,67317,38334,52414,95891,83299,24402,58169,60792,46743,32012,27567,61604,30687,54714,37473,67487,65872,82323,77525,47850,17726,64519,53924,13731,26681,63113,80626,94112,30457,87082,39242,72207,20511,58030,54352,55859,61736,22819,80728,40620,13450,52510,47784,37592,99922,85164,25525,57827,10876,69906,29066,60913,56795,42095,28126,20004,76896,20777,30851,52022,51692,20874,71894,36062,49565,33296,10534,52628,27655,10531,93189,51238,10870,38292,70791,69223,10554,15508,56225,97279,19735,33412,64449,11099,71037,63530,67409,78028,57505,74302,82910,74650,83340,20521,35605,80944,11994,61652,33667,78891,72405,32350,19138,31626,58015,32792,50860,28704,84209,80305,19827,61631,60283,55268,89709,88189,71998,69208,44343,25864,94521,55693,51387,43460,47978,90147,84625,55547,57080,11859,65847,80027,25500,24897,94089,67223,99244,22223,21265,52058,49686,98108,99847,41878,55584,49125,76373,98933,50947,66183,66295,30812,27167,48359,10488,71784,67836,48972,38590,73853,40201,30942,23706,74493,59120,13076,84161,88932,41711,29317,52329,62459,41259,61038,35099,35145,98098,35440,40671,68698,33585,60007,20039,93092,98327,44796,76786,47723,28035,82713,96542,43065,27528,60413,87114,41423,81749,33539,98929,48529,33993,89757,15869,37086,74684,58945,19250,81685,15998,95994,61289,84105,87189,20791,15577,12809,76725,41987,52911,13085,33382,66704,44058,27256,83071,88748,73175,75776,73731,51682,42407,14802,80102,72225,68101,58653,17951,36276,46697,98097,31430,34932,24455,13722,99817,41810,25196,12048,37613,56524,97545,98205,48786,99287,97283,70997,80844,70309,85163,43092,29823,91104,24504,43643,32121,15306,39240,75808,90369,30662,64392,73251,56751,42521,55251,99040,75794,27549,82163,58809,18499,57739,47643,22617,33173,45394,34784,95906,60303,73775,39839,48927,88748,35826,48468,91829,52317,26393,63237,66776,62477,32651,95131,98223,31808,27484,10812,15942,33100,20359,57721,64270,44131,40635,90689,62630,32243,35353,87640,10614,30632,86651,44722,46287,41140,26626,84268,85750,58720,42893,16002,31783,94491,95090,35556,75760,14525,54502,74948,46735,53997,23705,94534,92028,95923,79920,56893,69041,45402,12712,49731,64095,94442,87004,58033,91797,47235,57943,32672,71771,15759,20619,80003,75806,65627,97550,76128,41808,91516,40352,18515,13116,45108,46778,42687,54159,83707,33870,43177,81699,32220,82676,75918,39511,79374,46024,69443,67002,38464,54105,81796,37900,18496,83885,56649,43894,62829,13801,90423,59101,17287,20415,52448,95143,36198,36857,54585,66315,80375,37284,88727,34703,72852,55629,78402,51734,86612,83024,35217,82056,17544,78072,54423,87306,37739,56843,80508,41305,48092,16291,17929,25363,69921,53251,57336,60437,76532,82307,72290,88483,45146,65985,52675,15525,46956,56754,57069,30626,80444,40213,97578,28128,37758,72717,30576,13752,63132,52360,83689,52144,17599,23913,84104,42370,97316,80601,48869,31662,86091,23715,77992,84429,94080,18931,73638,59894,10820,97732,72225,19355,43437,21782,33362,14217,80732,11386,29369,31928,97066,12844,70530,19712,41319,73394,15549,53802,28467,42781,36733,54280,28952,60429,72609,22199,65086,46691,19531,16202,71214,14079,91991,81920,94808,66023,33080,96553,23675,95608,57811,33795,28292,40234,26615,95030,79189,54949,66882,82519,60720,34703,92515,32924,84089,61474,34749,15128,54485,79569,77009,16496,22143,34125,16574,43491,22493,12347,53024,99242,51671,93095,84846,80685,65215,34683,84219,47449,77654,50323,78778,67668,17922,19698,29161,17848,60690,63394,32796,64982,40793,31450,86087,16120,86563,83803,30828,32392,90777,67996,38146,16919,51072,73375,93382,15725,82534,72152,32562,85571,15324,72624,62140,64046,78753,85179,94453,26375,80115,91330,17661,50224,61018,32130,83989,22219,36652,65574,95919,47368,44848,28552,61551,27427,64996,76012,69821,85483,97104,51198,53526,46217,50854,78048,37792,60740,60124,77204,64002,21463,60523,28637,25575,21020,33164,66772,40218,60530,88580,37539,30451,72721,63050,75788,38478,96395,65750,27230,34610,45342,14336,75820,14514,54024,40089,17682,38143,35774,36749,38994,15758,21649,13594,78882,49866,35211,61417,13306,41883,96440,13184,53367,46953,22086,87556,13479,42875,98862,93998,16577,90235,47542,16991,76826,15344,36910,51452,82937,85157,90160,28315,12209,82512,85489,19519,78446,46206,84542,51141,95990,87077,21006,60822,45657,50670,55651,19545,64765,14460,31858,56426,94149,38708,31384,58766,42801,57701,81933,93094,42748,29284,55755,65557,17194,70291,10863,56559,16544,72731,77689,28907,73473,72848,82795,78125,41192,97215,91992,58676,72694,59067,68685,68559,56649,10849,60914,53937,62930,23336,15962,34111,32282,96342,80831,57337,83569,62060,76757,18078,32112,44469,97794,86904,15552,74638,12550,30141,54093,16137,98368,55274,86573,19829,29271,88614,32633,96695,72972,61003,33356,90397,32491,40341,14926,82362,63340,16725,23474,20119,19530,62607,37806,30063,83727,10784,27112,39615,63025,70211,16882,34580,69531,91590,16480,71985,92514,28655,16827,97805,11632,14049,74650,24899,25970,84224,16633,81590,61954,91137,40508,66352,68304,88062,33216,66988,46153,18230,27891,71778,37013,22616,14367,90659,66744,77759,26464,25037,97854,63684,36975,28274,88298,92403,14478,72920,88978,57593,77345,20477,95556,43844,85734,69978,42440,67534,10318,77414,28990,26756,58821,35103,35655,78639,89334,14577,10232,19569,53357,91588,27251,39524,61879,92418,78429,93094,47798,51128,60593,28838,90410,98905,89713,39586,86681,96536,34939,43695,32120,60978,52036,55585,24021,55631,79728,63281,36101,33106,82073,18826,47865,24001,99744,73726,95582,48995,50680,28454,98221,41576,87196,44579,47700,39017,95872,33724,65188,14444,48762,80654,76615,98186,34771,71920,35502,40489,26210,99561,76368,79574,80791,21134,34440,50291,60747,53072,92908,93158,16397,76393,41437,13553,84736,78279,20764,63595,36236,82337,45870,44698,58272,41240,23554,43992,35247,98129,84077,60868,90716,30968,88306,42315,65882,98521,95602,15022,54394,12601,79993,71719,38260,21291,95736,24408,80248,89860,87488,76006,16958,29146,45843,38291,94028,87015,28524,90555,87754,84086,74383,44924,21171,29482,32101,16781,11070,60538,36164,44022,14446,44354,65312,53046,34919,31520,49110,47725,35396,85547,67925,30033,29222,33004,38047,37712,69030,41812,40129,98054,18042,91538,79391,27670,19687,93392,12424,38373,30932,26103,28931,83543,13112,96971,42472,16143,47724,61468,18712,71811,29662,98722,89231,68626,46446,95159,64027,72674,67671,91861,95900,16577,24426,22446,14534,77371,97644,68977,97021,12752,39601,34171,62535,60726,72059,48882,97522,92451,66756,14205,69662,62923,50262,76248,91365,44790,55796,98754,42867,11982,21660,85390,52589,55559,10267,88403,85617,87740,51902,75056,15524,78078,20179,68722,82726,95099,90513,71834,34181,90136,75767,70614,44210,28081,43219,45864,85896,29462,69379,24141,53789,48295,57381,66748,73659,59987,10420,23702,58040,45505,11985,89738,59162,44993,72125,85647,85879,54556,79504,34278,85678,78688,92790,65618,19021,84307,36493,35828,22464,92616,61729,96395,25191,58712,16688,22027,20286,46151,73174,39839,94838,13684,80959,90999,81081,93391,96595,90414,30567,28637,85475,61918,12623,25572,28298,57215,61518,57636,55478,64070,60310,18632,10679,71872,43709,48661,38021,63116,35944,98916,41535,67362,45979,82902,36386,49743,96346,34932,25883,47338,56321,62786,68969,55246,27838,18881,82848,85291,90619,20702,11078,45954,53246,63311,29244,33036,34293,52309,80828,33970,29005,77534,15774,30500,39803,96655,27740,51210,57665,39694,27977,71106,22082,81069,20465,17350,32549,27586,75223,14798,16073,31637,21343,13622,35022,94505,25708,28276,32139,20381,94649,11846,62020,84014,89667,64655,74950,25913,69822,35343,72451,22432,84195,60107,20418,75158,94887,55193,55500,54457,43125,44355,29779,20992,13630,83812,33903,94170,99778,62558,96061,73309,48808,55718,63611,91500,45832,48699,33846,94946,30900,28324,61629,61047,42631,12475,59806,34699,97561,63181,13756,91734,49910,78696,64422,38844,17876,79285,40673,39163,42468,48331,76800,79606,41602,73254,62412,45315,29705,16787,62557,89062,42340,52595,56753,19227,81489,88732,29532,38066,16908,12550,41051,98766,22453,40707,43364,70012,79604,71846,58079,20046,14436,73593,75656,75910,47380,35383,75745,61003,12614,77534,60620,14445,79924,75537,38747,36960,38509,25672,62713,20689,78957,68513,36075,71456,78888,30397,88023,18943,94818,50680,23944,86075,71342,99807,32546,73756,18500,11027,84879,79888,38568,15198,65925,75058,54689,98324,64243,76691,96267,40894,94638,81142,14845,51277,64897,77049,82585,82953,20219,64608,95157,94672,25074,85773,12323,40648,66859,38549,58113,95731,80203,87967,47452,25697,32828,88775,27767,64557,61380,72295,18687,37808,32393,94407,18047,78952,44004,98550,43325,48387,76067,25511,59806,86743,46899,62210,60321,54568,88193,39141,76456,25210,81600,32770,78202,99260,95798,31543,39363,39807,36113,65866,73634,40945,86618,24943,82286,32705,40677,81091,16990,27690,12458,65860,60393,50831,70318,34329,83003,61633,54722,98705,74321,63221,21346,39841,44669,65777,18501,57691,21970,95303,31332,80747,77747,92395,22971,55500,46528,26524,10390,65589,96214,40019,13381,95473,30669,33337,39478,11640,64686,53105,80602,82602,83036,79579,73283,60114,92006,57499,56816,39006,99208,65489,94976,72661,39612,96204,58425,30649,92349,30258,66776,60961,84284,88695,82188,22544,72944,34596,49782,64226,46282,38031,18948,84729,26469,88605,12786,68718,61449,51545,42125,12997,37742,48838,43605,52599,16976,98994,52792,69429,26427,31550,91374,50700,20999,48274,78398,85748,15942,41672,86977,18487,99139,17949,77157,84901,15868,86111,87584,94419,13125,57442,55594,42462,52777,66442,89399,42370,46422,99832,95336,18072,37058,74159,70018,20677,55149,35213,54267,89863,62828,43272,79139,71551,42851,19469,94501,19634,87024,14833,82804,55744,17993,84856,24552,15729,21521,23461,83750,54544,62111,96978,51324,27302,93475,93772,33677,67655,83527,46682,27082,95088,77190,56314,77725,37340,50540,93162,36332,57864,93058,95935,54231,41722,51939,96583,44297,71306,94798,59704,69877,82434,80629,82676,39309,74063,97264,68111,21140,54559,31753,62582,81660,57003,77123,27046,39199,18600,13237,31009,88302,73098,56102,89801,64829,99730,66335,75883,65771,89526,52396,77936,34126,16891,80356,66454,40112,99441,75946,29465,34286,53824,13766,73471,33242,21088,25292,10274,13708,96274,54113,78030,32673,37989,30462,76640,73745,40033,33562,69910,79102,50219,44991,68373,36420,99426,89222,57357,27403,93884,47387,56883,63393,47157,50416,12667,81348,61335,13884,20924,31035,23354,13140,24390,74317,75807,85398,14294,71240,94583,84777,31401,87020,68343,44113,51412,67961,63326,36019,95481,63183,68211,52103,20951,90439,16987,43184,73785,67451,38572,94405,28695,96156,85534,48408,73556,78100,15554,99098,46823,50297,91297,88794,57768,58685,93824,89718,14820,81305,17950,54352,42319,33093,93818,40967,16638,32088,87265,53202,33173,44241,51423,18347,93529,92162,63933,44833,86745,38125,29450,28664,11213,67602,37407,83306,60239,17179,24948,43788,18435,62518,61223,43139,93676,51335,37352,31720,65465,60435,65623,20331,20112,31575,26161,43940,24676,83256,96298,70974,30809,62387,24809,37216,38887,92792,81102,92919,14850,92809,29375,83683,26194,90819,13002,33488,98006,49247,21716,50702,67032,32979,62402,30959,96826,45045,18921,18331,99131,89541,52328,18826,65784,14543,31181,42875,29492,52872,55571,37077,68105,13301,22030,66202,53923,42723,14998,78309,85127,63926,80289,28121,64714,80720,47329,59161,51859,46288,47039,51294,36029,23549,58317,81607,10800,43859,28572,23470,24496,13019,81487,10662,60592,19613,93471,81993,73408,75563,26749,32202,78840,90508,65278,98243,24801,33598,61980,75375,59451,72847,48687,45931,63965,63077,40599,13321,88923,20659,81592,16696,59967,45589,21279,32670,23257,40030,45616,62367,16902,37413,95562,85957,60860,53791,75656,91267,13732,23563,43237,52945,35618,76933,49798,23158,34669,81321,70736,77097,31710,29189,98566,23124,19372,94343,29814,46038,67629,60938,47224,67017,58381,79033,30776,79588,45070,39995,12598,30557,76885,23576,32546,70348,28468,95125,22214,78682,27594,95933,83327,71912,25514,97558,29054,91800,38542,88695,91517,88915,48278,77374,20119,10506,94500,82257,62272,72869,68633,45909,34947,33057,61271,19239,70200,35059,25803,48349,61558,69548,22277,76161,73117,18325,80590,22956,47489,96227,54936,51969,31949,47317,34545,16604,45710,30739,28403,69858,33199,89537,45054,38291,52911,85338,36369,75051,91735,93666,82752,59667,68889,75403,61427,68385,23888,35351,18587,97442,29349,96193,30659,80189,41381,54881,17122,94255,62963,56043,90599,11925,51121,44694,98880,24695,22073,29881,52237,55945,21269,82709,59377,67603,92908,85708,27950,60702,22443,17113,31086,81101,92562,70166,51571,89319,86394,27148,88297,51147,98067,37431,62392,22159,81573,33796,61676,48368,67211,43663,35834,22676,67426,80115,92940,84513,77892,80736,49473,35866,80753,94594,18208,95727,34362,90442,74545,20950,55848,98720,13072,37129,91058,27738,68145,13757,98084,42241,23765,95942,83681,91330,39875,31474,21821,49688,34271,61350,37969,47371,61096,74129,80577,33824,81724,17236,43193,19703,16882,38594,63695,74910,67254,37720,24536,23044,10111,80924,59286,61824,79406,54026,24805,79656,19491,57854,38750,42260,23213,87475,25778,99931,21049,32913,12248,40530,81337,82236,76764,75945,36497,67057,69505,19094,10476,66489,87282,53395,38391,84968,76938,93870,88897,77648,80796,46440,58654,43955,51898,30449,39876,73690,84633,85317,55959,65121,92464,32029,82860,44609,49461,13805,66740,71744,28319,38384,68778,15706,21459,35375,64848,12387,45015,46922,54685,24013,18676,20658,33076,20860,10120,76274,11539,50535,71351,44351,75858,87622,14764,71523,14887,14486,14323,30608,52041,60446,63324,77116,83688,39243,99382,32575,38493,98774,23840,52148,31771,36635,53756,65633,32052,42094,65897,96143,64304,78590,99752,11245,73340,41405,27349,94822,43241,57183,94216,63017,57980,29053,45758,74319,76046,80363,77729,11969,62280,26331,70526,80678,86738,89693,95495,70469,49669,34522,71475,48305,57767,47575,26012,46780,24784,29766,96249,37248,67301,45988,82496,41837,85674,42534,62988,91300,14533,18978,20428,24883,39850,20583,54998,79483,16356,77043,66672,65887,75370,98734,90234,39835,36656,20396,26920,96709,17685,27277,98642,59069,37026,97796,81323,19371,67643,32743,19579,10560,62100,28645,80275,58985,97839,60164,33851,44299,53373,55708,70890,66829,49551,75903,75175,33793,88436,61534,16194,39045,46080,70661,96305,92216,75727,15669,47590,13347,77559,88826,73562,29896,97221,61918,36626,39761,19375,12975,69215,24141,63094,47868,57138,29455,33194,39082,65899,84806,34174,78367,47377,25522,52136,38562,86192,21847,69676,40257,27577,55509,38007,38517,12633,41096,24327,79131,61605,97784,12766,23013,72207,16249,51074,69086,47230,54672,61708,99649,16995,75043,79732,81340,20573,23875,41067,37592,48237,20532,72231,92863,74609,31364,86957,43876,46000,84180,30106,50053,22882,40254,81471,65808,94432,14566,54105,41973,58482,31300,47079,18170,19469,49653,10148,56201,59747,12536,45149,59717,41702,64008,75426,17050,41225,52883,23434,58966,66817,11939,39082,81847,40306,11725,18494,49977,83761,88936,13351,47440,88437,25725,17298,54234,43174,73179,86701,98047,85606,92060,91381,75058,43071,39971,10804,40584,68085,63205,52560,60045,11728,24212,52653,12944,53974,95918,85506,55143,35402,43155,14460,82407,20272,33072,37853,68559,77242,36861,73299,84924,20573,60002,41200,88640,56668,89872,52636,21547,73251,54558,20338,55398,53938,60342,55842,80838,24427,42704,58437,60545,95084,65336,87193,30947,20262,56871,43373,13379,51679,46029,63763,83921,22198,46447,46038,17157,67667,87925,19590,78653,11518,74496,61578,39000,61374,82208,57562,61800,50652,27031,30940,67114,11753,76579,83586,24842,21268,97746,39132,79373,44440,83046,51417,81831,34959,46133,77961,17353,61443,95286,75053,14765,96685,92232,81378,94579,92952,36466,37674,77103,29615,26004,86650,89596,31240,67047,75671,41334,81993,43169,60297,88513,78209,12385,56116,93949,44503,34382,68998,73295,46592,73063,41970,66607,43196,79302,65031,29985,35720,35422,63370,60235,82909,50839,68869,60751,72010,64064,54888,11157,18965,25140,56340,85596,58168,99493,14678,47989,19963,26475,75815,19221,41937,90008,35916,75325,75150,62968,48778,65213,16284,88547,94157,83058,18800,13553,56790,37786,25937,33225,49900,44785,94412,93464,14680,29270,22433,10413,66346,83768,27858,51298,49325,95184,39579,13195,71812,34277,34230,80323,48934,37341,91274,43272,81009,28860,67611,28810,59997,98980,55276,29439,86031,32910,29707,39931,98069,75202,50290,12123,39264,77843,86863,10991,36730,94439,76754,96343,10229,60648,57883,60042,36712,93890,38545,81884,23676,43175,83050,96654,66691,86279,22253,15224,44624,60279,92345,87902,33135,11591,58472,31644,83687,43124,75731,81630,22777,38896,46853,79198,97897,33540,14290,28182,94059,29505,36915,12181,74087,10931,28140,81393,85257,69287,86420,21948,12903,62481,25573,65326,56539,61954,45441,38345,51002,44934,21604,82912,57434,87220,90208,88696,17041,17368,34024,95719,63817,48060,10131,99334,88368,81939,12888,49437,90134,22895,49348,42206,66628,12783,91177,22870,49161,15555,74799,93951,78295,17984,80730,43733,80481,92643,37381,19314,70583,91327,60047,22196,67217,46901,41674,91148,47650,27242,32206,92826,14628,11970,83391,36719,55603,24876,22194,86533,94785,70596,56554,19230,35229,10468,17223,17887,29450,88724,18694,85849,54223,91636,70639,92831,94011,17937,85480,50819,40667,83125,35535,65348,34600,19640,63374,57904,39560,81663,96445,11498,80379,37996,95472,64013,34399,63547,20464,99315,65359,86511,93546,90982,77091,43102,80714,71349,78750,23142,85671,33155,43061,12409,39213,95580,12533,89379,54434,73971,68164,30786,25821,30621,45480,10089,34442,69856,11478,52033,75866,32862,99584,95469,76158,48268,65039,92268,35119,27128,49106,42623,64924,97928,24928,21464,39939,48340,99786,29020,81493,53078,40131,51457,45566,72310,44997,85486,33181,25617,91980,37207,98070,97086,11082,29254,22821,90321,51376,30829,94258,85255,29600,66206,42733,40895,21968,77641,63488,64296,83690,86053,99703,39936,44047,37477,34585,64483,62066,45376,74805,96571,99835,90945,96237,10546,82408,81010,42897,10925,85140,25921,88350,51531,98661,53868,63659,92171,44756,37781,47760,91278,48950,48168,75748,57848,55725,46182,49812,15539,30979,43809,15193,94931,42898,59429,90641,91628,87301,13221,39595,40078,28508,36436,51426,66997,16671,92623,13437,33703,23926,66785,63701,84454,48418,60762,36769,42072,96981,27417,89335,13226,17050,36581,79018,42778,18481,91689,85735,38885,16124,12591,79893,50148,78507,95964,79117,90481,26238,65964,29513,56381,86192,74654,60208,95523,12556,10417,89511,73560,47777,51992,16464,96682,40048,42126,64530,98384,87039,80419,15922,30911,67381,43627,73810,27408,99743,55722,30795,39811,18146,70275,84835,81478,84556,83243,85013,73067,58986,43018,15454,33568,90944,22384,74849,97493,79448,81695,65018,55750,70646,92453,33765,89634,75222,10685,63951,41631,52120,71839,71077,58954,94013,59192,56763,90608,16222,72527,76337,61426,24279,56566,70798,42127,99555,23667,87528,68581,59662,31280,25719,78726,55133,69594,91346,12795,39511,30686,96536,76736,35990,65652,38484,20872,58858,29336,70776,41334,93497,14254,30652,63010,29286,54233,81050,62086,82636,79069,63006,56273,87369,75054,37789,28289,36898,79828,86202,89031,45191,41838,57760,87216,84562,50206,67870,20507,26346,17399,87987,64427,72661,34018,96201,16764,16688,24310,27856,19805,66103,90847,39176,74410,49218,50352,49229,99875,42206,84290,43662,61083,75419,70630,77752,11558,39428,10154,97246,46741,61942,90894,43218,43405,79604,33446,13526,50280,26530,57358,14558,83749,56160,21017,87759,22768,83823,38491,34553,35043,38510,24577,12389,90741,64238,92004,10642,62750,75265,89719,82003,20359,10704,84824,58993,99311,83752,13554,42462,34270,66624,87465,54657,46471,19586,21679,22313,28372,74747,13893,64192,70060,67749,40186,45941,66481,95228,18850,79581,12414,28703,89017,36744,87706,14083,85716,91878,74565,15538,11160,52095,94346,32052,96150,56493,63736,90796,30324,36785,54521,65287,56118,50029,31652,87260,39229,43222,42533,61015,73726,11320,43302,24582,71669,44709,70083,20646,94906,10131,25747,63399,17887,74671,56319,82588,94024,98667,35291,20811,50324,39283,30728,51506,44538,66238,19746,41711,54801,86596,77566,45292,40871,58253,96918,97948,68250,56238,48291,51319,24208,42950,19483,27607,37547,48262,44300,24142,98028,63244,72816,68357,39228,24813,90303,62274,33675,59340,29991,90848,84627,66426,50144,82294,95459,50019,96410,17748,63629,68009,56434,12660,63918,81977,77002,67015,85410,46664,77939,81655,78896,87986,44808,83828,63466,85889,69782,22180,34484,94837,78534,84823,31346,65311,49073,90372,61674,38638,27384,82858,11145,65875,95383,84957,71078,68515,53688,68525,11911,13933,81558,49405,63002,56183,22532,67760,50036,57726,11508,77276,72780,93265,35317,87235,99980,73948,73831,48440,10626,42202,18334,51460,49527,61747,56163,19644,56285,32054,92898,28670,58729,84572,29372,80838,18031,96257,64215,95134,56988,13445,13433,24603,71663,88033,51494,30573,62575,85384,40804,38916,19666,75693,14048,22046,94194,99538,59567,88671,86898,63779,67269,97421,39316,89757,31945,47117,24143,39935,20986,46032,82277,74602,22175,33269,45510,43147,35159,88795,87131,97605,52346,49032,50955,83573,47121,55205,36634,59758,58399,98357,42920,55390,71286,74869,42934,13580,36064,10721,91138,43260,60869,89955,31143,91247,46075,14344,38789,40262,16141,39985,52054,18200,68688,39513,77512,37374,27769,80751,23211,97188,56622,70837,50376,71109,69992,26985,36470,40572,30929,86038,49374,50019,27191,75515,93658,74134,10224,65159,33027,93852,70978,68052,84410,65372,23269,98936,46197,13594,86851,29137,90380,22370,95752,22859,30211,85371,17202,62542,19425,11529,38869,74317,61440,51056,88269,28259,96060,73373,16245,48391,69643,68271,48794,20075,27710,99413,53869,11014,36330,94765,62435,96550,64372,41848,21836,98879,88859,61776,76608,60505,58836,23625,87017,40075,29456,21875,83212,78165,41371,77329,53644,81248,99749,18004,48028,21869,20105,92248,73721,45573,93116,53965,86079,58550,50568,10077,23315,88589,88726,91263,60582,58372,52274,33396,44827,13090,15851,23966,50534,76036,34846,15921,14955,84643,44339,92250,42921,98755,25274,35675,54135,20265,90068,25614,32658,25401,59096,83589,50002,96711,66377,22183,44567,81517,57472,48470,19591,42292,59271,14468,74224,92042,44694,89396,10075,71244,88799,44049,98213,77811,27852,66219,57149,38347,45705,44817,34648,91461,50977,28428,96315,49956,39374,47713,41864,70100,51616,98392,96929,41269,31214,90419,79994,17097,13307,54203,26787,34465,67174,57980,40315,46494,47489,64710,11013,23443,64341,10753,11144,66653,47678,70706,12533,82701,25389,26439,15513,63321,57015,16833,23334,99050,66677,79589,78026,75750,41904,84071,87915,24153,44617,60950,28153,93457,87409,39382,32081,18852,43900,74456,58732,86702,84839,94259,59797,54683,84975,63888,67724,54423,99360,66455,57443,53752,84047,23274,96656,74037,88950,88848,15562,88066,14143,83446,83351,62958,85247,59903,98198,16179,74499,84207,95695,34725,21832,95743,11056,30536,59128,78502,99917,12855,81537,51150,95353,87695,18492,81120,95155,91480,85538,54606,69207,25372,54779,64049,16625,87448,21672,84890,42000,36286,83773,67777,91484,74818,77654,58521,98237,55765,58691,19509,12566,48955,36494,99723,57730,60393,82287,29088,51140,12571,74184,27751,58452,23605,97132,96263,43789,55242,92482,40162,60420,93931,39887,88811,30762,22114,63925,64401,55309,29526,34690,67471,59922,33088,15608,73328,79346,74018,72419,41826,70247,61890,52595,84402,91136,67976,68912,89171,57832,71687,50480,49030,77159,32262,59417,78173,76295,99132,74772,61559,43432,73221,14220,27753,98065,37266,15842,27844,52783,85504,19367,79021,55944,25413,79961,95529,67884,51166,84621,55675,47475,81494,37012,32905,79502,55824,77878,82467,21940,88125,91044,17834,66034,17432,20862,16543,81792,87331,98789,71176,74852,40758,15786,50297,55781,21493,67345,56594,51221,30194,94233,63013,11976,79612,53740,58954,38662,86937,46365,43930,62903,60917,87985,59013,54488,57968,45329,17111,63673,48521,65390,97554,71744,42302,33723,56838,52737,41005,46246,64961,18219,96003,64889,52894,55797,26486,94636,77848,72904,80892,57043,99366,19867,58026,96541,93327,52724,67439,35460,39941,34950,99365,93178,95227,99067,78514,18400,99939,32595,34670,40609,71008,51545,88544,44905,33062,66605,40626,98651,62133,29351,92027,84108,59698,18613,88055,59719,21278,84284,85078,67076,22924,14106,26916,90321,71251,35902,11366,85427,81501,36902,76329,94451,58730,15356,56941,21028,73296,14365,36883,12025,25338,12844,87276,90609,20046,23069,61207,22083,93525,84472,49871,40898,99143,28291,50045,62353,90576,93270,46691,97353,47116,90592,43826,86447,50085,50805,40395,44240,16573,10268,34906,51471,14602,68181,30998,65824,80302,55658,63690,54419,62458,54371,78993,19034,55157,46253,12860,17816,26749,42067,39900,54444,19572,30166,65336,19384,92867,55071,88111,61603,71847,77936,55830,89674,81846,72776,40942,39347,73624,70968,66736,80579,90059,71268,25174,32609,16902,32600,12453,24173,20061,59120,93036,53662,90925,55499,18709,87574,10128,90140,88437,73124,83159,53668,30993,20271,93664,52397,50996,29312,50195,94912,23195,44416,62350,20056,31477,19130,58183,88434,22577,96112,83428,24977,22341,76721,24390,49629,77101,68962,31714,44956,65484,22283,51832,33506,12691,20847,44644,64169,66697,76471,45933,16003,70106,68348,26537,63849,79532,56733,19263,61850,44661,97195,91641,29240,38108,12358,31408,92471,84931,48348,25661,88150,16034,35006,98679,46997,23705,70260,22054,91219,88233,99583,81093,72282,19836,78859,60640,37832,16179,21116,22930,94506,11552,24517,87820,98798,21885,97811,46736,48908,79960,91766,90622,35416,87249,87043,23044,21979,77591,99230,67721,33325,62136,98509,64090,30677,55672,59323,83665,56529,45600,88226,80303,69196,19549,66715,90651,72554,21695,84523,98612,52112,39706,43819,62655,97766,85232,28934,40826,56541,62410,79481,57249,15033,30678,33708,64242,49826,98886,92697,38924,40019,68322,23050,36589,89430,60843,54909,14935,93098,98739,37019,99589,97092,43115,14168,39195,24586,45710,32118,86046,39827,11990,77182,81787,50949,46158,65237,40507,57711,23580,38936,94943,96172,33192,28213,39252,35562,16275,67112,87783,78155,75677,39804,60516,29365,40379,74537,54527,56331,51403,42482,93507,30061,78139,26809,50217,23821,70428,39388,71849,40405,12314,86628,71119,28727,10850,33272,42267,79979,97465,39404,53017,93563,54767,52825,97780,12046,12913,37329,97704,54519,70987,52742,77110,48215,15758,98026,92803,88668,41166,35393,63014,29937,72842,75302,36044,86791,13658,64482,12281,90185,71820,61315,42789,96455,34181,80442,88842,33681,22914,77826,72776,30974,15649,26750,46979,74049,50657,84932,20560,34782,16419,85998,32873,12003,26567,61120,83044,50131,53608,23914,32831,41888,30825,66516,20407,68560,87736,36610,65574,41576,84635,26081,95484,89536,74090,69733,78087,56891,91814,93986,31984,82785,15277,38181,33859,29813,41098,15202,77804,26912,88131,80277,65347,70083,58079,30384,83975,57030,43012,14979,79675,87357,94072,43649,85807,99292,88809,12366,92759,90546,16456,63821,22961,73154,88612,66291,95694,39113,58850,52847,54627,36467,93528,96681,25292,61028,68598,95112,17059,36451,70307,61173,49070,63623,15321,93149,54412,75828,51029,55915,44388,55944,19583,93855,97018,54555,98214,66869,77431,30031,33095,92810,87089,77193,42524,82646,60570,77700,45782,69663,67576,63318,44549,75658,89792,44206,16843,46825,19805,78446,33203,75668,45969,74541,97502,97251,33967,60640,64352,14199,38821,23864,16741,62682,36259,47399,23328,69779,96398,34194,11543,83337,31003,34764,96421,34593,49197,28549,36646,11594,85143,70196,38246,16228,18227,69584,95926,32723,50032,90750,15004,89362,46972,69613,84068,14355,91984,25140,83327,65628,15818,91227,59744,95374,58602,88589,16572,47894,24496,30823,34358,75775,19747,57659,79855,92649,21548,45856,94871,50654,62847,68371,77839,84032,91997,92891,97937,17479,59700,91067,68883,96435,44185,19250,22204,31713,74567,23417,58742,52879,41587,35968,51173,10069,44021,14118,66149,49977,47266,66915,25365,47552,72057,95349,55097,41357,93512,77857,28312,25467,78131,39745,27212,84600,74228,32617,38225,49764,85983,13617,26691,44165,71536,89586,63368,10250,58419,41771,53351,30673,18757,15829,43563,73887,89454,65666,49623,12185,29371,64927,90989,97551,32229,28650,31720,10618,48907,87342,34838,16215,25879,66079,39083,62927,22203,32935,50828,67745,15466,74893,25493,97235,31503,29971,17905,28300,20881,31388,87969,75694,25790,45681,65507,36640,41566,51369,96486,53280,20422,21029,24035,68625,18116,61485,88722,47060,61684,16884,42455,70400,15008,35763,30891,16904,72835,61395,79520,45552,19057,56918,73123,83490,81851,24605,18464,66304,22572,44493,49215,99600,24214,59005,21025,63596,36218,53132,44946,18197,37046,74578,91364,98134,66491,75686,99774,85364,73082,75162,67313,68425,66460,31348,59110,70175,91448,53715,85018,84002,54300,92256,98007,46230,96662,69556,96966,53219,56907,77281,88084,63081,48046,23273,32134,67973,24700,88850,84234,24291,93038,37013,24760,11897,63197,14408,15788,72366,46984,84565,68071,64577,75224,44985,88694,70223,41502,94723,73242,37003,20059,19721,92088,84816,57240,13910,43308,56258,11670,57932,83700,86622,34413,42545,63936,51275,89147,74799,84104,39052,65124,11608,57854,19672,93638,54341,86315,61847,78617,80339,30898,56243,16805,56172,98223,36743,98349,93364,19341,92425,81319,18792,89888,42173,65737,56810,50924,96776,64030,60700,71393,16450,55609,74758,86264,76742,79139,39871,26560,11695,90432,18161,96367,53267,91540,34975,63637,52727,48042,52746,74766,40133,48130,25750,37905,47781,90238,95190,98178,64831,33213,32667,25748,11695,19819,36630,33748,12669,43367,40451,78784,16026,83358,69207,61865,58609,68847,76271,98098,79120,28681,81787,37135,72956,29595,35115,82039,16573,31899,51496,43974,52730,95125,91308,22311,31277,62229,77982,13626,17594,16433,39713,79229,92636,70315,10225,74022,95156,96160,16103,71414,49897,77623,96541,36770,93726,14298,42033,40731,49066,85760,53701,30280,65819,15279,62357,34090,30398,28082,89897,96462,64704,59437,28674,48266,31859,99326,74777,77152,25016,64787,99142,93563,12901,89771,88346,24778,38568,49821,71104,47434,81643,87420,60425,86869,54363,25865,62198,82407,15638,86284,28776,57055,48018,76757,21903,38106,39234,10741,94514,72562,98293,99797,11707,49215,32444,35235,68841,68856,16025,10135,80137,48748,53151,27532,88908,54052,27630,74377,54820,76303,73070,55610,16833,37625,26583,91905,77059,60143,20181,29065,21636,10607,66490,24873,46356,57875,29440,42659,72618,14723,51525,10725,52275,82238,22674,59556,17761,88545,67200,65517,55646,80058,34926,48840,23900,63664,67885,95841,82114,24235,39044,97900,77761,35148,83955,60091,72990,11378,86257,26776,73017,62214,30885,18464,74390,24450,39930,11012,89878,11363,27997,58636,72369,42395,86874,11185,48227,15100,77972,43371,10319,57880,24155,24362,90947,92267,99801,90872,83699,99785,30684,77137,13280,82583,67640,97313,63757,26385,45414,65609,71163,42442,86159,61057,32475,19394,43710,91384,29282,36258,95005,59991,30569,81020,43030,90355,65226,22023,51303,55270,12050,50175,63302,31043,90908,24408,53317,39788,14049,49398,34695,15588,79350,32953,11323,43793,49496,76598,67634,68872,66648,52564,93499,88876,64605,74474,42363,75667,39437,87201,19223,45026,73189,13083,81814,31914,97711,31504,76416,13359,19700,57040,44581,63400,98048,16302,90296,82346,49105,36504,38168,47109,21065,50646,50482,25666,37246,25109,54406,74769,29907,41616,42268,83136,87045,81813,45143,59116,41846,73576,36777,37038,25297,31528,97648,11337,22839,56426,70068,63749,40220,28479,92069,11901,35023,19997,90610,84547,68477,72272,60674,49010,65596,64017,97757,78138,76154,22379,34000,17832,93926,97103,63098,63606,33329,58925,23514,12300,99754,23427,36757,51572,27651,43355,70881,62690,84953,72887,91174,27316,66396,64929,14267,94302,79796,32080,92684,57506,67472,24447,34435,88650,90819,29152,98079,12809,76073,60099,74260,96027,31824,88711,84813,19199,75721,64622,98930,41706,17603,52745,18820,80475,98626,16402,73426,48557,75109,81489,93125,31275,37836,27965,10905,14823,40405,96714,12099,68086,99251,38737,53291,56450,75724,39752,42262,30224,37443,69685,71991,63730,69189,77041,58844,82564,79707,92907,90038,67375,98706,94357,46270,53646,17624,59598,32150,47222,74274,20800,92702,25607,39214,70685,11285,68301,74148,96090,51393,69983,34024,20144,57449,30133,39284,19001,94082,37115,82394,25465,10999,66581,55830,67562,88879,37197,90957,44142,30811,98720,75073,85420,12371,67300,49768,72431,68808,15513,14502,28222,74277,73316,21359,43393,41139,32987,35406,31090,34173,13174,24290,12624,52623,84955,69600,23807,78378,64299,30333,52512,15460,52792,71800,56655,17074,54307,50670,24220,72321,43913,22780,70841,25637,14175,22042,35598,87298,72611,11585,45724,20490,25530,65551,85835,34786,40671,13911,56707,35193,39219,47094,77233,82307,99360,91003,46890,63289,22158,75623,86668,41203,91632,69078,10196,19962,84639,51523,90465,75182,67915,90061,56318,23291,90830,95814,37192,88683,28884,66245,43231,73440,64169,32613,42098,27162,39686,88135,20326,91706,33634,33922,76205,41888,67595,99670,49900,70051,30487,86708,41546,71270,65809,16137,87115,79267,94258,52586,60863,92967,21570,38763,78915,99736,37532,67788,63698,21701,52273,58688,76929,92294,76029,88524,49000,79264,81307,49010,30406,54545,49013,17810,85346,24279,31898,57003,69452,55569,54311,45394,83420,26897,73614,67449,20010,40835,58155,68840,64699,42491,39090,64189,49675,86632,19815,30817,66377,14100,36802,90135,72926,63973,66219,22376,19197,21651,89549,59676,86454,72870,31998,30915,42054,89428,85921,94128,21940,88814,64773,60822,18423,18966,93632,82226,70563,30185,33580,12894,97236,88344,51069,33376,14676,95010,13039,22693,37815,74765,68642,39592,32516,88578,66308,98668,47032,40615,75287,87355,64987,48427,74419,71312,36709,87081,52646,84060,73959,65483,39875,40352,55225,14608,71242,35597,48763,12768,12038,12774,33842,50576,60558,17908,76266,66544,82802,99038,14469,31541,68483,46156,66405,47210,69294,24924,49737,70068,88777,91783,67043,90093,58100,79238,39827,36814,11481,38339,85358,45114,44095,42890,16309,23562,47108,42215,52919,69326,91129,63648,62891,18999,48449,73814,11127,43978,51453,17925,56739,78941,62113,60943,23717,18183,42387,53509,16591,77509,50841,16553,92304,14443,16474,87466,51905,34403,68775,87647,77604,24596,54953,73605,51121,49744,59634,98541,61138,54432,47379,40445,92009,92010,78214,65239,53015,13722,56166,25441,27663,11861,84223,84969,16727,87188,74631,45135,19178,26921,91541,88349,77185,98983,13380,49080,66872,47048,96530,88753,97090,86891,46079,91636,79034,99251,25211,63465,95399,97400,78116,65689,49336,74024,68823,47527,44935,46792,52883,80378,93330,79999,13132,76416,16107,28595,45617,18162,28948,13076,55815,71987,65341,12224,96172,82067,42622,43020,72666,92565,98415,56786,89905,13881,60394,32990,28431,31751,34879,56071,32023,31083,73219,40410,94092,76385,91416,71422,91656,11270,10067,35006,78966,54832,92917,73070,55192,66741,94578,18508,97159,70012,95259,86317,91693,86359,95026,78294,19436,74795,49726,81042,51100,21934,36145,80777,84270,95283,42703,54143,52152,31923,85106,46864,60585,32732,39713,41840,77734,84258,76269,16524,73312,35902,53184,12472,39633,69548,85040,35825,13245,22924,34362,25632,84708,40409,29936,24878,87192,74075,35950,22077,52782,13755,25599,25244,94146,95527,57613,46666,42087,44156,94306,85489,88395,64865,28933,42227,48922,59936,25929,36063,59097,63482,92377,90008,89501,31388,29263,27874,79542,16420,53827,65106,16634,25974,36662,20893,36867,23292,97313,34765,32382,32623,18246,79057,13248,37491,38034,70276,51602,97482,18097,63599,15885,78824,31364,21652,54968,19405,83773,62691,21644,34532,70081,86137,60495,98856,84620,73405,40652,81638,26974,11564,71456,61891,42849,47919,40343,79125,36685,30241,43768,65143,27398,20008,24455,18452,83010,36333,29845,71181,78109,17952,17249,25224,86539,72202,63625,91224,13359,67937,64571,15734,83806,22635,49142,98227,14090,41327,93074,11413,97026,36018,98986,68833,74687,48984,76556,29213,51050,21058,66969,84220,48525,88908,54657,83644,45515,96592,91155,14598,17164,18002,77819,50897,47287,12526,80208,32792,50629,60254,11908,60189,64173,95175,16240,27225,40746,25470,50952,80577,58401,25365,96166,42522,70575,51456,33184,32343,96841,76013,47531,88072,78895,88917,24949,44812,22204,42393,27544,11275,58625,28941,92611,63828,97753,66185,29958,64566,44671,25713,49078,64219,78476,91867,99631,69124,83934,36772,43379,17536,41935,65635,21926,34173,20609,91120,44309,67997,18071,94752,79595,71346,79441,81946,58253,14389,30687,22262,41510,16953,68906,93179,88447,35983,71560,31380,74500,21074,90778,53201,31733,87313,44956,31943,91382,94965,57795,64505,10705,50036,84716,22095,22506,84133,36709,80197,17856,93319,10576,86823,55947,98197,34375,42084,88903,87922,27641,95279,53161,38530,13643,17491,10099,52019,54592,37407,29759,27848,70650,46299,67341,95991,33890,77986,82418,90338,65049,73360,23255,38009,84463,50671,69016,91358,85830,76000,19433,91596,92533,66465,29369,87045,48250,47595,82170,67310,74954,71208,79666,16874,29248,25300,69555,35079,76918,52667,62188,34360,56852,23234,90360,42126,67755,90962,42002,78064,18671,72969,68698,33313,11590,69881,59298,96606,35292,59471,47810,71245,47110,31498,13892,84816,27461,72220,86689,18830,13510,10368,45457,82091,78699,93191,52263,80170,83824,73211,21036,39186,67267,60448,51136,81844,69089,83886,87811,49774,17704,39046,73232,42612,16110,66087,99797,93289,15536,59827,48180,56420,47579,49176,65453,21202,64060,85737,56975,19893,32589,64721,89327,54125,50490,92362,12138,47847,73236,98414,26512,73060,26727,90703,20196,80699,94467,15506,72706,71379,19248,36536,37666,51854,59884,87315,76786,51822,90690,55485,53225,89539,69742,39094,13661,18086,13439,48178,68003,21305,43819,26691,94402,12673,73746,81645,74486,62104,28340,74796,76081,30169,38913,71254,73544,98741,89516,37005,71412,79901,35820,20538,56066,94926,28201,17087,54205,26075,40675,75064,27133,48709,10905,66972,98815,28070,69088,16138,50817,31401,83157,34744,73460,89951,55161,12022,27726,25028,50998,15007,31444,53781,30643,81007,60876,38391,49895,99899,67441,43447,69324,90726,91599,41831,78912,37007,31246,37916,16914,90400,79140,14235,66647,65316,47277,99743,19737,73607,97843,81852,73986,96978,22713,57531,12311,50779,81014,91198,98932,11184,81356,59928,98666,89857,38732,82269,97355,50333,12528,38235,14422,75960,17851,62566,42256,51957,80272,48572,83776,12019,89915,37827,69571,41801,91757,46073,26080,65465,83374,68281,13399,55238,66941,97418,65973,17857,63364,72658,23301,18604,29972,49010,12255,44096,64221,33909,60472,87334,34705,78763,76887,73577,77685,60523,36599,16917,71568,22784,72764,17047,62311,33804,46430,56089,37696,73536,61284,53378,59619,62640,89740,26691,18386,36256,99160,82882,30759,70747,99256,84370,79916,68041,22284,91232,42734,23222,17398,36035,95018,86697,74477,60676,47413,21074,65461,46912,72640,38179,40328,96442,45487,99865,64719,85265,76622,38328,55105,47354,35973,63851,75126,29913,34255,16509,38289,24077,82731,41422,41165,93477,99759,94097,30604,18060,89765,49326,53833,74925,72342,37798,64205,16161,60154,21805,60417,99405,36150,59304,80655,21325,87712,30152,18533,61221,81322,13839,43511,39100,24759,50791,99182,49761,99901,14931,39292,56565,17982,46332,42865,39991,62297,40504,78829,77434,55648,86904,32596,87905,45520,76103,64212,46888,80610,83672,31352,91099,47043,29877,39846,85684,27492,16461,82079,25032,73773,43151,28809,54931,63845,21498,50524,39215,20461,64816,24729,84859,86384,35315,68212,41294,81080,81307,74012,88957,32806,30078,37798,41644,77746,46711,73412,17353,93951,50357,94606,42097,70459,64356,97744,22577,84890,27996,96853,51713,28811,59813,60448,79269,42490,56288,12185,86971,64114,41093,24590,51191,98680,17982,47343,58502,79991,84589,12843,16591,97122,15049,57406,31740,35584,76367,82476,32482,58932,77533,34363,43034,81144,84690,80052,61806,68276,12905,21897,20936,22335,94554,40032,54968,93703,52923,35871,45991,21537,24019,19674,64667,90722,77672,78607,84216,97653,27711,35622,57188,55283,10384,23338,31406,12005,42861,26863,89290,40693,30269,29830,10973,99393,91561,44536,82976,38242,16630,44562,95167,27348,88436,19228,20482,43574,54214,32594,43924,18414,57854,61310,21082,35253,68009,59115,32945,83719,20206,11258,40579,31551,15860,54442,84294,47410,83385,40435,97773,36342,61438,53020,49407,38000,90935,70895,86958,10359,27116,10753,37156,75653,66400,68575,49939,79536,97081,26448,69064,93376,20079,84433,96944,85581,71361,94679,27988,89788,67303,36692,50457,26093,33570,99879,74963,73711,11665,17724,84242,40220,33685,58041,39398,29520,72524,67910,13940,99771,42321,99744,79966,86549,29666,66035,93732,81062,16328,73121,57502,52492,89633,52455,98553,71915,44806,19576,63709,44087,23414,92636,59902,35612,46921,99845,98338,65534,57555,96355,82816,54805,15884,90520,80261,99710,84775,99635,36881,38863,84990,46753,90309,49836,35455,90337,42240,46436,10443,31971,72130,55488,87191,63681,81579,90443,42869,42758,23221,10770,48313,73366,47847,94893,82169,31411,97062,83419,58300,40652,90251,75695,89641,65578,72812,59245,55515,91614,15399,45744,19777,41565,57311,95726,19279,36006,74974,60907,62372,88705,89258,33931,36026,44023,11559,15598,15281,95878,52489,34831,60821,92867,44319,39127,40495,12113,48218,18665,92933,52657,38366,76170,19962,18288,16614,71060,77292,39479,42753,46425,62166,84711,74436,62840,62112,90911,58600,18822,41272,91252,42567,84233,18024,63038,90896,45442,15996,45791,90311,46482,61915,62212,24977,23584,80066,44113,75322,50021,68485,51770,61252,40357,21972,43457,24148,81852,45365,44131,75712,95660,62532,49731,92254,46324,91767,52506,50317,32495,79617,78983,85512,86052,66945,20076,37610,18225,91982,22733,74992,84187,70068,19179,73425,31513,45333,84727,74421,50507,62071,95488,66066,88451,74826,44845,24511,78209,60549,27487,61470,25374,72325,16889,96977,87147,27764,72404,94582,58975,77994,51151,53405,65536,37549,34756,45832,54217,49245,66835,78923,17415,53784,57512,99240,80456,38304,12245,47857,32149,75053,93728,16748,18936,19755,58031,28771,66752,76302,53572,41673,35975,13426,24196,14580,30150,82608,76737,41695,20356,81615,49160,51402,15513,26086,89813,17563,85473,89152,82292,11462,32352,16084,99438,74976,99651,75746,72367,80651,60590,15734,65783,83285,21707,62489,27008,48909,89349,27148,65955,58293,82470,52003,85864,33518,45191,13048,74514,65787,69446,25000,54387,95287,13840,96533,56921,97076,22329,43714,84355,59227,81166,23347,73384,88248,36987,99338,91479,10064,28943,13790,51054,60887,88636,11784,90061,23947,37382,51484,46107,35735,33250,51030,65406,41961,91299,82304,55827,73514,48113,45210,86296,11942,57900,87346,24313,35960,57490,46265,58947,63025,38145,81553,33355,78262,79393,24995,41214,26775,22800,80196,41247,68842,91830,96965,76271,86065,89234,29108,63510,93582,42747,53874,87248,59903,34206,77428,97820,98907,94335,64452,58385,65900,54505,16203,72880,53419,12286,18124,91545,27797,27106,58579,57489,53215,87765,90550,45151,24891,94920,59240,83579,62402,96740,77773,53693,26568,52668,98731,65446,51273,60610,14836,48679,65983,59508,87437,90850,62921,11943,85071,64513,47188,17199,76175,79219,55433,71044,50823,28146,57028,29857,81417,29863,64978,84307,57950,49453,72968,28874,13247,30096,47124,58386,24730,74053,52902,21576,85350,60178,17083,17006,72171,59859,86169,62777,99479,80766,42784,56160,55221,75016,53257,23049,20154,42170,73380,80382,42639,50903,41707,37725,70257,70868,21106,90145,74446,58218,20311,81964,88108,98512,31872,75176,45479,38953,65394,78869,14549,37307,43970,20082,88877,80355,57065,44606,60663,79129,23908,49322,79956,76673,80713,68333,47703,69858,65213,32214,12450,82565,32766,60432,80244,19769,45524,93739,34892,14505,66746,38711,17566,14721,88169,11815,53408,94554,82384,32006,36249,37794,86634,22885,33421,19548,95258,77486,80144,52944,12369,96699,73923,26789,50288,30155,32291,77539,30777,35604,72867,74508,48916,77045,45517,13276,22304,84199,38348,24327,39525,39817,66106,65874,82417,16297,63799,87871,77432,63188,71790,47818,70525,67809,43606,14475,28218,73070,58295,60752,27116,57914,34779,61334,30452,60068,20607,42266,10630,54642,62997,52861,19191,57473,40907,88382,73470,68979,96408,75163,71383,47744,36807,73052,58343,98673,38792,39752,78784,37266,38678,97315,79623,58000,28813,79964,66979,14638,46235,27547,38087,76233,43646,34843,77785,18757,33539,12428,54765,39720,30332,90382,17659,37432,15348,52949,56534,55695,96687,23148,59419,93358,58615,71192,74161,77380,71560,69536,94938,83596,15931,53189,97308,69003,13906,75882,99995,49375,30779,59373,14772,88765,52922,27901,22518,22640,22224,66544,16457,94696,45079,78205,10140,61393,45741,39077,73109,50105,42256,82819,99603,93718,59012,15153,16161,71567,35476,55501,76818,17045,32766,96833,96804,19242,58431,54181,14112,37172,83110,94901,51029,62196,80243,57175,33851,48767,42978,95689,88710,37683,72920,44624,79106,74224,30896,36485,79765,91231,17015,17752,60523,63040,55048,80114,86198,41878,24920,50254,82585,47505,27200,85475,42820,19662,71562,66064,96530,54125,50230,18416,36847,90246,68709,97171,88604,13525,83515,84006,63747,80826,57404,30914,63205,94450,16651,70484,26444,79162,31805,58438,78834,31801,23679,51624,59111,84929,90905,70866,44564,20201,65591,97305,17277,62158,82099,16318,84263,49208,20465,49592,82379,91534,51833,93563,74234,32031,96983,70665,89403,62229,48378,77579,15984,17527,50622,51003,74016,96860,23223,99684,40310,47838,85225,17303,87884,74042,34023,86684,44184,58858,40726,73391,15711,86446,58016,97850,17471,73352,25269,61817,17688,24243,57637,60509,88020,47958,14722,26815,45608,35531,87683,52164,17082,48872,15293,40250,40730,69089,33133,80411,59045,83416,66049,35286,97473,49836,14836,24225,29330,56767,82449,91716,48126,49430,36997,83923,78257,26536,53839,17494,57105,89473,52279,97605,99098,44121,68840,32895,10852,82830,20299,96481,25376,95205,94302,70797,86389,97280,49299,49770,91226,97430,95664,94821,30118,85557,76315,45804,79542,67821,16099,87740,70485,23655,80802,25307,86996,71653,67782,39879,40428,25382,85341,17564,87668,70913,19068,24989,52314,42140,81696,67037,89334,95149,96106,69808,28370,44746,36382,45871,89637,47578,14908,83621,85199,72744,11902,79612,57674,90632,99518,45423,54242,23304,24599,50015,88856,98712,60434,62149,74847,47661,59895,86738,71910,82608,50503,28075,51691,38879,54945,43098,10032,77384,62993,38059,19765,47495,74925,38130,64631,29436,59963,91196,38035,48603,98958,67758,87869,41174,85459,96274,60196,40869,27277,84477,68415,83417,62207,91922,62500,19323,17584,10221,87868,78316,22901,19072,14518,80542,14009,29726,41389,33672,98205,33745,77121,19299,11015,91158,95720,76973,57476,88687,70239,89350,64361,46060,13610,74689,61438,15572,12997,20585,40593,14242,13101,68645,27611,56172,46358,59485,64990,49834,51455,90501,30504,21635,70769,13395,74275,21249,30179,57842,17062,86846,97074,79973,54540,77199,71067,89069,22451,58635,11446,47542,33176,77731,86689,38283,59279,26266,23961,79356,87749,65758,20728,32596,30171,49510,30604,95062,61532,20517,82881,48755,50972,10944,53338,24412,79812,96817,95493,38385,98409,40301,10765,70047,95213,35749,40027,68622,61955,92789,35000,15182,26810,59699,19418,55241,23278,27350,41720,27749,75979,73160,44843,42368,23669,75422,76735,38828,99742,18545,38152,62329,85389,12151,74240,67599,34797,30784,52229,40488,14363,76928,57615,35864,41617,35991,80863,53335,63800,44453,83897,88907,86667,19832,59287,77655,19594,45804,49103,79813,70601,83064,32584,47001,89659,70776,73766,96312,74298,67692,59803,22383,71785,12937,13693,36679,92238,21249,42321,36492,22940,48990,38492,88182,38703,88949,13114,82002,80355,49281,89275,93589,92876,40308,66962,23319,42002,86883,78416,81006,43628,18520,23304,39159,94719,77190,98306,51518,94590,45140,72879,19015,27138,27468,26476,46596,75540,44924,55997,66154,89306,92240,27245,68027,18220,19666,87137,75865,60102,56533,39388,99946,73890,99803,72784,48461,87114,50406,28388,54256,78824,75070,50063,71761,14080,55617,40380,39457,97890,86142,87131,33077,75827,47094,70451,15358,39504,39578,97582,58516,97349,25476,49927,98766,29224,68359,10002,38051,33111,15182,98059,50016,95986,99804,63984,31420,73466,47007,27308,20328,73909,56776,14714,50822,45401,16150,96580,87716,74787,21913,17235,55887,53704,17551,84384,84132,66206,42645,50597,61948,38340,24758,95611,43053,14948,33222,75570,39928,53003,64730,62589,60685,86119,40751,58998,26473,52483,25777,39309,79071,34792,98169,74431,70024,91294,58779,64443,34273,15070,28010,62916,35697,75777,59343,42006,83929,95297,51622,24976,32358,50674,98016,30444,17693,21387,25683,12134,29071,61879,85854,81621,34671,13721,92776,20821,49499,87946,50990,90458,49651,81672,92857,10489,15955,22893,31789,87507,45710,66491,49982,52299,38385,15800,47469,18980,68624,79235,62370,81139,94542,91089,97361,84379,24088,48145,49671,57419,36141,64223,90493,34200,87452,94373,39149,85553,39227,52289,40351,28266,41895,75183,38989,46863,29199,26539,81853,19394,32295,43013,82810,87158,56350,28683,39331,70556,68532,28090,94822,79466,17915,21611,92869,50844,96688,26371,26050,11359,51218,62154,32716,92304,63017,47800,58684,19079,92068,90771,16685,98694,22561,21767,62316,12984,64032,69263,37936,37164,93661,81665,55239,98471,90378,77489,91101,74911,28527,61146,45421,58321,23388,49709,46667,47223,95306,30494,80608,40239,99404,54157,94494,39417,63650,36879,53054,10243,62025,61411,74349,69400,52928,33612,48169,19334,75161,66919,82436,59437,91808,30575,67475,15985,58941,11496,74588,49099,59678,70336,46332,47932,37869,75708,58054,13065,17447,38594,65523,86182,19720,79698,54436,60084,84285,53752,71323,80031,33697,72973,48599,20883,41942,75865,16642,28076,12034,61262,14673,88879,39407,12149,66584,26423,28929,12192,32220,91999,25908,70951,48370,60737,69328,69509,66274,77586,48130,76531,41651,84667,89346,61932,77636,57151,34204,10834,75590,63833,31106,25592,30847,13499,32129,30483,67355,81060,31290,25957,71710,47407,44827,59574,26149,42009,56776,18723,13227,37844,75311,60267,78003,73443,95986,89494,28198,17885,83328,22707,42251,48760,42851,70829,10251,41892,58601,79874,83331,74687,67852,62531,37661,31584,10415,91489,86921,22549,95148,79062,61600,59828,95145,88513,23338,89918,73233,37326,44629,74026,51736,93127,11710,53929,91267,86481,67581,35270,29336,46419,89330,81934,60652,42420,53844,79289,60118,53916,64304,12227,52119,92604,13414,92844,69704,52497,93151,72743,43986,93093,14125,18052,71375,77029,80800,70423,85554,95909,84724,84638,22684,87200,29984,38092,35717,46533,32439,33927,85253,25424,78149,11821,59551,44909,71360,98105,86194,13825,27890,34324,25312,40881,95132,13059,39568,48275,77221,47898,98082,90566,31403,81421,76247,22440,37185,22740,54294,16071,56100,87075,71427,89746,98573,42282,83432,63941,73421,97557,63255,24720,39359,47993,27741,46574,79389,90530,96978,37306,81523,92944,89860,81465,15364,66208,95401,94566,97319,64580,64744,29270,77031,28063,49832,69445,52355,48732,85573,77735,89769,23131,76546,34550,91484,68114,33313,96749,96818,51860,55814,39893,81166,43074,44660,23136,92622,69022,73421,35938,45416,84100,45371,44088,61268,47303,90926,26899,81059,10691,37670,11713,89396,81162,11579,56051,84729,22288,81917,95798,74178,29488,76671,95575,57901,44788,87227,26844,66301,42363,46559,93856,80730,13169,38698,38545,70892,60844,13409,40032,24420,58274,26776,82755,77835,57777,80585,60736,60307,96250,54266,62070,81017,71801,39739,41837,81234,77542,28955,89566,49091,26234,70328,18025,13610,64689,84412,45793,56446,78572,80155,10245,90078,81581,10422,38890,58807,18134,23809,62469,57863,37557,24949,63181,32400,29661,67685,89438,59708,35369,13492,66961,67118,31765,52597,52972,33563,90664,10299,52620,56857,56156,47008,34330,88769,10886,36370,68221,66298,48989,21349,20997,18263,70179,90322,67829,73348,20531,80975,82112,94655,32271,58055,50221,36902,36833,91608,43616,45101,82476,28797,16705,28018,63687,14053,39641,52155,82411,67492,29449,63119,43999,13972,85419,78294,58485,89947,26615,37356,77882,50352,20850,53939,55538,64751,74124,57422,53033,79768,37278,30353,54112,12442,24891,71623,57247,85343,71592,30806,78652,47940,19141,32838,22623,14402,99728,30559,79106,24906,18829,51461,33815,93293,14689,56346,58215,52575,27083,67346,43515,22515,76970,30636,72030,57588,44919,26901,92961,82430,81304,81805,71329,10439,18090,31288,87846,25224,80327,81146,12845,38524,95690,48200,18390,75314,97024,41610,52479,92952,99958,29527,56489,24108,16951,27940,15872,75232,31829,16318,31518,62936,65217,97975,84528,74664,29253,14623,99008,53991,48888,60002,45764,48192,83478,53857,90896,99771,82496,79009,29711,73573,10940,61854,34306,79101,81498,56397,58165,56617,76326,91324,10444,20134,31706,47528,63562,45988,64595,32381,57215,77838,28188,91554,55445,74439,98802,39441,81977,63444,15787,42703,16804,29342,32644,37810,52558,50835,34652,82821,96494,74088,75337,49604,79024,88387,50305,86361,10249,74776,81183,29538,26791,17192,79921,96886,65591,13733,38646,20085,89984,88668,19207,32740,63372,26391,82353,29873,59867,69131,37125,69795,60638,92235,46454,30206,16515,19561,67860,21064,59432,31607,86439,33552,81231,67217,36494,11079,74402,77013,13609,67678,33930,25701,82713,28345,68956,75603,65204,55816,99002,77402,78952,23411,38611,77749,27209,22125,60637,39544,55077,43609,44964,37647,70884,81156,15909,52356,71607,25230,14193,35333,47820,85047,53232,77611,97262,55245,37577,27010,90180,15900,91171,91191,38898,18153,34870,30005,16244,16299,59369,21624,89582,15369,28081,71468,33104,97374,68079,86000,45641,75797,74713,79924,34561,34361,26125,30982,76415,30628,19132,66939,53571,70000,13125,97566,38861,60306,85551,20707,94824,75523,41354,74066,80926,36057,55747,25439,60464,25817,15533,47054,51318,10085,21966,40720,25038,18111,56620,62807,61463,63083,54737,99510,19590,49389,69815,68871,83973,69896,41851,47240,78680,95724,56576,50015,94487,91288,81148,68519,46230,93111,23053,75207,33928,40964,94560,65006,47070,13204,20250,95017,27512,80923,16410,72773,85062,95534,49375,67002,40241,87564,84865,17756,61508,40374,76969,11551,65608,13833,97187,63362,80975,64969,70106,12968,12130,84575,73570,42572,90736,82462,33354,97603,42927,77219,46307,82106,53873,36835,56174,96769,69634,74523,24817,70360,37429,26971,91328,52142,73817,73824,19619,86700,41980,97424,96592,77553,63474,84562,39031,57810,66176,58912,27201,98308,13114,24760,55596,97559,79331,27152,57971,45184,48485,57976,91700,97040,20374,51053,38733,60083,34344,88222,60967,20369,69433,28284,75763,50661,16751,10286,86306,26342,83298,67549,80846,13586,95083,12395,12226,14954,71260,23642,99460,82418,35038,77226,83852,80627,30912,39354,75024,63064,95979,74493,96419,21051,22924,51113,87900,20966,92870,34348,45437,15065,52177,37584,93349,70700,91998,25349,59008,10630,82986,51381,44275,77703,22992,99443,33271,62922,42281,63186,85655,90819,56509,56884,52261,30388,41276,42486,32242,33852,43388,25475,30942,86309,80372,85168,11563,74992,26888,88166,14628,93539,38262,14921,72211,76734,47532,86897,81170,99685,86791,21980,34900,37384,22910,32060,87392,62498,80850,63686,75826,56891,95482,99817,85995,83355,19693,67890,43377,38511,14787,48779,46805,82638,57458,85311,80350,45060,30589,74656,96276,66743,61913,47970,42610,36256,62719,86730,25198,11898,26866,74211,69834,31119,42786,46640,80995,34800,32987,46773,85595,49438,40145,56208,66074,12751,35138,64108,94893,64868,66784,75640,55788,69102,68685,79616,43430,49945,42060,50620,58818,43519,18995,25846,15368,27904,10447,14896,11191,69047,42774,81244,54556,32812,18116,12550,44830,57380,35263,87011,95780,45672,10442,50789,91524,62254,64548,58658,23675,28278,94891,65756,27209,44090,90252,53845,44034,25027,13362,16465,92267,46444,20324,55078,60954,99346,77145,70846,93810,33944,18398,97153,82131,10161,43889,86271,74619,28060,94781,58383,18567,59318,61849,70168,67981,56329,76409,99323,74293,89357,93729,39279,25109,91271,66515,65435,64171,75765,93081,56343,56748,91809,93337,35140,94734,73170,63066,90025,72169,75087,17993,88774,59638,21253,11607,82946,31606,27595,31396,95241,33747,30704,32048,17761,10592,78885,59230,13261,99005,75188,86226,57991,89183,54195,52355,91373,51553,19472,98474,53816,93687,61770,93354,89478,54350,20813,99640,77734,96066,39086,26032,16170,74246,45994,52874,20739,65263,96966,19365,39040,33054,53435,32602,45886,47493,40565,33041,64829,87773,92266,91866,68767,56440,34915,47837,61964,98036,88487,43061,44542,14373,40044,69931,16983,74699,59274,63095,22656,54202,77658,40217,42628,41149,91784,34853,18365,66489,99982,30948,82578,27899,76648,62704,28521,67269,22126,39331,78310,85017,50796,20906,38419,99600,93239,28880,80329,23576,90868,41223,27487,67166,30809,96473,43262,10837,45578,24582,80746,41876,42493,37403,65851,91932,71342,70374,99958,83356,10233,52271,47161,37858,47608,75021,83363,67141,28813,26897,53629,92637,34874,31554,24290,92367,93236,98416,93652,33183,96874,38384,57158,11754,75938,91494,69113,27790,59529,77669,77500,37192,98978,69643,19089,66902,14008,21531,30615,98280,60547,71079,32598,94005,66021,72733,60220,27374,53249,66168,63537,94359,83533,90768,45171,55698,50108,94472,30176,40599,46381,82736,42056,55380,57358,33003,76270,99439,17756,85661,60303,57922,22617,93290,27744,98869,21543,39891,15730,63049,59362,78926,66617,92847,75707,62938,91967,82432,34082,61905,39630,94910,66602,38291,41338,49352,89141,10139,88522,95317,59524,88749,91259,98432,74576,80029,14504,79385,36447,14108,77187,68605,12912,40166,88032,74721,52983,75967,16011,81353,78483,90553,69338,23874,79240,54047,48837,78922,66752,72520,85789,89902,86586,97003,20590,94327,95435,15061,18051,73810,64433,73889,58929,64990,79531,72843,53490,92335,16387,79968,11003,73155,38510,35355,42122,80487,55801,71818,88365,47674,64772,64790,26720,98631,43469,80627,92944,35691,25029,34375,76679,83802,18235,20699,59924,32112,82016,81583,93198,81107,97847,27381,40090,88793,85085,19962,89320,11758,66874,60312,28584,29295,89976,87375,71153,70885,98000,95862,70345,97258,48702,52083,97621,22455,78389,82887,77133,97137,35740,86723,80141,94796,14569,38512,34797,10951,26650,24828,49140,54519,22763,20710,98024,70050,89294,26143,94497,31801,92392,90141,28383,52206,79138,96957,30018,83040,91037,49872,99689,95024,15538,31077,68957,34285,60689,12262,74061,68708,96807,55039,42858,93358,93211,47233,99748,84764,19937,69114,86802,66386,32403,61335,90849,38165,86341,64042,86303,98083,23944,27225,94020,25368,54855,36536,95805,90981,38699,76698,85223,22580,39946,94250,29681,83336,93278,19852,49081,99580,75379,92047,20534,21150,88530,66270,31679,69161,66637,62627,65303,74896,41796,34974,19900,57870,16417,94313,18130,15801,85462,30816,78555,19251,99869,88586,36448,94945,78922,79631,67999,10498,29281,11176,19926,43702,49626,74860,91819,40697,47819,95356,79086,87225,26474,49647,99655,93104,22293,80460,67347,74785,30180,79150,15094,44566,63109,72118,48539,20316,83981,95874,92103,96772,48994,44268,81842,31165,88223,11949,67874,87415,59894,78424,17037,25048,58777,28631,35370,64405,20732,87034,69649,61741,70933,99013,89573,93740,69513,97964,55028,21879,15633,91921,97489,89641,52872,86670,38948,94564,61992,82353,27406,68286,82220,17249,53520,53347,70240,63561,62443,51478,78085,39089,93545,96121,55545,65500,71952,42666,81341,42192,97628,56905,10224,85838,37007,94843,43292,49707,37214,21980,57212,15728,20028,70587,60998,51126,79163,17802,60245,81735,30100,71335,53362,20545,56280,96042,73835,16082,66875,82475,39900,21906,89817,54748,72161,71248,10852,74864,53662,97983,38669,86071,99985,12344,65177,49311,17424,28091,47575,40239,18599,47511,93919,58703,30666,43069,92708,69866,96231,65095,52064,60429,73442,83015,95534,18810,64214,45263,21757,64468,67059,20036,35953,39767,55502,90729,90431,48070,84696,74317,52262,47426,11776,98674,78561,23165,70613,87622,95833,79774,74164,34996,52795,63448,87346,18364,56067,42140,82755,46794,60649,72339,16186,99120,83172,25043,35308,91997,14580,56157,78723,45966,69759,73042,42153,63144,99620,15181,58345,54321,26295,81401,79674,28466,74783,40638,40356,31427,29420,13642,45998,60430,49310,89035,95634,42519,52654,21516,46151,47589,62273,58432,33344,52224,43778,68118,69285,87973,28409,55800,65461,60690,49018,78104,71045,31746,91286,46108,31036,95956,79656,66938,88107,21834,43870,78768,86535,93910,70393,31118,19496,59910,78287,37106,25651,53611,11829,31565,54025,51122,26332,58210,23930,90446,21324,47995,11677,40583,47549,70211,47942,23702,44839,69437,62707,83169,76234,45442,86983,47877,41409,69008,63581,42431,53541,32767,73444,70949,45412,62604,56238,62573,63801,25328,67469,85980,88870,94925,31441,15826,64960,41923,64982,21997,77455,49711,87831,88422,47754,71621,41110,97202,98434,47980,91109,16441,95115,37687,87877,40516,47183,38766,91250,40751,89432,56866,33521,39176,24384,12639,59137,21887,67710,85136,29239,91223,22588,27497,95527,95003,54823,43044,71425,11288,36220,87508,38316,70695,19150,50601,31894,89482,46817,58411,63202,96242,82013,87818,75500,17143,51265,97177,97105,57625,81287,22153,83161,46058,76184,53407,60719,26386,27251,61030,71820,59468,45174,63250,76772,38937,71302,90131,19790,73373,37189,71677,66216,52752,25439,83985,96967,52076,46391,64073,70069,58564,32811,53777,52243,67576,50715,75970,39545,26700,14741,49465,93912,43787,71829,24445,98491,68854,90494,58823,80333,90071,16970,19888,46654,54533,46457,81207,40713,29099,61268,88714,10033,90042,48770,82369,51323,70749,51376,27570,80405,58003,15440,81670,24782,93763,66567,75230,20474,24526,11357,25916,35500,63078,78066,30257,58185,12455,43768,27789,92661,27272,65820,12805,16890,57824,10291,55274,87814,83522,87616,75601,65482,25550,40644,39518,99163,92248,51218,77885,90423,60885,10827,48902,40765,40203,95957,47992,25345,98321,79950,36333,69608,28700,76340,32908,91677,81448,57748,65258,63904,79396,83072,75223,30367,12250,95599,91605,72772,66454,90165,56989,31963,62658,10215,81919,96492,79153,91702,76247,17618,53065,70312,43867,87610,46357,95112,88036,40809,35018,10674,28296,69235,68569,80624,73344,30442,27795,51021,17817,60291,28960,47757,50918,27137,47481,19822,60618,52592,72519,43938,21966,67194,55281,52717,17813,26024,52051,60283,26491,76192,50526,42958,75305,55507,78399,23940,96016,87487,22383,72927,14044,71196,71533,38815,47466,60966,26522,31598,55628,67793,89632,11694,58411,23560,26798,16397,39107,57463,44023,58451,79703,69216,64863,93958,18388,68088,48421,73029,31365,35807,26626,59290,13757,24127,63536,97665,90170,19375,23638,29360,78574,25088,67231,93456,50309,67980,37745,46318,55923,40737,19274,36544,41572,87958,63673,84960,42709,85503,49096,49408,73383,74546,69148,50347,46554,78098,69064,53376,64299,50637,53234,81771,53884,76975,68893,66327,46282,44844,30999,11646,25454,23731,84824,79099,94449,53127,32636,33990,20204,12555,26542,67421,82849,11290,66858,81285,30443,27300,29837,94432,19046,59613,15867,81877,86622,48511,87582,51094,42314,84194,64034,79948,89032,79820,23859,32689,48900,48972,35054,89497,93152,57717,56107,29586,51821,36050,59755,67126,82855,39574,91284,13419,68635,27462,43212,40579,45391,79545,39023,70563,10707,88882,96177,43921,75879,40009,89708,68112,90804,71535,27855,68172,49920,36212,71664,75542,78338,87592,75710,96793,81696,21708,14755,32610,15966,82860,85363,66868,99156,89387,71737,96429,83727,17751,88775,26902,59263,85701,45681,16142,18047,93342,21948,47228,29255,59620,57718,75908,86676,24456,88209,53488,74075,61042,63346,88300,89427,49907,10194,42113,64163,39677,79071,13201,47447,23141,41337,27675,64698,59435,40709,35767,85196,85596,29521,49196,28975,51483,80123,16522,10419,58652,18283,96521,51969,72163,42630,34770,46568,54265,57416,80615,89886,34830,41163,42946,42119,71833,90546,20610,87918,64268,25746,37254,85280,37343,56105,57594,58013,68936,86288,87692,62810,30533,80171,98287,21536,87591,98295,49612,60882,57726,31420,51445,43059,41207,98805,67411,33427,41279,59261,23476,44320,94933,69007,81824,70882,75501,90840,28132,29880,55193,19270,96054,85794,84804,89287,90292,85615,73258,62274,20032,95652,45880,91946,50672,96411,59889,64987,69332,42702,75532,69662,12965,41335,32714,49403,16794,34529,92312,14203,88092,35531,89048,61525,94007,10964,17667,55539,28289,16104,10326,98053,24146,34779,55784,19283,22376,43967,65193,12756,87524,38165,37075,40306,33515,55355,44927,89081,58183,85983,54060,28497,85532,24827,12188,83459,52588,80492,13161,54738,62825,98525,58824,45817,82213,40484,29877,44382,77400,46125,68742,47035,96551,11663,50087,80881,90892,59908,10169,62524,80154,58587,30758,41159,80368,84788,91527,31164,64253,71158,59582,96583,25057,48400,31464,77522,69445,27843,53711,59428,36156,95140,74164,77335,98155,38453,22918,66838,95724,31284,44848,48778,56702,75921,65792,90758,25161,89354,45378,29032,82669,25472,33605,42550,45248,77332,37720,32209,39264,90735,43875,73238,64203,70535,91063,38499,65465,80784,45686,27651,91284,92180,10478,42040,98362,37030,97469,68323,62992,36613,81026,33217,65626,59399,66526,33366,61273,87736,34543,17177,60614,57691,63810,45887,54545,77550,18883,76287,61460,61345,65716,24456,81159,46434,20674,99591,76295,42048,13903,13323,98802,60594,24385,85593,16594,71535,63945,36553,43003,85920,61916,85482,29597,10452,15724,20214,21206,21411,90437,79250,59028,45325,75767,83963,27189,62812,36334,58866,32595,48250,38616,73749,53455,74612,57965,34383,88174,11944,91402,61660,11366,36503,88706,95091,79106,34877,73920,70180,45288,79565,89852,65083,87087,27561,13203,17676,68357,82050,30091,77452,58431,70767,82481,36205,87887,59760,75676,32639,96249,36439,44594,38401,66554,95998,38687,27485,77711,91870,13206,86678,35595,58913,85524,44037,91898,61885,37514,81042,11455,14433,84754,71749,87781,10315,98121,53613,32152,74673,75742,44774,52607,57004,13072,20099,25325,68679,19266,27780,50454,38806,73686,72033,12081,15134,61097,98132,48028,85678,33228,15721,80944,59344,51247,50576,59493,87163,92095,91443,92953,98179,47476,63049,18958,73613,97219,71233,59608,27095,95453,39764,94532,43981,41367,65984,22558,31089,89379,57214,92222,38657,59603,54633,22130,85505,31025,39177,75331,56124,46629,31077,10702,19336,38028,90793,69287,83902,69250,30284,54870,61728,69372,97531,16927,94853,33366,97106,30697,61339,64236,70315,48498,64858,11541,69042,30112,81461,73759,50487,30069,27293,50431,60152,27562,87864,40134,27007,10042,45526,54333,30917,38911,51636,23783,69591,68114,54581,32912,24586,20358,53806,39938,98741,33595,85966,91774,27619,96993,60855,71486,63410,90828,82961,47990,63508,33566,74679,82696,49668,82445,62972,49168,91052,64526,82301,24652,75627,77857,42484,65728,27788,87949,70859,28109,43421,36598,47160,28565,83174,55807,61583,63291,46622,63200,97464,32048,12075,67469,94807,54437,46556,68978,18040,19417,65627,20645,62308,41269,75827,91524,27624,71741,98441,45888,53389,19204,98593,13883,85629,63081,61426,85050,11459,66707,10121,68697,89366,99284,81388,63886,57093,23340,28830,89054,95115,91876,82409,79604,75071,92628,23240,21111,79964,77500,41315,23764,34138,67039,54684,69823,69108,48305,73718,18930,42386,79494,48567,98180,97146,14543,48906,77421,47118,82145,13814,82039,71090,42798,86603,36018,15264,89396,96623,56937,52553,18862,63775,85911,43896,51075,83733,87596,85674,75590,72271,44920,82251,58116,44392,31548,36129,49512,67510,90646,57749,87823,21255,86596,27925,83104,23517,83457,93971,22388,80613,84106,58045,51823,19788,68664,31109,16334,23208,55721,40423,84325,40775,86658,55996,45378,39412,32342,49638,49540,96623,90523,94997,56734,55074,68218,88228,57700,63125,40982,14759,19643,89623,79094,37353,37097,88592,40230,45952,80868,22761,62560,22142,37139,85197,53097,40335,73993,78421,33638,36503,43948,21630,62982,14823,45704,58464,54063,59446,23764,78964,11780,62985,22280,69106,72260,81308,54732,65610,48038,93082,72946,79862,28685,39722,97794,68234,40903,42614,47495,65778,46282,98887,41787,37036,74606,51918,45028,86245,18161,93128,78700,39974,67752,19247,97005,55322,12906,34130,91283,88658,86485,24027,99918,57049,90560,17390,72577,15297,79577,79533,80578,16445,80936,96912,74629,68685,11764,50708,72138,51244,11441,20998,46063,27324,44929,68274,55030,22819,69541,79690,40450,29602,74005,20447,28737,89822,29581,82041,70984,78104,61141,50549,74235,96287,64352,87225,51006,41323,28586,26788,57769,73420,31189,73729,75506,29812,32023,97383,97120,72741,83879,54120,98002,44595,46392,11227,63071,59208,63544,65913,93764,56689,16745,80684,90624,21152,61146,68921,94770,38626,94351,14745,59733,16651,66154,39735,26707,99978,32308,76822,11105,74186,39697,26450,64407,78100,89381,11049,95199,40598,81115,24830,77540,86556,98640,88757,12491,91238,52842,56261,32130,64010,81415,38643,87057,95302,40922,63343,70971,40852,12470,36406,38681,11678,41842,27935,40270,84284,14311,76855,11286,50020,46653,54267,87962,17207,26781,59594,60945,14142,75258,88596,14443,81662,11424,86567,26097,45782,60485,75198,30741,60371,89496,26854,98314,40423,41248,71539,37125,37383,76546,65434,10476,62858,75535,83478,91139,62476,22929,58426,27506,30793,67586,97147,55685,84521,78911,95698,18027,43135,78239,66172,85065,97820,27221,64792,21063,22461,60627,94060,74292,90600,26948,67281,37030,51751,44516,25090,91607,24266,40903,50824,97250,42681,81196,25670,66444,67102,53017,64965,43003,34659,52694,88376,42928,51373,36453,50287,19188,71156,45509,16052,61503,89709,22886,82803,61692,51711,90393,86806,77022,85531,69199,42547,95497,71026,25302,54889,51072,86518,64944,75271,30803,53552,23052,21257,16446,14272,62108,27441,43679,65239,30860,61814,68379,94455,29353,13548,59835,97887,78686,92736,45171,28912,32362,25862,80561,20395,21371,80657,94436,34147,27485,85060,68525,31691,17240,10134,55092,40314,17446,65380,18196,54035,30480,59797,47639,99211,25908,81675,69835,83707,90997,18856,17112,95337,64305,69496,41318,40259,29898,60239,43937,57681,44600,24952,74903,24839,20099,28684,28841,99656,20548,72182,21480,94034,86230,80128,27930,28763,27468,66551,40650,64361,38246,60302,76362,90836,51290,21528,39892,56999,23049,41216,30872,94720,90976,63137,33071,17705,71945,82342,82397,48617,41170,83320,42352,74493,48554,22368,30197,80077,56374,91024,70878,93513,93167,28353,82495,53292,23449,59117,31887,51206,84778,23802,69568,32281,25753,88864,71179,12892,74285,78163,43006,12530,90173,97944,28323,10067,99543,23910,63864,39830,95744,45858,44077,14185,87401,33866,45688,59572,38791,40801,28574,96704,95742,89376,26425,18555,25746,14692,72436,63146,90808,27770,99183,24332,68834,24281,26029,77342,32713,53110,42219,35417,39079,56040,14150,32396,13595,17071,66780,11905,31334,30224,66669,73749,23180,31042,37518,78510,85988,46731,47185,91264,55351,60367,84893,87548,22545,25760,83624,54965,16774,73373,86181,88255,22477,84078,95527,16971,54532,51035,23329,41181,83086,65926,48432,92842,39975,30662,74268,70065,66902,38391,11514,25892,10930,58284,44850,90037,57523,38283,26424,94058,54630,58830,64535,69598,35537,73327,13388,90647,68742,88022,69919,69133,41706,28259,93936,28338,35315,43732,39714,69641,41963,88410,65314,82124,39838,40162,14400,77321,84417,92910,26301,44129,63297,24568,10101,58630,63719,26647,88071,12496,51750,31558,28406,94356,70576,21779,10690,59508,48490,70733,71277,55347,56640,74347,83473,44065,33109,37541,90907,34532,75990,92042,77711,29435,29364,88494,73326,40700,69744,65878,52846,28507,64812,92949,16808,77566,13423,48104,18384,20072,18402,64909,35088,35502,24272,27841,92044,15235,51299,75148,44500,14027,82383,94422,66112,92196,60990,23773,27643,53248,54278,27215,99209,59000,96684,23589,29535,87769,93507,96697,10715,92594,59295,53020,29680,35524,64327,12007,23039,20012,89697,28155,78668,58735,84145,79530,19934,70565,85426,29052,26437,90854,71559,69999,17939,38668,94221,31423,59967,81263,65192,15590,90533,89902,85167,70499,78528,72622,85739,78059,53622,81936,34873,80019,76707,84872,17785,57829,81021,42188,29019,74698,72191,97684,26201,85379,64080,39212,50153,16418,56097,30138,65499,24494,97279,20190,83952,36725,88387,61723,53973,96013,39960,47168,98278,94370,14909,22359,23333,99209,90550,23903,30066,72468,63717,75614,84395,58326,51857,78834,79750,62685,97475,53180,11200,93112,88956,72432,12406,10649,50054,70269,71806,58763,61067,11795,14022,10339,47290,51451,56197,39744,64881,23544,93697,56575,24320,66547,74839,38667,28228,65875,79442,10285,44360,34310,79477,92815,82969,99816,25759,61412,87499,41670,32827,61107,47804,30491,35905,16596,55740,24740,39775,81342,38727,56479,60342,67518,77035,70835,37796,38026,19595,17719,91437,57532,27645,90598,13463,48856,28251,56472,49039,98908,64030,22571,19843,88919,79573,59400,87452,92977,55047,44462,48124,92995,50129,65515,62039,97244,43171,75302,63928,68034,61419,72717,25073,53005,95868,99494,41732,48963,88490,63998,95121,64994,46015,95729,10091,89044,87619,97905,16040,55510,54563,16963,75559,41295,53996,37455,88773,39413,21278,95666,65596,39890,96516,10489,93508,67502,18917,93436,34489,89891,96558,18968,59999,53741,57207,57356,53298,27960,79194,13243,40413,36972,49344,75186,51866,87283,44479,37669,29868,73112,45132,95370,19057,47583,42217,85479,47680,82469,86475,36753,81333,39597,75323,41951,21985,57361,13873,70423,73595,31092,47487,61776,61194,39828,20350,34431,92474,26541,84151,41699,97795,79224,20954,87798,29293,16364,39594,67377,27663,34490,81937,45543,32462,44141,24776,57231,30149,79048,68036,70239,64941,62256,32667,89379,50032,54235,84661,85652,43781,77564,66187,89566,26093,21263,15821,51340,50638,32632,69753,28191,56867,11266,54637,86491,32715,16080,85747,17851,17549,17565,98308,68756,27647,76419,93732,59917,35097,30869,54072,78002,26517,31735,17132,44562,75577,75306,60715,89129,52492,50409,88896,27952,43328,84635,46524,23984,68560,19658,92196,91175,92116,27020,51075,27083,49420,85154,16642,58673,45678,34347,49425,13887,80628,53948,27742,66790,20770,61515,26391,54520,55475,49812,18434,12861,19790,63965,53308,43347,28752,79544,10038,80839,85415,89890,65423,16232,89021,29188,13345,20999,52838,66514,86107,66489,52187,46890,75620,37974,34238,59720,48826,58871,53228,14456,71996,35396,13703,13591,23756,76080,23339,62364,41541,26213,32193,85620,96227,80581,88259,64601,64185,33822,93102,30163,86874,85033,12529,84798,56828,47277,85023,74529,98321,89737,86195,55322,41753,98763,76762,13288,92446,20017,68067,44309,82469,64797,48487,21584,82246,99637,35171,72463,50350,38092,97276,79410,19306,30587,77032,11420,22185,26548,67523,35763,99074,30579,64279,70208,68511,47793,88781,44530,66845,73034,71737,62584,18039,33458,41241,81726,87257,20803,98126,64302,48965,76897,30170,63914,57023,23752,57227,56272,41946,61947,84021,20517,33955,90311,26414,94245,93788,55135,38939,31377,58020,21089,33387,96802,54725,32544,97423,62328,42826,49699,16268,30133,67908,66621,61862,83358,85713,51857,88708,58365,23987,43404,86542,22622,61028,61527,33823,61741,62845,25214,79082,90214,99679,50755,57252,30357,83088,13349,68968,54916,31276,94495,93197,70848,32548,48520,83344,29173,85486,33722,48106,21972,75415,51332,85400,93289,99916,10386,78251,95274,14816,76877,74234,80580,15233,28425,40609,37719,22026,15571,90121,47123,78001,75277,87644,89893,34132,99596,82340,18862,19472,79864,62016,88554,32759,17589,92843,63625,27889,36794,50891,21359,39001,36700,41635,49463,85135,89554,94000,79233,30631,68692,57129,23236,77390,55065,63598,15212,22686,69941,64430,22442,96569,19939,68967,13373,59841,88054,38886,80105,63469,46289,75059,70558,13218,97054,26598,76861,52270,19360,44676,81879,54884,70435,61479,62906,84261,36437,44693,98532,57450,74491,58123,51478,94643,85520,95271,36658,65954,96818,89654,42843,32487,37761,86376,71984,34170,26859,50088,91916,54985,39964,83755,80295,88467,48028,27893,53460,60649,21464,14614,81855,75820,29038,34306,75866,72025,40006,37561,11834,81554,91069,17383,11236,43936,47877,20323,88172,82623,76702,73283,81092,74049,54629,32222,94996,86379,28495,32043,93822,76827,94776,62675,55926,58817,23216,13594,57953,63828,61628,36414,26655,41621,24255,24206,51214,93641,89167,31407,91858,34738,17006,93589,70784,85699,72204,70484,93565,31032,76239,70159,38238,56576,88743,62025,55568,61287,62854,85047,58776,40543,11285,78058,67829,68289,30332,83664,86098,81016,68985,33160,88865,55179,94135,77770,69908,19886,43684,52056,92696,30028,68678,59391,56540,99060,73134,97175,32340,22249,74520,76866,22080,34519,15908,66813,40689,24212,64530,76279,49426,11146,28630,13942,97582,21807,42723,93155,22720,40480,42119,59955,82023,58813,87785,16973,15323,31367,32809,12723,92081,27273,99170,84161,16704,72295,34720,93779,12727,92045,21873,16035,65087,59568,23006,75996,38925,94769,48453,33680,26080,38116,90490,81143,36448,49019,16180,37200,61240,73194,39591,30020,89702,74908,40741,89360,90529,94053,65662,92232,15440,14924,27709,75049,49158,20425,17681,20168,51676,58694,46563,13308,24216,30550,25444,94800,68525,96172,23834,96602,43896,19612,88516,51719,33900,36571,14937,40506,27132,71997,55611,55735,82781,57044,34245,99374,89653,99499,37415,13583,47270,34753,76792,36290,60951,38760,99252,71082,44673,63888,43284,35585,51749,67633,93153,12173,67328,81802,55274,23211,97116,30491,23352,48540,31364,76006,44157,69017,63867,82672,96241,69882,61902,87579,37125,43710,72360,19751,21181,54773,67630,70133,71216,14571,24780,81840,62982,86876,23266,21547,38692,88478,41255,70528,48781,14176,44235,54142,14880,57582,79545,39753,58809,27229,71596,76587,18436,27823,52791,24964,43655,81716,17322,97698,65755,35252,64707,26556,15194,23415,40850,75012,28450,26059,97762,45043,28560,88287,80885,35081,49513,59648,56299,22415,77331,20893,69771,91440,50292,16264,94617,93618,13412,90042,59925,73012,73998,78688,91338,95902,68591,70966,92771,54563,38519,85094,68114,33217,98078,86257,50294,21183,52546,43914,10637,12505,69260,90886,27893,94938,44256,80197,71316,11957,99866,86827,76034,95667,48977,70675,59933,71485,48343,83504,61196,50832,37906,71862,10342,19051,36978,99229,11884,72729,46766,58290,10096,74754,33443,12390,21358,63748,76138,85996,16411,61184,96472,32045,66622,19084,26778,77165,93056,67936,28065,91212,81616,29509,37603,43454,40601,36514,17427,45654,62428,14481,79233,74286,25918,17568,51694,20719,69885,15781,12212,93783,31368,16081,60037,50310,83503,49562,88124,41332,63271,40870,18294,79150,36458,99307,75486,14870,45944,52736,70351,13700,20948,38323,14190,78592,58183,57668,36599,74234,37705,33403,16001,40838,93351,98734,35123,98711,10135,93327,92994,88514,12413,11471,91945,42360,56410,40753,89378,84358,75604,71602,60694,96603,89428,21292,68508,89654,17323,77424,40188,62318,69694,19205,83755,35649,36648,64531,43968,48362,17599,60317,95970,30842,88330,88722,19097,65419,10531,26935,22818,91536,15993,54027,91779,71473,51683,88132,47994,19073,48094,71876,11063,49383,54495,54605,83405,95955,10833,60408,44770,47973,54962,58966,72597,51313,19504,37944,40218,78802,76788,50313,71537,82896,57398,56283,76631,63749,22993,39200,17206,56151,14002,66081,14481,28603,27380,45917,61898,88316,68985,81870,49245,81150,26896,74073,46651,90275,77502,37990,71232,72801,64985,45699,73933,33498,60155,23151,79537,82268,17757,53791,46569,53534,55862,71056,21902,16922,92720,92354,16001,32709,33382,91966,93672,53656,40097,66705,68790,68154,21743,55778,52011,94310,90177,17419,52388,38770,50105,63154,69012,60959,70750,82791,19275,99347,48126,87033,89790,68830,52223,60925,40371,82968,39711,86041,15809,76637,13227,81921,86918,70276,89614,64480,40365,98966,36830,52995,24170,74790,61241,56793,36958,16468,30087,26094,22593,53030,30474,14502,85957,92453,45194,46537,96573,42047,46603,71376,47993,63107,40077,99886,36800,73087,28186,20330,64115,81624,25236,66615,40649,92153,52477,57464,57006,66709,66488,44694,58009,31967,97612,84058,44534,98034,16356,31557,16327,50771,62537,32524,17275,43097,29625,31119,82524,48165,50922,32787,74059,26153,42063,18557,24190,16274,18795,19056,88772,21846,52469,83264,41100,99898,80673,70587,48861,75346,54921,48023,89876,46664,13521,42893,95229,84278,61086,94952,38035,16361,19332,23268,62670,28420,18120,27332,84527,26189,18057,39072,72473,66940,73276,62983,11977,48290,54010,23838,31996,55287,85871,26715,49165,87129,44483,57930,54554,60926,68981,93746,36364,40243,99573,13963,86487,12464,89574,22329,28547,65898,23761,25666,11944,21625,13417,22249,31638,65476,74418,62596,64443,99500,90308,36731,71775,78411,25792,18103,67318,29395,67218,67234,26054,63689,71300,17602,93968,86284,46111,71371,37243,35019,90127,59873,37559,56348,10513,26765,36363,54261,41688,28656,64987,99670,31873,16878,93919,67093,36835,91560,65673,54676,14578,33785,91493,61429,89379,69247,38667,87840,37882,39135,70103,94327,59289,33942,14906,40384,98499,78514,75477,68246,80400,90633,54628,15616,98272,61439,14889,98172,90074,69754,46106,35438,39296,99541,34755,89675,28392,91659,82677,14083,36667,90599,95967,54380,98472,24456,72766,69071,23662,15511,98797,32864,53281,69752,75183,91973,21370,63485,63015,66146,31973,96294,54157,41263,60029,46502,11991,33047,24340,60098,83829,68871,73233,50592,91177,43507,32147,53970,79183,70033,25833,58337,29938,65783,50622,80524,64794,68515,72470,40664,23130,12312,93981,40191,29105,32313,17124,23089,92049,87708,70362,53167,15096,21946,58988,89141,55567,74624,84266,43528,11789,62247,16653,93861,56530,38555,74956,15223,49336,81419,17547,97311,79617,24926,87195,90352,97452,21628,26469,73533,67366,72570,89538,78533,13565,38842,35734,73510,20675,76443,70960,22465,17350,36392,35442,18920,41156,21346,25592,43419,15254,93185,92648,83660,47854,96884,59799,52971,22334,49478,94326,38006,76513,33525,13289,24457,54273,41140,78919,23967,55371,51880,12761,59942,54824,74376,11603,55121,93403,78531,33393,57164,68516,38099,95256,65443,74373,58326,75318,62651,11236,59268,50407,14898,12929,32225,72468,90418,14031,20599,87298,42883,16037,72953,29383,32240,20956,13841,33338,43757,17485,26818,10295,84563,39497,30191,34090,12485,38133,13772,74098,48354,12721,11766,22691,45393,79862,63608,90084,90093,84498,54171,17054,72094,36273,26545,64092,40412,26708,65190,36322,88077,29136,31916,97828,63322,47164,56387,27815,25205,86266,90489,26693,98224,22197,99714,55444,80322,20311,61500,55453,11642,60545,53219,63922,22102,52838,25292,74837,72729,29542,86073,24723,43452,13228,15650,83471,68445,20667,21666,88527,54455,15274,60346,71333,18054,28486,51178,37759,48810,23453,41642,92346,68024,81582,22094,69604,68931,80807,94722,63436,95952,81788,86102,17492,11874,72095,84211,22851,84852,31226,16388,73132,10734,64350,49928,41463,61738,19879,44552,73947,96672,30560,18257,58859,73364,53308,66173,19223,36175,82012,24364,77125,38971,23461,51400,61258,30998,57343,75983,82481,57415,61238,11723,94453,31383,56838,24424,10234,36198,74471,26998,97536,17680,85990,52915,82215,44766,49133,24762,36183,88947,72675,89831,89778,96509,24622,42153,89983,25602,67196,45069,41456,62089,14185,70890,64778,45489,64489,18459,25917,31242,48317,44270,45327,74983,94984,66609,27716,68249,96854,25928,77784,62536,94052,14920,15264,10601,68824,97412,70760,25632,25988,71008,66851,17247,96868,49252,21708,62535,38456,29678,87764,76652,23199,10364,51846,25070,75343,64479,51561,85486,77532,24187,76939,39751,31280,32191,56873,86538,71596,67941,72525,64101,57069,17807,49999,40026,93077,81508,67314,91620,12743,71205,58045,16429,15817,33395,64631,55278,23997,61340,76046,57098,62028,60325,52568,60923,23923,74221,26720,14313,22099,19215,94041,83556,37731,13221,64616,12778,52698,14280,43952,54985,74086,43444,10690,43509,32144,80899,20421,85944,73925,89348,93779,36070,96851,21622,56340,79331,27238,85792,85593,99331,26627,95254,41120,17586,27116,31574,82354,76732,68333,15736,35261,69326,20619,56587,73108,54419,94455,89342,95876,39393,20256,38059,26693,96868,47161,23658,75742,50901,54390,42575,59740,93054,21134,60799,77145,41109,15672,60166,79180,29524,61729,43795,12813,33585,63112,26717,64318,35992,87682,41125,42290,68143,32712,47486,81432,14886,24244,85209,52437,30567,68254,10213,20359,63159,20274,94959,62469,88986,89777,17248,61022,95785,58012,84622,69973,16680,39890,32768,44437,24286,99644,81404,45045,53428,87212,39032,28979,65290,31016,52271,45292,94576,19615,69245,60015,50293,54854,65019,77226,66336,66473,69418,13524,53280,91953,51990,48425,38282,77191,71617,55944,64836,35960,97182,41939,71501,56189,50767,63445,94077,59412,20390,18659,34369,32903,99767,33732,13110,58124,75117,58570,75418,83601,59055,98960,70853,14405,44261,37953,58013,23685,99459,78617,70649,72691,29745,37376,57439,55334,63863,12361,63075,26255,33383,44575,79948,33193,46951,45752,89331,74390,45360,82090,82843,30227,96747,27710,19649,33552,41532,78332,85683,29711,58092,58583,93020,37866,19086,84105,12490,13732,49380,49808,59207,33021,94167,15832,24730,86045,54402,37634,87867,54101,22199,73598,33571,47472,51492,29284,35415,53021,87528,97981,58699,38820,39727,21168,28301,41102,89324,72362,61413,22415,41139,36431,11782,73374,10884,40655,29780,37189,84362,52461,53859,22012,27331,75320,44336,52915,88157,55231,45089,82788,50021,46609,50000,26418,83719,35324,86189,51576,16254,31636,43419,16324,11835,78596,69367,56626,87293,43511,33612,88885,34340,18325,65885,12938,58133,36244,38714,46404,71496,53105,51014,91130,66109,22082,79750,12225,84813,97783,34016,27436,48468,99520,58017,62183,24421,91864,46745,34100,45906,17514,60087,96332,75783,99819,28424,64163,30482,56217,61753,51621,73630,98953,39511,64906,16305,79158,66912,15869,98277,73381,52759,87887,63069,79559,77584,41014,51615,60324,11812,28788,91644,79819,41400,27232,38637,58531,28286,50734,54893,94804,60428,24719,27485,14251,82938,47448,25470,60578,46720,22405,77347,20497,10757,39920,56134,79457,24670,48041,11381,18830,91008,74717,15468,62682,58395,91577,21200,42250,83496,83786,65769,14457,44098,89294,67584,72337,24477,25319,87087,63486,19543,86794,82555,26117,68294,21293,37928,97628,33134,83403,81855,88328,36696,52361,96802,57067,45606,90617,71633,22708,68936,84425,75044,58625,64006,32154,47853,91448,37871,13917,52785,74502,84268,31285,35521,85436,75526,72394,27664,83590,41791,43384,66396,50450,10893,85131,22989,22291,57627,16767,80871,47547,32132,84358,11364,16265,52452,97319,82026,17813,62475,64817,63474,72105,86187,81699,69597,95519,35204,90551,52587,94380,12325,64742,68270,66078,33609,19086,63305,34499,55622,99387,86782,91297,27503,73402,22271,39591,74326,93211,24608,91934,32032,70720,73160,91347,61061,59464,85206,93569,82297,38070,29361,25781,98704,88092,19497,43095,78287,62894,94235,34861,31385,64680,20804,80745,71616,40965,70918,11145,86846,53193,85947,65830,54749,17912,41094,58868,58222,19107,87635,54481,24275,56497,44009,34320,33565,82798,90931,85111,84929,83122,65193,24397,20305,62138,36752,61920,21930,14631,49418,59400,96557,84066,97067,65146,74374,96492,51913,10693,93535,32361,31636,46533,90466,69375,44089,59240,25235,92170,64786,43459,85888,47227,83827,67190,11516,17361,78971,38719,10640,99387,69144,78946,96576,50316,96271,44297,15091,55541,75170,89589,49010,83965,87936,74761,90673,93935,45717,18564,45496,48776,24877,22843,61722,17437,85043,58212,36052,25022,69388,50068,32455,30257,73555,28678,55815,97690,32947,13216,43159,49995,21751,36950,71493,32133,26560,40169,18931,76625,28706,78584,39407,70775,50472,34877,71918,77158,44472,82861,93248,81177,85237,26924,86233,58938,41495,39011,94963,64000,29958,42595,10107,50528,82989,43054,10578,49650,50377,86616,91806,73803,22869,77241,23461,64481,61105,66028,70608,41067,87770,62417,51610,76069,67579,44383,71064,22340,20322,66351,55492,13373,29267,95607,20537,25416,44952,73664,62530,63829,75196,82749,83973,37822,81956,36330,91675,45008,33788,41902,62911,97749,14941,30213,37228,90711,28040,22141,35311,36682,32585,30010,59353,95683,22715,51421,22779,30356,97923,86457,80723,33264,16472,82026,23726,20286,83143,62746,70162,45053,85945,31587,33940,76501,11289,47002,26744,29807,77270,99043,18272,74213,46414,59423,63911,89758,29746,20763,49412,71561,14287,82502,22709,33465,77037,14694,79257,68099,67542,93646,11133,51804,19613,75663,22430,82315,48639,27756,60836,72297,18699,37367,88381,30274,41257,32527,85698,92114,49040,18601,23941,42508,37105,41026,40909,93048,92974,68375,51096,24886,13239,25431,14457,99255,86350,30746,79882,67734,53436,28090,56238,69993,67880,89412,24875,81892,74194,38983,62641,31427,23921,79705,43676,71786,81279,90043,34002,80106,49068,67478,20695,47549,27815,60073,18599,47246,87488,44758,17414,10716,20271,16668,72570,36640,23430,36947,45028,18807,29404,43230,73341,52327,72127,77542,62159,84655,55434,55991,64271,99128,68926,40743,86130,55957,48525,31897,43943,17389,63133,54558,32036,54482,92662,55790,92758,99192,49680,41360,42906,20603,76489,83627,52093,64313,34260,58669,16356,25045,96806,52511,14504,89232,73513,97173,83632,83277,99194,53912,48083,25392,93296,89653,12214,92922,98916,78257,63443,38611,74624,65696,78695,62711,57088,67364,84875,93711,99235,94259,20805,77006,57642,37668,46282,29489,12817,42105,78915,99733,85929,40907,17885,71167,19955,13691,30162,66394,86529,75727,63192,69559,35685,44509,20177,97099,68652,49205,16175,98811,22041,58408,97910,81811,81240,20946,46091,52937,75052,40467,50168,34062,87746,95171,91263,90926,88868,78755,55961,59662,47487,27098,83146,92678,60080,29532,49826,47601,70706,62840,20095,12974,31778,23948,66617,67320,74617,60203,91914,58419,56861,25791,27318,62876,92755,72535,13884,62195,58874,98605,27514,23074,78890,67576,55381,78918,99207,49842,90837,53487,65357,24944,16080,53339,38510,23765,62418,40574,88614,74488,94712,27757,33008,17656,26858,13360,74003,31491,53036,71136,15213,25499,74557,23314,64101,17383,79192,52760,61064,86905,60387,82006,82335,12922,58759,86386,79959,50946,98519,92604,35147,99558,16370,66651,43199,89438,13863,49323,70701,37161,21876,11353,38406,71518,79225,77222,79533,23954,42349,84400,45373,17967,71876,10408,40128,41623,84032,30602,69322,72281,23303,66517,80104,62978,57228,90450,20490,88049,94533,75365,22158,24704,68902,70359,88066,67484,91690,52216,77716,25216,97202,46144,55015,51725,52295,51535,17676,87032,79989,52884,10807,30051,70155,38585,83627,32655,48481,71982,38494,88326,57356,28480,26358,34140,38095,24427,64920,89650,23848,43088,81931,64349,39489,23219,62890,84908,90482,25772,85499,15246,90386,74919,39111,49447,66697,52586,40985,83279,56630,60774,32812,17706,72862,43695,77591,84988,93187,26054,66382,66683,31916,66234,83642,30074,40547,91382,58004,85314,36734,82592,15941,63993,74813,11986,44925,33682,84285,76346,77329,72469,94251,43151,52284,22257,40225,53923,10223,23302,57712,70755,29973,63376,90175,77681,61129,68323,39110,80602,91234,15727,68586,73453,68625,21130,20259,85263,89371,43885,15932,64517,52050,56907,76747,82851,15825,86335,41786,77475,28926,43319,76225,94525,14318,91747,30086,14915,19388,86837,33194,24814,80039,85898,76754,44134,11833,93400,35414,93907,14826,47511,77299,17756,50566,82738,64089,62645,81989,34848,98392,93843,67554,55625,73808,45732,60146,96658,93977,25430,69844,11521,95780,82769,55147,32704,70805,79242,72961,69720,50633,93538,52258,24733,87681,95176,67736,78466,74045,18827,17372,70470,66470,46114,10552,15599,41591,29816,56354,37899,83749,40807,77363,59252,51770,86865,63660,28642,46016,33574,61224,23213,66431,13355,25974,44732,36936,55370,49875,98141,86919,51164,62611,25371,28783,17360,23371,58532,83041,62302,67823,31344,64013,33071,19668,26824,92335,89288,71852,77017,74127,18870,45668,21027,60926,75617,26507,34244,42222,69798,83478,56933,76977,89965,24231,39371,39926,94436,53307,36457,55442,85969,29201,96313,78608,37558,43196,77269,28326,99902,20884,42540,38674,37304,80079,86477,57410,68016,50042,78265,59465,76297,45165,41383,53327,89676,70638,60443,73745,73656,17138,98012,37835,83236,61656,15183,49190,56111,39177,95767,40805,12515,87505,70717,24670,23369,32641,10774,81825,45125,96482,85751,80567,54628,79102,47656,59542,99620,61886,94041,65490,76773,69738,37480,53338,41034,23574,55020,55324,78211,54127,62792,64897,93737,59840,61261,23445,81164,62068,91764,15052,63055,82324,57045,77992,48891,58044,53025,12660,79962,84865,74666,46086,89507,50592,15280,41148,78178,79819,62977,28174,31188,77684,32758,45034,79547,94287,78770,68545,37596,30642,66423,95534,28976,72824,78843,19980,60344,32267,18145,23838,33157,43104,63481,27604,72858,35918,81655,97132,25008,90463,98320,41947,11922,78843,64223,73815,27293,73626,94431,43075,35770,28678,12659,61452,15661,75844,56986,95071,46621,64064,75571,93897,59874,39374,37631,46266,84534,73585,83475,73807,98954,95248,90082,51923,29809,33584,82841,82084,89222,16660,77789,63329,12733,26049,37199,50689,50706,69529,70022,65661,39338,52659,57215,52883,29997,79178,96068,76753,84190,42267,92608,94168,74006,20179,30480,65655,83911,74663,37096,82837,66136,41228,17798,93816,19451,21937,93917,98778,12220,74249,45879,29855,48758,18832,19460,59190,71940,99834,10919,29474,26225,55831,17837,50203,41071,15453,73655,25888,22282,51228,16060,12890,81217,10458,15364,71649,48958,45029,27289,72597,69983,23476,28171,40075,53463,87170,99375,28363,55835,61860,61969,56835,59854,58029,43784,93472,84253,59446,52404,34532,97322,59428,51213,42161,94755,61172,63257,36223,86336,64381,20526,51793,35783,58509,31311,76941,50603,57972,61080,69033,49707,60704,75514,99156,80885,72059,77184,30063,72074,53278,30611,24635,61878,80534,84348,63127,58746,15821,63147,30897,65789,56069,54769,45156,20767,61633,67194,96128,32827,19110,81893,39927,56708,91926,74246,77766,50671,83410,29518,85823,43455,35560,88904,26040,34551,74530,20125,66204,17006,31430,65618,92828,79129,37837,36767,12600,11338,17570,72241,44913,62687,20809,16838,41008,90065,15624,87717,60495,12914,75220,65638,34256,66643,94497,26600,39782,13979,28720,93525,79576,60155,30464,73755,45731,82852,43018,82039,45831,30374,85079,73589,23816,68128,42405,48650,60980,24518,69787,55370,57487,54074,59245,72685,47402,57751,26546,52099,60156,61175,65040,99630,96250,47972,86803,57497,15772,97257,76410,52504,44704,99165,19689,55439,85337,18009,20978,59023,26195,94602,55372,59138,62263,91387,31674,22613,83504,31447,29026,25186,69712,61682,79991,34120,10205,44371,75376,31780,49933,72771,22357,57601,53396,48579,23095,50932,86692,95785,86421,89111,66165,57383,12450,52200,47739,13831,55437,21988,92755,84985,27578,30005,79582,96897,63412,50368,36459,47853,54848,22541,16980,78742,56865,71858,61577,83054,19999,64626,40689,28136,83698,54058,75530,37799,51974,63858,25178,69474,32019,11033,21977,64685,61069,31011,31945,44238,48533,89523,10203,13372,68385,48743,77408,39289,23181,45549,10896,81898,90926,98681,48920,57332,76658,91928,75475,81218,26126,30009,70845,75834,92140,66105,85962,45298,46844,90634,87051,52237,75748,86468,99794,72293,68659,35153,75153,11885,11602,73573,78889,13987,68788,14051,96886,55404,39207,56896,75827,11045,83972,82826,61141,92290,42867,84816,86540,21694,82423,37445,29213,11005,97321,95132,43060,78557,59254,37386,15247,92657,16814,70498,16399,80217,95145,14377,57023,76593,98046,53596,12821,54466,51451,42526,80754,13984,45362,54982,97245,96320,35391,50548,43267,83103,68742,23750,78138,69448,99122,39782,78321,55115,68878,80335,31868,11382,59697,17391,44205,81837,83730,24735,15687,63832,33804,94542,56606,86033,34938,22244,12876,42186,64618,14064,26683,13163,15000,20486,25807,52293,71876,49175,58592,98740,93850,22926,52661,14813,63308,26259,86612,39171,94884,56404,36206,12686,35563,80100,11861,23755,97992,61259,33493,42238,40068,36813,72324,50482,35688,95319,67522,60571,64730,98490,54262,39982,88665,74421,96277,84229,10757,54962,86882,21126,70748,31932,27754,14659,54521,49688,75144,56571,31858,43482,98983,67538,29746,92801,32612,40298,48483,22893,95154,54731,48136,73405,26855,65032,46954,79011,61345,78015,43739,27042,28881,99358,77114,67044,89066,24702,61869,79042,92791,51226,96168,32034,60158,47199,47266,32927,46601,26727,44239,24051,97789,60804,13859,43386,22989,41884,97623,54208,38038,25223,28046,32528,77056,31148,86134,39787,72535,91189,60699,19802,77215,84333,64610,72484,75770,81477,31739,20749,81398,53886,20285,12683,18750,21414,17289,44328,63680,95806,56900,37794,58143,88499,32097,17070,41753,59402,95777,13185,76974,16422,65524,55047,53821,66375,46581,87746,17442,94796,86916,65782,39260,73263,93111,45100,16179,85495,41639,71512,93047,50424,31807,15530,90135,91060,73135,50967,17963,63346,88691,38447,36836,26827,45760,79598,49553,21676,53111,54758,27260,93230,41169,45152,13585,98262,17901,59119,79251,34287,98357,92869,83568,42224,23942,53190,43527,22247,77889,16697,93881,39076,75870,83258,56061,82992,21368,34333,36916,46983,35704,35024,75278,31100,85860,49684,45346,25590,75217,88200,20038,50868,75606,67330,25899,39234,20955,63630,69074,99006,61059,90100,78452,42438,44966,55476,22285,50114,47500,83539,14705,17862,20902,93820,81431,33390,18257,96549,36720,54195,89761,28259,10239,66702,87965,52722,11101,36645,97689,60224,60314,24160,31573,17393,31448,84758,83530,65012,39101,26744,31802,63822,18168,12225,72814,70584,40347,95017,65551,31549,86290,65957,75920,31907,36328,74716,56616,21111,17706,27997,12509,49399,16645,28614,12015,75922,96078,95083,24202,95246,92500,35419,76649,68392,33776,30158,22153,89391,90907,81727,36672,68378,85171,11049,87653,89058,46648,89704,20406,94527,21329,87340,84788,13085,14784,80155,21727,20799,84834,68203,31554,13383,56089,95883,66858,11131,70966,32196,36342,66020,99692,89869,44373,79163,24272,40458,98448,38113,95237,31641,70540,19688,33622,92878,69267,83487,62096,64498,55932,71597,18382,94122,94615,43089,20516,93753,42323,27458,47071,13746,93439,94133,83397,82686,52228,46554,37318,90048,38186,54475,44736,96233,15118,67109,88767,87469,75542,20859,41353,72904,67773,49724,87275,21180,67508,73570,10056,75603,50931,59211,66843,12600,13383,85270,45656,37343,35652,51263,26638,96164,60365,29368,33383,83287,19301,75263,77913,56882,52546,74351,69675,25046,92225,61132,27882,28186,43333,37104,11200,99226,63372,37915,60178,39757,84656,72089,77705,78287,74628,64900,46646,68940,47022,86939,28685,33234,47266,14959,45417,90038,47124,67339,12035,57700,31049,27995,86196,48152,45027,31318,72141,98582,91042,54648,95635,91755,21417,52983,62285,76279,53374,27079,46296,34894,74164,13866,19972,94973,66898,79782,56873,28328,47968,45768,72614,57263,34076,68619,84314,90940,12576,29060,56407,13472,71350,53512,12177,90570,73491,23474,51569,72969,98174,86323,52415,87062,98855,58371,52680,68851,16150,94322,53831,24982,65527,60536,46529,62776,54735,31381,16964,20750,83497,10626,62247,44955,98480,16561,95416,36973,39312,94732,44198,29219,91578,81515,55828,99197,72554,30037,93470,40569,85200,18310,75108,72419,52155,29288,72823,74698,75005,71837,80347,77180,90674,53347,57201,78185,89191,80505,79590,95724,70674,54656,22642,12166,26927,54912,91929,22156,46124,60008,10945,17373,70154,87703,70923,63386,34002,98985,28479,29803,58444,25933,73275,13479,65866,48019,88854,98906,19927,78711,99416,87136,58324,56917,14192,42205,69361,67944,65386,90044,19447,94994,24776,61430,42193,86930,33777,67425,34538,58239,76179,64508,56091,87293,69928,26045,45443,49555,43769,55981,35602,46680,62017,27474,19188,25626,69615,64168,78304,90605,59896,57314,77235,89427,69381,51645,24255,96003,57172,57140,79509,62046,52180,59539,62265,82422,24796,12874,90204,46098,67810,78876,70573,23576,67383,21990,52701,94666,64214,52426,66236,93592,76886,66195,12613,88860,60093,47527,50955,32611,40789,45605,21576,74982,18978,82209,59157,19660,73256,98692,66572,39174,44762,26953,30018,17808,44103,27132,53689,96469,83152,60587,70980,33477,25449,82761,11903,61561,94015,11906,98236,28263,13058,79831,40586,53770,91155,28202,40918,98012,47872,57021,28248,40128,57809,40132,61277,61103,92269,11157,41359,62592,50503,57972,81938,62433,87606,26348,72328,67887,81473,72377,76379,93357,28208,51382,59151,82269,60997,53468,24407,20528,71559,61857,53106,24754,64142,91745,74623,94941,60105,72170,82183,55197,90297,24295,70325,46991,24526,40292,52779,60212,87383,77218,75257,32861,87113,44395,22266,25987,24213,90614,15148,33009,25943,39491,69760,32090,16995,41827,22408,77706,81572,59930,48954,47776,51634,60799,11937,57352,59109,70184,15461,47793,11366,81516,41970,45038,60263,18897,89194,27545,64974,51591,39157,60744,41044,62551,59301,73440,98375,65755,40728,51669,71847,20552,75694,32350,96139,55234,80086,64390,89511,42975,95863,91558,35426,87315,70981,18678,75393,32102,23104,66174,25495,84771,74287,41871,87637,90862,53974,64264,51660,15256,51777,24594,36577,43204,81786,81097,39533,99397,62111,62564,74719,20723,11860,51983,32565,48922,48448,48648,87099,23118,58430,82581,63573,54136,12089,87746,88394,48556,54943,16461,83492,54457,68739,46429,93231,62744,77888,60888,49424,58079,43023,36325,80816,29294,73665,20248,96068,64632,11396,12305,83393,59248,87632,28438,43967,86110,60150,27210,35419,66672,71527,61034,10272,12685,24610,11851,76396,68139,38260,51449,77447,74746,69312,34619,33039,91368,46376,85357,26684,18330,73791,86368,42797,66467,99421,72608,66958,36052,12109,37574,97580,21940,50506,49983,44448,53713,45250,31178,69817,75091,22126,74508,93651,29056,14220,26747,56575,23317,50699,58062,25184,74334,62183,15402,74878,95051,87995,88151,74768,71126,83033,31280,99840,53433,76969,88098,93288,64332,97710,93059,70754,54851,51155,72529,37557,31309,20938,19966,93170,74407,49190,37051,10306,97729,55550,10743,27763,82431,58139,84724,63804,30007,12452,81990,55746,51654,69271,75933,85042,92115,93099,40145,43668,17294,79075,31963,68951,21073,44966,12779,33065,62947,29049,70809,55875,24456,79914,69948,46209,20707,12836,46711,79412,83269,56218,21888,54346,92240,12392,48428,19278,89506,65801,50692,66191,57662,75395,26373,31075,81692,46392,67458,32036,37527,52481,42898,30863,59622,43280,55748,95686,19426,42422,47548,88801,98736,28129,36861,41599,99074,60104,52732,23683,32163,34746,13040,86967,40766,99998,11757,40422,53034,13315,34965,73422,53573,17204,90241,54635,34200,87887,18792,72388,95332,34718,62819,81145,88468,15336,15982,67505,66488,88400,59778,77352,66175,80143,22501,81591,10324,95606,14708,59513,22466,14476,28727,63548,13918,38527,64820,63016,29292,25237,94989,56110,38442,44097,67465,52846,24646,26950,68012,68636,73810,39168,87236,63814,51076,35684,67081,38196,66506,44208,68305,70199,38956,60366,94608,65434,24803,79925,76923,80101,83757,25088,93890,41642,65465,33317,50307,75244,28617,55916,64655,82299,73496,87210,77248,56123,82616,65168,68887,62643,32213,84646,80339,16725,36479,50399,40762,91897,59552,97358,96074,93078,54185,18653,88747,22524,38810,66463,73678,97473,12058,71636,50370,34642,74363,39305,63285,32153,10072,19337,20853,53174,53400,22452,20919,48415,35494,84892,11516,63508,60608,51687,19054,74981,43083,33224,40334,64817,24735,74635,94394,65207,60307,37611,41036,75649,45579,46223,52147,70645,99638,55813,16141,39213,65901,98607,47340,79251,91248,55576,41952,84564,64601,38896,62132,65120,21777,73409,58440,26719,37161,46186,68988,76792,87559,82800,28442,15724,14700,41234,55674,65921,62059,99201,71909,21523,29207,30439,31289,94792,34520,63919,31372,26236,45631,30150,52342,57670,33716,16800,67959,31354,14509,13530,11473,57101,76297,19779,15691,27619,37792,11727,17067,27576,98225,76460,25419,28692,25181,84945,55121,25857,26078,32556,76975,24749,42465,64357,38411,68481,73770,93106,92268,64182,83843,25144,38161,36592,35550,48583,38096,35864,35972,46989,93473,85854,74485,22370,56242,90624,76047,69773,50661,97197,60813,66312,80843,50721,64322,34354,74645,74623,44518,85620,49888,86677,21825,97803,74510,60224,90580,25350,20430,63961,93618,60911,52255,50631,59597,16629,16925,83025,10603,95553,29100,10049,56923,57718,73400,58297,13011,79512,82564,94848,52691,69469,56589,77236,36342,74008,57569,19565,74430,54972,50804,62015,19340,63221,93291,47605,33507,38057,79372,37238,70805,66683,78909,83405,18536,99278,33721,81058,14792,15793,27229,17132,39484,47402,23892,48602,38762,49585,68210,57723,84376,15980,40868,23845,89504,33300,51338,89879,46321,77040,23523,55820,21439,78153,63756,43637,88475,26218,92748,73014,85807,56428,40984,41843,81370,42070,10649,28070,89965,47017,49370,91425,55154,42992,20086,63914,49478,45031,74472,35262,13295,66141,62171,72080,35610,44576,54285,19234,88934,81713,79724,61651,97900,25084,30386,99115,97537,37566,99835,94552,53376,53087,10995,65532,86050,32127,60792,13991,12215,13682,21246,58836,62773,73368,59987,97266,20580,63793,31136,83194,81590,51731,98566,19523,39878,10384,33466,51267,80539,33759,36581,68914,81981,36808,82571,86939,22812,98735,39335,96473,21272,16576,44150,25618,41284,33362,36953,44204,28793,76234,15464,92675,56508,21782,59515,82568,37698,84258,44465,46095,34905,63498,74209,39909,75269,96887,40697,76845,42001,66495,99705,26728,43854,66678,30743,22951,87099,67569,88514,58096,32503,85184,68844,12261,97190,57436,20540,66206,74241,86980,65932,68544,16661,24725,84670,56141,39137,22791,67995,54573,71700,73916,35234,25323,44034,29873,71236,87525,30045,93609,12030,71897,73930,65987,35266,87245,69954,94378,14372,30337,69279,88311,25072,64660,10678,36171,38698,92468,96457,67561,26788,91647,10121,57786,53252,33979,78563,59180,93597,13298,58062,50207,43713,85224,78987,59137,36892,91117,69008,92957,60384,69227,90930,62390,31298,10312,66018,88974,69305,73626,27649,78139,21915,90984,93037,10516,12724,37734,90058,95118,39839,78093,30425,56110,55458,95938,22796,14701,69554,85332,83416,57251,71940,72473,55682,97216,33631,99272,92197,50535,38966,49708,39997,38828,80719,66494,11728,63112,46403,79859,43412,79132,71705,55794,59600,26828,38920,76636,89912,46833,94281,79109,13778,90874,47459,84999,10807,66617,50275,19663,27835,27551,64884,35429,24875,65606,57686,11276,86031,60068,24905,39422,60608,91432,71407,55938,79483,75457,22762,78921,96154,56099,71248,82765,44915,60531,64517,96502,84171,18333,51860,75346,69290,55843,81226,17508,69453,18182,70085,91226,27608,49310,83213,97000,59545,56658,70265,67587,68453,92373,99209,59741,97074,51105,90669,70886,11899,72581,23539,51526,67806,79316,17676,78001,70121,49129,53185,79221,91318,70953,23542,57221,84004,27765,92544,11251,32196,37241,63549,93002,77858,37630,38387,73579,10449,76666,58723,15839,18485,73599,84944,13411,84845,57800,40938,17145,59910,30353,75388,28413,74788,79714,31445,57592,61487,12863,37190,42136,35366,12499,13402,71303,75831,18302,63775,58430,12810,55508,53097,54301,30375,26870,15002,67437,41926,27618,29277,70551,49168,32390,89756,97284,23532,91349,75801,35427,47711,60337,35020,26947,58530,39432,16293,67049,27474,18452,61836,70219,43883,79883,31638,30890,95510,50978,62180,43024,79077,10656,60326,99808,34873,50924,13592,49224,98285,64184,41125,48836,50943,23406,89489,16866,38772,88373,84246,94967,42063,73063,43661,93657,78098,27485,79566,30943,12385,29487,17923,13224,24191,98222,30060,83729,39265,61378,87471,90868,21948,63891,25247,37686,18409,65531,61909,79472,73170,91033,72569,26138,64927,20009,89747,21259,56411,13317,74374,23004,56493,32819,79495,68236,59462,39618,50827,66371,70740,64386,58482,59902,45248,51053,37040,20200,16186,40407,35496,26001,36826,86294,81352,43408,58087,73593,81146,62340,86202,45914,18089,59760,77529,39760,89463,18243,47837,54165,93658,25850,76960,46567,81919,69223,90857,80944,43794,59993,79607,11523,91418,53609,57247,64228,52615,45210,26833,39105,10622,45368,87190,50219,44778,99976,15337,96817,68380,92444,45087,56533,59116,59070,12782,34064,86237,36418,97349,25384,27631,74162,16102,28349,38323,58852,58895,24062,83588,71926,92548,32823,19456,92695,26191,76686,50281,49306,68643,17100,71537,49980,66479,83099,61271,18767,12439,58401,63286,72961,37980,83972,82412,63383,16226,91844,85455,86122,38054,16149,81549,64363,47964,72200,56242,80135,77317,85395,50145,10733,82818,72930,40634,72872,14988,38057,26175,75790,52253,66230,22762,62207,16857,41423,80255,16266,59146,85602,32981,47278,89131,13933,94452,62097,30174,54633,77970,48755,32499,29081,11059,75503,31749,10790,96656,34261,69641,72224,21745,14541,42274,98115,50505,98966,13391,16752,74134,24308,28131,69052,39107,91266,61983,95167,25388,98834,17821,98412,10862,43825,66714,20401,36760,92855,43076,41375,37593,41975,39010,71071,94398,99977,82965,22781,28824,12868,60517,63708,68594,61982,42601,73349,12061,64958,81967,41623,45964,77006,27836,69685,89294,73462,22133,27605,85155,10744,54486,27385,85025,68849,12461,16102,77785,77043,42788,31483,78003,86889,69426,98306,83211,13856,82481,13430,79730,61797,61854,10369,10878,98610,78542,54084,95428,64662,37116,71257,94626,91972,12533,20565,89335,60225,15829,57275,15265,39615,54202,23717,53581,79655,97332,12412,62559,42333,25688,91761,21605,60893,29741,80305,71208,15676,60574,35477,14383,19492,64058,24373,20972,52140,19898,60938,26973,81712,27887,56174,91248,74595,18268,42338,26004,32805,76552,40297,79956,73437,19871,86750,24955,41367,45677,66483,97395,25862,24203,10814,62898,13110,59326,89287,91924,51437,77468,44121,93637,36318,28100,56507,14049,72678,43167,21993,60671,56710,35536,55375,58025,97729,29740,91008,16386,56244,98729,30803,58309,28710,93486,95888,84756,24786,40021,93241,32496,37698,99476,70913,78197,85965,35723,22675,71181,90942,58096,73979,50139,96246,10366,35634,64780,53097,41472,93531,17924,92109,61086,68651,59340,35269,90589,70090,91392,41219,64338,13052,45017,83362,59964,80401,45778,98583,95808,35394,93518,60596,62002,62930,34615,89467,91981,90028,28784,81772,66446,20688,75289,42920,82626,40349,20529,10983,52370,36067,90732,10054,95404,74197,86616,45276,18357,57623,69690,47333,88405,71619,65934,83974,77198,72542,92729,55317,92625,47591,91694,18626,28058,30816,24223,13725,37966,17315,13963,81288,26418,99640,57349,17785,87219,59178,68707,10655,32556,76263,19267,73614,19061,19412,66930,67942,50390,85764,27315,56553,11166,40958,14899,35708,36888,33525,89493,94511,45142,64588,27042,50220,75000,30443,23918,22576,82097,12652,40807,74784,85783,71162,69073,53237,94583,14568,44351,35491,39089,38444,34877,67888,63941,75917,30512,26177,10633,58770,71389,60020,83392,22481,34268,58828,40061,26617,11695,94661,44943,93207,63287,52231,15664,47961,88488,85786,66242,95352,46456,49714,17896,41034,45618,23495,13455,20446,90519,59159,82438,88880,13067,18862,96958,76869,49085,73289,90634,58567,72656,61108,13285,49382,84010,26927,77646,65296,70586,11271,40549,86743,69420,45643,74383,75804,78937,28348,80026,87144,94134,99641,52877,57595,93586,58040,93918,54456,28755,79852,88607,22125,30555,18793,49775,61816,69937,46583,54988,28410,28789,81298,86465,85097,79603,35453,59766,94674,85253,56441,79846,94696,66145,93318,43378,11407,16956,22887,25876,52183,13219,92661,30002,92331,62108,82988,24728,41465,34590,20353,78669,40670,97307,85481,28018,77975,34865,35169,93780,27047,55882,57118,65142,68173,76800,16377,73647,64824,43560,54779,80090,89786,82901,53596,25796,43567,61607,21271,42737,47211,66573,32771,60589,97323,96449,75297,65781,26055,41770,92459,36057,74756,94283,50637,91277,81388,39892,61092,75536,22842,16363,68375,14107,59536,68489,86231,65726,78229,25493,96252,44779,89563,49684,65108,30670,24456,35970,25503,51005,90630,38714,70275,48286,50276,35241,97159,88529,52557,49294,62286,40338,62792,26468,62337,36304,10902,29850,63532,65733,15332,55144,41807,65575,99777,31241,48092,48109,83838,83516,26355,23738,48909,81563,61609,41238,13428,50958,12346,17274,99868,54491,74526,22138,79077,17831,58047,27289,20537,12222,84847,29816,62038,56901,98059,13077,91914,57920,90825,30373,17053,42927,54093,23104,63808,78989,99225,63528,84157,97647,17923,67952,65014,52888,41981,66896,45079,22199,76009,14148,80400,34203,32173,73343,92212,58114,26614,63933,57991,53044,17351,75904,18352,25293,84292,45055,37442,69958,80721,93317,53384,48471,60476,64704,93679,17481,40602,66136,48148,43210,18675,91407,76566,20476,44335,50370,34630,91000,94324,49452,50952,34583,12183,80455,89762,94389,28990,87189,89151,70805,78285,60530,12668,84846,41756,93027,74555,70893,39752,88650,35827,80395,26725,74276,93592,62465,72386,72493,68017,31598,65250,20746,60488,15690,72656,78864,14322,89585,81951,34323,37474,27552,83336,10309,27280,52017,14631,13383,35702,38936,82294,96099,40492,75303,27236,52444,68237,82070,26412,13986,16946,72528,48298,56485,80516,85153,44980,14943,31249,58109,14356,34380,56938,38695,44320,14122,73532,60706,25991,35293,82481,72008,40397,12384,80118,97539,70002,80068,24081,97110,65803,56690,55312,13024,88164,44663,23763,49587,63375,76777,11052,86216,67136,68801,29281,85195,18512,95376,18952,50611,42582,43847,97269,62103,29007,50989,87205,69074,29641,72710,72395,69967,78087,86389,81029,73481,42022,39561,53705,43726,38759,60434,93930,63697,73517,35977,74399,79317,95618,51296,38986,52429,82587,27992,27874,28659,59726,52739,60947,80873,98296,89175,52917,42209,69795,89567,18154,23991,99062,98852,56808,50735,37677,84762,76410,81350,54489,83758,24476,45082,57491,97661,65695,11187,95642,30686,33437,57209,36010,51868,39226,72279,42138,35858,84360,45089,51217,44902,15140,75895,75998,89423,87371,50975,52775,18768,78690,46875,81801,86658,84391,78714,72111,89252,28037,90848,52615,54448,34478,41324,69756,25444,69608,39292,34541,37606,54081,57099,21598,87463,15752,65343,75116,74698,61923,67227,63179,27438,68489,86478,35170,11017,61417,33129,94970,44719,73392,71095,31976,42064,22357,58383,46891,49858,32419,28352,22275,70611,16903,70534,78513,78083,44596,25208,40940,79369,14913,23136,68389,21036,47150,33758,40504,50500,20453,42496,51808,81229,84411,95953,71429,20237,39692,98737,33875,37175,40454,71294,58452,30937,99422,70124,49504,66310,35345,21580,99848,83108,86336,66103,60414,64749,98435,60661,84478,28519,60585,42064,34301,14936,72233,28105,78569,77749,64677,38043,89122,97969,27121,31911,62157,64373,59080,19900,12246,88006,85975,21367,90334,32923,63749,18437,33724,80430,91603,78929,97568,48975,37465,98797,28903,32351,66840,81826,64183,18450,75343,71380,89760,90924,39651,11737,39955,79688,54233,95349,24804,36387,13225,52910,28454,48863,58584,65177,27616,23126,46423,43305,49805,13926,78798,23704,91081,62874,12822,27368,69654,76827,34585,86041,51498,20109,73281,87592,12769,16071,61839,25812,57514,10829,51836,40181,36913,13314,78448,77806,68394,48799,78043,38233,78024,65051,47022,39290,18048,66024,35456,64097,26747,62807,10039,97341,86867,59795,17813,66650,50147,69929,60299,93951,89179,99787,65141,27745,37628,58520,55904,39604,43174,65843,84806,23940,54828,72424,81604,90322,76529,24367,33154,12347,51349,30913,52731,36624,59979,40768,26231,28958,39232,93067,80171,97211,71390,93435,53242,53469,57375,21559,21737,52270,46530,82485,31960,34079,58921,97492,56492,21233,82645,66293,44279,90918,15428,42195,87412,97370,41280,39597,54775,51105,29399,44209,93110,82825,36734,12540,30757,21412,76182,12067,49796,27780,67974,92842,55567,15939,88360,70347,97071,43556,93144,68722,36892,61661,92373,11345,92917,44868,68002,24177,19159,70474,88990,85433,45163,31288,91772,11446,12816,11380,98442,42097,94185,93048,75412,12061,59842,90062,76291,15186,66576,93189,80573,31685,75513,87913,62590,80941,48495,11304,27542,77845,93192,68798,71493,29351,97520,70965,65204,55278,57564,75692,74837,59629,80922,46977,61505,11302,92052,21627,23964,30600,47490,85238,72836,62994,82929,20995,50230,80987,49531,27574,52433,31488,29309,25970,38966,44623,70564,96497,90197,87019,11299,52482,60076,63166,64837,58694,35233,79854,36070,43220,37256,61620,64826,93348,70581,12689,12663,90540,38305,29782,18491,22599,70261,96049,41755,68276,94048,23718,48376,92085,62200,69889,93113,17999,45197,90809,82606,85314,24645,95623,15194,34373,99004,60957,22970,37679,79103,99174,51880,76896,39089,33517,91496,61845,97903,35187,83462,23900,21511,31294,82830,74270,28061,82061,91737,24391,13207,30483,13716,36176,11662,58471,12226,68743,19379,40129,99777,36484,30414,27555,32010,41400,36217,85583,42994,14771,28772,70736,49533,24739,44893,63543,22037,30461,63538,91942,62056,50310,55267,98552,71541,15221,80728,86853,72217,70442,93572,28486,48367,34263,41191,71480,12814,27115,88422,14434,47784,51949,29473,63300,62025,88692,75921,96747,84059,55521,48042,94264,96788,10890,31536,72734,94956,41614,89382,17276,81408,86032,76066,80750,57860,94071,24240,94466,60223,91671,28612,64027,90993,33453,86621,72632,26259,48080,78108,80275,79854,97389,93494,70622,22146,17131,73299,89464,88208,63429,45206,44161,14451,34285,48928,54547,99285,63403,40783,13998,27994,84760,84305,47711,35685,90575,26398,55495,28583,17274,25428,74797,97619,16120,56565,45025,14114,83938,33276,87651,97295,10472,10010,77959,31465,90364,96934,28325,29286,44987,16229,40673,96641,80057,22486,95517,25852,62091,74446,31614,98376,30453,79038,67031,20063,21694,29655,77672,95882,34278,46754,54006,39544,34935,90527,32454,95696,38572,21994,87888,29743,90776,58895,17660,89931,92066,54316,99838,46604,81543,19760,91340,82721,25872,51311,64960,64865,60841,71275,16783,95109,36498,82830,90808,73150,72642,39897,88987,98197,20299,50874,98972,98381,98752,69012,86149,12080,38802,55724,79300,78341,47409,42739,10680,88016,22081,18652,45272,76128,53373,27917,92863,63562,34426,61962,77216,97864,41080,26434,78414,98815,95651,79226,93591,88218,10163,14414,43667,49117,30109,53541,13464,32753,29015,20547,20070,46185,75248,45427,78581,85299,98690,58878,58532,43284,29479,48539,41743,33196,43333,56517,54437,40879,10571,67945,20361,35517,14013,55014,12238,32805,88991,63892,61359,92067,26870,42869,86815,38463,24612,23504,78329,98100,50906,81533,88006,50174,26387,95405,28979,12377,24400,18061,69999,86461,87376,30699,13847,52320,10650,49702,70795,21742,45774,99733,51716,55594,36469,33155,71009,29503,65079,78724,93182,34242,67529,14623,38319,53591,24491,26330,26449,81552,27121,58050,40518,72705,60850,97572,80421,52882,19326,61205,30240,19596,27326,10649,75023,34448,15088,95209,36034,80586,75431,99331,33813,80145,25755,99232,93389,48159,72636,20063,71158,59713,30547,63981,60471,73672,58290,14162,73631,98534,28563,90551,30823,84154,49980,60190,79644,40553,75653,95583,93660,89540,55159,76081,45335,50456,81275,30436,61206,14955,44211,16536,22495,77123,23006,63749,44908,16045,82383,17104,84937,11564,46631,48930,80849,56272,84016,42939,75399,94580,46295,30617,84903,77053,86404,72986,44380,61769,56184,94293,96837,39304,38303,86656,28329,56937,94621,85300,36204,75403,14463,11124,65866,77734,76490,91281,13939,20871,19864,76288,92447,93241,95423,15863,97373,30448,49128,24735,28925,62801,51801,56156,89089,49448,47048,40165,90112,31444,56147,68684,29990,99469,14267,67222,91399,45556,19702,76018,46971,48782,74074,86904,40074,34646,76016,34939,64159,68689,60065,36480,44834,70624,93467,50347,71672,60965,22001,60053,39356,99744,56931,89956,40214,79810,35782,22245,84369,42462,47603,17784,12516,39607,73308,14185,89249,11365,62866,95951,60216,64680,63750,96563,28829,68568,17825,40598,94722,20734,84357,62282,88137,28590,12008,42177,71905,22240,34695,17471,31013,19143,29915,87290,87698,39902,11050,93728,51232,55432,76087,17930,25898,53089,80824,46593,26590,12088,38143,70944,13923,35614,20746,32676,79343,56435,27752,19226,72729,92909,16045,12795,19832,68353,94677,59655,17567,83275,45992,79358,27386,48349,64369,37025,19436,44018,59064,83553,53960,44231,14009,19768,91823,25267,57345,35159,62055,75581,85548,20775,46411,29955,53014,41030,14876,92660,73814,75033,71672,63783,59671,65247,23758,81021,15865,66577,17096,88719,57839,31559,35506,62632,94140,89134,12650,77713,40082,22881,98725,29779,82050,79040,81287,59296,44688,25794,59094,60340,88463,12156,70325,37482,19535,53809,48235,25331,16685,34594,31244,41112,51561,83628,34157,12157,49811,94579,14001,43782,48364,42904,87303,89947,17737,13797,94769,82804,67790,61042,14462,62937,84426,24716,94601,34480,95730,96350,64521,23385,36120,32389,87233,71545,93422,46983,51140,75672,46022,95311,82029,40831,57700,45587,14036,91675,98482,48265,73336,28899,73613,43328,17265,15702,11360,35300,56473,74718,85108,93475,22992,21102,21920,56287,15286,23871,19829,15827,60414,28913,96171,53314,18229,33879,76798,61536,37711,19046,32387,36248,92388,14814,85901,42475,92724,38690,17526,30663,18614,49377,44713,59624,84825,22331,91136,70776,58018,35530,99162,35223,30896,28135,60197,53680,93308,88513,25505,75588,30494,96258,36085,28179,15161,91794,68203,12298,38663,72921,48663,58809,69475,75794,68668,50983,28175,10043,22081,92467,97070,79518,33816,23515,54309,77673,85867,57473,93749,13688,18630,21196,79684,35112,94801,50656,77724,37455,74206,81896,69750,16432,65144,40770,59284,82823,68574,86832,34578,81042,68357,83836,74448,94458,86430,27369,85356,68083,21639,73098,16783,72594,29397,44084,29773,24087,58828,38362,54084,29596,77767,90588,20504,97028,95318,67715,44071,38761,27624,54861,15874,52670,59229,11711,13332,81701,22823,52603,21566,44052,62540,51033,73216,60686,67557,74223,54607,14857,80834,81114,67731,74874,54498,83433,93495,24382,10972,95216,60617,70931,11983,15409,35106,68414,69478,49974,17377,30496,89485,82048,42506,37554,75782,62540,67989,18919,52571,59013,17510,45744,83178,18747,55688,17945,88795,90103,99540,71437,46455,32000,60022,53055,12909,32049,61020,24424,50509,39832,47099,76279,26153,15981,71820,25037,87946,23594,78799,45264,11774,40520,29293,58922,50099,95798,85116,30730,20348,40514,50413,32227,95935,28065,12974,65613,56985,23765,49613,64274,57513,43123,33749,95574,22066,85012,53012,93010,37142,11245,56394,53054,47839,77654,44071,86738,68401,59625,84995,72961,87000,88826,70272,14357,75675,19680,60725,51691,59434,30817,12895,38482,66732,73874,49862,72797,89812,71207,41423,94007,40491,30180,80938,14349,99822,42443,80345,76073,62372,20678,55478,25428,34185,53698,25085,29463,84388,98387,65363,84610,16303,85858,67421,31759,55614,67679,81890,98907,65355,53746,11816,67305,18178,70066,40997,12834,90919,37979,35139,88464,41825,38356,53725,54738,64765,99566,30571,69364,99980,22630,99337,38903,32509,40013,42059,96362,26128,12815,29131,63625,79760,44089,58387,33291,15251,78987,17725,25393,51819,31095,22294,31540,92643,66185,14976,47755,11478,73036,94336,31476,92074,56193,93309,29978,87558,30191,64575,40944,43436,16449,21316,98247,13260,48122,69804,49187,66916,59261,16134,47935,80194,47605,38000,79751,77220,97693,94085,75136,16377,16419,82515,90809,14260,85162,48609,63449,89554,19776,35675,13685,29311,33725,16881,82739,84200,45613,54553,60063,43223,11439,58995,32104,55023,48593,14509,92447,98022,71352,79243,90208,74864,96931,38479,12577,60254,82388,16225,48782,85112,27250,74417,57056,44393,24931,12413,70865,59700,61048,16051,23030,83844,24935,58341,89874,40900,71883,70108,86274,51064,67801,69113,44185,79117,45018,48500,20380,39321,82015,88435,42493,26066,98411,83410,64207,26370,63391,82710,56023,35698,27206,95660,67932,77335,54160,23862,13206,11267,62881,58905,25404,78946,64105,24097,42959,89517,70636,48640,40100,50318,21486,64283,50340,46553,56159,65772,74408,13232,81113,15188,31026,76798,48704,78548,20725,92571,78054,53711,10099,63203,84179,40186,31336,69600,25104,38210,54390,11000,60563,80241,96839,94893,14418,89634,10865,56830,90480,98663,62787,48881,68110,91495,11101,15101,31166,95698,60468,38399,87214,39358,68490,75428,95035,66447,23449,74698,70062,37092,36060,75566,69007,94203,91406,52781,88052,31707,34305,73258,85748,37984,60349,88408,86058,61864,40512,79967,34964,61134,72638,89397,80432,57898,89360,30339,13376,15182,20993,32746,33293,60544,31015,62662,76583,40617,58425,90412,38100,89304,43592,18594,37665,51518,49821,12355,64993,84073,70744,82209,78150,13080,48337,30129,44092,12570,97863,57020,97083,97260,55152,41743,19505,80412,78196,24005,13116,86321,46841,68739,48549,39305,22531,47412,24271,29036,62905,82456,70283,88145,37296,66763,95498,17367,93563,84762,69226,36613,42756,39931,46785,77705,14154,30047,46945,20928,40925,61408,62029,86643,36390,37658,76305,61539,15202,98688,99474,89684,95556,42582,63914,12581,67686,76480,66832,79679,19920,65410,78284,14025,84736,82844,82222,94787,25841,58829,72065,62075,25926,82095,50181,12303,96640,77862,21572,57707,24332,47804,84420,64660,39537,75347,66032,95027,11036,24551,25845,25701,71313,97690,44084,40796,53669,13049,43672,30998,81839,88017,45549,14305,16980,63310,71148,50941,28428,74307,70097,74060,77054,81083,70523,66589,17218,92574,98732,30348,90056,21406,49464,62467,21291,98619,76978,76983,46297,95598,97154,31397,11673,87460,54076,29422,66089,56133,29012,66194,20930,25399,82632,28008,75122,11537,48473,86224,89750,17481,98295,40309,79669,41733,76309,21907,93405,69869,38562,20253,29579,69399,38256,84658,60090,20929,74595,62490,64884,43500,26940,25364,41992,71773,36714,59771,21323,54859,29753,87856,39612,92225,52121,22082,74852,94327,32845,97895,59739,60920,44744,84779,96304,89777,26201,84755,55611,33184,43026,88088,39849,54367,32840,25829,17417,76546,24539,38223,51856,70876,27644,64616,65657,97119,54140,93882,40733,96224,35516,97667,45950,79580,95014,63362,70385,14347,25762,86803,72150,55567,81378,88279,97699,17502,69409,44013,62686,15595,24318,61207,69003,26141,65408,91080,61508,20027,48448,94439,47690,44202,97576,68368,24701,63174,87963,80703,34888,41298,81149,83952,59729,31887,80134,91458,79842,96544,88142,34358,25612,82994,79109,61137,67930,79882,27291,92490,29130,96920,36528,82184,84426,90547,68726,57920,63841,78511,94984,67987,15445,39684,32138,41961,42040,79616,86605,56365,96748,56183,71343,28204,72626,96999,78877,48472,16415,59034,66545,98761,47970,32205,46812,58533,99964,16470,24972,57726,10688,40619,10118,98388,74012,17983,69525,26189,46342,68247,13104,74157,43280,77863,13893,34886,39112,74222,49492,73826,42435,18822,45055,28784,99680,71578,76088,14765,74283,85205,94195,23460,94599,42926,40474,61266,19887,53300,94247,95002,59606,14169,88819,72201,49521,59482,16708,93775,85790,22301,85962,25441,20063,95816,10718,40224,18548,18588,38873,60265,66747,24402,25111,93951,39101,34404,83225,17689,68962,29950,14633,96043,55275,42589,74212,76403,31785,15718,74914,60499,80775,58656,21111,58643,61610,41610,39096,63532,19542,98838,51129,69801,72385,91738,37701,75937,21110,46415,98897,37933,76483,78631,68049,32714,29752,24929,37100,22766,58351,53917,85221,21401,34136,28706,19054,51622,64546,82081,49015,23866,50387,22221,36058,71952,22084,91869,56585,82897,77216,77129,10672,28787,12894,57206,37085,29418,69040,10349,38080,10953,34950,93279,69556,41384,91420,67742,76572,89690,34727,89487,80936,40055,23804,63938,21419,89140,59359,66975,72126,98852,48044,65266,33560,28342,21213,50077,98838,90997,87642,25045,62845,71677,53597,38569,40199,97466,38991,55580,30050,89668,89254,36194,17203,88535,43349,82547,35926,61822,58231,77113,45061,81519,65279,12909,14219,61989,71480,72996,55263,28406,70183,78524,26058,98755,20656,80953,80824,85908,88435,29982,84388,78389,51562,90920,79149,24701,85090,67183,57898,50873,17597,37148,14759,70453,91383,42467,64727,58002,81060,85865,61477,15470,41355,91869,99246,16899,73862,28663,80827,88533,10054,92440,42509,62500,31929,28381,10024,23283,30798,26566,21957,32552,63553,26349,66104,10672,15142,43971,87917,42513,17960,46819,21852,21524,37911,34589,49814,17570,18817,83951,78220,43625,65849,21860,12053,76869,13852,69481,47182,79304,48103,13158,69473,77147,59804,58868,67356,95255,11080,71781,35236,35738,28127,18173,26115,45218,96000,30847,94714,24604,66113,20452,48283,22743,81561,10724,10694,22874,12176,36871,81473,37186,76144,17006,46700,53523,67336,20648,87030,83184,48889,58585,71360,62552,36364,41952,42135,89999,13045,29485,38945,64625,74360,96072,43186,15716,54033,91808,51804,64039,34856,27494,96590,77718,88981,27708,57358,51399,93476,54723,33145,44477,37758,17156,27246,90289,47672,82352,44505,24010,40590,16675,41344,22233,32094,50636,13259,66077,61270,59499,11751,53861,41872,74307,52858,97972,46119,25951,47593,20739,13479,94959,97549,86751,31722,27538,47385,73665,11341,68100,86280,60693,75924,14816,46073,61246,40193,55851,13614,64923,16927,87530,35639,81040,67803,44564,89899,89008,93861,46360,37341,18004,32186,99264,20691,75919,21664,83122,73239,79062,41649,41100,28632,55697,70363,84631,53281,22418,76771,78442,32827,28286,14108,67696,79646,84168,57964,65357,27484,61750,61208,40195,23874,84774,47380,38205,11992,45620,48057,86654,29287,49781,11681,45202,96157,60173,93485,50065,39135,52572,65506,42798,57120,93241,87146,44868,17205,63031,52953,77520,94247,95237,91226,81921,63270,46627,29573,98127,92284,86064,56996,86138,13499,98455,19851,97882,81225,64338,65821,82012,86917,67193,23580,37845,98727,11582,71009,48382,18447,11347,13775,55486,61123,18649,56279,94245,72462,58799,65284,30665,43441,69774,93755,42094,13507,10630,85011,73217,13677,48298,50952,31230,50777,20409,73069,86685,50713,87043,46270,83666,31666,55272,54164,68842,66319,22669,39605,49585,61642,52697,70460,12258,14292,30058,98999,80373,44638,34945,19237,68089,65055,97958,54083,81627,36959,38446,25929,95082,83365,18743,20769,24603,30505,25574,66311,39407,48344,43403,34115,41243,38485,82063,47645,49809,31969,22387,36408,46297,37695,69772,65520,91427,55197,23497,80781,75607,49936,73378,81786,38231,59913,29653,90973,72669,72578,24948,57830,62169,10173,24857,82815,73087,13022,55056,82105,39488,34704,35241,95725,63020,48551,63714,55406,89759,86586,73688,83099,70616,98379,73778,88264,93216,33478,32781,95789,34605,23440,86196,45804,44561,42393,55956,92520,38883,12694,11567,34229,50333,85120,85240,90867,85023,35819,49683,76041,22991,54423,38443,48189,71433,73142,72522,76254,98819,23423,27064,96324,38931,36934,68613,11241,99060,54073,50903,23454,88127,41194,20743,85106,66950,50308,97533,18147,70731,11503,76273,11321,17319,65457,75379,36705,15746,20316,86517,25579,54119,29679,40443,46960,97876,78803,97934,29625,94217,58861,25556,18947,40960,36531,94540,66519,33358,61578,87824,60884,56480,96059,75334,72895,46687,91897,22375,90797,32429,35711,68624,42487,39472,97453,25098,38901,96528,52517,53188,68164,92866,24686,45489,63025,19699,58270,98662,14287,84052,45177,15799,16693,48714,41404,26390,24107,71704,22199,15804,70236,72060,84993,88220,42330,97276,68806,67560,11598,38881,62520,68016,76516,26411,30364,32301,51271,52765,98577,78288,82108,38941,63099,32803,48326,19098,62383,70780,53355,47251,97322,31211,40957,85489,92413,23577,73830,97918,99400,88035,77050,65577,24254,53682,52928,16235,21199,15347,62810,94227,98239,46347,97825,29339,44319,63682,27001,28745,37816,46282,19012,69985,90445,45197,42795,52772,20582,39797,21085,15860,53439,60891,37726,18195,63637,95141,73055,99334,36881,72010,85733,51459,98353,82546,74875,87472,84756,12922,91913,42585,58059,97070,35024,25793,97886,67526,10624,35240,41470,82826,23574,80174,22559,34470,39093,35561,60629,36968,70522,29159,15677,29319,17229,62175,37921,68732,83985,25199,68129,63956,77767,74436,95357,72691,65986,18414,31023,10070,30110,98467,82154,33494,68302,17600,67387,18367,63393,41679,57978,70938,22917,32201,55629,50264,20574,38204,94069,32044,39497,58159,60878,14330,61960,59464,85178,66441,78971,46499,92839,53685,47590,82035,39478,61919,92983,67212,73547,86140,49718,44934,17857,45696,88853,24500,90995,54936,97150,91839,75125,59024,34706,29191,65578,91814,20250,28016,46026,30233,10821,28549,16873,32888,82501,30043,94826,88525,76238,73216,18009,67406,85829,62001,57611,43635,83015,19127,40876,89223,70134,78374,41775,38879,63833,49068,71723,41250,98698,54096,66906,33837,24861,42829,39450,33793,84279,78634,17909,99867,11655,48718,70885,17832,41222,28497,64799,81509,14290,46462,55784,23687,10958,54841,58590,83591,33215,23412,55466,92170,58093,86406,51267,35986,67051,76227,12557,36862,41510,67217,40234,87664,87104,40016,95634,92069,34984,11686,19643,47815,47618,71404,34861,85051,29463,56572,42336,50071,27760,33652,72665,30765,36390,59572,50792,44816,86448,55744,66880,61291,75330,84820,35264,71682,58375,57653,77886,87386,75121,30797,60817,41934,78042,13172,46219,80686,35838,51483,57236,72823,55575,22933,23076,70928,84916,17038,97218,93021,77103,67080,28380,31561,42963,68214,34976,36430,53191,30060,24881,45307,89177,60895,28167,95349,89007,58607,18819,42163,92176,70679,85603,95155,38180,77760,99370,77922,78991,77658,78033,20740,43559,19462,76950,72800,87767,26658,97404,80454,63398,50758,52468,39601,94397,16757,57367,36623,40796,92246,37934,77759,37653,50786,45889,21850,33410,43296,75121,32755,52510,70257,94182,61942,81394,22115,75818,47457,55326,45082,62671,11391,17578,45504,25222,49519,11139,95517,85805,94330,92568,67858,13396,25268,20157,82421,57381,38475,50856,64731,10624,59313,46203,69741,58452,88392,94566,21753,17342,17375,38379,46810,91992,34108,88494,42338,12192,82420,19504,52169,60719,89344,34852,38655,54465,89612,65281,26453,66206,75113,81712,64281,90391,67680,49048,50910,74978,60627,30537,42108,62922,86870,58754,41199,64174,44229,43464,21474,12254,68094,58456,32165,25337,80332,85895,79492,94945,85640,34934,76749,23882,15958,64638,38276,10723,34908,46253,33223,89268,55209,77103,62138,92917,12070,40378,90083,48586,30977,68807,17789,60056,76070,58456,69572,93667,86825,37436,13493,99259,17544,22621,35385,33471,16571,89100,64031,17904,68222,38570,52460,37493,77754,56905,67763,96679,12181,10877,59911,61549,85815,71607,17413,10181,37654,22092,16717,39953,93106,43701,36036,93482,54651,46860,20686,84217,12861,37272,71731,96000,67696,61514,28524,44190,27564,57406,45274,59463,48909,69284,26970,55106,63196,26887,63201,28423,73636,28243,75343,44354,68776,58551,56726,60592,61217,76506,63867,81581,26480,37250,27044,56269,73615,96707,59333,28154,18687,19039,11410,34535,41060,79424,34102,99270,33195,86643,96221,60914,19436,78892,29036,70885,82626,90123,94481,56340,32314,47892,15603,85075,72164,61430,21516,71296,75187,81826,61000,54326,55767,10460,84114,27611,18054,57904,69270,85234,60619,22489,35231,57055,89906,35148,91199,11800,71510,39116,35406,68605,64937,93478,97129,14439,65654,43156,80315,70948,53199,51204,48881,39408,43170,34837,19233,22915,28184,45177,56130,98109,98027,36497,58757,92989,58278,46913,61886,57312,69352,92556,31504,72010,93764,26520,16836,76881,36284,20750,44029,65584,44170,59106,67909,41062,39608,85837,68284,28740,90142,61659,18921,76426,81653,29583,64680,68304,48979,27613,23449,96087,59387,39543,94466,38892,30946,22198,26931,34058,68942,84022,90351,81281,25600,37103,36931,24142,61555,96740,56269,71070,60635,74369,94404,11205,27214,10718,11738,99395,95103,39449,58620,41632,46586,48121,10261,35699,91410,53816,28982,63422,35048,29947,32612,40312,72981,34304,61349,19759,48995,16867,88206,32486,54377,76778,77734,39987,11915,68864,43955,56908,46598,72491,84035,68421,45426,84025,50010,82473,58885,33205,90858,61803,90853,23394,58468,26088,29385,20631,17965,83927,75880,98841,12432,84535,75060,60867,44671,14917,76934,39407,66434,74315,46951,25163,25993,92225,22361,91970,27242,29609,69598,14603,55954,40145,68623,84392,70049,42478,27114,47028,65385,49819,68966,57901,40584,37434,29740,41080,91743,49728,13007,27960,96375,20705,27825,70878,87589,73758,12099,20952,69530,43839,64437,94679,58717,12078,21748,52132,90176,46851,62870,42594,22413,81897,25734,65735,83567,79990,71186,78458,35331,83829,95594,87889,52190,36704,90052,12575,93401,90877,54877,13262,35723,73862,47718,81382,65650,20836,94472,63593,62881,74743,75431,10933,15687,75082,29066,10304,55450,46613,29399,20886,27119,11136,98334,97800,95626,72288,87030,79219,57596,53711,28542,53049,97848,57289,94321,48392,79750,45454,35245,97732,98417,72010,94064,86318,28477,18956,89680,52977,59724,15151,62610,43838,93399,60135,82722,45365,53330,40101,22639,60547,63743,94187,60287,89329,70953,77766,52363,85292,20923,50231,11437,26387,47835,85808,49088,25610,10286,33100,21269,95438,69786,39148,65698,36846,73987,21336,97680,62616,74554,32860,59385,99266,39972,76742,27923,78704,69945,90052,80942,48219,58026,11516,36524,55762,22322,81437,59179,84740,54331,58668,65215,83948,14710,19374,72176,66508,90307,47090,21014,42958,54922,28581,56265,29056,19558,15643,77648,34683,21223,27746,94759,70649,92122,15505,63989,58520,21709,95416,72939,52535,96567,10264,45082,22162,51403,78990,37753,19293,46625,74348,91960,59102,91574,86650,68357,96482,25636,80656,77279,36949,45968,72307,46470,45108,21018,65039,65849,95003,22191,24255,34467,11862,58089,25927,52848,19701,13150,11023,81563,81034,69678,49808,94186,64377,34400,95631,77600,62491,73651,26004,18192,37480,58352,16044,80991,81117,46573,89807,58875,11204,58724,75955,34633,30494,39895,17593,39891,99853,99099,47044,14368,36607,21887,22545,14664,80090,92709,91941,17127,53584,32806,49458,52062,75195,37021,90198,43064,61457,52579,65087,80536,21923,86416,17142,18504,29331,44906,54734,64754,78690,72325,21168,12704,63809,84939,37944,33521,22650,82211,89749,45801,38207,72620,88253,28085,51366,58048,58844,40695,54119,46470,53594,52494,80565,76367,59590,50337,32049,66979,53135,25099,25331,68126,59553,98471,28817,58744,45695,34727,19096,93871,55199,53736,32310,51696,32708,10598,92046,13571,92485,30871,56303,70854,81324,86953,86726,65205,38731,25396,86974,87896,62398,71045,74372,89588,70701,15160,27741,29225,25260,75996,91751,82113,75298,31741,23191,84211,69601,79411,87748,17736,88752,80129,45656,93411,96333,49333,72852,16464,52451,20608,51953,57451,18826,99875,39839,87714,54348,77450,54531,84558,33122,54878,34076,84081,47724,80296,54656,42016,35320,58838,86674,70103,68142,17318,92499,99503,54491,81498,57312,57231,61645,77165,29227,68274,64312,70780,66262,92216,83202,85284,85195,30347,11093,42740,26433,34169,28678,83863,87317,70405,98079,51649,31308,52176,57053,99271,45760,64289,68344,95961,38306,13569,37036,28200,99005,71448,26030,23276,70882,76390,17419,92314,84396,45160,71183,79821,95771,14690,19360,27417,80851,40578,24667,56951,55720,70813,27425,46257,76103,75213,50890,34725,77120,99956,48858,46458,87908,18415,97824,19693,40229,30676,59185,10608,11339,85305,32917,18392,71972,56244,56982,44607,71198,76179,78619,41970,65444,73773,24912,76349,66302,22790,74664,91006,20049,85257,63909,40872,98737,94091,94477,64283,12404,27768,86738,48112,97724,69076,49907,76328,57580,88851,40697,80676,86252,74087,31642,80996,67687,88050,64152,88094,15254,12662,18613,41355,45284,59920,11065,89720,39247,59529,76422,50277,79553,49314,47720,37088,36087,13628,33113,79902,75220,25057,16824,31751,33293,36908,55807,66488,40405,49054,80386,10359,47058,50288,50035,23327,14941,56563,41724,49249,84300,49550,65131,60560,86075,44593,81782,95060,44539,44608,71554,26513,62699,83106,68079,68884,76131,66958,17552,28443,84603,18285,62426,55608,22901,75986,28195,86189,33355,71592,35467,92801,57911,56378,29004,45429,82720,32971,34887,85367,19804,64189,62803,61403,63989,33353,80392,35186,10333,20526,98985,63284,13014,27003,45477,97102,70738,44697,28312,42201,60202,48383,46983,54154,92587,59441,29998,42581,50726,33933,40346,34417,42472,62891,87434,70179,29482,37799,11712,95450,54633,25190,55529,29748,27857,49165,69839,41632,90327,30313,19434,40792,74853,86699,64729,77393,56670,44199,22084,60053,86078,12455,14704,29824,39021,58918,47067,21993,62033,57657,67925,11129,65324,88643,38372,81942,68876,29826,40573,65229,87099,22689,50864,35741,78674,93641,86786,53072,89300,63606,32406,72441,73881,81223,99473,66743,21441,17693,33723,66641,86228,78164,34174,29181,12919,37185,85592,50821,48563,29134,96279,62731,27830,73314,99334,40921,98080,97244,63382,50225,55350,46839,12877,98895,89299,25759,46144,11916,45073,19445,91826,87071,60133,99409,29759,11591,88569,45316,97619,89722,54699,24424,43528,51111,89457,39462,89426,49145,84536,97466,62564,86402,80058,54696,41655,34016,76214,77578,93720,54539,91404,88873,41380,81410,55775,86428,42827,97413,97036,70467,58292,25057,30715,84450,54179,46037,84780,71084,54378,42259,14513,28178,37279,71975,51601,32783,15838,80718,19355,26528,14271,84242,58131,65468,81278,75976,98096,26494,81517,74368,27707,22415,88176,15363,85949,80855,97003,53025,86186,76225,76399,70777,78274,15164,21280,59233,76766,92903,44541,96790,77423,97864,39162,62200,56968,48391,17620,37889,47168,52017,76018,64697,96976,29490,20083,23831,17929,84274,17119,87415,63098,72917,78631,83089,18970,92965,88614,62627,17267,95911,84442,50062,81981,25827,74108,90534,49266,60484,19625,17265,95731,20179,74997,14537,71824,68355,79096,95822,55869,93470,58615,15391,10416,18528,74802,10734,10054,29750,90373,40713,12143,31122,94111,29750,92689,34180,45279,37694,61077,44213,13296,93365,68393,94237,59808,38335,33766,79035,91918,10892,64318,37395,30451,42738,21176,62030,80476,96932,17098,46912,25615,82873,34491,54969,86141,60052,75778,27054,19890,48439,72130,47911,85274,67224,71104,35090,67006,55771,87573,32153,52091,15895,78405,30941,17782,47893,28725,40361,78055,75658,72622,57201,32269,22966,70722,68401,15271,77646,65256,87247,32932,43223,39346,27666,31796,68549,19664,76405,43774,28422,22537,98362,93549,34069,42860,51516,86757,13192,38847,90064,22700,47461,45514,26052,49722,97033,69918,38807,29342,94681,41477,85208,77524,78502,57553,59521,19365,57017,44476,13273,82373,45914,37573,47881,60612,96374,33135,43193,10117,94910,52482,55335,38152,29187,69946,79651,89137,20333,37474,42643,45859,26701,60413,27935,93426,62274,88482,45685,33704,61886,13091,63890,42904,13311,14642,29783,57425,18876,81745,79893,52514,54008,16657,63888,32543,27661,98161,39568,17414,42838,99183,60715,59471,62966,94665,68104,71153,29935,59489,15353,91186,19061,50788,64788,22345,68880,88633,70027,33625,94885,26116,52173,54997,27335,97689,27775,25372,87875,29412,95331,21570,27000,37223,48145,69504,31702,17437,62495,70534,65930,57300,47352,36117,22162,83012,37639,91454,31510,11375,79566,88461,40463,78998,27805,54314,54479,59973,12959,67620,59091,36590,81845,38126,59631,92294,67039,51127,13885,22171,96973,19781,33149,99879,44373,79316,66393,72313,14362,78460,82056,96868,39144,19997,86353,54630,44142,61891,33915,60534,58242,94378,15957,69963,81572,99291,54797,19638,57729,42651,60422,73713,25330,89103,47875,85596,17289,72845,80750,68541,25250,62232,31156,51731,24290,68849,48644,68154,64963,41110,63745,62574,86049,34156,81680,55761,22874,55879,36847,11383,77725,84571,26298,53495,84970,31875,34936,10964,15853,67041,96813,93480,92943,24609,81352,91128,37731,92570,41448,39027,98919,73772,88141,24802,19887,99788,16954,40799,93726,35608,69940,79843,23922,55536,93811,17631,41759,27108,20318,39395,57693,32873,92737,88834,63250,43481,73673,66658,77804,92498,96830,97046,61517,77168,91487,49244,66584,28150,46167,56647,60152,63430,40799,41296,62740,94212,98656,39380,78154,26331,35838,55954,27100,88453,45598,14623,38420,59596,58409,44795,26792,28402,71235,19626,43510,87334,44823,90342,83239,16374,42529,13566,70741,35784,82551,66528,80361,80340,66433,17847,18246,72231,86621,26270,95565,28240,66302,76477,60643,65534,72314,98866,48788,99662,49934,83673,17503,64039,28680,47718,69959,80173,68600,87280,70355,78330,50680,22989,78561,18587,24771,59550,46424,83257,20316,81929,99871,18874,70154,62892,10655,86926,76819,28160,49265,19269,53294,54639,64352,37528,34641,60477,69346,28196,16754,83206,46486,29133,84949,12775,43946,62182,53464,50492,29945,32192,22218,41645,51393,40755,95355,71264,19708,11522,70878,55855,41392,99185,47834,99053,60562,69294,84993,57193,76083,24835,40023,61234,70389,32571,22753,59754,86264,83146,49189,10994,95162,54987,48309,30203,89451,84255,11942,80779,25463,75153,71286,73544,20213,97942,39402,15330,30480,63358,87188,58265,82058,95150,70762,79540,80805,96855,29323,72465,88167,25957,55950,13630,44589,34078,31046,95934,72558,65219,92987,85619,31602,40683,21585,35684,95205,40589,71421,40065,61205,26505,84528,86045,36663,93086,16008,58625,93719,79388,16416,85061,47200,90460,11858,45882,23881,38179,46542,54174,46365,84348,28498,77602,83364,56011,77719,60443,89226,39551,62496,85691,18294,14319,79155,59107,18757,40469,24877,28466,69992,78701,56551,55449,21223,54331,75348,63686,23531,46566,71495,89643,61214,48055,45637,22214,72429,85776,88821,77097,55542,59190,78419,20268,44282,22662,50399,35742,11469,40810,48896,97234,59582,61397,69408,13235,81964,83247,82973,99424,23452,37459,75874,68557,96216,39372,46409,61499,14312,52301,89253,66458,24081,85672,99721,55932,56727,80725,10139,63093,15168,11917,50136,39311,39695,73016,68143,78419,28020,46756,71901,32603,88115,84612,69172,76052,26513,44054,74526,88685,37838,30649,75221,62340,68198,66029,46562,31772,14831,90692,15237,81032,26669,86405,34504,35266,29360,59706,32416,69689,56087,18535,80276,12053,53152,63561,73624,61944,13304,83086,88209,73402,72627,80413,42943,20649,94248,32107,68547,21975,69149,81535,83590,99696,18781,55940,59319,26059,92668,87010,81698,73255,97878,24104,33272,75474,27888,78132,88327,19221,29098,87100,21675,38539,92068,61714,49810,86274,60513,84700,10754,97688,80118,88307,43135,58609,90030,99523,13325,33123,71398,22288,51899,13671,28598,82582,12345,77267,76671,13553,73089,89150,15505,69416,84855,30581,28880,63329,60711,93705,29877,63520,37213,22967,82133,31086,63365,60910,83358,29066,50327,11149,78080,95293,21062,62447,93898,19711,49527,82054,86358,95409,31403,48766,46854,10885,50869,43501,65989,39382,22643,78528,90954,12420,37571,28162,41307,40019,66144,85846,33566,16931,42164,12180,42921,33497,16164,68844,77353,14356,72863,72270,23048,87773,57315,91867,82461,87797,62625,70123,58255,34753,94457,13763,71742,64876,96967,17621,46010,97674,83221,58348,11855,40670,86411,77895,83642,59654,37392,75713,19329,19799,80872,56094,16913,48323,86053,56982,61135,79499,50278,71618,81173,53919,60402,15819,93159,30297,41551,79848,62281,83143,35972,62758,12857,69281,88271,57257,16754,63277,32291,29106,98075,78739,74888,93951,14571,33006,81478,88990,53486,65929,97402,20981,24146,12140,70499,39565,91309,10902,49416,48033,41387,80437,36729,90791,31763,96167,38452,12839,38484,55091,61392,59833,51675,88926,86943,84481,36235,69271,55349,11993,87380,55684,25550,20220,37837,71116,71757,66110,99967,18853,19692,90937,69097,29902,35417,59977,18839,22498,89810,51084,76989,20829,35615,70134,53005,30872,51882,51964,43235,96433,17056,61202,53112,28435,26291,89732,13710,41013,29261,87268,50546,36537,60299,93411,43027,79174,12312,76288,99458,33969,75239,72901,83058,27309,69343,70080,57518,67302,32710,56197,62759,35295,57710,99769,42408,18364,66737,36421,40796,32454,12003,26308,42248,56819,26513,25956,36990,64901,81527,42595,42606,32795,57143,23366,42872,54401,64073,72608,33698,27837,40694,66406,53852,85793,88144,50077,85139,20524,99957,88632,75777,49145,56192,87582,95770,13110,10711,68106,78843,82599,48496,72227,73007,48384,68497,88737,48365,81458,73780,48707,15819,34767,48623,65668,29706,15432,68438,75104,75956,29435,27098,43550,64897,91480,34191,85096,20502,47833,26881,88263,90346,99024,13240,61853,62682,86391,32110,93446,23164,69329,27089,98183,37677,22222,18635,48555,25817,66265,70045,18292,14154,87867,63682,23775,90389,93943,16043,62720,51787,37745,24154,93094,96690,33273,40121,53399,78817,67183,70540,27086,34501,77724,48264,26914,64854,18564,36698,88353,12494,24718,20812,67325,66264,51892,15690,26944,90784,25131,56763,48785,72268,29063,95985,86523,75457,60866,24307,44594,36978,94416,97226,60898,62480,48500,80978,56423,22915,18180,29004,43147,41839,27669,72175,83081,94258,26291,49514,77901,35707,14629,75488,37484,57496,64589,18098,77997,78156,41351,82503,36420,54504,62483,48509,89628,51544,63244,85669,60227,90548,57998,32115,91475,91159,21617,88140,97426,65129,47371,40864,96534,17191,32263,50441,69744,72475,29526,26892,62431,44819,13655,33792,58434,26938,59123,42800,19087,29204,38446,74159,31160,91191,72181,12584,47336,88783,37925,11251,45637,64275,16166,37469,15947,94873,99997,21758,24347,12531,24319,21006,45285,27791,92851,68639,54404,73126,68961,18156,58137,52951,53362,23913,25206,58301,52539,90856,61631,84974,82071,24373,91397,47761,65702,49529,35753,96553,19219,19976,71337,20456,49603,72508,92859,62868,45763,60145,65877,86738,48274,78704,37689,53747,73191,83237,96710,16142,25753,10671,87335,61282,31646,88428,59570,79976,22850,74932,73456,53394,81239,70609,86058,68823,33189,44619,13639,55408,67384,79191,63708,68383,35368,11431,26060,54278,37944,71206,64032,97325,55281,31146,72538,15783,16153,41222,15326,24585,83278,48071,52034,22396,22424,46102,78256,86782,12322,63578,20453,35444,41932,37627,97334,73358,36004,66992,26268,64616,50841,45005,96319,38376,59362,62176,16463,19913,39267,45392,26851,29945,83502,55287,67821,92350,19797,31292,79150,92124,23721,75629,10224,24985,63298,35366,52804,51848,14535,39638,22855,42042,90462,46261,10180,66410,80939,24698,74021,89285,95834,29926,26145,20780,95322,56932,51925,54218,57321,66472,91112,15875,67992,50481,53225,59105,42261,44351,86383,90860,97473,13992,85874,18870,90443,31279,38096,84728,16441,39918,27928,91777,97933,65370,98027,93151,83132,15501,76170,48494,11727,64753,37191,44542,25258,50837,57817,73802,77121,97545,48013,88791,41835,86440,43733,74046,77184,74978,98337,45024,18369,16618,52758,89702,59587,31209,22739,47933,51402,82254,78977,50180,87055,21808,10380,22541,99989,68230,60045,37368,11395,22966,93382,95367,94562,52013,65656,96171,78261,37486,21708,97876,30327,79163,69484,64572,95190,31113,29033,20558,84610,60766,70123,69443,33202,41507,31461,41361,50940,43933,47081,78539,24406,41938,88259,75538,33654,11312,24734,78673,99625,57666,49927,27197,40043,17920,60014,56787,81133,34926,86922,13930,88425,41392,13556,15986,15835,85705,11104,12875,14559,76102,37994,23088,50810,63164,91325,49404,65932,66938,52399,32531,53988,19764,17932,93780,17982,27692,66725,16516,56176,71365,51769,97942,93333,66221,25580,75364,30883,18721,25691,18227,86306,31568,74448,66192,36902,35278,11433,71062,85011,42611,25752,48375,40499,19864,40714,22716,54315,81068,27975,72275,59472,57730,34925,11707,85803,68851,66725,46333,46783,51272,90357,24696,57792,84757,12510,11886,54174,34169,25808,40118,30916,97748,47647,24048,25302,86520,96403,21981,12781,13088,65286,91327,78025,15939,38996,25887,48920,81528,65516,62439,28110,67196,59395,93801,68756,28746,77019,44087,50451,70250,91559,72428,65891,74641,93253,34505,99990,55850,70938,10558,78440,18479,56174,14055,76369,29146,58719,50719,39373,94232,43457,47847,99964,95378,70323,30528,33259,63112,80036,45317,20678,14426,71522,49629,69485,15191,43163,88640,32125,31380,79385,73333,45306,40282,66293,96712,57198,38398,13643,72812,49529,59277,16517,94960,99625,69746,91893,54270,53839,52678,15282,37978,85137,92580,26713,68989,45985,43950,70782,40185,45968,78352,47276,66943,43129,81538,16102,41157,74965,85717,35644,72038,44322,44659,51542,90994,28763,58423,54987,11818,89199,70642,60587,88595,26839,12507,32757,78559,82982,26958,44066,66082,18496,90398,51938,48660,84323,67897,59410,32113,60473,71976,47457,14140,72872,42997,73497,58281,89282,64906,79533,20599,99221,65002,13840,16228,45532,83919,73822,73902,40847,27584,31081,33145,54212,81590,66833,58307,94239,46832,26900,48851,35049,83628,14337,87781,89189,84461,64283,38833,28011,81527,89333,74462,47123,98995,80564,39056,48321,65080,70740,27240,49175,36371,79482,57754,51000,92844,22171,66262,41172,93997,62171,69635,25911,24480,85256,72594,39476,49264,65450,24063,74900,44004,77633,32656,47486,48801,35049,97024,70818,64637,57747,88768,32395,79985,46211,68869,82354,21168,95484,47431,75423,40517,80136,42769,37303,99561,44561,26225,10704,19820,29826,89249,71907,87106,67081,54826,64420,73294,19322,36972,64729,21243,18376,69488,20989,11622,90568,65826,13557,16533,76245,36562,36005,49706,98326,13394,33420,53329,29844,49385,69608,57690,20173,79063,67742,75151,79031,57607,94732,79709,47506,94180,82415,28345,37928,52751,81241,99169,78782,53230,94407,59674,56321,56318,87435,49700,18900,51788,61261,33472,93783,10862,54329,76032,33282,46475,56210,64059,45991,59797,31558,95121,36246,19510,31183,78491,84066,70595,80706,38363,73016,90845,26936,43455,95563,51310,27356,84222,84608,26615,83277,70958,23802,47944,97447,18426,40903,39537,69267,44685,89050,10596,59231,70050,89513,34363,14857,61673,40037,13038,40930,98415,90089,14664,15125,97604,47326,14714,79110,86711,90609,78084,56238,35861,93304,16547,92711,88024,38820,27939,99385,99537,41726,43514,91750,87160,32243,61366,23476,43891,72753,31408,12032,25734,22112,64115,54429,97159,39449,87591,94021,41762,18174,18909,93780,50534,26964,58892,72143,75625,68886,27030,97323,51946,84073,65679,41089,12530,35389,93323,22750,29358,34793,10852,75707,20882,34695,76069,72626,47139,76928,35366,34654,71475,51706,97319,33794,22788,78302,61788,67669,40169,99673,19487,48085,90818,82346,19480,83333,27872,61562,74394,38362,38157,52282,35650,77210,66201,44440,94605,30838,56334,50183,19707,23101,60078,24864,70654,36982,38630,78405,61449,71191,95302,71119,39524,85298,45922,41517,38808,43844,32092,73117,32568,86563,42545,26225,82101,74132,88268,50419,31637,25413,54328,44321,14176,97071,97998,29243,29471,94355,58573,65719,12509,42404,61242,33541,32107,62222,23137,94195,67143,29846,94560,62738,62101,96339,80426,31686,93825,82403,66638,54120,78893,42531,22955,53840,63504,54598,14750,79277,36889,14901,78080,28958,93661,31299,97175,13168,32972,13900,78789,11169,20646,58432,63986,26143,42999,72905,63897,50683,11783,15885,70584,35100,38273,54547,35685,82202,50754,42782,50180,12959,82498,39748,85380,67277,89060,35190,35899,86217,87123,72444,19604,78488,60007,70693,61556,39820,54095,43886,44232,49800,74776,52323,94096,47478,97706,65450,70685,90500,68818,52428,91221,86699,47179,86549,31297,17583,84267,28862,85048,58218,67646,37756,24335,39529,94865,91952,27437,17110,38606,31525,37969,15027,59370,46975,89785,77447,50558,36053,22744,40151,82307,18732,80694,19621,64023,97658,51199,52262,93128,10833,89317,66170,28666,12182,80502,17350,42478,98688,78625,81395,92440,16319,49045,15933,44138,32572,31699,59301,91098,47800,98037,41112,67947,32096,83395,32508,37250,25387,95024,37452,83489,86699,25255,26124,55828,67771,22947,88856,49362,56940,15781,38932,63693,92386,95872,77108,79233,46218,13973,93013,20672,97939,51546,96727,70162,49312,13545,74829,71886,21395,59117,70446,38875,69809,42439,46247,96838,70864,57383,38351,80500,86846,15906,30945,73858,25151,89018,89858,89146,38755,58698,33543,56930,38072,31705,24980,78110,88489,84580,72603,23632,95227,40730,61922,21135,57154,15067,67007,28564,46261,55897,52210,85077,19944,20761,74710,87140,19514,23370,25233,27797,39734,80119,34552,50018,18978,85546,65946,46813,26155,97346,11779,30303,50251,96810,65759,20191,80457,33052,26371,46393,67359,10414,24671,26165,80446,96304,53505,81164,24339,96137,96178,71756,31367,67840,31062,73777,13936,73328,54934,79020,62192,26148,50168,61485,73067,45160,23615,32251,96076,93979,78526,99399,56565,40543,84074,77052,24477,38981,52467,77477,51275,24826,20866,13259,44793,79600,63806,64265,65981,86336,39157,50778,33624,63835,71332,67010,60897,62559,45384,98335,61870,35974,10486,88877,71882,78514,49241,49064,74982,64899,82432,18028,54941,86920,11597,50518,14600,64144,21308,63041,68713,27894,46624,69474,87521,80099,80871,64548,97518,66201,67103,15870,43016,33235,87841,51520,78103,28170,75550,66520,50284,17620,59439,28576,10586,14935,80347,96119,78788,19600,98849,53098,19654,46575,99427,78771,38313,60038,63372,95754,23670,82631,12690,95108,90842,18373,76926,44564,32295,26941,21047,29461,27760,17765,34141,15892,64665,15420,53998,99211,42194,86294,49132,21551,30432,41206,77958,88159,10267,54024,21832,30378,92940,33682,21034,91488,87315,54644,27925,37848,26839,91869,44547,71089,36901,96532,38065,57112,18917,74149,76695,62629,79333,72198,91655,62792,24082,83493,19859,38869,68213,85766,49986,94740,63225,14622,44755,57026,92828,58801,88928,90155,18129,13357,74706,25471,67497,53579,20342,27828,87490,90355,42416,87438,72853,74073,12337,63646,13406,48487,14353,37423,35802,95261,31029,74118,51225,93968,34033,11361,49457,49167,42333,22606,91223,43991,43794,61647,88024,96294,21112,37786,24900,54257,65208,36215,66028,87239,38228,81976,81681,79166,60570,46622,68901,43015,21940,91723,22060,26134,80468,64659,90981,20761,28015,43527,66390,78614,14274,85152,45203,34030,99806,87241,94755,87769,35684,70264,17306,77739,50518,93301,49775,83367,76872,80012,30762,57965,60952,28241,99848,44501,19661,16845,58494,42903,12205,40938,23025,69944,61019,67845,11701,56273,45851,73033,73197,97168,91550,17537,76276,56472,59153,82310,85374,40680,85102,86152,26175,34429,11158,78983,75901,61486,45358,34456,93873,98110,94733,94238,25042,94419,61717,11501,51133,41470,28876,25124,18566,46962,31449,79469,52531,86212,96571,12243,30645,49141,21444,43192,57770,30508,82688,40509,94327,23192,11993,37440,75514,14017,11076,95273,41329,96202,19202,52784,56716,13991,37631,22020,10039,28376,28212,76250,14138,71056,63568,30209,24526,95332,65324,78594,76838,76302,56774,28615,90252,31188,89835,71402,30722,70028,60520,47674,64939,77357,12254,80145,42138,56633,81064,69054,26328,90936,35421,28703,38567,28072,32613,49530,65263,98164,20457,52723,78612,92208,81516,77959,70447,32093,53585,41445,72895,77112,99995,78188,81258,80137,52268,83554,72322,74585,24681,33912,87735,46090,74390,20382,11431,50707,70607,34150,18524,50872,52264,83410,24617,65168,74439,56854,17586,21634,18428,12579,52501,51718,62339,70082,21476,92315,38708,15071,44338,65620,98472,76617,91082,89850,61659,36136,36498,41028,14015,11938,74006,22262,16361,70020,35608,83125,77287,46582,66511,34635,64225,20516,63478,39081,93190,41918,14575,99308,16728,67968,43219,15191,17577,41070,64034,30411,70608,59752,88952,46067,36967,97267,47602,15674,58191,53041,67857,51367,72035,67987,90340,84754,33852,75477,53171,28119,11507,83988,60457,57468,79531,70656,77705,43415,92379,89254,32410,43629,84324,33737,88763,23623,60234,19693,46351,82648,79795,21188,38177,88159,95268,40818,53404,80710,91501,55561,29278,52105,76466,58883,27934,15203,59097,77259,53936,84898,90579,58217,27313,39405,26658,34198,13090,70448,14067,59267,20656,76933,26553,92737,24396,65741,71599,62933,85171,75946,27424,54410,69104,16682,44977,35822,60635,24904,21777,70271,39969,60218,17146,25871,98000,25812,35584,78066,35838,34960,40671,34892,75269,42612,10583,14770,16191,93514,38769,91131,92405,57141,46187,73295,66216,45767,52441,25373,32902,38740,71923,86723,56799,89603,30831,39766,80414,89483,60293,87062,44842,38796,77552,71312,38364,92000,34573,88746,80662,47847,20160,76720,44054,81357,18486,36285,48761,92852,49174,47742,85165,62287,61494,49099,19360,58170,50600,97763,97146,34982,59310,21759,35221,26108,91718,55519,39932,52127,16992,81166,37853,74156,32048,58213,12693,66441,41415,79708,76884,67811,50550,91753,80643,79406,34976,20457,49043,19635,27719,15801,19711,92781,27613,42941,64081,85303,19462,69834,41661,29858,49976,20006,89605,10733,53497,50646,62252,50501,41145,62329,79903,71528,27824,65421,43945,45610,24397,88312,85945,97871,80428,12667,14661,79242,41077,45332,16748,70173,71242,92494,27155,70967,71583,79587,89672,33608,20410,65378,89110,70562,32550,40547,49553,36582,29840,10956,60706,65064,89662,97647,91123,89551,73764,47026,62325,46693,40266,34902,23387,20743,95072,36867,15511,66006,41732,58666,70088,30124,95754,96413,39498,99750,80248,59393,73746,60670,36981,75064,76396,24290,76445,67711,73106,98713,29910,11476,82147,61179,55134,22069,89049,71163,97426,70237,75656,52824,26610,30704,56602,46818,60978,36805,11017,45273,37775,84654,30138,13328,60768,12672,29251,42975,39541,21761,98773,24201,70918,57618,90249,71928,98428,96173,32186,51636,38968,52384,88054,53929,58219,98856,25811,80182,18941,52588,10929,29995,29397,16381,67266,53496,40064,46870,10628,78707,45950,59963,37953,51954,59894,39113,36950,12484,42913,42464,94001,75049,58650,10891,44885,90586,76540,55713,13877,48929,42293,92712,15042,18529,70964,85358,73286,16006,21624,61104,76407,75436,39923,12747,60009,60527,62677,30694,80096,66535,84040,70569,65488,45129,54615,95436,97712,63146,42187,53468,13879,84567,30807,99532,65508,10543,10095,47965,92820,74595,28924,54232,16459,37146,73040,50146,53937,87234,20110,75429,96396,58467,56205,75109,59729,55375,29217,63122,45203,17113,89270,15058,56289,85418,48105,49925,45911,66496,19513,38779,89354,69362,18208,86071,57368,23226,95057,19318,59771,20143,20331,64740,11113,53601,89738,27726,67318,76136,28983,27951,87942,91628,58922,40802,72734,20482,16691,38979,73611,44095,59498,91872,87098,40671,84506,16934,39961,58632,69778,45900,17174,31489,49084,57798,16061,41059,89550,44326,87507,29922,56599,31058,35691,50409,10985,42134,82302,65649,28590,32610,25532,88243,51965,89980,95139,52767,23002,24762,50206,31555,54160,91457,40690,18624,15097,49211,82437,16261,69128,66861,49285,48135,95091,12816,44962,64543,30653,20256,17276,10838,76600,88543,24781,41630,55689,34803,28197,34464,47833,48059,53563,25498,60254,20807,17531,29575,49535,45261,95959,36925,95672,95507,54178,66735,34943,10616,37375,11131,10460,58375,74229,88332,48535,81839,48542,39977,32377,87682,82152,43622,66914,88652,51155,18198,56520,47888,27229,79780,13030,35680,37535,59046,20400,66295,94046,91167,10209,48780,58669,38856,44857,73906,18330,99944,43835,35147,38827,49230,78241,91093,95553,42301,23704,32847,92041,72164,21444,33238,93250,18733,61436,52222,69837,69637,60986,52391,86517,52611,64676,88896,79027,54446,30435,52268,94556,95451,10556,72078,74842,35354,28000,81754,79631,41100,67945,93151,69646,68471,53728,93308,19317,41322,70061,80070,32861,96741,85450,95155,28848,13681,45859,15050,82609,18724,45165,73603,48465,37932,44013,50628,54980,19503,45155,77460,13466,61227,27533,64754,83787,81726,43952,88312,78053,65193,51379,49846,47419,67795,23720,10828,31520,91053,77323,26171,21826,47402,24435,52677,42463,71412,43007,49600,58680,87082,21268,77204,81893,50112,40828,82351,96453,70778,70804,69745,62303,53411,46240,47432,11847,24670,78246,49952,65149,60116,52357,52961,37634,27863,17866,27019,75136,42635,64531,59343,60426,89158,32795,72558,62066,55429,58985,99085,73260,69345,34133,96825,32703,71737,19395,68927,41174,29468,94317,28010,55116,23880,25422,20669,48656,86558,77572,51299,91675,54700,80677,56260,31151,94603,40409,34522,38225,62895,14767,83528,73373,23854,68612,66889,19857,58185,28584,13919,21096,28259,16646,77538,29789,73152,39670,35846,15759,80884,32072,97491,57321,46670,50999,26374,67500,98898,63619,43048,65109,89736,19124,25600,24020,77606,98664,45578,96145,71737,73928,18857,58948,58552,95863,64801,96931,38513,53872,54734,95783,32611,85579,25354,22510,24333,14824,18419,80902,22407,55530,23250,30114,70219,74315,61985,53060,59424,28224,65381,93586,59626,31486,53471,67961,46446,22313,29523,78043,98341,97964,94658,40361,27676,35240,11879,82329,84266,57556,35556,13832,19726,45696,17178,38427,37183,75938,46643,49402,60309,39423,81830,78499,59664,51448,90526,59834,88855,10242,20865,92843,42694,53559,82737,79258,72093,10949,40641,41440,68386,30312,83515,11491,22278,45901,71577,79561,95833,60750,71892,22898,83818,12345,82825,69531,44107,93654,86781,96557,74053,73745,87255,84765,16773,10361,51172,57239,48642,37549,66717,48517,10663,62156,21190,28692,33674,36068,64108,82314,11567,51575,26436,82535,98930,89329,36847,36671,80068,34928,41197,78928,13096,98103,53254,31780,97315,65134,72121,29321,47831,58915,51252,34968,75047,65274,34190,78718,54929,82465,87794,45134,69327,31699,50013,86809,38173,89861,51064,95899,18511,75765,41967,31675,81815,28324,45692,43787,93431,32126,54922,36637,76406,87765,92820,97473,94301,59145,23416,39960,97233,25398,48225,49082,16045,32640,12368,68720,84098,21069,77499,25174,69945,83400,73271,65137,40498,90188,27753,31546,47417,74069,40285,48022,18864,90852,23852,98744,29543,50470,63070,88845,22023,27621,51794,51774,35183,63059,26824,60430,96186,79379,97959,93355,86077,22133,92777,14118,32381,34063,44739,34691,34575,22105,28683,62380,87510,39772,37431,96218,49924,77231,51094,25313,19559,81219,21494,27534,71845,48633,73398,93639,45922,28617,95402,58634,84003,80701,53969,38134,31826,13267,12112,34767,61285,21393,43288,27101,31715,32092,46572,45696,80836,98727,72406,18049,86163,48381,95140,93846,61232,77121,49857,43996,91746,14562,94233,63866,35076,54415,77228,38481,50049,21032,67257,42733,54623,13385,83942,56819,40387,49606,18459,54991,50972,94690,43094,98199,19206,81312,69520,53701,57282,52881,92049,69430,24637,57479,30174,45192,78052,28272,58183,70447,94660,46355,61247,29476,82888,57972,66858,16134,39509,78178,35720,81238,46398,30291,17257,23553,28072,73492,46364,25059,42160,79503,45316,65954,71788,56486,90041,61831,29114,61593,90855,97268,49519,48229,26258,74691,95377,36360,75882,24815,82400,62935,16098,33053,67052,76393,44621,81338,41817,53037,40632,51708,10170,99750,65069,14496,71561,71173,70172,18271,29670,18870,51674,33301,25649,34028,66666,96954,63188,52359,32232,90247,72974,26329,93874,17071,51060,75725,85241,73703,22598,94575,38702,18395,86691,11520,21037,51522,23036,85826,33521,15870,78023,98314,13525,51441,14342,87856,46248,77867,33836,22990,73771,27190,21779,70863,16256,98585,56969,47795,77518,47170,44926,94326,42944,86593,44086,76373,88189,24463,54711,24907,76984,78850,13357,42491,19289,21449,69633,23410,77520,98432,89726,81137,84799,59491,45186,20285,83198,23012,56238,98902,67296,25009,73989,18895,50034,37181,31094,54616,34400,70047,47247,32049,79276,56598,22480,89138,38594,48878,30842,50379,31959,11584,77765,17270,65869,72675,36600,66487,86941,89750,18749,38306,29925,91284,89466,10851,66626,28253,64576,35082,16591,13204,19880,76831,91325,98845,60400,96513,46259,73395,69372,23295,84109,40996,58875,60381,30264,36259,60898,63654,56898,85437,41476,77706,36345,35929,16649,19973,81506,27712,56519,49383,95194,78734,67088,56994,93934,87217,73112,69686,31626,62395,40754,14085,75807,71052,70187,70256,45354,14138,31036,82936,55248,44956,71735,66296,46623,96303,48718,89539,28415,75187,40974,72340,21942,73467,59581,33398,40015,85601,33419,78614,16009,19139,48225,40790,91771,58201,45177,15435,32007,42557,58174,18355,59438,77447,26882,36323,76543,69421,89383,12307,36622,98625,31234,84593,16110,73620,66796,63396,73965,65947,55900,77090,39301,59159,34718,87192,53269,20149,39910,22573,34580,62738,43624,39085,72084,82383,51685,14566,81761,18094,33680,58244,14433,56927,62794,17714,86204,48689,84464,83446,12219,56545,26239,65456,56185,99364,72414,70890,63792,28977,28350,39081,18209,35993,27011,58935,40739,78950,88048,35114,71134,23463,81579,35941,33745,69614,45060,85126,82287,10450,14929,46025,60294,72970,53480,64769,27648,27302,95799,11885,75543,41433,399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,61301,16857,41013,43596,95881,13746,93670,86757,14653,30444,20773,33153,24519,56232,16844,61994,94015,21046,70835,33107,17235,82929,41692,56404,25056,22368,84527,23584,50920,20024,77825,16010,77794,27843,58946,49352,65383,24643,69333,43298,88051,62108,40422,68523,34804,71125,33347,10121,97201,94480,92337,78745,44498,74913,81801,63973,46881,20577,52216,78660,21909,77153,60303,75963,73270,72416,46489,41787,75714,69140,76345,94087,39525,40614,72307,45486,38311,89836,98226,49419,13825,26032,80732,39311,17617,45094,83400,34779,45829,26353,50022,27590,35002,53967,31516,22034,66307,53162,63831,81926,29387,49889,72675,74431,55189,58490,35489,36864,62153,29932,57796,44251,88785,42607,49869,81442,83298,15963,81546,60640,97923,89128,44305,30925,23446,30153,18221,65495,92874,45663,92475,52276,74347,34584,75249,86970,68999,55464,32242,98518,79408,75477,41080,19390,65914,65135,19567,18217,98039,89257,24895,78996,44578,78027,83298,47302,66375,58064,69504,89950,29800,60884,63118,93157,43663,51344,96046,45369,45321,12004,23759,54952,44833,29505,61873,65095,10189,29640,68263,65902,26594,93717,44539,30805,12458,71798,51255,32895,35326,47464,76066,18710,56787,39403,86917,13295,56368,41594,96978,93528,13941,55840,39851,19522,36008,49381,68286,70549,12079,46295,63345,95567,26443,38710,96160,26386,48715,86457,96733,96939,67763,12121,92403,17289,23374,96082,38274,68311,33352,68874,39910,27799,10706,67412,94759,94896,79306,84389,22222,12153,99549,85115,22219,54166,77199,46684,10824,48644,99926,65827,13185,61859,79589,37667,75249,54359,89810,53642,51183,59094,65664,90999,38265,58352,40519,35305,78383,55277,98810,63683,47275,22487,41716,17820,18752,47331,34561,91782,61823,56565,70606,75010,19587,27961,59741,32834,90078,79490,71433,80566,17141,68260,93059,83536,39365,57978,34132,32678,66581,34640,51073,44301,89796,36484,70839,97921,31868,67561,11532,88065,93813,86004,79321,13832,13111,39148,70095,10184,37097,61096,19536,45209,47970,49059,43243,90509,96114,60668,30543,34208,50973,55774,57414,27109,85755,29841,75452,99304,18230,27405,33637,98469,60645,53538,69245,57093,42578,64198,20426,67382,25599,76593,53554,47616,99004,67768,66557,17279,56269,68793,43872,67960,18670,89659,36062,81247,40597,87604,60516,94727,85647,75387,75673,41480,94899,98669,33994,80249,73119,84420,14164,28869,33651,64827,92758,93630,11846,76513,21103,39829,36408,70651,79029,33529,76733,14749,17913,47025,99966,48959,39407,45715,83205,22928,65754,81900,28468,90006,66095,90053,50450,58638,52719,96013,19903,91032,16985,24463,25121,97882,55712,69710,83588,61060,77571,90354,89382,33329,31859,78737,36968,40512,34974,62768,66118,69742,50508,51122,13150,89832,36857,74551,85326,18376,66376,99260,83633,53128,45406,52097,94419,69494,53148,21887,42709,40914,42798,16520,43842,67324,18472,61736,88124,89806,19523,99775,19024,44652,28039,11301,14834,83710,66296,90929,64146,55149,14309,92387,98176,35279,34250,27704,96369,53744,79921,21438,74731,44089,15961,41398,84084,20646,87097,31503,71944,73677,40188,34407,69492,97438,29528,31976,35166,12257,13553,52396,55389,76752,83867,32713,17269,90033,65997,10578,81554,29703,99398,79106,64119,98216,42772,90268,21737,93743,24717,61460,17193,74208,53384,89466,85471,11022,83456,64769,15233,40773,15100,29323,15983,69956,28110,33916,22053,26916,76511,89239,11646,58112,69066,57119,53664,28726,59213,47454,65061,65061,29806,16777,34387,49335,15221,75515,29937,27179,61713,88761,96881,23147,58664,20153,84322,34009,49973,91425,21139,89860,52806,89227,29057,77541,33464,10534,26716,55060,46964,16866,80449,88052,28161,87715,10834,53063,55974,69054,80126,68197,69074,83230,68177,51284,80085,32569,78935,18681,66388,81572,46639,69003,45996,35183,22825,25714,64053,75426,45788,25019,23050,16416,52553,18110,19760,75711,17206,39575,53969,52817,55277,82819,37617,41152,12560,97835,51756,65897,99751,82477,24431,98983,49279,11630,25800,99553,38725,84860,14798,62068,89066,35840,93997,43996,86016,88701,16616,90124,55959,28103,60588,80514,40275,72014,83171,25541,45015,37206,46966,36485,44290,28706,99510,47609,33889,19927,52757,98324,93848,59959,70314,94815,93219,28276,76897,41366,59833,44420,77709,63190,13569,17893,60658,25176,15350,85524,41779,33833,85426,29822,77018,46312,64731,26557,50259,89369,63429,16133,47968,24219,62181,30922,67447,91487,62758,54785,94632,64526,49781,13840,45294,24181,86720,11953,47641,90401,30166,14472,81467,15552,24783,77487,20564,54784,40823,64074,17940,39749,86283,15483,38004,67996,91140,34030,11012,89091,59629,81665,73206,41468,77637,99256,87684,90115,44589,56788,85488,24446,85615,93311,73205,67820,71606,59082,33929,19830,50905,73134,32391,44555,78101,99381,42416,93220,96644,64731,52909,27952,56017,33822,52669,62445,75177,58440,97086,54782,89406,47849,92000,34721,69134,94102,51262,89391,40818,61645,11061,27617,92313,95782,79451,76606,97914,52194,98892,45165,10931,46433,95349,52215,16243,98815,10246,16947,93040,96735,28490,98891,48943,69084,44577,29482,37935,50836,91581,68554,66851,39298,42773,55731,99323,96685,33795,84973,44713,65617,76105,28945,90563,64583,20269,66054,98388,23683,28961,79727,93937,89936,49392,51981,49795,94964,69756,47933,75716,27235,24618,84592,97931,79688,46664,80640,99035,58284,90992,48924,62097,83437,16698,52089,84296,17408,49758,70175,66442,62793,70433,51983,74374,52759,85954,50646,87432,35097,65344,94989,82564,76013,84025,42272,51894,57243,12156,17908,50381,46398,28960,53382,83887,75384,43117,98252,58923,63140,97294,15832,95081,41291,94713,17738,70980,21543,73811,92145,34133,49554,62998,61762,82540,23115,53392,34233,34243,57326,72548,73104,59131,79175,14397,88703,85969,68921,46829,77631,67937,42757,47128,24109,74377,52571,18821,64025,40784,30378,91643,84755,64642,46300,53610,53391,98906,11468,63097,55473,68848,53987,19065,46820,20009,91920,77561,32519,60363,46734,74478,50739,24255,19683,92338,62208,94221,64538,48633,75668,42600,90746,57083,63712,30596,90311,23081,88448,53795,89289,69940,91025,12913,72225,40166,44635,99388,92013,40120,31985,30884,46167,30665,66287,77124,22565,25624,99325,48663,64494,14051,65902,52393,31874,61980,25691,65248,86722,10003,32718,18307,53791,93995,26592,42408,45366,99606,62017,77909,67133,68098,62221,28841,84507,12952,23160,89103,47165,86368,64460,76772,91995,14326,42614,39167,66777,51081,54193,85070,55947,55912,42253,76371,36855,70356,66342,60397,79518,65077,91733,39070,55737,13141,71695,22997,35641,23893,91702,62276,80607,27212,32147,43842,78874,38100,53564,24393,70486,43700,60795,41904,20612,58665,23451,35803,49617,97313,99096,49188,83019,37545,61569,53414,35414,54362,19981,62161,14640,30279,39262,57947,70429,16663,17369,69208,13845,41505,17662,98768,61194,53525,65656,11052,58491,33478,49786,27921,79071,86915,24721,25409,30882,77969,75074,37367,19881,80103,55800,66764,16778,43277,76324,14357,91071,46605,36780,17447,81499,39799,11452,56295,24813,51584,16390,51719,23451,67514,60862,52283,18922,26492,92377,37207,71904,28934,74175,10493,53640,28308,60656,87308,21915,90584,43843,68662,28524,12648,49371,27752,89724,55757,49120,94880,60106,23490,88571,47155,79115,47973,35578,38525,97069,77158,37937,59361,42990,91055,28559,81929,94149,29342,17870,49391,30387,79163,50098,71048,36355,33319,68502,33780,82231,29433,75720,55161,61733,45073,75814,54701,45625,36356,74159,42490,67731,38679,47806,88727,44804,84336,37998,32672,17902,85594,50451,14130,32733,22795,69723,37470,18955,75059,90465,98802,60932,65271,88748,17589,76692,53248,93458,52276,20630,21424,88521,63378,29890,42024,93516,86251,20539,10854,29005,69068,40056,67222,14593,22318,19508,36462,58398,51355,84205,25333,49188,54869,90311,47109,10228,91438,87113,91054,37987,79924,59919,46557,87287,34422,89056,75433,87283,80167,95482,90577,58548,18436,22898,10160,43049,59167,48120,13767,75490,17294,65367,53527,60909,97782,90350,28863,82479,48902,18465,85331,79932,34545,64418,56293,17437,61442,38537,34599,70554,68549,47225,73923,46682,58781,94008,36737,99025,61985,82648,96090,44705,10923,21984,18718,34600,46773,82588,31881,77843,74640,62554,94801,27236,63246,53399,26275,88721,70153,58530,89712,96653,67802,96881,19922,79776,88544,26690,40012,47252,24090,90057,74788,54064,91406,57175,84122,91211,54068,77218,12928,17440,42751,32554,84851,17745,73304,45438,75578,60451,25010,14148,91371,74465,92725,67760,81529,74189,23320,27700,34292,27916,34323,71757,32904,13839,18164,85208,74489,63950,95364,99939,82003,91309,87977,49174,82885,57236,75608,32335,31109,90122,28104,35703,77633,94961,16341,66485,50092,37931,64033,55200,72651,51829,59095,98476,73211,67554,95778,61154,93980,92715,15311,75579,80728,71046,30801,33692,16179,63314,77069,85314,52686,82558,35997,32582,37637,61445,47339,47325,44801,40173,23842,79527,22941,40595,52438,70299,50916,88396,61316,10172,19489,68409,69365,29706,11163,24997,28527,56683,53283,37112,49953,87938,61519,30427,26435,23177,76748,36920,55508,73092,92883,58376,86245,36250,34677,69574,48490,22825,85181,41922,10659,73807,45985,11493,91334,96695,14817,51587,89405,21796,28669,84546,29039,70325,57714,71726,56245,75170,18128,64311,17550,26397,46374,35955,18496,95107,79808,73147,57958,17631,77675,27629,10854,63043,46739,63733,65129,96150,23424,79807,80299,22560,77233,42172,29323,68770,34679,44914,15321,88188,51453,81755,11629,65851,84852,80754,38798,15673,47629,72165,10260,52732,12463,51954,91766,85057,25564,41464,40951,80239,77359,61740,31873,38919,26006,38376,23379,50404,23317,82409,97447,79044,54542,71235,12645,94585,38249,89813,44316,74671,75135,11259,26755,14770,67024,95327,92144,97721,74754,52235,47691,23487,79506,50657,77024,39546,57066,80212,31014,61358,93762,83309,18063,60399,81860,69860,56755,69617,20269,59050,33407,26549,93411,14489,21565,98004,92354,83267,39890,56097,47156,50985,45141,91921,72092,31951,64421,71563,15787,99541,87418,49491,78555,75087,54247,35432,78405,14472,56767,79838,21927,55304,25132,67752,86339,90657,87303,63746,81112,29183,75731,22771,97930,41378,90712,53045,23837,93084,90967,37677,22953,79046,23363,87401,43530,91397,39453,29641,32703,42496,45694,96013,45181,66431,43938,25415,77595,17342,81930,27979,77811,25864,72128,39702,16144,16179,51157,64834,21952,39322,17107,79667,78699,72153,18690,94587,40259,86537,14785,60366,63077,77415,24905,39191,19328,29990,17744,27840,50218,26353,95471,78373,46838,95398,70542,64613,63904,59413,76830,71664,53777,85811,83341,34069,54464,85931,12647,71877,91089,18822,68954,31852,24402,61488,56025,15552,21777,19168,95720,54765,52345,34944,93942,94203,68228,42421,64328,38213,49123,54258,17325,53478,43575,64038,61416,49432,67420,18512,93016,40914,62484,68689,10433,28160,42917,72956,66769,45728,72138,63354,98776,86394,18040,82644,36909,90947,46065,32086,40084,91665,23760,61872,53879,39677,69380,94494,95149,82830,71931,74805,24817,28253,39450,81640,34198,26248,52276,19503,23258,49363,36613,73084,14766,37627,49512,19125,25488,83879,84481,90111,62275,98359,96728,17586,30215,77104,17616,54815,69662,10496,97026,61648,91507,96239,70024,32604,93947,51515,34732,99581,82936,25637,23102,35302,86098,23342,81053,19441,54705,60591,91403,74434,78155,49220,75437,38447,30239,38981,37825,50509,46891,80894,63716,20731,83886,79833,24682,50347,33181,35035,46346,62497,58278,36022,67673,91011,18762,30929,14903,62218,34619,49561,43891,43491,94955,97802,89546,41361,57631,79497,49365,95396,17427,44817,11896,27163,82636,51728,21658,29113,88673,29890,96263,14056,26037,60637,77963,44005,61475,85369,16038,26374,74616,99360,95922,81407,12273,26000,19539,72647,35695,48671,13440,54968,12410,84174,97528,66812,26531,25984,23710,55133,18666,94319,19075,69648,94013,74086,55073,94429,13376,33235,80554,74612,32080,55096,79034,57989,39961,31860,13052,86860,96345,13913,40503,89895,90790,43047,83411,79412,35900,56296,65143,98193,79210,36707,47639,97705,50724,62454,99208,10954,82124,65462,55960,33112,10645,31186,17548,50652,90353,52847,38382,16243,75264,75277,95725,26146,67058,45802,30834,74237,88669,75911,15452,56682,55792,18907,92115,83928,23441,67505,16064,51381,96197,24851,90391,77127,71547,14421,74416,74136,50319,91636,54299,76658,84418,47695,75102,69111,53561,59353,91254,98373,86049,53352,27808,61618,31556,16623,25531,30916,47092,18341,90917,10559,53614,48172,45854,86102,52893,90461,26356,18397,65277,74155,84359,60543,79956,99154,17155,16180,12810,63260,47988,93484,22380,11749,12445,80340,99470,39129,77796,45066,22528,98696,89044,41644,15770,79622,78501,33100,62288,62017,49136,62497,11625,85031,97299,19917,95265,71516,47348,68306,84753,24761,34960,73062,15207,15863,73447,18051,58548,68206,92892,96224,93789,82590,70931,38508,78861,23514,65234,85860,69346,65129,22336,45406,62335,11562,54843,92028,26470,20154,15901,18852,94643,88699,81020,73015,81209,77952,54441,90658,22274,30584,22867,77129,42871,88102,50710,78026,57619,22194,70821,10130,74272,15141,21129,98237,41987,56933,55897,60735,74072,16992,49122,54584,68003,79428,43704,82481,16921,41531,78835,81957,24409,50299,86409,18586,16897,38735,38953,90070,49591,69489,80574,57182,28168,99633,19029,54303,30984,13280,71259,64188,98169,31937,99750,48635,41170,85268,80402,44761,48745,20076,85460,99025,20739,47637,48801,35934,20482,36508,51894,88520,85001,11808,48070,76071,22939,49790,86344,90252,49300,77820,36116,19378,20414,14929,13756,30778,26983,87164,57543,80447,55082,28424,55719,32183,82838,96051,22340,78900,20418,56414,67424,26682,92678,58619,75835,85759,80234,58913,69920,89199,46593,26665,36596,71937,23314,49709,41106,49507,76493,72145,36560,49736,97568,28360,53859,70421,22237,57233,43971,18621,23496,80182,84966,53521,45653,47994,61333,40275,57147,57538,67958,69699,18570,39378,81054,60853,87316,46332,98740,18784,50457,79994,83397,54832,53814,15374,19161,29988,25113,98588,53621,22422,94552,78032,83918,55329,16584,47699,40227,82025,51793,37077,20539,84618,82942,78916,88955,78119,55557,43534,20612,17247,13270,42365,19103,11847,58882,64461,20160,17100,37277,81722,73738,52328,14792,28520,85384,38528,29983,39707,76604,64541,11495,64173,55458,88057,54150,26216,27626,76341,53735,72616,61322,31661,74514,78715,33085,39249,15903,64124,68147,85866,75903,92631,68978,78714,81400,20089,25534,47795,87494,94287,67208,47190,84300,36481,15320,49603,61936,85473,85689,41852,37182,91786,57824,83386,89400,29764,11679,73646,29518,35502,84029,15823,62833,16490,94100,61214,18850,90337,82822,87220,85501,79221,18106,56682,53061,75521,28252,84448,76464,48773,66655,99296,31843,12778,95456,44073,45767,69942,50736,63450,15228,43202,10776,18645,91643,82085,56990,49328,27255,96072,50002,79652,59790,21598,88406,48655,74203,91162,95126,38273,96473,36849,11117,65228,81105,74448,72062,99587,84831,63944,64972,36944,61961,12395,36364,29158,16264,90144,97833,53669,68358,46653,74938,30212,68493,74619,55020,69356,91602,44687,38166,59138,44196,88691,43328,79366,81627,66440,74651,51124,83841,77898,21825,21998,76913,47386,35975,45787,10659,20219,61945,13707,35544,20499,17887,58652,16900,87797,99225,93655,63915,83914,28821,60199,20650,62529,69499,36471,64140,70736,39606,30261,39620,31327,13849,36412,16957,99435,59139,29309,49733,55358,62385,50123,38609,66682,61557,88608,71900,80058,51766,84305,99706,78644,21202,37682,14065,23215,40950,12910,88348,50364,19457,33640,36290,88627,25184,65920,19362,47133,60535,23259,46306,29243,39155,27766,48443,38071,32002,44887,80093,81109,26398,25436,58353,65253,10205,68279,43020,15228,48086,97042,81621,20277,93248,72997,20384,44965,27073,23517,40848,41360,10560,57434,66504,92699,87457,73454,50820,18960,12776,33105,10312,29517,43818,36417,10343,56753,29303,13005,61069,90958,78980,37008,31747,54184,29132,31828,23047,47354,30354,55214,19628,52918,82555,89313,29557,65241,55433,16621,33821,84957,90761,41455,62323,60848,76573,54590,31622,73325,81038,71879,63274,27531,82680,90614,61021,11675,26413,56420,85452,56374,45443,59216,89917,84856,99236,76420,74024,42190,60550,70711,41575,58042,38897,73593,28138,30235,48132,70428,25802,30515,59828,26828,19187,86601,40626,89069,93007,53382,66790,21435,31467,62811,15212,53545,71000,73745,44538,28111,14999,46868,39117,81107,97359,39988,73773,18112,45067,39779,80370,44891,68991,50932,29386,74641,86542,34768,17043,12716,25522,58682,81395,29757,39267,36092,10593,61474,37013,79562,41926,59333,69442,89021,55938,47283,35491,60149,81668,19768,48723,34303,11978,61831,47100,49653,92210,18099,68140,86511,48529,90730,81788,12822,23474,49573,26597,73703,84957,52646,81631,38464,84326,11768,51154,17392,47151,54227,91895,78960,83309,60338,69245,23846,32381,15425,90698,86134,73812,17711,31009,47228,13963,79877,93632,26080,88328,51928,89411,23110,49710,63947,67033,67219,71791,74063,75907,73380,78590,30620,41600,83854,60968,72163,54011,28634,94118,72229,93503,75143,27135,22046,85419,21892,64523,52166,80921,21029,61070,44087,36327,74313,26089,40205,37841,40346,77903,60223,33734,98139,21346,20049,91071,15014,26547,50145,20974,74559,35057,42760,43305,80578,83019,64194,55844,84508,74877,52348,39758,88333,81178,14161,75367,79065,85442,78817,32172,66729,91585,39763,15621,33984,35165,61021,82654,59237,93139,69156,77155,41911,67231,58174,29875,47023,93951,67767,55346,60967,86417,80562,26489,58694,25912,24726,96090,22302,23982,80128,24232,36629,55517,88339,92838,34924,42719,75033,28450,17201,72566,85919,68947,41691,19160,52069,78519,84910,71893,95470,15563,86482,41884,18141,91383,51069,50192,84862,99985,62471,59862,35154,57833,87665,41118,93818,19063,19635,40735,77496,93765,18235,33621,96299,53052,18472,98718,49109,67021,98331,70244,38095,59146,63753,33828,28357,95019,28032,79545,89431,62601,15047,61815,20340,41136,26145,93519,79348,32568,77586,32308,21921,77449,83745,16967,59488,68488,38353,13164,92760,46910,97649,51801,66643,26389,87173,27834,92923,30105,95492,43341,75102,37429,47024,49129,97314,23649,88791,31623,42022,15080,43635,44923,21954,10085,45968,45085,39777,71476,24149,29781,10252,85418,50397,37777,32383,89241,32299,14481,90539,52813,74259,64902,57717,27880,60675,72132,19355,22579,19061,29673,53382,19565,85272,74671,80347,39861,38454,12015,96713,19690,66128,48878,76889,71157,29869,49524,23567,34020,41239,18744,21068,69099,58907,52894,12298,83355,57474,45793,48055,91134,86137,49814,32887,71975,20594,76236,55862,70943,61314,17364,61384,91398,32623,74924,20484,58675,99246,70179,50246,35132,61777,14637,36685,87430,91672,62647,10498,55433,41899,23873,80385,40253,84499,28857,89215,74025,41361,97437,39767,10049,56244,41425,34591,80767,44718,90973,15830,11612,11634,50311,46607,57050,57256,39108,49559,63514,10245,76233,77041,51096,74408,89589,23469,99206,80967,77937,93019,58633,42057,47690,15369,13397,99790,67999,58442,74740,89465,25640,56536,10527,40008,68003,52103,73878,65625,60868,16867,90672,19309,32555,29239,18491,39093,73198,52444,17912,79515,43469,30705,49934,72584,60999,10472,68056,83143,58785,98382,92362,69251,40610,48796,50032,24149,38378,32303,93110,79316,40817,79251,98139,24439,95985,25977,14741,48879,17587,50298,94784,32507,13870,50229,64573,58285,50389,95070,80830,10766,29513,45960,27148,33918,83561,31684,70751,28485,75639,35208,56349,92782,37095,95987,94397,67393,50371,33165,26777,29923,44064,76623,18363,57314,26003,38721,93204,18915,63300,60984,31540,58367,53831,86389,43387,62144,74562,54163,71966,78533,58975,47224,63249,11880,75995,38250,10612,31426,20813,31199,62017,14169,98478,50025,56933,55628,99552,53703,51415,60013,73273,56266,16393,69964,39029,81533,34259,63781,25244,45601,31649,75825,28511,60881,25835,98587,89254,30891,56937,36026,46271,44060,81052,34442,75007,47409,90941,79021,72301,12466,43593,66915,92778,51938,13476,61611,72078,47910,74697,18739,80280,17243,58833,13948,21757,92361,47029,46871,23317,72600,23452,84586,21385,99346,73186,64017,64140,72597,81460,88152,32107,39715,41928,91215,72853,15730,70208,87276,62010,73895,52274,37783,74131,69699,88664,80560,90299,47398,70134,40116,35451,85762,75428,43792,97967,30364,46515,29058,30839,13223,27766,22370,54820,35828,13815,82997,71039,91067,16613,96893,89512,77581,76861,48503,22199,92541,32599,22660,47101,43456,81227,54273,14228,15499,64602,81631,79451,52610,82983,90703,59936,49328,26572,65435,59946,47971,43994,92883,92746,39030,32050,77682,22485,18295,75273,73750,88202,88921,96337,70305,38103,33467,70849,19307,21677,2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80,72890,35200,59118,85356,50375,22768,64685,57495,19700,64067,39192,67466,34050,89023,47546,99671,38667,87834,66484,75373,29700,91459,22812,32935,13746,87288,58673,87511,13671,23907,51216,85283,22851,30899,58799,83478,22082,62491,49562,85415,52679,34001,95562,22797,51853,37765,28243,86649,81790,31883,86144,27461,55930,55837,36592,44487,56124,13570,67461,24463,38829,72936,15782,11039,45105,59812,82612,34528,72702,22071,58827,48241,64985,40852,78898,66894,25032,54660,46191,63105,20685,70497,60915,71574,51530,59491,12185,17405,47965,81956,57051,57155,58333,65544,84068,78077,66570,76357,72094,28239,82394,68906,93559,38308,20211,98187,57223,74403,48159,53533,34332,13178,99208,52099,77863,58239,44915,69904,28163,46679,49818,26854,72714,89010,80890,99165,96675,50715,65272,42239,69577,43274,83062,34577,42041,19541,52525,74648,73485,56226,62347,13740,56830,42701,38114,36920,60044,20507,39252,50240,96447,79563,53537,48200,39440,71236,13177,99542,58172,28847,60484,14621,21140,51143,79049,92774,57966,13650,74039,73867,13363,13248,53638,93796,49284,45618,80260,39409,89370,58445,57110,83356,98031,50596,49107,50668,42750,36139,42731,98471,64328,23770,47078,82046,60967,55506,80688,37996,67542,99748,51420,20475,81488,78046,25418,79700,36499,59522,81518,42740,77341,28822,41815,86847,22693,43463,40236,59426,27146,59697,91882,95462,93963,11142,76543,22089,20652,66878,52388,46200,80266,48181,66164,45244,95848,65339,23512,76118,23318,51560,37741,75982,94429,23837,28274,14454,83157,26650,94663,73963,34162,23413,16617,12633,41930,77866,21469,89907,15762,29316,63855,84383,86219,14934,47153,37966,20674,99715,44077,13791,91134,74080,39383,58947,44083,93791,59083,39633,58745,33763,88416,48430,44528,24500,24600,18478,68884,30838,19866,44915,13212,49529,66891,56471,39874,87487,38781,21345,66341,54058,87036,53655,28038,66554,55022,22422,42802,86690,52823,93741,95330,96790,97872,16335,64330,39856,17287,87393,89672,52422,25990,40884,22118,59965,91838,98551,57996,29773,95493,71444,30783,28607,58580,79166,68045,43625,27717,55787,72855,66898,31186,52156,40621,33621,46732,30146,88320,12008,84083,92207,88605,29154,53017,78561,15092,76142,22656,49586,58464,37555,75395,21030,18355,17654,72507,69926,40970,14404,71968,95627,88985,78019,90748,94114,43124,48717,35483,98438,22502,20749,71589,49836,97028,35091,92483,93388,44618,98515,10029,94605,41521,29748,42825,17221,14049,23693,86537,45191,61974,40441,57787,45062,13311,30455,50172,71052,99101,21183,91064,71890,30243,18603,22965,67574,14257,91099,18373,83042,32977,72202,95567,85929,40264,11015,71913,50921,25988,95541,37901,42133,16653,35497,46094,38183,60700,28868,44143,72360,28766,33379,80330,65061,27306,82226,26673,80761,54339,89614,73657,38897,91128,74368,96736,91015,50577,15148,45506,55088,56658,79657,71943,15662,26507,12818,88643,44646,82579,69081,11813,18919,35985,45181,80870,64190,98929,63606,57595,65652,29680,39998,90772,20519,60195,85062,37614,41896,34207,75352,96121,31804,55236,42088,44407,48285,10376,31128,45014,26384,73364,82176,90113,20213,56389,27174,43097,91392,21897,73335,69789,95304,92597,82572,39810,39397,83109,64536,59275,72280,54869,50811,13915,30934,70121,33928,73280,23009,67755,30829,99178,96225,54485,95059,23961,26600,37288,63817,12181,17351,17936,56210,71877,88854,64996,89169,47201,47104,78658,82935,30503,83370,18856,81262,52698,92793,47604,59647,18123,85420,61523,62808,42099,67402,95627,41165,21675,90290,22064,33838,46780,56858,33445,65725,12705,10775,56248,74044,66619,33394,36860,55272,26040,80799,24399,21611,97883,17012,54802,19055,41386,20124,88314,26252,11511,63029,14267,30816,92821,73405,66279,74397,60645,43132,37970,91363,90160,81834,99054,44059,62087,33055,88702,36877,58837,43028,11753,30608,19341,26966,30516,71175,84614,36542,99066,10524,37306,88008,52687,97559,84232,13491,85759,94608,61535,87895,53880,43711,80044,53603,70740,11068,11160,78138,12280,13029,83141,70013,33297,21245,67479,14660,22716,68312,27956,29538,94882,28578,82371,62529,38236,10956,19884,99541,36008,64385,82680,31068,44488,43658,27201,24032,54758,29317,34014,25931,11953,80673,28490,48123,68315,38325,60836,18670,35238,14760,52632,84695,26861,70154,64149,11718,98916,11525,29969,66562,99105,41362,70757,24859,24036,40993,18370,10551,64212,47865,17515,65166,47216,91615,16576,52419,58278,43161,31213,71571,30627,65592,45136,95531,82611,55006,98757,30154,75309,81416,68917,96441,12708,25683,34055,53480,80657,66314,53699,69857,64748,80043,87306,31832,33727,88057,28033,80536,81962,98063,21372,24708,32043,37926,76308,10136,63095,14630,49999,15335,41667,87567,35916,26309,48987,77055,55656,13739,37021,55863,11020,70652,18544,73196,16372,47370,95427,75325,21827,30754,60271,29997,33912,71553,86967,30475,94184,39987,96992,10568,65882,10840,40122,18452,65248,62676,15422,15764,60286,43918,34219,19633,33546,94054,92479,95591,95335,57810,48003,20134,94387,26426,56088,88346,44375,26876,63321,63182,46731,77358,89862,75543,89932,10119,56027,13026,67074,52698,82518,98073,10419,26913,34873,16972,81844,19994,32312,79492,41288,39079,82967,24665,10908,16851,39061,61750,14079,80182,82241,71799,62363,57636,58827,94609,13008,77864,89684,69365,96363,53031,64867,19786,77486,16944,22751,96628,61928,74667,52144,89131,72553,90738,69636,88505,87788,75188,44700,67818,56746,34875,95450,84526,88550,33170,84342,39846,73120,86513,63912,20790,30162,44712,68958,41742,19655,44201,71671,37823,67562,66790,95330,49509,22925,91467,87858,86193,69172,86972,47709,84222,64638,30846,56155,90262,96076,28717,34010,94635,97737,47703,94307,22130,50351,45676,52813,61582,73052,86556,59986,33351,55045,32664,14684,90961,31299,72014,19086,32743,94316,82482,81393,53220,21728,61468,10010,58142,49156,88929,42073,49180,98416,14558,75475,28808,54831,44005,18903,51233,55725,37494,76373,11471,36640,24508,95608,57169,46233,18892,50136,43702,39688,29069,88046,90587,66489,80955,78788,76494,28224,87676,30472,90677,84323,24801,21382,26581,66737,71032,79646,68700,82350,33409,82275,30636,79786,53001,33928,24781,91006,71728,60173,86653,48922,34384,88354,92732,80826,42522,99842,89050,99704,57848,30651,95197,78715,70320,68933,73418,22156,34534,96239,78022,95415,75303,66005,93585,71027,58235,65158,28798,71568,37764,77000,95563,96367,97244,54628,54915,27568,23641,10584,72163,83086,45175,16307,94873,36087,54735,55681,46487,30090,73426,85458,32486,86257,57745,76515,60423,32029,88645,93017,89581,37436,72842,27657,62762,93302,36094,73775,62063,23959,96219,20647,58568,79893,50953,52143,31828,61879,99499,62338,47159,62852,62241,72333,47230,76763,71326,48570,48025,57030,13386,19699,71089,55722,66157,21971,75828,31253,27210,92113,97591,98470,32996,76202,25788,48256,88686,96118,27143,39771,18440,73826,96573,88681,14830,54343,24289,80743,77712,51286,81235,98916,27609,83666,43345,81947,37371,22014,37792,98877,96101,48596,85849,37166,16831,76400,94356,40069,70968,56494,20942,38331,98796,39432,75516,91919,32222,32161,42811,64876,56063,28441,90695,15641,95402,81410,80663,59300,55738,86957,47459,78246,14262,99968,85331,44436,14549,37156,73640,36781,92033,90621,71922,75534,50921,30420,81850,32218,72273,43461,35110,70200,21137,22754,27214,79137,54654,79358,48321,57245,42358,40515,37507,58859,58649,59379,41541,33715,88957,19142,35355,86323,92689,33687,73415,46672,99418,34247,62600,96457,89795,33746,30495,72672,41004,47022,41162,73175,13678,37641,69486,62925,30349,40382,16978,70921,66491,97930,28461,79117,99049,76019,76313,90971,20268,46675,54573,65852,46942,92845,57178,46868,23504,51948,69811,13973,16882,21054,56491,69118,42633,42744,97099,94281,30163,66194,79646,99250,79832,50016,19006,39651,90673,25351,79868,75978,42097,95015,43969,22878,81498,75597,80007,36988,77148,96146,14655,64349,98514,38558,78290,21335,16846,63220,60418,98802,13090,35856,31798,14591,62682,29069,37420,93770,73393,67113,49273,49686,24270,80830,69411,92131,49230,65356,83979,13796,93536,19703,77124,86079,71158,50676,39859,65704,84120,93567,45079,59587,26451,73006,10114,43995,54403,52573,88706,92565,60143,10832,62903,69392,83942,45350,98413,32176,88891,22610,93913,98440,78836,48625,56416,93722,32306,25926,46566,72762,26351,64589,44595,10797,96734,80831,35334,83984,48267,41240,90542,68477,54215,75215,47038,38852,77053,71609,22748,62393,45173,25429,19579,96670,44752,59221,40015,36908,38351,15624,32621,27098,27964,78338,77164,39267,32164,76683,59065,73118,41898,29531,20771,74038,43374,67002,64600,19158,49425,68561,61403,38326,68948,74950,17574,33231,79571,49687,32782,68428,44918,84604,39378,36381,60367,89166,50046,34033,80199,59097,22524,44617,60997,71973,95448,89164,74426,78298,32192,84444,30251,91502,43011,21838,39915,31532,48848,76579,50239,70955,15465,35599,45205,91651,57237,23520,40849,36188,24578,76734,33972,90128,68118,30907,93827,21474,38468,22849,54195,61201,55651,71455,23936,93459,72738,91313,28998,72549,50128,52016,72381,41554,40633,66347,21410,77180,33846,75524,31959,52965,50199,10492,53856,99122,21367,59004,32907,16320,90089,49656,81832,13651,34854,16913,45124,53841,50400,75389,92306,97938,20363,98094,34648,92443,88373,83423,18544,88838,97703,67157,11492,52159,67362,41522,88690,95858,86568,83363,17004,18613,40224,44645,80871,64752,45552,57243,70370,41435,47147,33815,60817,27140,80548,23320,12352,34762,40260,41865,36888,19489,78485,31099,60507,26986,85181,30073,97865,66672,64441,89735,14465,20157,90073,30979,52120,88907,91231,63499,88331,73106,94335,66013,72973,74856,90192,97068,89519,79866,58963,66260,22135,22453,25764,26755,16789,61476,34869,65819,19658,93291,97323,74352,27633,84992,68205,64173,16715,59839,62206,70203,50050,82103,67501,33879,12015,39769,65939,69248,53162,84217,62334,53129,53170,69124,86548,21433,25432,75784,24984,21296,65859,84858,51436,23757,47446,54490,99464,79170,84858,16078,38753,67534,67571,20498,21027,48285,18759,80507,33883,73433,47361,94883,31058,29846,97899,36158,56905,36765,50608,40104,77288,47078,66197,81780,98879,11416,40431,48303,49431,68707,19652,11224,32334,49465,94235,92612,22283,66426,83916,93004,76798,49282,13442,21878,54494,35018,68121,93885,47379,59843,35497,21063,99710,22197,26938,33553,14797,36434,25933,58143,24104,81833,74241,42358,28671,82579,18379,67405,66161,89746,72768,15381,15319,84630,43681,45920,98482,71564,52465,39846,72538,12292,89306,12209,68871,53691,51897,38021,13627,34265,52264,85512,57683,14460,39055,70287,83873,42283,60710,87562,62427,13159,61268,80977,82658,54313,85857,95856,91019,73613,58065,62972,14657,90224,45004,49035,76729,12151,76066,14578,72247,66020,64786,41287,67316,93130,27930,47194,59590,95203,46174,67669,65084,26157,92915,10477,34793,68393,38007,11621,59952,95025,59677,23414,15202,11537,87325,63948,16929,67364,35934,12070,50688,18407,66301,69269,13240,77396,47213,67898,49664,86772,37786,79583,46971,71994,54335,71466,25245,58453,95682,18760,44186,44404,52339,61724,43379,48237,94850,79637,91995,58682,11972,49260,10325,37296,18202,61759,45320,60857,33927,22765,76179,40509,69345,68907,51311,52621,16426,21741,92219,72777,37856,12208,31677,12128,79814,25749,93206,53978,74149,77799,44796,25497,45905,94322,92941,66186,86023,65437,51331,17758,88691,47959,82115,46007,12701,98083,80707,65950,74719,43560,97064,58333,81666,75581,87545,43377,28563,88524,28218,20475,67621,75302,50112,88408,40789,66422,35000,12196,37326,81414,16297,70461,53448,19831,84239,80648,23622,60079,99614,12792,63694,36280,47197,37767,28760,86210,37188,88511,66857,93869,73480,42846,65468,64066,84768,10990,80537,22027,41648,73499,45952,12265,49228,60663,78380,12929,27353,92018,52281,72251,29828,15496,27245,80828,86957,39546,10094,30128,52201,73697,35314,84496,81332,66383,40337,17991,25425,14593,17125,49897,38247,33759,51581,42932,19657,74101,35717,68669,53169,38177,35939,79998,86933,55357,78494,64480,92103,49195,15171,35091,76129,85723,73625,59489,89771,49567,18343,70877,74393,29942,88658,95218,71341,91164,20315,37880,77019,18381,30970,59532,97003,42098,50510,60215,36649,54308,59902,18604,87541,38342,30882,86741,85162,22405,19664,43868,84960,44689,11436,95884,66857,34505,29832,29961,71616,95349,10006,48150,30862,18600,88170,92954,27690,41469,47325,22226,39694,35965,25304,32150,60181,23334,23435,79670,67515,28128,62344,19118,68794,92286,66209,52563,80458,14647,94657,64443,90858,40349,61637,36878,59114,21778,15187,97197,47728,29530,18671,81559,71472,36166,93091,17675,84386,42368,95157,22033,28903,12404,37324,42809,55414,38448,67496,55163,71182,89791,20004,22096,50808,86426,29954,99347,64651,64288,18749,47726,64661,66473,81741,82063,33719,88032,35051,75801,86063,70577,20072,72849,38639,32286,13215,56598,43326,39378,18578,51045,77782,47144,71107,62215,61459,70010,87091,11620,79173,19552,23369,26466,87523,16018,27654,72119,86716,57068,61042,44385,76634,69145,92107,89420,12723,21035,50731,88763,30592,92835,95339,79922,80519,67457,47507,32561,20266,86476,84154,97779,98782,77186,90911,14396,23806,37105,41117,76391,22390,75228,67876,32292,52380,17779,69877,46026,45930,40458,42007,52474,90524,17835,75472,22445,78382,60847,23491,34469,81236,40904,93891,87614,75084,55634,51946,73301,86057,88406,93495,69519,94979,76472,36391,27147,65472,96343,29849,45384,32803,17063,79449,99924,87254,52169,53136,95364,98318,36715,15259,41467,70048,46540,83658,92703,86196,66812,19403,34542,39538,31156,90237,33802,29291,22653,18791,80105,66160,24518,54461,24680,84424,49810,63342,53619,78718,86613,78055,58204,36527,39956,75433,62062,60436,89644,92500,85353,22331,30965,10019,77735,98775,34250,41246,65316,88642,72260,78394,88245,73443,55582,13011,35884,90639,93583,57552,74956,87283,35203,69809,53988,30932,37340,26019,23878,19631,34240,36915,58834,69920,68525,33838,22973,78698,48831,99008,95417,14183,68966,55080,53253,21598,64216,50227,37190,11044,60024,22990,55158,38266,67202,84039,65946,91787,62966,17007,63090,50931,39270,93412,77101,67110,76086,48740,44626,18436,10656,71615,10374,42892,66207,77853,13039,54031,81410,33244,25912,78988,38219,71203,88985,86297,42760,18539,63020,39760,89992,20370,17212,14497,34577,42222,54308,44529,14857,29147,90626,35796,35497,64295,31910,50358,55484,93773,57602,92297,78619,29342,95505,24181,79078,69053,41468,78238,83594,77870,85465,42115,18569,35430,84314,10653,84634,51218,65204,29754,40723,11523,40258,36597,85652,87560,67467,51285,73785,11985,34040,95998,69182,59058,94010,52993,59965,34314,95858,79994,35741,66731,39093,10682,41880,65224,33882,28492,30563,41340,93891,53131,10959,77999,77626,83521,51568,59786,30288,56935,14359,97418,72105,88076,76362,88670,77616,63224,88680,44565,83259,21987,73959,19456,82821,75337,73407,39639,93057,44146,98873,46249,72894,21619,61707,69395,86358,87735,38735,54770,98603,94307,94589,62651,31817,15797,93629,95444,15824,64192,39765,25623,22788,47796,60572,12958,72510,66340,81149,27483,16766,27984,28167,86788,71275,96897,55961,28427,46230,51986,15027,65894,63362,28867,33957,69942,28398,33579,89559,46003,86585,92433,15682,98936,49484,35516,27202,24366,89159,76506,59477,77199,90600,24634,78649,54678,56385,47057,29428,64887,76730,67374,46579,13076,21217,85820,58789,94387,56961,49845,19368,27180,30799,20504,96604,80657,69430,24345,11771,85611,92945,71002,90274,84693,96061,98224,41292,17922,99495,74991,44721,46374,66918,36876,50707,72787,60115,96992,69599,50793,56913,77896,67503,41485,33773,55906,41518,13521,95224,20371,36989,43227,89765,85878,30943,88967,88203,88265,81039,88232,23759,28103,21949,30310,65611,20860,60286,87786,34926,63618,62831,78313,97713,27584,31615,46522,28810,25866,91599,86327,50199,97033,12901,70443,96520,89671,74089,61601,49076,70799,96930,77649,64785,77779,12698,90533,90750,89131,62585,64922,58239,54558,53136,21063,10559,86294,62837,82979,57600,19445,70509,54015,34191,37121,37293,57188,74362,18334,17016,77990,38297,64552,24909,83703,23132,15825,22814,80439,42399,86181,37011,76559,41869,13216,92020,92242,32422,79006,89263,92179,73358,97453,55329,31616,16530,14981,20532,97772,77581,33132,56865,66570,58421,14345,26086,76328,80294,51924,93278,75371,96428,55013,93606,69635,45350,67069,63246,19248,76216,46921,94686,62368,96512,96674,28504,13326,42157,56975,71150,81274,35398,40960,40194,89912,71470,50688,70183,99102,81252,62219,59848,10030,48444,49547,65039,70547,76114,51542,18815,98067,43448,51593,90819,77170,88578,30115,10801,19499,39799,88404,60439,61462,97794,35182,22632,88671,70039,62990,35464,83849,30494,14448,51359,31629,26951,66571,44136,46896,56624,13859,20047,54963,13806,14114,78082,67257,25210,10172,33560,20187,93893,94502,78102,50445,74329,97569,20546,14992,36931,41491,73161,79904,25197,97208,61224,19507,39029,82126,39935,93131,53670,34061,89765,23833,21854,74547,80509,27230,39861,87066,59612,23209,30062,23031,91968,63120,75297,62250,40551,14395,25375,51322,82978,84781,58222,35913,42092,83816,41846,72296,75335,53098,10241,31190,74211,78958,39869,63559,97782,80749,89617,11235,21334,27840,91331,11191,81510,64221,47902,14418,10303,40827,22156,91292,50339,63312,66109,57167,77695,31276,94483,52823,84112,23112,93572,75408,97349,40071,20123,96913,27671,46643,69516,79606,75464,29848,41721,78279,57044,14082,90170,85513,54928,51562,81500,33525,55727,50783,72262,38833,15352,32690,92851,65027,35381,77527,43651,85158,72881,87698,25515,60342,99374,26534,41702,52840,93896,31936,22488,78049,47923,12623,54801,13220,15874,87310,83195,89778,87552,44460,26486,57156,61623,84103,33739,87921,47362,18367,40665,26928,52530,58797,43463,54472,57820,35783,40766,72613,84350,44998,65175,51381,64336,93161,88154,58097,58544,56651,67501,16782,65645,46492,33465,39719,54798,35631,33558,93084,14709,59342,16472,26408,94183,51346,76548,58029,21972,97615,61047,10652,98250,82841,44649,78117,95166,69308,64732,34352,63650,37976,80376,53591,35761,69097,97600,14046,47645,11862,48551,59081,34028,42570,84883,68202,86406,87007,54819,28072,21373,77699,23601,60443,99733,40023,20506,53581,78642,20193,64842,16229,87889,52858,91567,76232,68214,33239,60419,56324,29469,83437,95984,55745,19977,84471,19668,11375,89409,34793,63587,79704,54238,86289,60475,34706,92120,83546,82926,91780,94247,11484,40555,25026,14746,31912,46666,82037,51467,99537,87747,86551,89055,14998,29722,57442,15472,80346,50069,33310,19737,19728,48745,35082,49565,34355,11656,78135,38972,28795,36701,59683,58218,88602,67061,27792,12151,74865,86981,87991,59650,81516,31842,86084,56481,56503,89738,98217,30319,55352,86270,70092,48407,62729,37281,21403,71579,84850,63684,62483,61925,25864,85217,70228,81695,36645,18263,28557,74479,41957,67618,15646,22222,11433,85334,56479,39573,78429,62949,84853,34609,87957,59129,15476,39542,69481,26953,20792,21333,93925,67916,20006,87561,84322,16578,66711,45277,85333,16556,33178,76971,40550,42702,24410,61859,76450,45364,54120,16748,92689,71418,30025,24241,60286,91955,79375,49536,63786,51202,52648,60207,28184,75869,71474,17613,56212,58100,40677,58059,35068,29366,50162,37157,90669,36222,28205,11030,99846,15676,78378,96451,76210,16928,63084,85565,22256,36983,12306,98191,68566,91227,80338,29872,20536,16625,45551,14283,95478,74359,60892,98028,91187,94932,28963,21417,58914,19251,29186,54031,53734,63650,59048,77486,62265,72267,20488,77777,78295,10319,39672,17930,15037,52309,58632,55422,21424,77741,32274,70728,53991,79748,59648,76260,82379,24802,59952,75077,84660,42153,45565,26477,73637,40558,85517,81812,74991,76672,39633,20727,88986,68812,47656,30543,18689,53251,43947,48925,23488,35786,64918,81095,96210,43362,86364,67521,12973,79598,62270,88137,24586,50878,90589,53323,60789,25913,64745,41138,79463,26413,22778,88336,29359,76537,58159,45133,59020,10271,91469,96648,28627,71051,33752,15949,39383,40071,39153,60178,97712,82668,94008,17248,74502,95997,48785,34890,74670,94026,81847,54365,27173,22550,34551,55963,15278,45280,36153,78937,73809,86779,49243,62828,94600,94746,33089,95855,19280,15725,46319,57252,82627,21334,52187,55294,78772,33991,72119,53640,16190,76640,76191,36643,45297,75409,65051,35556,50236,12073,40123,78595,29193,12223,67283,27401,22075,75588,62424,19655,13290,52687,32351,57823,68228,78703,41643,60549,10766,32749,10435,19161,71671,12615,52709,89043,96921,54761,92327,32046,77424,49474,20757,95735,63030,21993,70209,42946,79572,71874,97077,35696,80070,98390,47668,35612,89060,80773,67260,42187,25337,78461,26214,18230,21166,16173,14025,40681,67210,83818,77908,74321,41105,31956,51960,55067,78543,99807,33803,84919,18705,40359,74012,35103,20477,61669,18331,53998,46854,12385,79222,63422,57594,43126,82872,98853,86584,65214,46936,97620,30702,85471,46608,90207,68758,14206,86013,17357,10520,25953,17963,54277,55793,51045,10964,16503,63155,67679,99967,57783,33080,53965,72874,65334,22366,98898,81028,46738,78718,11775,27699,30583,60053,66400,17194,58590,50570,21480,77164,80111,36985,33586,91052,48656,40270,23820,22280,10841,62074,58880,44423,33652,42902,46978,97361,13057,44484,88498,65098,35640,69736,67432,91879,27591,72045,55575,55620,84304,32334,61408,95542,78215,40997,49557,57024,78135,99492,65690,71948,49174,10894,43313,27364,97759,53706,90558,69605,30737,62205,33135,73280,27857,12007,79191,34236,37289,60722,74727,58799,44054,61914,84911,54186,81339,94853,52751,62544,42928,54187,25092,74843,58585,29902,74486,35572,32800,46629,38725,47050,14116,70080,84762,70036,73579,65950,77954,11034,27850,96466,70941,75794,26534,71396,35729,59732,16059,61262,46479,17336,54287,48777,47111,59479,13519,13901,93347,19923,56453,70744,10827,74658,87407,69691,35160,38523,46155,51470,94720,35236,10388,67091,54542,54199,84768,87384,15829,32644,52133,96416,12325,21804,19615,70318,41385,37201,94652,48693,74746,47991,29291,66854,27421,93307,50438,36117,13705,22042,50061,20792,34221,14808,66941,16386,13448,95041,14837,97716,47770,40357,51115,29585,71634,93406,18290,61811,38982,92466,69167,96723,79466,30203,20376,95240,25441,80653,73197,27142,17926,50132,70021,53489,82160,96435,17267,48764,58974,73233,89133,95915,90702,28080,94846,69687,26336,50951,82979,77203,33474,63206,18362,45927,62994,99570,42449,17270,50821,28419,71121,76308,16132,17576,90878,21437,65122,75629,73502,60683,12921,35992,17764,91206,25332,90219,98734,13405,83545,91314,67432,61301,25857,64821,72875,43972,56969,46551,91383,26803,92636,76901,30246,62027,64287,55214,27753,31899,69542,42926,69889,90934,22006,58452,93823,18600,10112,85629,33840,70057,74921,17244,45808,31922,35433,85555,35373,64993,68165,29453,25847,40984,15255,60841,79243,13794,65063,58515,25721,21000,45617,84024,16541,80901,51274,67204,29345,28166,12536,73285,11771,53032,52933,22127,59681,89788,73299,73747,89967,25893,18538,84253,33916,60229,60854,33171,64036,28237,74849,28651,46397,99744,78733,49076,27619,98007,57532,92826,42972,51829,29850,51474,96187,32317,57574,81235,91681,94012,41996,45500,73955,72085,18131,52685,96335,63786,67973,20120,14111,67704,93881,75939,24634,34724,23961,91798,94194,76255,39594,63875,45681,30761,81767,45145,94004,40658,14263,26426,72605,52942,13271,56121,64129,64966,22327,21102,44127,22826,54816,52952,82350,70606,50711,87155,81976,34515,95988,99014,16325,30466,70914,56199,16961,36569,52346,13408,42930,98722,95306,93047,31079,13587,52396,93286,31421,97620,91082,97465,98421,62089,24648,57699,54699,90332,97679,10437,68440,98800,59918,98274,70698,78140,90182,15502,61318,88620,31812,62289,34340,56474,58535,58499,64906,35930,57830,91178,70572,15874,29648,44543,22446,24545,75307,50518,17605,77532,18242,49491,75620,58515,25901,10844,35194,69059,40348,94555,74401,49618,58412,16544,51720,15960,31142,64068,41467,79972,74082,85074,82214,97250,23724,98700,82931,15309,63615,44132,27643,68050,31296,24658,69367,41369,92356,25319,12764,62658,47600,28202,69689,84832,49704,85747,26078,12955,72431,76523,92643,14380,83361,53337,65469,65171,74853,40315,38144,76711,43958,24920,15806,79227,97880,12293,13550,70152,52237,53007,30262,52680,67635,19937,32559,37448,98394,97608,54336,67295,87251,82004,36761,38398,92352,43095,74565,17950,47771,28957,80160,69714,65520,84736,46291,64062,86702,94859,10322,81253,42714,91080,65695,68339,79437,23212,52456,22903,11341,48499,63553,70722,52564,67656,35731,42839,74323,51848,26363,16925,79209,64376,97246,60459,66911,62283,98411,88110,22653,16475,89821,35643,51965,62374,88594,33020,32752,70708,74741,70235,89912,37164,95144,36192,39693,29697,45580,34982,97512,10314,49868,96567,85205,20331,17629,67154,45248,83055,78664,25346,37877,63058,97643,58309,33291,68723,40056,34567,93506,54445,64048,20232,50280,77410,46232,19276,49279,19841,18395,88088,42125,45179,48217,92887,58488,20866,19198,64419,94143,58922,76570,15963,22421,65187,34221,33162,22437,33769,21227,32444,66461,43050,30844,52444,81800,95719,10487,93156,19065,19892,37097,97061,29583,69324,89630,74640,31433,27874,45346,28953,32298,82493,35393,35230,40909,26419,17518,39611,17032,15900,53881,69535,45801,86787,27682,63824,41729,18636,67950,10929,63953,17934,94345,67698,75318,56212,58203,80209,33791,33522,40178,61912,42384,24676,89215,69837,27871,55750,72631,40656,67810,70684,61663,30591,46318,25470,29186,37400,37174,86351,51933,36555,22268,69828,81015,12094,55271,24781,71445,11696,73384,55397,48010,40412,80300,67348,84836,79443,51282,58216,58711,48989,22010,33079,42550,22977,65666,97820,81050,49161,28943,15608,91651,31198,96852,26615,47641,47502,31920,51537,89570,49246,16775,40606,48994,91392,97661,31751,65329,71351,21481,63165,41444,82434,35388,38052,93046,52161,68397,43739,58189,69168,30122,35736,65504,56260,36478,35505,42458,48798,93036,49209,11534,70174,52985,31099,36659,43039,74821,82943,83621,70356,70322,29255,75892,44789,22303,33006,55772,83586,15802,90674,70367,32059,37744,42113,78727,96319,93788,50273,83537,94460,19257,33143,50136,46191,75099,11928,98809,95494,62519,37763,96672,94338,24093,41479,13161,89876,20273,73045,21186,90331,95848,72043,23318,37711,53936,75048,79033,69372,21339,25406,51631,77187,54568,40133,68978,75138,57008,97011,58145,16211,95478,73913,95032,11858,54414,49637,74152,16069,72149,81822,93684,77089,22932,57758,70962,38697,49059,74218,38755,19300,23615,48152,58892,59514,73743,63387,98110,84974,26923,76593,93332,30346,40214,98985,10166,95786,28944,73217,38197,53194,71778,23811,62846,41437,59176,31846,37495,39879,24377,84892,21651,16269,70584,94052,24667,63749,95411,24609,22345,30472,81257,25966,96089,94743,11651,65821,37600,85788,41565,91111,23430,16082,79286,62014,21155,67247,41099,88579,95142,45660,78323,61350,54141,93838,78742,15152,26887,88337,22130,35232,83797,90822,83696,44364,43437,68164,62146,78144,83205,16451,21347,79437,22247,45735,13507,74223,86626,97269,20959,27709,62171,85134,83412,67531,38118,44269,93983,84062,90633,84649,38222,52278,70101,41838,94919,32697,73022,93010,57363,57642,93346,97358,37829,57480,71768,77551,21469,52154,65511,55686,14231,69047,97036,46141,30266,98543,11980,90933,44693,79908,10340,26719,86402,11997,22081,49623,14854,96304,96776,50399,35444,61994,59148,88883,91505,47924,51740,85493,98566,72063,93883,41626,31969,59111,17934,91464,82038,89836,85258,25722,17955,53926,13216,82673,54472,73452,61762,42048,44097,33927,92223,49019,26147,24501,25353,11454,79786,15171,26007,80335,97704,42492,62197,91246,72149,26838,26304,94699,81624,12337,77266,97274,52356,44321,72824,98556,18265,94051,53871,19806,55880,86903,23593,49705,28949,59138,31657,95899,58114,26495,75192,74919,22994,64511,14194,80492,58904,38430,15268,88932,41586,92779,64934,51523,59003,95239,23057,52839,75609,16173,57977,19433,51328,55145,49733,38899,93368,90862,28731,87160,16318,61040,18181,17605,43937,27261,23332,64187,85066,21422,97840,48967,20094,86057,33905,14725,72066,47297,78310,83546,88962,94351,59384,75722,62152,24607,48256,72926,43648,67240,39201,32538,36282,91800,10785,63740,12131,57070,65974,73728,47208,78386,30253,60095,49111,68255,56465,86786,64126,25050,29886,86756,95697,61681,11573,60845,16977,85955,38635,16905,32735,48491,11190,76079,33880,73833,30217,39475,19381,62743,17867,84140,48794,91410,58551,48876,97130,24727,96744,59302,61696,60325,85399,59508,74086,39597,19864,49866,41713,30836,50369,90755,67801,24244,74213,90445,99799,16412,78072,84275,43976,50469,68382,94337,67097,31491,90907,27854,57620,33330,57589,96904,61903,59403,91714,67849,55233,28717,34161,50998,26174,27997,29316,25186,90651,76565,99279,31956,27892,26704,22981,49766,49146,78699,81582,13477,81792,77495,76777,80370,99106,78775,33239,96283,80074,30743,24273,13431,96802,86208,16895,44584,98953,35642,36488,16146,30323,78944,36103,12152,47425,48730,17767,87352,73148,46803,55868,64204,79141,76613,51931,28617,75226,32251,98808,64963,34985,61384,80185,55272,86105,26654,49190,78413,62392,58721,38678,24311,35320,72165,66334,21868,93250,54625,81794,98034,45930,72453,86596,26985,86165,69298,82174,56548,13241,78664,77928,71229,65444,24440,24636,28996,82635,28197,24056,93369,61661,54090,51759,84277,97257,32037,88402,50438,96171,25065,84856,38954,18658,38473,39757,88681,99438,44257,70489,35647,93746,11145,41368,74369,54865,70039,30972,27121,13015,91854,11020,41963,13188,99946,52295,89848,43709,82733,17831,40445,27675,77449,18401,22180,62877,82576,89492,15754,51198,58355,17947,57239,51922,22440,74692,23842,52980,26301,52172,89191,53511,83468,88630,93725,24964,84873,79905,87473,80852,62594,96061,63264,94608,98237,45365,81867,30389,92359,29075,21962,64630,28720,49780,13606,25382,54642,73751,83836,55981,39148,83647,33983,29913,31811,93960,74159,28194,40106,16311,83116,18284,55172,18740,24959,34529,94379,13292,47055,28456,39425,28002,87043,61044,15221,99949,42323,30928,59060,84997,77905,66038,45239,99241,75559,56809,60545,57096,23266,44247,32405,80547,22934,75294,89099,97093,38370,39174,22875,15283,34648,69286,81772,39619,44766,34329,82185,22158,84904,86210,10338,38674,21945,14006,10757,69806,59825,78902,60513,71073,49837,45491,50523,58934,92287,20083,99984,59765,69440,23985,20205,45151,29462,95855,61915,80896,99763,60470,38306,47112,11893,53515,76432,48958,67355,57466,45289,98776,68336,50471,35103,42807,40809,46151,10545,10432,45803,66293,82092,77510,59949,26119,39807,72762,47602,24665,11913,70622,59659,25487,98975,66828,44132,55477,80576,10969,53795,72011,34839,56525,52350,43728,28528,27486,92387,77689,49328,43902,16670,36022,24636,96085,64031,25646,98583,45290,49048,47332,34055,66825,50285,49227,68190,50098,30040,65247,95412,45509,47447,56469,26010,62711,88380,66655,16854,59611,89585,83195,50393,31022,52215,53386,80593,67776,35273,72045,28841,21037,60668,81199,35176,72147,60874,99119,40239,40870,72811,59327,23993,97698,52990,31137,57692,96239,51762,20290,68175,51622,98251,93608,77607,53140,82466,39461,91887,13476,14110,54443,12294,22151,38445,98675,85506,70937,65834,68496,17111,62451,32211,51277,78026,85251,51325,17721,65139,58470,32755,22420,82806,92797,70681,28877,10533,81731,19526,36383,77061,73357,90491,75864,86288,12237,79819,33196,78569,73845,47963,57856,80573,54684,89585,95410,84216,12306,30278,96600,99600,59877,41618,48064,70462,68122,12224,66738,48882,97753,30697,76656,69280,59758,16318,70763,30598,28817,23427,39670,77912,64071,51689,42092,65291,51079,84638,16771,83361,17358,17586,84882,19340,96366,15308,60935,91685,68905,61500,33499,67185,71928,20115,97907,80398,38372,35628,61631,92080,27129,58693,80072,38911,50903,42190,20673,53967,37093,71416,70299,38203,53841,48060,56057,62083,85673,42128,60464,89641,37724,54181,41289,43103,11033,99751,44075,56750,59324,14007,42705,89988,59738,38147,67634,85198,48161,93960,21390,77626,99332,70732,50459,38221,10305,36280,95182,49860,35609,13464,29471,31752,38869,44933,91703,81711,38969,36421,97127,58112,20082,31547,63592,37928,75508,76430,58206,21973,49282,54235,22840,27190,55554,40327,44387,94558,46491,47798,90203,88318,19116,92475,44884,60475,92787,23312,94871,38175,38425,76701,12718,51625,43028,93906,98465,20384,88378,68980,94417,69771,26540,50849,83619,26190,24930,10598,47573,87843,46504,22886,83884,33166,59351,78757,29909,65122,66329,93841,66097,59227,20841,69667,34709,79568,57512,56730,74245,41284,28924,28790,66164,52190,47110,32122,83416,90016,78012,53171,94432,57165,51582,97320,97639,38948,67462,19911,89200,53759,13921,48543,54613,90861,61211,60435,44239,54913,40926,66940,20664,57512,28144,12229,58801,46372,85588,55539,75645,85837,18516,66604,92260,15943,94740,26382,14613,81628,28833,15271,83366,36716,75553,28924,59411,43217,43568,78894,27388,74968,66873,56541,36935,87184,84430,73022,11346,64332,63246,33790,99895,27433,40025,29326,64474,30517,90365,61307,42357,54457,33039,28928,45708,40606,35533,10926,80539,42500,94835,67648,45124,27762,11546,91706,41731,59081,38396,48766,35265,11247,20840,97410,12208,92835,18060,17278,22158,94702,67830,90263,63644,33083,73171,88482,71388,83265,33020,94368,17414,91962,19541,86769,72688,65919,87065,26832,26077,79362,70026,21337,62889,51138,44270,25266,99165,78950,39699,84228,21940,79089,91627,79392,25913,56140,98372,73476,48714,30937,74559,61667,54563,86071,37869,41853,77207,79413,21430,71564,16489,97269,94136,51598,73692,60264,97466,84167,79391,99724,22438,76787,45553,73911,72987,13646,27655,99390,63119,21935,10048,65501,75572,11267,18838,46331,14591,49978,14370,60344,86416,36413,84407,26690,89269,71862,19220,56126,65992,27188,45178,23162,90326,15120,62060,90375,21693,99300,47736,14178,13648,29407,61335,41053,60274,25742,50380,81180,71876,15426,21668,36796,79622,11100,21496,97633,50027,93853,71726,36191,24413,34497,80558,99396,23510,69798,42420,26109,21493,26983,30137,21697,18494,45657,51904,12998,90287,99846,49325,50352,55461,67639,91489,23714,90142,36303,83100,40768,88779,46406,41408,28433,84979,72045,82282,22445,68735,12939,29072,52076,47575,25250,56556,54316,16617,65770,18777,30270,57749,19545,58020,79598,48112,77455,98201,80168,54864,79675,12021,27251,89712,47311,44494,71129,19866,26724,53996,56873,44664,52336,70657,63271,65076,85989,39987,52406,80239,61639,28425,16630,46074,70407,53110,83129,36680,85917,38629,46627,18012,88495,28861,42728,26163,87003,23073,24250,85329,75580,95724,73173,29957,64516,87579,59755,22113,70889,17420,14684,23791,81726,39069,63362,93408,99663,38368,21243,83463,92636,23459,10898,34603,75497,83181,25669,74104,31942,79348,74385,43388,78108,44573,13688,78688,56071,23947,56412,50614,30812,64193,32074,62620,36543,79683,54040,22358,60784,70035,48739,39678,82817,47482,26340,44008,70095,48239,21362,60185,14326,38326,64945,60713,36371,56845,68160,24872,29132,85933,54727,95532,64855,88394,83868,32084,33620,37563,16610,76066,44222,42635,98907,67633,86406,83684,28795,27841,58007,75253,45960,68178,14850,35706,87936,37950,28923,59395,88819,97793,55566,80606,25190,76229,10369,39362,32985,10336,18352,93152,79497,79626,13718,49907,99364,39327,94682,96944,61597,69367,65711,86864,74427,12605,58765,12174,65053,85491,24475,99493,76466,79778,32540,75108,25144,94901,30438,65039,52390,24962,58928,82936,79903,77586,82307,47412,52827,17253,33262,17655,10074,25964,11820,86633,56944,33836,85270,22461,91771,21486,87203,56010,86727,13252,74820,69035,64326,64706,55927,46663,45735,38470,11152,55642,36476,67166,12291,77809,61057,82940,41133,70837,19529,36166,40095,20083,18863,43356,18472,10282,69335,93962,90327,43494,15626,16705,78530,89269,96509,61000,10330,33409,51920,47621,81467,65269,12015,59751,19371,16899,79801,42304,33486,54295,98725,28013,24375,32435,66616,97626,72041,56400,90517,38757,78378,52237,89812,94078,13207,37251,71492,81721,72132,20118,67095,21639,30447,31405,88349,92330,44306,92945,74907,64141,34796,87705,95046,42373,45617,74978,35578,22667,29639,15570,43801,17164,17107,51983,29341,99772,54530,51167,61553,77931,75969,46006,78217,83458,78554,78997,41613,23423,35454,87249,60162,71361,73602,66560,85491,13943,38071,96924,89624,13162,99646,62549,71119,25366,23648,79725,12892,82591,53400,19251,52716,10795,28734,72593,61102,31345,75680,57515,96166,39159,33142,76325,31371,26557,33280,11298,65903,11650,30767,35402,56736,24245,84031,68528,29290,62782,40889,53077,13964,56176,48538,25685,23897,77486,28954,69793,47559,24760,20763,39081,31598,38696,62349,66261,58413,38588,43595,37852,67945,49987,81096,39362,83334,27641,46654,62705,82421,59759,26695,42065,80945,25036,22546,34136,79262,83862,86945,53659,22885,20145,41465,28381,63708,51293,48013,87106,25350,36222,36636,70795,42628,65144,95128,63514,90848,28061,64360,48305,90902,10344,23136,48965,88319,31549,61286,96673,64506,13585,15568,60338,27846,87965,63293,14026,87186,41250,69650,52455,13225,93314,16350,74355,60701,40234,19599,29257,21024,71236,73948,19796,25001,70043,37942,30389,10496,31190,57650,97753,48682,10077,28650,24201,11720,63946,37158,41508,49426,34628,64668,10736,84824,12535,62444,63362,22179,30429,39392,95812,15575,72148,57538,47190,80923,99209,59740,97428,86419,47168,67569,17269,88337,48159,89566,74810,94608,39009,43814,69393,18395,19887,17497,23399,60697,79670,75897,70805,37315,58421,86244,59060,27499,35520,38670,46547,42652,50415,83574,25912,51896,23764,82049,74343,82410,80684,25355,76456,63518,88927,35835,46042,81988,31760,83907,78833,64723,48775,97793,96461,67580,94724,36059,45317,65307,17469,50829,71611,71854,32566,24220,30642,97168,82871,95971,24542,67975,35911,64011,36747,11753,35498,27384,34555,97047,13671,87585,17092,24263,54157,49938,37928,97807,17653,95169,37763,90109,56663,88858,79737,66248,34803,60176,54069,51408,20312,83122,97740,15569,12244,80139,51488,80883,73173,32940,88189,25065,57221,31598,78531,31329,81040,98700,70522,45524,60000,48227,19227,99053,35964,14515,18550,75028,83324,41508,91544,53669,74450,63074,21468,51458,35986,38839,53301,39888,49841,87431,85179,77402,60909,49396,64771,56377,19698,80628,35497,62427,76537,50363,46986,99251,53147,96346,10068,84006,72715,56533,25334,60323,70524,74341,54809,33551,67181,69601,18848,53773,70274,69577,31898,35209,91354,76198,78878,31564,98244,10172,14278,27161,39812,80873,41909,25732,19375,38798,76121,98749,91843,58497,79816,54489,77792,92047,54463,14976,76798,45507,28900,46640,35764,39685,90977,13195,14236,43534,71331,17346,12795,57245,54928,97482,96301,12026,44039,19827,80366,38939,43355,93813,74495,22220,63500,32841,41755,28615,15796,75088,48015,56887,74833,91914,50015,10270,91764,46641,62359,69715,84993,11202,85015,29883,98233,33063,35960,64358,56681,86514,71774,23869,79229,43324,87583,84514,70051,30556,59994,84338,84616,82830,65097,61838,17718,55811,67245,89930,35050,88795,78490,22313,34894,72062,86781,57199,29425,90388,55810,51835,42367,35946,15886,65923,56541,52330,88802,11109,33497,90400,21091,14940,35253,54587,45615,23014,53813,73114,59360,30678,98286,91113,52520,86796,79478,50923,27947,85393,28004,79205,25811,26563,91141,96461,24808,12701,24073,95334,55680,67573,28356,76118,81354,70379,59783,22599,17429,50220,70114,73076,25555,15964,71827,71854,25900,51871,20018,99300,78038,67564,61219,49955,93335,57390,83856,21707,52739,71928,13710,73478,12262,58233,19170,44401,84312,39888,51402,66456,90240,18629,67403,68838,18062,59581,73142,80598,37489,16577,36880,32267,25752,22543,26182,87819,91334,46513,50156,77776,22475,96800,89854,72148,22338,19012,30282,46407,63381,23747,38481,56073,26454,85836,92598,70742,88130,40043,97792,19127,31966,80658,87101,65549,85573,94021,83154,36381,88814,36297,78698,77429,87480,59217,97329,88379,68880,81598,21379,15968,70061,87317,52563,13095,89199,72433,82738,10714,95541,39798,10612,29099,99255,95885,47675,82112,15690,39134,13979,94723,37563,71114,37589,80665,30644,88052,88857,97578,33152,68485,93861,87286,22380,79143,82480,63651,77757,56602,82233,26539,70417,46197,97273,34714,96832,49438,15445,16214,42827,56479,37173,38265,35531,66629,57812,41078,77414,15945,83476,77599,23577,77074,48958,70187,24429,94362,25114,61648,46363,66177,38422,16975,22377,16242,76276,25601,40792,76101,74338,33977,76049,40887,72867,99903,64632,85785,57538,80885,80703,82639,16075,37609,79654,19362,10114,76170,10267,55725,57523,22357,32154,78676,84623,40266,46712,93470,93399,15424,57101,94207,80716,22699,37744,17706,10879,43936,67026,50433,91604,26071,93840,81192,22548,47857,45443,57368,81141,50798,61637,90649,67623,40034,89054,73166,51106,66798,45334,80579,27005,31971,96056,28053,41316,98381,28535,46417,77026,66960,76158,19104,85184,23136,25508,98466,49641,99761,12484,44206,75440,31551,38528,98682,91746,92778,51308,20249,11793,12340,38478,96887,22721,90188,99532,19222,83927,55261,17683,54271,79157,24512,95334,76160,84894,41994,73976,33761,16408,43112,50525,20485,59774,44967,22415,67667,64195,51983,93823,97040,42155,29339,90855,83506,24335,68391,16485,89566,48795,39163,35405,53138,29411,31396,92631,83844,54418,97396,80512,84120,59454,93025,38659,92075,41587,48559,70067,50441,22828,53577,93341,26966,98577,83532,77021,87112,93388,24931,84814,32137,33971,15251,88746,91819,15733,52145,89107,68746,67902,35017,45480,92665,18715,71988,66623,66477,93520,45124,58143,77507,22290,53619,72944,90994,20801,65598,65567,36419,93967,30558,37666,49541,91888,60699,42961,68871,83461,61894,15273,53771,13550,63944,28906,22823,84104,62855,93568,38872,56082,75949,70062,45508,32568,90195,50724,44014,67078,86270,85290,92046,72611,44915,94996,75945,89682,85939,46205,30142,14442,86613,14488,75725,61077,43856,60199,96246,90833,14509,26404,12925,35273,86839,51488,75197,94537,72547,83876,25758,52511,15791,80625,54327,52708,65247,17457,76680,17180,71561,25211,65876,90946,10682,70672,12061,23151,26765,47558,76035,11317,54595,63238,76712,24371,85448,82604,62127,35955,74094,39911,32847,15750,14206,88145,45484,56754,89834,79766,72318,72597,24204,53273,43236,36210,88295,63175,60420,55994,75563,41241,95305,80594,42570,25189,98707,80329,49284,35102,75097,58761,64794,21365,14548,63342,35385,25869,16042,54914,44660,53266,13466,55238,48992,49853,46077,89707,30256,12774,59775,50210,62975,69920,17679,97129,37514,55120,50519,95681,45702,37546,50374,27686,87108,21302,92160,29121,96250,91114,59779,72486,65983,11204,57954,97588,18491,87548,88211,63910,67361,65836,74973,44930,48349,30252,29733,15964,47072,73504,28365,36020,32501,82966,31318,75756,89947,34265,54571,99899,19095,44659,68676,41280,93252,46989,55462,41865,62970,66189,92823,57974,47483,21388,21658,73767,36196,90468,24478,23651,36180,79702,43827,38176,86303,37322,82204,34384,46586,23972,59445,11714,60354,63911,17343,50092,19171,97673,75741,66282,31570,23032,34388,77082,96577,55314,46599,58419,47190,43255,36155,24380,15539,61360,65319,43891,28355,43883,68192,73506,93675,46583,41316,46000,72144,59424,98882,32108,89381,91592,38567,48568,65230,16306,34584,79697,90980,82196,52615,58822,91648,41327,68226,41566,47954,60945,90703,98787,78465,42617,99718,23865,85949,29134,71907,96433,99097,78111,82422,82062,35255,67363,57780,52524,87926,88507,88994,42264,28248,41287,65249,29383,70678,50206,66632,91272,72945,35602,50639,31464,73523,54143,63565,13826,10147,69301,74493,89007,49506,56629,21930,25521,92436,73784,29222,94281,35313,73051,52747,92800,86734,38692,48052,52408,44425,40365,20013,54119,67248,14649,36020,62375,87938,32744,49159,61557,47721,74862,89685,32879,59970,24738,43177,58063,50835,69094,98756,18125,60926,14908,40992,29634,25199,55195,20285,22721,27797,88350,92462,41813,91790,52607,62708,91978,68750,99024,82042,26942,36669,52073,63005,37201,29776,35422,59139,54687,67766,28707,29298,94316,72082,76447,37616,58756,74982,92075,62870,36587,10467,80536,55587,63649,76680,39751,15703,34525,42943,53600,60750,60207,74705,56865,85056,69413,48902,90807,73109,84145,90377,26957,16748,45684,45753,69887,33516,19005,53867,93002,58161,48449,35453,24850,60541,57304,16348,36937,13642,58407,51168,44523,55075,25818,13149,56039,52940,45246,55294,67730,37622,14074,60296,80829,75818,40950,46749,63001,81377,90048,90291,46545,48743,35008,14590,63628,90230,63070,71507,92999,68392,35148,47681,54952,51635,45346,26228,28749,92896,70273,28299,77484,63446,97420,67435,81713,94351,24723,15978,66271,50162,33951,92294,57458,39917,83876,60326,18960,79242,22950,52003,44111,57144,38333,31272,90544,82103,71592,63323,34365,24592,64526,96376,92643,27759,80605,46159,86486,84337,95004,28198,26188,58296,43118,60889,15829,57087,81622,93404,99817,22907,45548,30643,48324,66912,33965,55005,83745,66760,21234,80714,68342,82690,27555,21159,71757,31422,58602,96525,93524,38823,17111,10418,18764,49555,23509,62340,67743,16321,88642,32598,25595,67360,72833,10989,42794,13225,54573,16561,72978,67237,10084,89325,68094,11224,48697,86918,32767,36868,30994,47758,11391,78685,16104,91384,69053,14957,33654,49450,30476,62298,21777,89486,63896,81251,57613,67757,39114,69534,22112,65053,33200,94810,64401,64811,40422,85868,95801,21632,93422,84052,88250,77338,28078,13340,75378,60739,45964,54272,82327,57974,97014,37476,71547,50168,85644,84545,38669,80326,12452,65466,91962,33571,87908,45465,30555,97294,87409,74399,13082,64818,60300,35568,24051,70007,98635,91319,82999,82636,56933,28416,93256,64899,39038,41125,48908,62394,33149,56922,82280,70270,77143,63334,61779,23699,41731,84844,35542,44051,10623,18087,85451,21125,64974,48897,31841,34222,21353,88161,14379,75302,29272,88173,80351,62343,37370,66260,78309,11354,89876,75873,44221,21902,20226,73318,70436,58473,35532,96433,22999,67998,77304,22381,23800,53501,46049,42252,55083,12521,85460,94993,47893,81135,63296,74590,40345,65779,65259,93973,78168,84519,94551,97158,82024,11514,81305,76213,30900,82645,90759,25440,16056,63979,79083,94861,53477,51410,92655,31784,70604,91058,85744,67850,42728,72185,16082,81184,57113,46938,69120,99979,61418,18092,99309,82736,30495,82617,77297,99094,65479,66612,88154,72963,96816,71818,56755,27214,44128,79394,42305,92364,69529,37354,76046,89271,68421,13647,14812,15940,48421,56098,76800,92842,77668,29976,29533,84217,28869,90387,15945,18952,78006,83819,56829,77620,42784,27755,42841,85332,83239,17969,28902,62790,83563,15659,18870,27811,51205,54344,36944,34214,83708,26191,73275,87094,92665,19600,25689,66200,27329,41543,61264,98177,43378,92272,68034,25224,68779,98414,46315,79025,17237,29104,64932,61624,90407,33458,12494,62734,95198,51580,61057,20670,63691,46017,34155,84236,33916,41415,36858,70556,42588,98966,45327,67768,66386,18772,29235,42542,43460,80198,60057,24227,43797,71516,27195,48265,34862,60040,36925,89252,74742,67296,24546,31380,74375,93937,70097,69011,39709,39471,12122,79881,85173,69797,23435,75936,20688,38746,17672,62005,59328,53071,52626,86873,75961,15310,69331,30441,52362,37991,53572,28777,83185,86059,76977,55819,91703,36271,51697,45310,54348,80575,34006,55370,35042,89196,61766,69934,72309,78918,42150,75710,91096,44627,93457,12306,79447,36553,10529,67825,55171,76823,41340,55095,19990,58478,65704,68523,88177,68008,57738,73695,29806,78860,79774,59543,11641,82389,13219,52233,48829,11744,53522,91409,49165,51597,38489,79440,57854,65265,69140,55583,14747,38033,80824,92239,22245,87181,48781,46593,51032,15142,74105,90156,28035,77738,56203,43438,75578,16330,32188,68878,43621,23483,41836,14812,53778,95455,29314,24365,70336,12579,94356,69336,62379,31924,19337,67959,67096,73543,66179,22166,91534,16897,35730,94416,51682,61503,38950,79569,55305,45568,55891,42431,64718,14319,85454,12624,30596,39978,82471,44401,19698,31458,60994,51555,63670,97479,92463,88263,71985,98962,83307,59928,39059,20561,99284,74148,55834,85035,39635,64242,60252,26859,30031,65513,39298,53044,63643,37365,80864,50476,84520,56366,89956,51646,39351,25574,56263,19367,71181,36870,56997,12032,41591,40649,62358,75963,81897,86474,76274,91905,32498,83830,15132,19274,35658,92204,95665,64642,62718,85790,78946,99946,59133,28573,22529,40625,67772,68279,59675,17987,57152,78940,35674,44627,88003,98356,26590,28872,63080,35573,51798,41968,51790,11621,10491,27026,58998,73822,79834,46771,66110,82438,71619,78103,39585,41195,77293,82471,41161,92968,61674,76515,64328,80566,12747,42627,39851,19275,70244,26998,50263,27342,80675,13978,33923,76595,71951,81541,97442,64299,52417,20528,78210,74671,25197,69445,50320,86184,49191,68448,11308,72003,33924,44475,84671,46298,58382,20243,91971,40829,12186,25915,85742,67681,57475,19590,95234,52154,51753,59475,80942,45334,98517,62902,12295,60364,32343,57935,80770,48644,85232,14226,10952,65434,70984,21105,77442,66027,34321,80306,15172,26580,31207,22484,48300,23582,96959,80420,95881,51473,43359,55765,67409,56712,15286,85268,85847,15321,68241,61913,24134,95400,84237,12857,59077,11801,67087,56733,81129,88032,87203,34460,34840,23805,98960,84731,24199,91694,48051,39553,23222,37090,32322,78832,78702,51049,89424,30187,77721,80634,96640,57315,78681,52036,64890,32207,60736,10893,99257,74339,14940,34355,15053,59336,13347,82493,24629,67664,16215,47862,42051,86664,49530,21001,36809,18331,27277,60299,53713,68991,61027,75465,31782,45952,10240,84473,52150,65688,40783,48220,54641,16548,45325,58177,73697,89576,57714,89380,78971,65631,15177,33565,47800,98023,60719,35110,43387,75176,13599,20749,66830,75218,32311,52100,30630,52040,23109,51066,26977,96361,40458,97903,29269,77340,92416,85467,32294,41385,73069,27757,94467,72711,56883,42829,55034,79880,35466,27902,90890,59016,84279,24298,38712,47843,37958,59257,13853,21314,82462,72615,99005,75098,39353,90676,27533,23703,77323,83799,64970,28254,31586,65467,59969,64559,98484,89215,70011,16678,55268,74607,51565,55141,15360,97558,45100,51058,58537,60784,75410,53906,34757,20758,55754,27241,93096,16185,70287,65102,14329,45082,77855,63832,33519,30743,98570,66421,15628,66879,42448,25821,68280,22775,74063,33046,83370,79114,64927,19642,67935,57984,22328,13784,52434,43543,60509,76872,50511,39884,85031,99217,50411,11762,75504,19311,98752,91646,39629,71433,26903,80473,32558,26176,93659,27708,24961,14042,89365,16523,60292,77903,75346,66275,33531,16348,35496,70472,32909,36245,92825,24000,84615,53757,50344,30027,97510,57998,19336,56955,45037,90370,53666,92096,10670,91583,40877,50892,80537,72303,25386,78676,53733,29381,61812,92859,12938,84094,40270,74952,59850,72831,62479,52906,26428,55240,36678,96099,30062,27154,28204,49922,21204,91334,68048,40787,18216,68035,94494,59711,49328,28524,82143,88842,29211,13473,23777,87750,43622,96914,68960,63089,50447,28590,22603,15048,58117,55778,99310,39179,13158,27390,71524,71106,92835,62922,38658,26505,78915,91547,97286,76135,63839,49161,93066,23247,62465,77797,33994,42140,92324,69644,80248,87457,96745,99642,57585,27239,96830,26887,22704,94669,80549,45718,82908,56768,30653,28796,60223,52219,19826,12231,41709,55115,41830,41489,68716,61277,71102,77645,24035,83118,63010,66642,79424,79197,76918,50137,94066,21888,39924,11517,14657,73205,99965,88415,34455,99835,18166,54754,90592,95716,28421,84118,36114,74209,79328,19690,87975,18395,53182,11260,92919,62700,98152,60506,95831,98143,73849,88219,21794,21211,30817,96419,72057,21432,54349,77593,83788,95935,77746,67912,96580,49534,69342,98652,98816,92810,64177,36759,80394,84854,93279,57413,57331,23296,67076,41198,34608,73289,82704,51629,57001,48862,93987,57410,29172,90815,74014,23928,75595,92318,38712,61644,69696,57028,32070,54885,35329,43170,45998,88622,69081,58991,82912,38363,89991,43179,45775,75421,38714,59209,28022,19907,59238,96414,95259,89518,11306,85481,57309,25933,30107,50637,61437,59667,47945,71223,49325,74074,37545,14242,70922,48224,40407,39466,22067,22696,17769,90850,39793,93093,42200,67765,62732,25183,81770,80549,21669,11687,20360,19451,26382,61888,22964,19741,23387,48801,42007,22380,80260,37489,85680,13842,23251,87748,18202,49051,15952,43029,22820,75970,47348,96918,62764,31307,40526,34494,56189,99069,69740,76144,48338,12393,22969,19808,36054,94886,49409,44622,55497,70383,66018,38476,92326,80862,35967,25577,51015,80796,16762,42920,85208,62488,30033,57448,38436,47323,92148,58661,78319,15857,96530,14873,28066,93528,54550,31790,77504,94430,78871,59504,14213,33014,47555,23594,13609,61591,94963,88979,52749,32970,21787,15063,80463,21450,29462,72372,67117,80998,79686,53575,90967,69987,25896,26897,29479,74757,88630,35661,21070,94280,41658,77200,28425,80815,74676,86556,27219,22477,50935,66837,68591,61401,86326,61144,87697,51698,37843,80001,40656,29542,98304,50682,17104,59665,78610,32460,45628,76048,10037,77354,85102,81880,15809,38825,16285,76798,37965,50614,44389,33909,91428,18977,57489,96099,79313,35341,34168,66880,69292,29957,44468,30113,64737,54245,80953,88467,89901,92766,28824,22929,92741,30813,72150,93349,61192,89469,50796,68668,44299,94899,48709,66619,11366,16396,35388,13067,25470,18037,37625,51273,54755,66560,32320,67628,33262,78990,11204,18876,12990,58207,64785,23695,74844,75302,64617,88261,68432,82460,75146,63455,92456,39731,97161,19286,46408,11612,34492,61568,91075,24678,15628,74142,10480,31845,66669,75068,39696,19917,94161,19325,27126,25968,42829,79531,79297,15699,28371,40441,88469,61968,63171,69833,19686,39077,36436,71166,31854,80534,75266,80024,42874,64137,76817,90933,84661,62290,65345,62745,22430,79376,32970,80239,20846,68413,43638,34468,24493,95329,89206,74992,19790,31657,29847,37631,65231,72938,86454,41992,55339,49603,95390,39640,53060,57802,54216,81065,45580,56659,67777,87088,29279,98492,62313,42730,87268,14807,68913,48384,72476,76576,48842,45669,40583,24092,15312,62075,51787,77528,77381,86514,52258,82469,15595,47825,79893,70630,44604,72349,60138,61535,53662,95428,48724,47741,14145,68364,46136,37552,29697,63092,84912,32842,43804,88606,14812,92978,25455,72295,70814,99783,35505,17594,19703,27885,12996,79527,41051,39559,62076,14742,56848,94013,41346,33575,45606,43216,15561,58233,79256,30948,67435,54725,53685,97061,15976,55919,19267,88844,67766,46673,70342,10993,20178,98255,47632,99813,64634,79672,22113,93586,36576,56170,84422,97353,88269,99035,95085,89760,28058,86286,68252,29595,33090,61137,26213,55850,47806,32738,19490,56465,43156,47191,96523,92652,96431,86943,99651,92572,72117,57231,15344,18838,80500,63750,40826,58963,88430,68572,51746,91164,88426,60927,85071,35614,21409,51177,45745,43238,89048,68549,72841,89312,76691,39408,86790,19529,70659,17112,40231,56839,20340,98709,60403,29323,34940,24662,59151,18131,48170,35937,59246,60856,79241,89697,30928,65666,48449,92143,17320,41129,70502,56935,78080,50047,70567,22162,97932,69238,35904,27715,18783,14232,91845,87138,44867,96637,24585,54994,55466,37081,47077,63670,18842,29008,22929,95595,10691,96177,80647,10564,58233,80554,10124,97492,85198,55498,17005,37174,99617,36418,64367,99986,43597,44514,95173,85382,61034,64568,61526,38171,16832,34842,68632,40121,47221,21285,28246,70170,95563,44728,25816,26208,95114,94435,51654,85893,39640,42227,18554,51188,62650,81724,56671,68056,13493,94561,58759,96081,65472,60960,45576,78211,98777,66033,37718,33365,53767,12414,44114,37034,73165,44391,40688,97499,37021,55080,50513,72019,79732,61202,70261,93828,29770,73153,57389,66370,84573,37052,89688,13078,58389,62924,75039,66432,22289,90983,33615,46624,41336,68295,37987,18158,65310,30893,28257,35131,37549,64609,27241,14164,47009,96787,23039,24205,59744,47266,12802,82320,53884,23845,78240,75190,36554,98414,54318,14933,62503,46972,18099,71520,98028,89876,69901,97457,24962,84437,62737,31355,21028,61372,76031,50223,90353,11386,52861,24093,41114,53427,47397,37224,67846,87007,24186,35397,45863,83960,59310,42431,79354,30525,50921,76740,21755,60888,26099,32226,50192,19393,58583,88089,34087,27422,64235,95189,93003,13134,16796,80610,71535,77081,78464,22349,59575,92256,79995,75729,82817,23352,62805,69161,26884,28713,26441,50678,36759,18528,45503,34669,94341,98108,71181,38954,62781,97108,38850,44015,82159,32908,67952,27116,92910,31362,72487,88053,67121,20403,43531,29701,55234,58047,55315,69894,27654,62250,35338,42105,88688,52384,25707,94957,40237,96728,85930,69235,96575,28809,61638,21732,92098,97920,30561,52625,77283,33053,47042,86844,97068,37459,92717,69274,75650,70547,36951,75904,61440,58157,21109,96295,97214,80678,47632,81144,93710,82395,49977,80066,32180,35190,33318,51081,84459,65729,46469,67855,36219,81794,94391,14213,93079,52469,12279,23555,66541,31128,16795,43053,85715,35771,27168,60707,51109,36243,86697,86836,11615,43078,60942,52058,54208,29861,64446,58518,76749,69571,53171,92441,42662,33947,68325,62633,97374,36413,86884,73549,73048,18254,99779,55739,72972,75383,24810,23898,34672,43924,97260,71317,13221,79829,32966,27353,63762,48390,90427,20915,75004,97121,60704,33981,58389,32109,83280,19047,84297,34340,42229,13843,41822,89213,88198,47911,33522,99864,33238,24395,14355,15193,50315,20589,15787,68821,15497,75148,40643,55923,71320,67305,85317,49111,95641,30491,68842,39797,41753,75076,54019,61617,36177,37532,85055,97678,52439,66966,69704,25920,90921,53980,14571,83608,97236,77903,67973,44897,86707,65388,39454,33851,32927,83181,33073,64768,91371,29241,32966,68252,10146,54037,92017,59890,15932,22445,97546,42063,78945,55947,75200,78780,92045,11463,63817,29732,88094,85149,16561,32869,77784,25363,91137,27764,94030,39028,88200,34185,91777,69144,65683,39378,24653,63237,94881,35695,20133,61989,46506,86761,47176,35479,86061,64783,81567,26777,73983,72659,51088,26309,76781,75661,31027,50528,50054,64270,89751,88437,96972,58838,52018,57682,72129,95826,56479,79354,42844,55922,30812,29978,68810,99109,69842,67395,92891,66922,47399,59731,12764,69101,49167,38182,58896,34237,84450,42471,61223,97596,87424,19572,47674,52203,67171,37392,44700,83955,70082,53236,52554,39176,32882,18923,39855,97583,12156,33241,55115,25142,64090,61247,24106,24827,29344,64858,65316,10820,39346,29765,55649,35570,50921,50067,50720,88084,37631,40891,30222,56933,97368,14123,84315,93390,42182,77135,34821,93060,58365,78673,12792,16249,43072,68541,14317,77502,47386,92090,99908,52332,74021,30175,66742,26799,61105,12196,63999,73470,93311,47161,37668,97627,49943,21581,76100,24413,75752,86315,72515,79932,94733,55935,89018,55106,83917,95868,29296,54715,15348,22171,22156,61294,38238,28523,96406,89267,82442,65172,76135,14991,57218,16704,97277,72086,34746,55414,60904,64504,29068,29762,91566,78765,25279,38907,62210,49416,62716,57485,81125,79790,82685,36993,53006,97791,40595,90283,72957,48155,43803,12382,36515,80868,60672,54892,53626,65614,25581,67198,57698,57208,44260,81113,34941,45350,63199,49792,60006,42480,41907,49971,61284,86030,91785,83920,68365,17532,45335,41815,37449,65051,97871,41451,40684,35351,98076,49460,74835,71141,66667,33167,28332,97011,95513,85777,90837,35537,97655,99393,88852,54059,57232,66745,98456,97521,84172,15443,61522,58241,68863,87724,79115,23376,51809,31374,15432,15064,16785,94537,24065,33244,99860,78914,28669,10831,77034,55114,88199,89659,84744,48739,53228,67737,25264,49426,36906,95462,86171,26621,34345,40859,52929,77813,87485,22019,12021,23669,66197,26600,40833,80326,89778,66539,15871,16314,55317,52797,88035,13345,90498,69799,73348,90222,88469,42916,35226,99391,98287,97074,35564,91644,51054,43809,23455,78209,12247,62912,49225,32389,20870,53460,29608,25064,42582,14308,71239,66741,97489,23781,70394,23424,54893,79179,17366,44457,82654,35171,60165,59708,82865,53427,43379,19164,83452,28265,44359,74466,34160,78052,47594,16914,83029,77217,14858,67385,27762,40497,82295,75054,86471,42258,51595,18616,23954,83638,31055,88302,56412,23198,24714,43093,61797,87330,81691,22046,41352,36127,36272,57581,71053,95451,12745,20202,69445,51494,32283,34443,34142,68488,86995,21567,24448,70137,59777,54071,62220,97464,78277,27091,35257,49262,30252,21976,53796,29081,84379,60782,15757,33454,90823,65931,14079,98354,61285,87685,10770,70723,44821,55389,74457,93155,51421,39112,54220,56768,38970,42713,31597,63624,53835,85598,68468,34484,64002,49975,92225,88118,59491,25841,47185,75560,15023,81542,53700,80020,63664,39019,19211,62886,55434,31313,16595,60772,27689,14520,45974,69316,43339,52188,37901,58926,70828,95365,30319,67733,16342,62693,69324,26337,95873,89841,44569,40931,22376,75567,53027,40552,17312,27689,44163,24813,67858,24873,40362,32822,21408,11361,57309,96484,74326,99069,26684,55126,79814,28821,48182,18477,93685,54512,88224,34623,16943,37812,29280,52586,58949,63663,13058,56784,74610,17258,96499,24271,25706,32771,79068,25724,67542,21026,10745,35135,46520,60523,74908,21861,72045,96459,69853,14108,48288,89077,49358,30124,17241,75484,80184,97579,32439,54630,59897,84228,89663,58637,10959,66959,29949,19672,10221,42304,18131,15233,43800,19254,51690,33291,45310,34624,55637,25027,44624,97151,40315,98759,52946,58581,92176,28695,33848,51937,34879,53708,85030,66483,60618,35512,72935,92955,35119,54459,52786,75791,47592,38729,78563,24167,94117,65379,47280,12193,29153,31898,11708,69224,73134,37839,87218,94519,79393,65194,13558,99738,20993,13339,84096,20263,83850,35829,53862,15156,73358,75734,45931,78799,30211,53969,24695,72865,62364,14274,74398,62451,26922,60533,64025,96590,48529,77195,21220,44875,41837,31670,29724,35404,60887,21864,97941,12269,27183,70672,77483,40410,45326,31827,19712,55558,68105,75455,19002,34315,31804,32994,83974,39871,44446,70841,12313,44441,93709,46777,10301,66563,55246,86262,13459,81750,39634,74803,10336,44772,63907,90037,77849,58811,27141,56671,28714,66156,97372,21519,10008,10210,75651,41127,97808,28196,36553,55113,74034,16375,99402,89673,84384,52733,85485,84039,16686,86323,99974,76890,15129,94300,74630,60505,92892,51503,70953,93677,54246,85331,93106,49259,11633,63064,48224,95162,90436,95748,72392,99449,33225,27840,70287,69245,63357,98632,16065,71144,18436,65051,39346,30390,73324,80617,62944,55491,80941,62007,11653,58189,29127,21693,15020,79454,72132,58353,13534,64399,37495,35560,45789,95640,85681,87070,26534,53125,73609,49276,30347,13888,92312,16724,32622,73222,37063,14093,17998,49049,80429,59237,24646,45658,79107,94875,27271,79948,48902,11681,62868,73702,55160,43316,39796,45645,63352,70786,55227,42371,77112,34543,90651,80489,62520,32380,61146,17487,51144,65900,77187,84419,66726,24588,45382,63599,69623,72220,47921,44449,53797,58078,47993,45046,46766,70766,15925,73588,68958,64511,61426,92396,41225,38924,33446,45188,57893,27878,36963,39152,76126,74546,36382,74429,19357,66504,96067,78103,45013,88130,78028,43814,59621,24904,94738,95731,60466,44074,65335,26298,60693,36685,69336,40032,44884,10947,26054,58851,62919,45211,13920,82565,84917,19255,57204,38262,94362,20539,84525,65645,78712,30355,23995,86911,59619,77377,47246,97699,59009,77687,99300,32481,61136,46110,95671,97618,37045,40300,53486,43353,45253,29049,10374,32507,55381,82332,44044,95125,47310,38592,48101,36235,64722,92699,79895,62995,29380,88306,71927,23378,26693,27624,50933,77978,88197,81542,32930,40099,20344,21903,22057,95068,83121,69338,68119,98954,95555,60627,72712,11231,96997,99050,51545,39092,11219,60875,28694,66585,17334,83740,38329,35154,48062,37354,88290,49828,59665,91637,47782,87438,88629,53910,51714,65346,57184,49543,40544,67794,11866,99823,61556,17823,20484,34107,89558,40008,16851,71136,27641,15947,72690,64170,34192,65467,70956,20010,73383,75500,29364,99815,49391,88924,21790,47837,18516,78478,12387,41939,82515,93568,92918,29123,17322,90516,48305,83010,54596,28239,53480,84868,10725,76984,79310,31532,85493,12557,11824,90552,57445,43244,88511,48243,69035,25687,23109,25710,35134,43126,49814,59470,76004,23579,79007,93411,74825,98880,61122,13872,85531,13469,14134,44764,44692,56904,27044,36957,60931,61943,79575,27323,16135,71545,12946,86179,20558,77994,22052,47924,36614,34162,63005,14143,64730,75662,15367,94488,20351,26446,39527,96614,13219,74010,90052,20292,73119,52605,51784,81567,20223,97104,91694,32767,51690,35641,28737,79738,96156,61100,25172,86680,97436,78704,36491,76943,88362,47244,44943,30329,36101,95303,25431,86090,96265,68036,61014,86712,66791,21825,74198,74865,29220,11505,46926,65760,15737,39008,55863,85727,45403,22215,77877,67140,34216,84784,68152,86343,51992,22467,55308,83867,59718,81140,65708,89251,75977,77148,71234,37732,53773,84581,10206,71224,32938,98195,52841,47403,28251,51770,81507,50415,82730,68309,23859,74758,37251,38545,50413,37736,21218,13788,20455,12158,78651,98580,78339,14985,39869,93348,53184,16029,89482,75308,64616,47797,37288,80591,58907,58776,78218,86745,64004,99955,70414,81370,17603,46485,83853,61253,15542,70732,86002,88613,90330,54980,62157,44804,36879,36484,37696,83288,58438,19151,29973,63213,96148,80603,18536,17627,69040,54350,64644,56767,48948,39024,99746,10549,88955,94485,59579,87733,22097,97365,83435,40711,81835,63730,51249,63600,42054,87719,28826,14432,25235,10183,97027,74678,96401,16987,70969,82366,62622,52245,57039,24100,59950,20661,29535,95505,64942,88816,45317,90840,19495,60009,57929,93823,13074,28134,96280,26064,46039,45130,63427,25359,27022,59277,18158,96044,14867,38476,22943,72456,12142,10063,72657,37817,40818,22349,61708,16621,73032,16332,53173,35958,40227,76407,31665,95312,42876,82273,35913,46375,44589,16580,56112,64772,46939,60781,19903,75174,81764,98883,44172,67907,90758,61731,62931,50242,54494,71212,74110,12283,95108,39224,38496,62729,64871,63446,99552,61835,52343,52760,15814,54305,86099,67389,23044,31888,50772,10502,26910,68258,44425,51472,49756,42001,75108,38413,54556,61696,67342,40973,54128,55882,71478,48564,88128,85659,63275,36770,23670,83633,54278,54466,79892,69919,39445,92859,17596,97357,26352,98432,16600,70045,14535,34016,33191,81960,80419,34207,71250,47653,73319,16504,17104,94564,19572,18970,40321,81602,72665,72039,38278,82742,84132,42194,23193,79833,29261,71353,64670,83379,18464,67174,46347,42228,88881,93020,33692,83138,84440,80603,27810,99951,71112,16488,73332,36046,32510,23386,34160,37568,13060,70043,14453,71762,11041,61483,10337,82598,27214,54883,36418,83096,12735,15889,35858,96033,27863,44952,20378,43705,17352,97027,95936,16988,56371,68944,91636,76206,18669,65267,21375,79263,68531,99849,17809,25955,84374,57293,88611,67473,81308,33106,23171,52232,57680,54903,35264,31994,31287,57523,57997,83812,23505,33272,95821,80730,17529,64980,81186,39783,67103,18939,32183,67122,57563,55925,80105,24943,86313,89235,15852,79916,19759,89010,26428,38549,89199,62921,86047,74247,18465,40833,46775,45524,18728,32700,21029,10220,78028,95116,28712,18395,53682,14289,98922,24270,48587,63737,42888,58533,19722,47696,48504,56653,11739,42476,81177,49101,27954,38462,12582,66860,17037,78668,39081,16878,66531,73432,81744,47300,20925,12738,29454,27539,31451,59940,82045,42814,77502,45531,38314,49202,95170,30366,55304,89289,35772,71884,40409,30197,92130,47162,67716,53113,67645,32390,86661,77976,94451,61129,98556,37480,36318,82750,29049,72920,36491,82063,72160,67491,96880,92642,19860,52823,26447,28723,78744,80948,72307,67827,51576,82156,40709,53980,49820,83596,34874,89997,14639,47899,41624,26575,42327,18064,62012,64682,73253,88092,63446,47556,12638,29682,58343,98384,18928,87565,57408,14964,62703,95262,35721,61766,48025,73708,82718,43716,97554,57596,68242,57476,56719,19462,93923,37796,86949,93971,91526,14321,16934,95991,81812,90510,42847,69353,65131,73086,65029,89867,73036,45679,32717,14281,16294,11954,49609,51667,71853,44793,27345,91376,49230,90741,37715,40366,57449,77262,87285,29076,90113,33932,62919,17213,58843,35978,63828,88479,30335,44445,87420,65554,68388,53110,74253,94384,10354,81829,15147,31899,40500,99487,11835,16474,84584,74504,64731,44713,18428,79989,24964,30204,60339,59525,19156,72555,11740,60246,49357,57921,49541,49600,73814,19858,12466,57175,68781,87167,64006,45666,47992,32860,70078,59050,84256,87641,27004,74986,99970,21600,94829,85060,63109,11269,69564,11698,60513,73819,53563,33734,58438,27112,65436,58805,16813,14569,50086,94501,46408,35169,47872,71868,48050,65823,84357,95228,30295,84240,24505,37802,42857,43133,44320,53524,58876,61248,27526,33725,54483,16705,68758,43693,12987,16811,20841,39254,89036,97382,79088,97083,44248,36000,87166,42651,17768,90034,96479,87218,37766,36160,40252,63103,63216,51078,89557,36655,19735,58225,12130,81821,13811,89654,46379,19978,95616,31085,82123,39072,84629,81269,70070,39333,24045,22564,59364,71620,91134,59095,25508,62752,36892,44179,41086,94789,10919,22994,49574,85900,94743,94872,30088,47340,99344,15154,71174,27558,97204,28256,93218,15214,54518,12067,41446,23473,46462,91533,42599,75580,16649,90874,12682,81852,93463,22513,18598,53299,18321,21691,14077,81380,36297,57210,84882,89680,62078,64803,62634,91862,11028,38795,38174,24021,14958,60817,62565,38454,73366,13819,96334,89806,27408,43024,24199,51173,26223,91648,52004,56744,11551,85541,80857,66362,93366,24843,86918,76338,39482,69691,92142,74814,53733,46872,66586,84206,72088,39885,37084,25177,46930,27521,82718,97962,45128,33420,77763,31695,14228,69759,89896,63562,77965,38170,58316,26764,78832,33251,46206,45508,82544,45547,63293,35165,33556,56049,91938,95319,84187,63400,82319,33863,85820,19500,47212,65760,91063,41306,85792,76619,40147,20960,92489,10400,19221,43652,54957,42651,84754,72376,80266,16246,76252,65531,78937,34700,74786,35107,77841,75115,83030,73378,20414,44959,94693,20735,73051,22807,45854,76324,16358,31963,60830,68637,94324,79810,28603,62005,47093,95576,34417,48465,51628,42228,75752,50964,41368,34766,82588,41759,83024,75026,70874,53405,84556,23063,23072,64627,74624,26248,78146,67093,60797,84302,65623,41138,29432,95794,48954,40558,23933,42240,94809,49627,61491,68711,89789,51397,85763,82646,93909,94524,24966,43041,38068,94590,96505,42171,10652,94351,80070,56098,99790,33275,14431,55530,85746,66436,85705,76782,26645,39471,98752,46381,88090,46345,49067,90878,86019,48427,18821,83284,42166,81231,23759,11271,97012,15134,89962,18813,26422,88472,17567,52490,30587,83669,49418,38203,92131,37218,84581,22024,34615,37322,91428,97209,28264,11196,49766,43854,53596,73342,36776,56510,44334,80616,82680,32865,19917,87043,23723,73276,76740,33383,58532,81376,68100,78487,78128,33460,21904,98963,31114,31632,28570,94673,88256,68273,63861,27918,38061,52341,43902,67966,53014,29377,93696,30133,58581,59744,68408,44915,95290,83335,78776,82433,98577,68275,33094,45638,43084,42536,34630,24595,33119,44477,55237,16201,38514,29855,37758,31855,68866,37193,79370,44243,99866,24845,90654,43777,20781,11250,26955,48429,61654,97060,41924,84277,77868,65873,25808,75745,65569,65298,21178,28976,40994,82053,34140,79451,84729,74035,86133,28611,44599,35151,18026,41683,25839,57575,18745,26863,33460,93901,65366,55134,62796,17064,56991,42156,65698,16840,11767,79632,40107,79139,78379,83917,51780,80315,73323,18927,85549,51849,62752,90781,95015,33305,62287,45349,75856,75294,35739,45603,27055,20398,80256,72227,79731,18066,92082,11138,89594,43486,11089,70708,48246,94112,24012,99082,84444,73822,90995,73730,55145,40401,54976,10894,33397,34660,25147,97730,91900,87586,41544,28216,88360,37163,28899,35578,19777,74269,27595,22539,48369,21217,56847,52251,15060,69295,73915,32650,32744,68791,36121,45599,48031,45522,88459,84671,33195,41108,23609,13954,70050,27872,67147,48541,90218,19606,47292,87823,81131,81354,89255,59551,22489,16789,84003,15625,23724,67020,43888,81924,41459,52488,12320,53166,91129,77839,36298,91106,96003,89357,62713,76814,15192,80804,62077,44304,82685,90200,51561,84626,67834,98065,85585,10177,49671,35109,68958,19896,87405,67811,47696,92629,80880,26770,12135,29195,85133,44018,94161,19532,62817,52086,91464,49547,55001,38608,52384,92241,94228,84831,75420,85440,94316,22525,99567,69621,28616,42646,10968,95770,37152,61094,65399,67619,80758,20407,58838,73191,45474,34606,96804,74116,47841,87212,11181,17250,24903,89778,47738,40314,10708,21387,14987,50439,17690,46883,81811,70882,10853,55855,73282,14501,93722,95791,14361,12512,66717,52757,59378,87533,42392,90241,83743,63673,24497,34820,33467,52981,63780,45226,68643,55433,25396,17809,19469,42250,81030,20760,42806,39147,87452,20105,93411,96054,82995,36638,63787,24409,37728,83397,58057,63394,52242,61126,99156,70324,61313,59623,35020,47075,90296,44656,81901,12086,36071,94740,44395,45807,22012,22317,75261,91274,95218,10428,74912,71714,39006,97255,12214,12300,50070,45440,20610,53281,31015,23568,99222,59549,48485,82077,61050,28906,46779,19508,14817,37507,15064,34217,67718,36650,86825,90469,17458,45040,66629,79365,82319,86598,17096,46674,73041,68737,59788,63352,20576,30935,14755,74569,71978,21433,85051,12039,48740,75124,10211,22001,15781,15980,32835,47771,30008,36933,39915,57049,27657,51705,28354,40612,11361,96789,95288,58924,60697,39688,32472,93806,48657,40819,47049,83073,95877,99733,98002,31163,46017,34881,27333,83904,28458,17399,49304,57522,74094,33275,98113,40098,16242,87962,40475,51804,82469,55117,88518,26761,66417,95885,68066,24808,64248,26028,59510,72874,95249,29425,61126,63567,42237,43581,83398,93331,49714,25174,60356,97615,64194,17367,41215,80288,77865,48176,49014,74079,79347,29100,10448,38597,29963,80997,99901,56016,17405,53080,53690,39942,34770,42397,24659,53951,85437,53868,31385,32344,72291,11539,79434,81721,79606,89126,70124,14808,82657,35656,19945,46821,12293,86314,17695,98528,68820,13036,33811,48083,43312,63966,28267,59456,60779,14479,24216,55790,54854,88165,43017,82399,78768,69943,22458,56608,66166,44946,11973,39761,70336,17424,90897,92843,99917,74630,18519,74886,38643,48053,55910,66666,79150,10684,54680,74472,69016,77030,75954,36640,27974,93150,58298,99595,49839,38259,35398,32941,52346,17707,96744,10742,47954,21979,19109,51437,33893,34717,47883,86206,64580,67858,72148,76051,11149,51323,15626,38028,84811,38472,94019,56909,59020,16798,80365,26723,39359,25361,22192,15217,49953,16028,82522,47053,45235,82055,52035,33265,25746,65815,53324,81210,54872,75287,90954,29704,47937,22466,97902,77715,99799,25443,35568,17417,18272,38211,45913,53386,48424,91003,17144,24187,11693,79589,68577,57193,30654,80928,58239,44640,61530,89333,55219,38306,71559,36337,16146,54193,94143,52524,79915,83672,18610,61344,43663,36621,10338,64206,12295,51208,10509,46446,37931,20003,46229,27966,79721,83011,90605,84533,73971,15894,35137,85936,79998,46642,56189,86097,26272,74602,53511,41706,31493,61761,17164,55282,10682,87075,76445,82594,34448,67975,92157,11762,81201,67743,71668,18187,71177,45720,94108,20980,44029,60398,13277,71233,60354,75473,35475,93620,83270,86344,65717,29044,12159,79167,77669,57226,47875,52080,22166,44417,90449,63663,73850,29871,48322,97774,48803,63563,49438,81387,38492,58242,61269,98948,78155,64442,27695,87825,29452,32796,88806,72005,59549,33627,60390,75511,66678,21613,67650,36681,54389,41962,37470,83167,24337,29021,80045,27712,87121,37727,23653,55668,24705,33323,29767,19706,17839,44373,15964,60425,60952,16612,18605,27592,13860,35682,60274,48039,64267,22909,44894,52178,73911,29759,14171,38166,25828,24061,60911,94801,13916,30188,17284,42685,41068,88832,32882,41295,70481,34702,68899,55703,48549,98584,84957,33528,98870,50565,77628,61185,43087,31063,61261,20749,81942,45533,31551,49576,93851,75612,74998,39632,64233,70692,68907,31572,12362,32175,16552,75231,68558,69053,11285,96516,64704,47470,87159,37279,57377,27212,67492,30304,23314,42984,42539,31529,25395,49920,89900,33370,41321,33037,78563,18373,45092,80310,68400,52022,72607,55348,12115,96238,38390,63047,57899,28646,34253,95237,19782,86961,85990,27071,55729,49501,21856,82282,28732,34094,37970,52373,90734,53168,31025,80519,37745,70733,40482,78681,40813,61895,92953,84279,24523,28909,45605,35915,73044,62672,65816,31758,44000,86194,22554,97464,21626,31891,33808,41042,96378,71223,78565,61170,25833,16834,80607,23259,37213,88032,16788,49035,21310,11172,42211,83968,86120,97970,87182,93581,33938,89408,49580,56037,35779,92691,16331,50530,82702,53408,74478,77734,18983,54247,89989,20441,51345,47635,21506,77242,33454,21725,58447,13941,15187,39398,30796,61904,77290,26171,92755,97654,60430,49127,62878,69340,79201,43742,60862,74189,16168,33759,39457,57357,49467,48396,75003,28105,73018,34080,81017,41590,29470,53291,53352,42645,78767,52450,92728,79097,92115,86329,67222,63458,32771,92305,40817,40846,78146,99917,14780,21698,30398,35953,21966,49649,93303,72284,14678,31880,38438,39525,80499,42808,97984,72223,21269,94157,10415,32776,82495,66092,18357,62989,88166,83729,19603,68556,92129,21155,32256,77546,63326,25565,54322,24098,67108,78909,71573,44512,77593,51990,97226,62906,24732,36005,88128,34452,41466,68156,27672,70886,71979,11528,32075,92742,15046,27697,88141,58494,17099,35331,97816,52583,54601,65678,84006,45729,83870,53106,36138,14395,38109,83325,76496,60120,12008,97907,36533,53666,23795,39407,15862,53494,71423,90661,93969,34380,84177,90160,48070,35549,69874,20404,41160,99960,21817,65578,12955,19276,71851,88424,55619,99178,37612,47385,12840,69440,80122,51031,46197,96694,61580,87516,88062,78675,35410,72796,99645,44638,80170,22758,85581,94172,89679,87523,58167,19980,46981,97780,46903,23879,52010,31508,39887,78664,58269,56615,48229,32980,81886,75705,21054,75692,47412,41715,10977,93669,87360,78507,10025,71488,36531,88445,85719,33710,25606,39713,90988,33890,49790,12693,93172,62768,46825,62615,65159,35417,63614,54620,31285,26151,19901,97583,46692,29333,41439,46804,49320,56903,90324,92524,64982,74617,95250,73101,41385,18409,33617,94279,16016,77832,22284,94022,12897,79946,37767,62252,42956,39373,21224,61223,18219,79863,31269,45837,75477,98995,28656,19868,90988,87280,63362,69878,35032,99553,41943,61433,64460,48784,17051,31579,35486,31538,87451,88363,32308,85625,59873,33438,87365,99666,77228,98906,24761,72466,39613,95276,44716,68242,35080,46084,84554,67467,75237,31749,90476,86281,27295,35254,18549,62889,82420,71246,40367,34874,71512,96013,68939,61398,76848,79929,67774,60910,26085,73192,10231,94500,46846,58723,98006,21349,22340,40384,70016,40761,47071,67141,76574,20707,76899,92357,32372,22221,16869,17600,10795,62841,77009,58264,23350,10464,27621,82733,52784,46623,48576,74219,59259,98001,77411,17271,87535,77015,61413,40839,58335,48941,47433,15313,99376,47925,92714,15221,80109,44953,86990,87136,78555,87498,34143,35425,22671,97922,36629,11762,74920,88371,55480,41898,35861,77962,20784,71470,46174,61934,41628,80089,13048,15161,29039,97930,80194,37415,54823,45406,46319,66071,80667,67090,73035,90934,27517,65406,96476,20011,90379,51101,89244,60368,30280,31858,59439,50871,75404,38039,79349,13602,89917,37464,11079,25010,91915,91369,54817,53227,34516,37027,34072,77835,67964,36534,45774,33061,47702,81099,74746,88817,82853,74241,52590,82448,23031,59010,40994,35812,71234,62329,10613,79807,85871,62843,43174,96480,34250,94294,79032,37590,58827,67415,13468,81390,90569,91961,39125,14638,43679,75304,35495,44003,74833,84191,96259,18383,72710,92061,16437,96015,58192,89642,10742,68085,75036,57213,66719,42887,98509,61091,76968,56105,20472,85383,23654,92358,50725,97784,55406,48254,98798,21730,62528,18526,18099,68320,56023,14489,46281,64795,72149,45259,40071,26205,66878,54700,69190,79300,85626,11157,24352,72424,44158,24636,29050,87581,42077,64418,73310,93576,30264,92575,16301,77411,65161,50201,66574,42413,37900,54840,32496,93674,54204,34605,17870,92028,47362,25526,12870,54236,50414,13026,78789,43832,74871,14154,62502,19631,80981,76869,21183,21216,44921,36360,66762,13679,51456,61797,91785,65494,30031,92871,95239,39876,60968,71553,94714,54088,21655,63407,17995,17526,83991,71354,18795,29335,74092,77039,41972,10908,41600,86038,96424,63057,39500,57210,87062,81637,66830,31870,16432,44118,54973,20003,26310,31142,14515,82267,75253,98312,97402,46031,93459,56016,97404,38514,25293,41513,23362,85131,47834,53693,45584,79368,74483,10967,41780,53550,35347,16199,96248,42240,90788,57984,48057,24286,11318,89381,25643,91378,38069,57359,81088,81325,45288,45309,61256,62680,34882,47162,28919,72975,18857,26630,14166,66222,93068,23682,16688,40172,12984,43809,85370,97004,34629,96483,47270,56008,66641,11625,88717,47269,93199,74914,25318,14929,40600,59770,53023,47735,89306,76635,84989,91957,45212,71304,12428,69505,24058,77572,52458,80026,90962,85755,50303,25699,20431,13603,79957,50678,48123,49206,46265,52589,63881,46254,35480,93970,71410,70984,35156,13577,80863,70814,15574,52125,59417,80318,25363,42893,58909,75785,77713,35763,97173,94716,40889,65334,56493,27259,67615,71857,59940,21650,89958,36062,52653,75621,87657,28014,23336,95706,81974,77390,48654,88287,80748,70286,15416,20386,67954,81162,11721,84022,82286,41413,35289,30491,11594,45637,77393,33167,68744,38608,86165,39706,18253,92052,26531,86092,52445,54521,33529,70303,99955,18813,19485,67029,40926,94464,41155,42177,19284,36780,81838,61211,57540,99663,70826,36587,58506,22071,98031,18375,44294,21178,83809,82762,36591,79834,63169,50276,33342,12429,54331,44838,85575,52437,63335,89871,85925,35802,36026,64632,67353,42166,18944,24901,10368,69710,75999,56144,79598,53495,17280,54374,68915,28150,88255,62843,39154,49787,29453,42804,97062,28925,43648,69522,61670,11098,60528,20759,46190,41521,76660,11212,60479,38883,39840,83310,23454,91601,53638,64911,83190,22682,79722,94303,42923,72882,19460,44652,35797,42142,24328,47204,94350,71699,17211,51856,43023,74897,16695,81043,86297,88813,18223,22735,24796,77801,39845,90762,40460,57968,60169,73143,44882,65615,81911,32810,26721,38352,72194,36547,77447,46290,91894,88816,68799,73845,37086,93733,74368,93792,57027,38294,54562,96100,47157,50188,40727,57425,77645,85081,11065,57459,26878,86334,49105,69060,35483,65109,29672,25228,64761,54303,61613,21880,40112,37200,92097,11911,37897,32742,26025,98933,49905,65162,13618,34333,85842,63349,75780,39290,48420,88998,72211,29670,34068,41362,96833,77137,12159,75115,11781,75549,11075,59591,27573,44351,43747,64106,98956,12792,73981,55447,57195,37963,40280,38418,91012,14444,96047,19707,68385,81404,40658,82077,53706,56237,23844,63462,52555,27488,95247,62061,13467,41264,49463,50676,34199,82377,28882,77109,35293,59750,84593,10601,29350,59159,22823,48825,50476,23857,12803,50592,51531,92738,38834,84973,65507,33252,98180,31493,91548,68579,67940,88807,95894,11059,69844,51919,69334,61219,43820,10923,14005,64575,26324,84309,13808,51829,35010,30899,89639,83024,75546,88630,84804,70553,96860,27450,84852,99315,25654,17339,71744,46557,26804,93926,24853,20430,32351,64636,98280,98041,65783,38148,45133,98060,42275,90550,77498,14521,85813,86671,29976,59670,88558,25957,56742,38152,71055,89287,77083,29645,32510,70845,72340,57017,53903,26440,70836,42256,57425,15115,99298,11503,25241,33362,99445,97685,97735,84081,62959,93062,41547,73208,29982,86518,72877,33763,53876,68717,69316,83441,86986,21226,98828,76815,63700,91506,66085,15350,26374,43225,56947,87711,11348,79850,53493,16294,79084,20818,76127,23852,98072,59931,41012,28412,13152,42609,40716,25730,34150,48008,64930,46379,45937,79249,56255,46400,91161,53217,15229,41470,49745,53949,76358,64730,13542,66436,18811,89026,59056,60264,48986,19468,44305,66713,70174,22930,24066,85130,41850,46593,70690,82266,40497,52819,21520,85227,96369,18904,16224,24043,23883,96411,71859,83067,50967,23956,10778,86403,87959,20500,68214,12766,16543,43293,12812,49743,10151,31088,20060,90795,35306,63678,10269,25797,71130,15636,86486,12263,12527,74985,59133,66475,69824,28781,70844,93945,25436,23819,38517,27969,68566,79120,78108,25303,71792,52746,84410,56110,49480,43633,77644,26557,91426,63048,28166,66970,12208,32036,90052,32880,25364,55443,95127,28055,63808,78862,95179,66468,56044,92908,56497,90617,57951,62984,43608,45535,92730,56151,50222,58112,83046,49217,77513,50344,36558,85583,53262,23408,18807,71301,39061,84535,54703,22051,83293,99967,85345,54337,95127,96480,45058,84954,33628,12498,23723,42160,64583,67986,68156,43804,66679,92187,12130,69341,66515,81236,88438,98233,24836,27164,25016,63687,50384,43373,51312,69340,34036,95647,28526,36590,77944,22926,98492,42706,66240,88870,95943,10846,57129,26498,51614,63599,90336,48144,65959,89993,53536,81560,77742,52417,52652,19497,30695,34635,54225,54357,63438,98531,15835,77327,84934,94606,39022,42221,96900,51991,48766,76224,45955,15736,46518,14044,72560,64490,23739,80556,37774,28784,98355,16418,68283,92981,50898,96924,72127,91368,74233,92138,10013,14675,39091,31657,96357,21726,13770,87382,95241,16753,96481,16843,22467,50705,77185,76032,73701,98066,12352,88305,34900,15687,69987,27080,73544,98302,33880,79426,33042,57604,80956,92545,21102,74021,56824,93442,22335,60243,71065,65386,47778,19783,62613,95753,87224,31628,93517,15673,65409,62894,13625,24764,27505,70583,50181,68861,22940,60007,11122,30396,35286,57650,60278,66955,23956,53102,68861,19414,30102,62762,73344,96155,70720,73832,42450,37968,45280,26845,83699,10011,84835,46566,63915,19328,37597,68294,45154,45259,48997,27635,49881,69667,38433,82135,57623,48890,98412,93555,37970,52664,53764,60700,55068,14124,12168,25586,37035,91656,51101,44662,29302,57742,51963,86588,32516,46999,14572,83653,72036,25299,48922,75021,81497,34754,17647,24027,71744,95190,26048,48440,24379,79911,53093,26574,29903,97194,43143,32578,47266,75933,95751,17108,49036,71423,91160,73595,99927,49139,57374,90910,15706,78497,93417,25652,38345,77237,42783,70751,57117,80687,37090,77091,80425,58952,95770,35181,46220,42683,44071,46035,27370,81127,34949,60678,23386,53987,42499,30083,88644,57532,60385,32456,94643,17012,50016,73909,30649,81208,50862,63974,79383,51890,22113,39401,93360,34800,71193,47181,70921,57548,75324,83413,12576,70486,18131,72729,96517,54512,14149,38879,58463,70968,61853,20552,88583,22250,28809,33762,15659,60258,29015,63995,68333,26817,55027,41220,74324,93302,17595,71704,76090,32847,15778,35255,81013,49346,54740,12262,97365,64912,83257,58170,68783,19395,89398,90664,43303,62516,59618,68620,72134,80203,91125,27906,94543,81965,88349,14636,70444,30792,18131,56691,15836,67594,78114,80771,58287,51725,46446,94858,39632,83845,87868,98395,13479,83423,33795,51305,45257,98162,46878,61927,88837,59942,39015,89521,76979,52771,73117,32368,47236,80170,82476,56355,22727,77258,61660,90072,77232,73366,98809,80803,85978,65541,72472,70477,51686,47830,79964,96260,23835,14477,34411,23535,66465,56607,23273,89197,34986,51637,49191,96088,39986,33247,90725,13501,10668,80268,99906,19405,26730,24057,90838,36927,63735,78513,68775,80090,29710,60079,83630,58831,53543,37732,92169,77359,48471,20872,46635,22727,90969,33929,37841,53427,49223,36852,22508,28210,80072,66043,37735,58140,58980,66152,46120,95114,50510,94627,28028,78274,51205,61367,49694,21251,66303,62884,75113,17327,55335,30203,20476,83480,51027,47393,35476,19275,74126,26011,47140,42646,34536,70998,49402,70377,55788,42295,11844,35682,95209,20123,17984,69308,41925,47394,84821,91743,94140,70293,45848,17874,57552,95988,42041,89419,81648,95794,62847,70191,36644,77953,27736,61931,91601,98720,31216,25713,54497,98049,95977,21602,97380,18034,81714,75521,23689,59348,25044,84304,95509,72358,64825,51783,18345,98491,23880,97256,13294,69383,28551,34668,39736,22333,66067,49751,77107,37749,39554,35385,37067,15950,41703,52921,98614,77458,48018,20554,69555,17688,30424,20360,42573,63687,91343,27629,91839,58318,91964,58999,99771,34649,40173,11447,85895,17238,87656,37926,79657,42663,48386,10887,62535,57839,49903,62242,37460,19367,56329,70006,61189,81883,76966,21798,48306,17094,47207,65754,83622,84526,55771,63898,18464,94492,35124,88351,49302,61952,15681,90321,79266,21360,10261,91815,29743,84211,30851,31177,59626,28789,82282,51763,82223,95856,27198,63191,22240,30131,12362,75884,15344,44892,67228,74411,83265,68092,56298,99115,74907,40979,54957,65327,21701,35816,14136,47761,42218,40213,65729,39644,38780,24525,95410,93669,92574,48238,91253,80832,88147,56285,42402,15179,66357,55657,89278,47929,62121,54830,61808,25727,17796,39635,16861,66083,53112,25222,39165,42062,72743,70755,11791,12446,57621,22722,38931,79952,99541,63051,21521,55154,78935,34822,60743,51915,23705,16888,76053,51460,65491,75907,91184,69795,59252,64525,64303,46611,79564,71608,65635,27255,37541,44769,93468,54999,64932,77073,94593,76661,10584,60855,31010,27442,89023,55220,49627,35162,84480,85685,54605,45856,77692,78644,58739,58388,22968,14764,45563,10794,10596,15309,10459,96836,90464,75154,63785,31608,75481,10803,96300,16929,55328,58383,99623,60900,40279,84890,13663,82694,44001,14860,67186,48700,66793,59176,95886,27711,52652,10915,97329,74848,97972,80299,36546,93731,89686,47750,37443,43160,84483,35427,96830,38141,88490,34967,28403,86442,96094,28666,31932,71005,53807,41596,64624,69727,76174,40532,73105,51674,31051,47135,13107,57220,36189,24186,15718,94715,70145,78081,78838,27492,78584,54317,27818,71888,32051,38212,65785,38081,67844,67223,25666,80570,44755,56254,31416,35035,30136,50887,70815,72270,35530,91297,66662,86057,34683,93382,35399,73324,72355,99579,68475,38220,44517,28960,30366,67752,41865,78678,47748,43339,89552,97609,99145,29160,28868,63324,80850,21120,27789,86693,92507,10382,31120,33153,14578,91330,59299,45920,42199,94280,57779,49630,17915,43225,53822,72136,26506,84509,61779,86195,28475,86625,79149,57298,92930,23624,18861,70653,86750,18705,68195,27028,34709,57606,61627,45724,36982,50380,52473,75917,80873,67847,80329,57030,37549,96561,90530,25284,35454,89380,70313,32662,23237,42615,99021,47443,81470,23046,82279,93118,29478,46010,25892,89525,79619,83756,52201,54554,46775,51722,26395,51873,64498,16178,92347,99459,79943,61569,99306,89135,86490,27182,63005,17060,18214,97296,22129,35759,32324,22700,44668,29649,56047,13813,62835,83382,76020,25342,97796,59328,38760,24542,38942,62654,87959,28122,22847,61370,94338,88866,69807,75334,32810,70548,10029,54361,38246,20745,43571,72786,16252,59073,14577,44156,89546,20161,66026,22446,41250,28954,79256,54686,97955,59939,50349,19164,13114,72955,30015,69899,10713,29068,60035,31903,45934,88042,80824,93584,90392,52144,86871,26834,32195,87789,67454,33254,90808,60215,55343,99196,77870,42787,98221,81975,23268,57772,36338,63558,45026,85274,26962,26998,55180,74160,19539,19804,60798,92013,32379,55817,22004,16822,97936,82224,24821,77709,15557,35748,70371,56264,77838,93479,84209,50484,89293,56284,28782,14315,95333,15240,24299,77223,92937,61238,80086,62576,61569,77344,56342,26945,41543,38930,74626,98067,48979,44090,63137,38228,29657,19141,77212,72301,14108,89639,68742,85968,77473,86877,50358,94259,78499,85912,25882,94770,21368,49469,44291,25610,26458,19300,93723,46041,68509,55560,64982,95793,93202,74625,44390,69479,12463,13141,18787,89345,95586,48391,70947,96766,83560,99411,18201,19576,98442,25319,70343,55313,75724,52738,69431,42883,98378,64437,68279,45533,11370,13772,22832,86506,99950,62152,92956,48471,12119,21646,78524,53598,77658,87376,77207,24339,12580,73359,12977,99625,65908,94393,20028,69114,15122,86937,47036,40560,89097,20533,64728,92671,61128,33864,70737,35323,29690,24459,68644,36181,84662,54838,91551,16566,98160,40959,82322,42143,83281,20308,98876,18277,31038,60884,79248,38716,54382,88927,19083,15650,17294,64026,82246,85904,12514,83015,12597,47242,32330,78650,82936,28164,40521,22654,80398,16940,92651,59811,38761,60933,36523,76864,73610,38786,91486,64473,18025,67281,99724,92567,36596,64456,64959,87909,69346,42751,18624,32476,33632,72798,60813,74179,48413,76380,63195,95570,64481,61339,78196,56884,42711,63525,18753,37176,17115,77538,44523,59194,12491,80402,97984,89476,40980,61870,97312,76655,23390,21025,63618,76528,72081,47875,64815,36095,63076,66002,76732,78357,13226,23533,78025,85583,92783,32807,50983,31219,35341,47164,67746,48439,34473,64047,76679,59769,65996,46924,33031,98342,65024,45542,25478,39829,32109,28303,69069,21321,15790,15680,49383,20574,75154,49644,23680,39254,34959,63314,95404,62266,72070,14062,44358,56998,91647,37112,60907,58679,48194,22069,49880,41695,99241,21355,45955,61984,94206,18054,42592,37606,12062,71101,87770,72360,38109,84898,61243,73890,62753,65831,59162,10252,63712,46722,54031,61122,32188,21780,86542,60515,30700,75953,49270,28235,61230,46361,99807,49800,56661,96672,95394,44209,57282,81028,87685,35394,24321,22730,39463,14361,47011,52124,83890,44951,98787,21682,55786,45037,66701,21485,31346,23064,49045,84127,48393,63457,68742,41884,20403,89630,64783,17286,17923,55730,45296,23761,27243,52808,65447,68216,22296,81362,31696,97980,71921,97642,51507,24098,12051,56990,91832,44523,75184,80205,44167,31771,35187,83282,96225,31787,18645,20693,81696,68842,47442,26464,34533,24659,64342,49430,79429,82614,52346,28493,94143,60239,87682,38892,24924,16131,32981,65396,56100,35636,13156,18008,76791,52081,77656,59301,76441,57069,11668,95263,99347,85607,41543,26105,39915,51332,99665,10414,28155,38134,28671,21944,92541,93938,16150,18235,51482,75021,29513,27157,11935,98539,95761,52235,32333,33968,43964,87260,63688,60548,73032,32253,94210,57662,12062,17800,96517,98300,28844,76508,41426,12459,87591,83114,65070,22465,94968,22723,37496,23885,80746,15700,38675,76171,79035,70255,97116,41407,16308,54656,45104,19969,88704,30178,25935,35237,10618,37217,82054,44746,99358,48781,12662,12278,84160,98716,90853,40187,63799,54102,26465,81906,93455,78616,12249,87571,48117,10990,32751,34337,10250,71495,63388,94698,55767,60074,39738,48291,49596,94030,38301,22287,81058,85175,75410,11349,49719,49465,70664,87817,74316,15773,59077,11392,71710,16692,39289,63886,33503,60977,34935,50919,57606,91214,24429,65303,27437,87211,84518,42553,28454,24555,22636,37562,92204,71465,52960,37390,24124,31796,87466,15820,61069,36728,19363,62438,81027,17596,76201,92443,49120,12751,33219,27553,81202,56905,47966,36968,40634,37761,63726,63347,76002,87063,92480,28185,12641,42850,20332,50343,52746,24520,30395,15503,18119,90014,84023,91822,45390,36625,38621,93962,14204,13012,25256,54042,71732,64589,42407,57231,26990,68885,84225,31521,85742,87571,72801,30645,74698,51505,54872,28170,35738,98744,65484,80639,78063,88871,12955,52083,38886,71407,94348,49256,61158,17804,65694,40019,85834,42460,28605,47299,17877,88961,63512,76523,43520,32438,96537,34605,73918,59178,71713,74408,24058,12109,35816,82652,21850,29178,50255,44338,78669,51339,49601,45810,16073,48369,82038,24591,81887,99588,13365,71343,55827,12921,79612,25774,51995,68549,24703,76346,41108,70771,62914,42593,13268,70053,59861,10121,41017,28185,45598,62218,53708,45547,91900,22098,96347,60514,35930,21974,72767,81078,65642,17160,55050,18378,99677,87518,19651,12372,21020,19016,96626,67681,48012,69018,95678,76958,50889,64857,75211,87593,65524,82237,34401,54078,50740,40362,50856,93210,33605,58125,48556,72992,88332,79684,76733,32618,50560,33251,75915,27615,62963,37146,25829,47793,28006,72707,82819,71217,33029,31797,39322,68767,77733,55013,65866,51131,14485,71624,23746,48973,33331,98767,69584,64572,69396,46049,64121,44294,41042,34451,86640,93075,64300,48966,97028,44495,45726,51846,65972,32597,82513,88183,84007,45614,80164,84873,94250,74699,22547,52427,60982,22949,43236,43519,57148,63689,57255,96695,47021,68006,82851,74505,66787,68903,60897,65818,36860,26465,26262,86281,47474,13017,38119,60904,15091,68796,17357,83993,22668,34823,92891,18466,31287,25102,96175,48352,26637,67600,73669,28386,38805,40578,35372,86458,54034,37899,48627,16874,63914,61604,90782,91266,42405,11280,51058,95608,54734,52249,77143,13526,45267,84422,14747,78068,89358,75918,81047,89516,19812,64924,92604,48093,56040,96366,91614,74825,45951,20221,93622,34464,79224,35347,18872,22208,38970,52462,25367,73852,90523,45302,91219,49474,62555,82453,91907,17745,71913,50110,35192,89353,37917,46838,17681,69955,56413,43366,38889,91082,69592,70392,20527,18573,59680,65458,36907,83766,96633,32582,34249,56977,45603,68269,51696,86679,40227,58334,29109,33120,79322,66576,29523,56560,32215,54698,91521,95449,38867,75310,44429,76723,59889,52723,70154,95755,61005,30926,80379,32387,49048,53903,84999,66249,78632,13422,97840,97409,50281,17509,17488,35138,94445,79732,58189,59220,19075,96784,91766,57176,25477,29272,56541,44997,22399,54011,24918,52086,43073,86074,73556,83316,20776,20791,57322,58221,87152,77769,54439,31612,25806,85705,20036,54768,54339,25531,93213,64033,35788,32638,22163,96154,31421,17811,36325,29898,92436,59244,50941,43607,91793,52767,48277,56846,39878,85165,52424,67408,99899,13358,40678,33848,51519,17070,76355,39969,86982,29202,57455,89406,15174,45746,19133,83089,33863,51652,15749,77119,28612,80866,33094,41005,23061,92758,59687,76853,81096,70854,56238,34090,42580,15832,35776,50967,92028,62486,86580,74461,96640,32696,38489,22102,91706,76772,10693,39238,73308,57772,16801,97433,60525,16262,84484,53841,12719,62856,34918,44407,51353,70848,22625,82199,10257,89307,12482,50090,76201,29840,45428,79967,23100,66125,85653,52122,93540,24323,86746,54065,40799,42732,15193,11213,10767,14049,22047,33251,80299,47625,45588,15083,65611,92927,38950,66098,21831,43228,45121,97560,44771,98008,23075,66964,66178,77645,10268,17112,19786,36543,74831,15969,41540,55319,20385,12094,50892,81757,68556,22571,84422,30940,37425,61999,12435,24005,65796,95090,82747,90373,31143,71707,26550,56745,60598,46715,77519,68944,11804,16757,94245,28271,26099,47629,57900,91647,47073,23589,33061,95925,42538,81948,42138,86233,80939,73039,56636,94926,12539,75838,13048,32532,22876,91476,18892,44830,83781,33613,95035,81819,42894,88976,47961,34759,60369,88251,59141,33573,34254,38821,17277,58788,44390,47795,57156,46498,97619,46634,15830,53066,89687,25529,17176,97990,43321,30434,84360,50960,97414,55359,17547,94941,11703,52379,29944,16005,48527,63360,98295,66447,67839,93709,74591,66047,71804,59919,27451,18868,88632,46980,76190,64992,76262,66478,41345,52992,34113,15571,56874,54877,29252,27670,45001,30882,72094,98440,36833,60653,89091,62604,64292,14693,43524,49571,20269,10985,17492,64851,17956,16707,85856,40033,94974,35307,57200,44241,81773,99238,65900,63751,33614,27651,17792,20684,23679,33275,54991,65544,98058,38755,69895,92244,42639,29250,50907,97496,13788,42554,46743,85203,57420,21726,61579,45716,31603,49387,10496,19972,19004,96578,99357,39228,87030,78710,78377,24328,27767,68951,10750,70289,37537,52471,81239,77389,22384,64568,73817,37095,14442,11643,22449,52186,10166,82047,96966,88797,19581,24198,55755,95515,92631,91526,75110,18221,32384,58013,62427,63753,24005,25490,20961,96586,12402,24766,19731,12618,76325,10948,18026,98537,18078,58723,19018,14744,14456,47123,86988,17342,47500,82817,49600,26365,96949,32020,98591,30473,16863,48467,32572,93245,66483,24881,16697,81131,89180,52357,88482,93233,71932,83369,54354,35764,17452,83306,43108,83834,68043,98741,34934,95301,96359,91010,47743,76519,69808,64105,74685,27298,55671,87108,71012,50270,56990,81092,36594,20539,36944,48047,69749,37946,10510,41820,25228,70226,75185,12879,38272,54434,72933,89494,86340,54776,27530,40597,49812,61425,48301,98319,87635,90977,71548,21418,72298,42781,53822,45781,16728,44508,96288,43274,56273,19572,33614,33423,69454,51979,76844,27910,23932,83968,76301,54942,87486,88530,23876,57287,88537,63197,48635,17659,65494,88029,29824,22324,62564,32971,75015,42874,96467,34090,15539,38242,35460,28188,56010,34217,72140,52875,22749,89023,11012,97955,93646,31162,94357,14595,30455,73214,76406,65999,48654,37026,67681,17080,88931,89726,55873,85629,48907,91310,30469,81877,38407,93027,50635,65108,95374,85357,80551,18015,59389,48131,10555,95098,60834,67503,38101,70147,24316,13436,15254,55537,72994,67716,92671,26400,60150,60065,29347,51806,26491,17675,86949,15709,58596,63649,34666,95144,19131,69893,51729,89127,88083,15452,11555,93897,49708,33722,70513,76909,12585,86324,99525,95507,19007,36561,31348,57911,88283,82868,93341,14982,28488,11898,85338,75125,40535,78719,89479,75057,56491,97215,77305,34144,13259,71530,15175,58203,80242,87447,36844,52424,35673,42408,54987,60306,88261,32808,69270,77867,96581,73014,22121,84024,52765,58496,60914,62263,21790,45924,73068,42273,70417,17601,43073,11096,46924,15796,70985,24446,56664,35820,89373,45882,80973,19769,35129,67738,47687,73022,79168,42185,20904,50623,89742,90623,96217,29261,44559,74979,59285,77636,28234,77783,43564,32309,19787,16392,20726,85524,49142,47194,47887,88650,56376,82668,59331,26992,66795,33227,47095,43875,95457,93674,35432,57850,77420,98120,63822,43533,20378,73624,74016,39283,35789,55521,93153,95234,92104,16443,62265,77442,67562,96103,27970,37765,60590,26897,35212,17237,14313,18914,89377,67949,96235,51558,14691,44603,35171,41599,15092,89590,83222,24541,97222,88028,36493,34544,54893,55599,57985,76403,98073,76760,95693,70309,15858,69393,70580,22403,33892,19295,86732,76888,89444,86349,33682,65454,16443,75549,63733,89555,87968,52396,33131,81255,68092,39417,90165,32025,27090,94994,76027,66953,49325,53795,91884,38534,18237,32416,99767,66951,80489,61592,54408,88207,28798,82148,55532,37353,73205,73157,46776,94838,32913,41754,27055,57747,98615,64160,77093,31003,95061,96998,75780,18879,35234,38089,49557,66202,95348,44988,38472,95521,63998,38709,78984,13650,65554,50400,82670,82533,49823,92032,33942,29246,58917,46234,19701,36675,96306,40370,44227,58440,80889,45037,37849,70123,74157,82053,16990,53572,60409,15297,88859,25615,27911,67053,18657,11220,18928,26591,90332,16475,43900,62143,70076,55714,57078,79805,50861,87099,73584,50473,50590,66650,94170,10618,63737,90081,83924,86000,34506,90720,17608,51500,10431,27718,55005,87389,89531,95006,54772,64358,64208,18384,79360,74990,53997,82758,33136,86557,75505,78473,56274,47405,35326,18365,33022,17335,97876,58330,52907,90373,97732,20703,58909,40710,91538,84036,59560,28885,40123,57256,89035,28327,71922,25778,57712,14758,30100,63551,68246,84830,66124,37877,22517,99040,53408,32745,55158,45201,56923,52684,61211,63156,32833,68443,56152,35240,27246,49522,94420,85409,49194,44140,76393,58114,27611,43222,22299,25745,46028,67350,77239,45499,35641,28967,35635,26213,42683,52740,22517,28659,81292,10487,76021,82447,36184,70101,20179,62036,66647,39536,27615,76248,43139,83564,76264,83318,16132,24372,76633,65631,63447,65741,32498,78319,96336,46796,14447,58162,51706,24276,53436,20082,14281,66601,97912,86507,20454,94204,50190,22523,31315,29292,36528,97264,49751,75374,97916,10284,15463,94670,31443,91938,96568,87940,10598,19489,61401,90196,73063,99220,31258,74825,10798,69379,15658,44614,72846,98889,30650,10913,83625,64711,98571,31727,79431,57663,55988,34520,28916,70094,96391,40951,99466,97655,64881,96613,62847,35298,55547,32269,71652,73320,53359,11201,56285,51714,72323,97947,59340,66899,57462,19147,52566,39237,36125,94584,54041,75854,87437,32706,58909,73080,30340,71604,19966,83672,79430,80896,10179,89350,68123,44976,39546,84859,62893,44511,35208,50472,33938,48265,59450,66853,35389,84120,62042,95538,91586,98694,48495,45059,41099,18741,84383,99108,97467,82997,86825,56841,93377,75744,39263,42880,21924,61279,58580,66440,75913,76630,64799,62808,86140,81791,29169,22747,99722,91222,74671,67528,92337,97439,35715,69578,43761,63059,30454,29317,53330,24920,74144,80383,67232,17745,35645,19697,44561,49927,31207,90561,78374,33660,63127,56446,48375,16330,60099,15794,26179,98813,14463,94182,80294,75340,55421,70295,19704,50628,61725,64352,31419,13205,77149,66037,14541,51249,44156,76681,11393,34185,77074,54554,50065,93309,93644,90808,62599,42579,69380,57779,63716,61827,82361,30509,89630,43389,85411,10586,95717,63296,53129,39491,19852,89235,67664,82777,68714,81347,68028,57424,78564,20795,14547,60446,26112,36722,69849,44664,46494,98550,42627,96232,46996,51565,84901,68985,27455,20813,99229,90157,65118,85469,67785,22451,77406,56294,11475,97641,11668,66383,74076,70440,38191,73085,96175,19384,70738,63001,53219,99785,66136,82602,64300,44323,43243,80815,16385,21385,58181,92444,25264,86729,81552,13774,16804,69778,89751,99175,74248,39976,40060,67191,62351,24777,42541,95117,95118,35574,19981,48809,97161,91729,44866,82723,10431,52425,50835,28172,66253,69150,64562,14914,17560,10604,85002,91106,90144,69678,42361,38403,18050,53507,51857,24518,40149,45022,89571,84006,79040,74220,67691,47587,65684,17970,86244,56748,95112,48138,76510,52681,53735,38492,58718,67215,97626,40974,35627,90242,23241,72575,16214,37518,91785,22700,65617,46363,30929,81720,72992,71140,46031,44244,62804,39855,73978,78013,48359,94293,13986,55747,73026,70412,17548,34002,69777,20008,30200,79979,27050,58637,17228,39487,71847,80868,83033,76834,25617,79248,23615,57231,72212,86536,52158,38627,32401,30041,43034,48414,47393,50115,42912,72352,75128,16396,82355,90189,19502,78591,37093,79919,50201,74975,98413,24053,45700,99472,31816,68231,19955,19063,53268,40065,15172,70931,95232,31118,33378,63398,67358,11307,76870,79969,94358,21622,68802,92151,78467,44682,36923,93628,52660,50202,75700,95507,27968,61383,25136,42099,22704,27503,77489,12538,95165,60894,96217,51588,35776,70379,63473,24686,20737,37447,95232,33770,20369,59829,89103,62277,66124,57779,24467,13000,89160,28582,15408,24515,55429,62273,41612,77511,21973,84401,26834,88817,15877,94784,80767,47719,83891,55907,51340,52923,63887,92477,39857,58419,78452,51591,12005,38541,96183,73468,45676,17020,85528,47466,50655,53372,78585,73302,34247,28890,49459,48323,47296,67932,48409,70675,99221,53808,20811,80362,33965,45815,46217,50677,90228,68763,41702,22594,78338,47590,79416,28270,28394,76259,38269,84668,79536,67309,67165,22701,33630,95831,94913,16078,94817,27144,65827,12131,92928,54685,44815,51527,55588,92755,44229,62357,68942,31684,81670,59256,59098,80787,82895,41000,82877,69488,57957,92813,69824,88049,88111,19860,35436,38839,26575,73079,83353,41480,56494,24287,30440,97488,90855,13441,85336,55354,62044,33249,45742,51766,59261,17997,53052,49349,27960,26773,99841,51615,27918,59273,63154,41881,28713,64884,15860,62467,46628,72251,71100,39323,79313,63955,37618,53051,37362,32613,41443,93937,23813,73828,29223,18890,97129,30871,60832,13392,56126,30949,53143,58557,94976,72149,67894,45322,83797,41076,93718,47584,51608,85236,35524,90118,92269,57490,28201,18106,73876,43532,89000,50528,42981,68676,50811,56827,18989,42740,15562,16424,23843,41371,60580,95593,91576,63712,83567,53796,87777,71528,94352,63862,90884,42370,98595,42058,70805,28894,34139,62525,37194,72556,95174,10332,73716,29792,81022,22629,91017,41516,83531,62733,27378,36711,57898,75429,15237,31866,32922,73501,34667,48926,81491,49295,23807,91235,62877,21465,21828,99971,18639,27404,11182,42651,11129,65540,95174,72098,11173,94581,51051,84049,80145,11827,67743,14568,21719,31171,42430,96306,94265,13611,32582,17394,28042,64553,90834,51784,82954,30584,92560,94249,99311,25052,32919,61175,72330,68207,84019,37616,16381,16960,11258,76071,81871,79991,98651,30895,44084,43373,60126,91521,92442,66705,18962,89028,76787,12347,68129,28200,12814,68166,41034,93427,28259,86249,12501,40963,89949,65558,36352,66366,54469,36483,72186,28312,18082,76257,30471,58509,66007,52250,22263,66378,38922,68445,57439,92341,68792,35327,40052,73350,83322,76671,99489,35182,35484,10896,77440,39787,13566,95290,22955,42441,34972,77978,18368,50225,14852,99783,15577,11762,14227,21574,96865,29003,94181,11027,85165,40052,57631,52434,90042,97618,29922,31125,80878,87017,79628,27410,50353,87544,11103,25822,99623,77644,38108,11845,41187,34033,25226,94561,54200,60707,69941,19902,53580,78578,87901,98540,68835,17017,38185,64578,42075,80399,40691,60023,17286,29247,75994,99063,45382,23145,43558,12291,95780,23583,25246,48223,15162,64465,42592,72620,81837,61424,55389,89318,66313,16547,96814,46726,33393,89031,52695,69932,67581,67701,63903,69424,95102,75617,60283,79196,84486,34709,37680,96361,80601,15750,59285,82139,96645,41700,60406,31885,74078,84405,26906,84830,99067,66564,53728,22805,97278,76386,25677,66822,77574,80361,88291,54211,97387,61505,59840,17959,80769,22880,92795,81536,76162,78805,46392,40866,95729,54674,58152,79007,77461,94678,16766,55340,12279,20095,40272,85867,97423,28389,92767,38409,47055,76426,98104,61704,98952,65687,44498,61851,38898,88815,13531,26299,58646,95126,50196,40878,51845,20539,96641,54862,57745,71038,42717,12525,83523,70005,17598,72791,88698,66954,78228,49658,68420,11123,57660,93372,31166,81487,77786,96322,57438,49270,58386,26439,22453,50589,78240,24889,27192,70432,94730,38827,88455,22136,54684,78725,43353,93834,83221,36389,36752,30172,48448,15452,84774,28027,96509,59062,82584,54352,38637,35676,17169,90269,15586,58532,99935,10677,59870,92829,98752,44545,72780,15467,54734,19243,66780,39395,24108,41554,87855,54281,59611,79855,10758,72305,94189,98017,40611,87897,38981,89226,53204,46671,26529,59280,79689,59318,18566,50848,40432,12609,92765,74828,54754,26989,20251,50399,42477,70857,47348,13739,50700,58415,65678,53949,53631,18625,57993,56969,55716,63046,94642,74361,60332,68814,51103,69708,44388,26974,88081,79522,59605,98297,69752,93460,44088,47148,63314,69752,90816,63261,16113,10092,90297,74768,98234,86919,47614,97316,14413,93212,83131,46117,57004,30761,35206,39435,94426,54112,68103,33905,57314,68466,55121,82997,18398,72475,44451,90202,70507,17032,47684,24352,70230,47354,55410,13964,89655,25809,40045,27005,59191,93213,79854,43720,26982,12948,10058,67443,29647,46513,30044,84227,77978,45060,42346,23607,67511,51697,90846,44669,19089,87136,84789,48958,53540,91975,29134,73727,63363,83112,82516,43821,62560,41737,16995,47457,30910,48269,43927,28279,49431,43012,13343,54525,39967,95942,39680,39032,60975,97597,73004,75548,27792,50568,59490,36474,91982,44859,52533,27010,14148,33823,25814,49012,39928,96749,56095,83456,91762,54762,86549,84379,93785,55607,89462,24275,79831,35540,69151,18297,67672,19342,23582,45616,70570,63684,21152,36954,14919,95931,73515,71624,64458,99743,14697,30407,69129,91432,51615,10916,45498,87469,86076,76889,51545,75766,74299,99289,39865,62751,76467,52901,77987,20937,72479,48685,64513,52348,10692,46102,65565,36026,22499,54355,50348,67697,77219,90907,42489,42820,16064,32610,67500,26499,41689,67660,17730,77062,91345,50031,78173,24500,74321,27647,36113,56027,91221,11640,42422,35314,14658,67566,96084,14426,16332,74830,65542,97650,68133,19575,14678,71811,45405,55671,40945,38349,88502,56863,42018,52332,91284,11364,30626,19858,88622,73524,84692,54364,60632,84080,21619,65373,24497,94555,39751,58991,46941,85742,57145,31073,56167,62581,39700,11206,46998,96800,16778,72875,88646,65108,17514,20186,87437,86010,86939,72088,82657,61473,81913,24786,88001,24823,22228,41579,15451,67264,23286,11664,82653,36181,62234,37154,36826,23311,10301,23249,55074,91769,95671,17562,66626,91780,37243,27079,67330,39154,94014,51450,41971,33221,87379,86686,70493,70569,51276,81531,33421,92641,39693,66230,74181,42375,73905,64372,48746,81411,85997,98642,96532,41465,18849,16021,94947,77418,75760,87897,28032,60075,31776,15570,34556,68837,25326,42017,67176,84851,47221,29241,69130,86589,14261,87922,22843,45317,31220,36612,37577,20958,33403,75774,60911,47816,60132,96430,18413,33766,62545,25082,40983,74571,61541,50522,14577,87935,46483,15720,23632,72233,38875,85298,34191,84843,17083,85464,69027,41644,18349,25799,15507,35843,48056,40835,58194,12444,72278,79579,94076,98356,94955,79941,57563,99660,75340,54289,67137,52081,29213,34842,82477,59637,77459,27680,86372,69245,58172,53157,93770,98056,24531,31287,59287,91763,15668,62432,85742,95855,56470,46921,91136,61755,95893,55798,36604,83337,51582,58081,22762,50733,39201,18573,34981,40196,28751,98108,23977,29989,18980,94533,56114,43665,49910,31166,11041,29624,51487,41906,35845,69093,68499,90175,98322,84464,47003,27984,35296,15498,80729,98753,93816,78007,75226,10689,61426,71290,73021,26609,35675,56893,57891,62937,43684,35030,98626,64203,69636,59078,45143,20036,27532,42737,65739,96623,85546,39839,76145,12212,33620,11570,30754,10979,30199,43283,25814,88480,35095,79790,30401,13882,14483,67482,75267,36415,24390,62217,86584,16871,76391,65349,32306,55010,85961,22432,55449,39469,12332,70516,11095,83995,15601,69885,45773,67030,54969,57406,26115,88161,77712,76905,80414,50351,56539,45210,98601,87609,94286,74125,22513,67096,94087,80262,97842,24017,29333,72383,97737,18494,71313,76534,23163,21871,89398,36292,67062,33008,13113,65315,89436,41937,76331,52263,28982,46901,49316,69917,14551,35436,48229,62629,84701,21184,50268,32197,70432,93724,48556,79178,11238,75608,28559,42932,45230,88687,75074,44432,66903,13270,23296,83878,90857,76498,91152,88303,28539,85361,53920,61442,54068,84961,24939,14251,63587,27759,47223,96303,61012,69655,67192,73751,10848,32634,23464,69727,66264,42900,96007,31557,88755,63117,59978,74618,49654,96003,93733,81769,48323,73454,17366,37892,69242,14800,66529,15114,59263,43594,68040,49041,55843,69214,87580,56914,59319,54726,85432,56024,20826,61359,41054,14433,82093,47030,80521,29212,41619,40378,61695,84827,80915,19706,14373,93006,14669,53159,34581,25512,81758,83968,93282,15440,31332,66312,36059,30403,34861,79577,79513,18493,57531,71827,19873,88336,64501,84824,74040,67836,43924,56094,13921,41318,35254,60517,10700,71312,89218,58331,63305,39242,11509,77482,25378,55651,91584,98051,85940,58348,73879,51215,45370,38305,84077,67338,20694,52545,54725,19810,19486,91882,17822,23464,18319,95815,31636,38726,72129,30812,35539,13911,93685,46428,60251,82396,95450,53407,27032,11443,73402,17902,65426,22577,46671,30355,88306,40213,23990,34730,81766,34270,19192,12938,95841,92415,30966,92970,37343,28876,54531,80792,94020,58624,67299,71833,58486,37629,28123,47528,77493,63140,94237,76421,41599,41087,73535,79361,51629,83267,93625,76153,47931,58170,80688,63237,85151,22987,85764,48434,74046,47452,18423,76253,51334,23004,65100,52659,61779,90902,42252,23526,46630,93954,63359,26323,10443,63082,57194,25278,48037,41160,98140,77897,66496,46547,27800,57502,80534,14891,49384,25101,83437,35991,56492,31011,30522,34537,99593,59039,84799,33415,47371,35767,59918,95491,30661,96726,29205,34892,92815,15973,22395,87767,70148,95442,75580,50903,33434,81101,56683,41671,48961,56067,60529,91666,49883,42218,67048,42605,51357,28385,86837,81575,60767,87754,78088,50805,83085,48546,60115,89022,59908,21368,66753,66102,29429,32542,66313,13015,26823,23102,20012,19202,19756,83840,24328,93657,22640,82716,64118,84187,81523,80711,67494,73298,15424,51461,75980,65654,71401,28945,72104,90836,35862,34222,46405,21599,42099,52604,96892,43660,71706,35938,18725,34139,27692,92569,76232,31049,25875,58516,12618,53239,81941,88430,45884,50302,45479,32565,61303,13753,71871,24331,23711,13958,27314,95779,74546,17385,98148,61903,11212,70326,74591,65974,49905,84568,14454,50882,75417,95727,19183,25324,97040,81710,56583,27281,59745,88781,16287,33238,80725,95679,25730,92963,41978,61651,21274,57353,20889,89077,33128,79428,15798,94367,80076,27220,88538,89750,71628,22540,54367,50988,89712,97903,39761,64326,25094,38522,49612,55727,27032,51179,90086,50327,33105,14775,62575,11113,14843,74682,75656,38448,26062,80609,46627,81442,62500,51537,36110,67703,79876,54516,69768,69654,61848,48896,76022,90359,32422,87672,45524,64672,69466,18301,16663,79128,77883,97179,79171,66017,57127,72621,97653,26765,68126,50458,42382,12211,82908,80711,22150,26929,27847,81950,50711,39782,94380,67476,36078,28976,44345,80221,86046,41598,81943,93082,33457,14971,95908,58573,70438,32447,67402,14109,80210,20192,19681,75057,68793,64842,88593,65876,97008,25325,67018,11230,11782,49968,17002,47418,70149,82687,58402,34938,98480,93242,11815,53045,82407,16260,78703,88825,71930,27650,61673,98693,14432,53372,30362,41302,49482,51822,37041,68394,28293,79864,80526,21338,93133,36381,71327,29445,30856,35991,77606,33280,89160,64101,12825,79690,81791,87793,69836,18699,33058,57105,88831,14093,30552,77123,25543,40808,38294,72446,19010,29503,95660,28538,45913,24441,88846,75785,42538,46562,99857,78552,42280,67135,93676,65144,56690,82312,52872,56690,47574,25800,61948,25021,32735,49245,44788,78771,88306,81795,57765,49587,98664,53531,76094,67708,31772,45488,26754,72862,91326,45450,85725,43197,85768,29342,63518,26160,80475,51679,66403,82394,79712,56373,59207,26536,73045,31750,18312,73476,27079,26874,62207,25835,54422,63524,20909,63179,57100,94988,80388,64080,26725,13961,33140,63814,36878,65855,41466,77608,88294,64360,54542,80646,31125,99798,17371,89297,60890,90190,36841,11941,31184,72739,71133,52724,22963,43228,29624,68010,88097,50675,74661,97544,63305,26111,46877,96710,55979,93789,79332,91660,69014,75093,53674,28559,66774,78783,47537,76155,88915,54269,49829,15756,57977,99893,36006,36919,47332,43210,44398,94044,73654,21493,34813,65612,69476,45337,21447,59427,14628,90548,37508,77666,28239,30995,80223,68744,98004,56355,56571,72908,95437,41294,75085,15184,40230,56752,20180,18642,94930,51089,26941,84435,42520,62583,63093,62680,69298,38465,63464,54941,13314,17223,73761,17610,71313,12254,22552,52573,93737,44676,86946,33442,35026,90854,67648,52985,65508,20313,89354,10716,85535,55338,98057,98905,47988,29787,30853,34599,37019,50052,71514,61126,77751,95020,52206,92434,64958,89238,85298,36554,57383,15424,44138,50164,16711,78094,96990,58687,45122,92955,46753,71319,98965,49479,55444,29561,33461,43351,82047,86774,84695,25552,64627,53793,15013,32390,22875,90434,61904,13201,14001,34281,66379,43529,45455,77046,59915,96915,47701,27866,43334,12920,82122,61620,71707,10591,10560,98725,16625,91291,16594,55495,50196,12691,78529,77136,72842,10962,58346,95933,10707,68055,89626,30984,26710,14121,32564,19659,12108,70221,89194,42838,88530,71288,85957,73624,52231,16847,65709,18700,23163,29878,66431,98119,26333,15028,60721,27252,63719,21478,61853,66327,64995,76149,12043,65517,10581,90475,40852,41813,76299,63723,86716,12356,35499,45076,45915,30280,81467,43531,36008,44384,77731,87892,23672,87024,97892,61484,31946,96466,92941,79310,57136,14346,69489,60702,58478,41490,65513,66569,39909,40028,63238,22715,22289,51409,60516,47821,46016,32322,57686,88304,93411,96757,86001,76552,35386,19273,73696,56245,69800,95713,60535,14729,84314,54723,77850,89952,33591,74119,26682,14242,44988,58393,81455,21901,11792,75031,39685,80196,30014,71046,48481,25135,57686,81048,42218,30149,32604,57570,96081,96170,97112,68778,71025,19679,75949,22360,15130,26711,63523,98720,72170,20175,69775,61132,18949,98718,23648,95274,27831,38115,87288,62830,31789,35325,51531,17491,99593,16526,18024,27624,55190,10252,62156,34813,73158,81439,14283,51662,77205,75460,54069,84889,50419,58050,90827,69539,15770,18778,48370,54358,49180,35295,25172,53622,67140,66292,18141,70853,84336,73856,79044,50177,96395,34536,51882,74670,59292,41380,62720,41131,39703,43012,27293,16572,66936,91768,97019,82894,95337,31243,20631,44140,73099,21092,62642,74156,31790,31299,35011,17451,71070,65769,53609,17938,75824,74745,57114,80436,99010,84610,29076,22619,13989,60591,87757,93523,49629,99460,31412,64460,63246,76728,57719,20886,26266,85942,24680,19253,94050,99621,49854,94159,67007,31830,86403,97192,34397,85803,80826,19758,32999,63408,65854,79149,90200,47125,89374,14646,98995,75920,97078,23441,58530,39494,97195,56227,85592,84238,74144,13532,61191,24531,29891,46399,19673,52805,66773,52098,41364,42104,12303,93283,59156,53676,79959,57616,11733,49682,48860,65739,12055,27339,42476,56699,14984,41711,41981,96588,51590,19006,85791,95659,46661,30228,62967,92303,46072,22132,90184,49067,54632,25627,22052,96735,60387,89975,70348,64533,71788,99129,14599,33959,55863,29433,25203,34865,56525,94220,45098,53379,27299,48485,51758,58260,27583,75616,15876,92972,14972,50170,73562,72051,49322,18716,68897,87159,59617,89195,89766,30026,17003,71745,20563,11136,90375,17807,43276,88968,76766,41368,47233,40587,78930,23199,19310,88268,25985,96829,37448,18894,54803,26241,64367,22176,86620,22701,38696,79571,26318,75486,32682,61890,68084,63641,84557,58991,43356,91755,31405,69806,62177,80734,59774,20313,49288,45448,87595,33523,58765,65189,81491,98851,62903,41885,65385,55923,95468,80190,52249,25662,31112,24312,14241,87360,80298,56443,13660,81167,73113,53739,75630,86016,71157,92609,44902,57864,51689,92248,12998,27076,60063,60983,21943,56781,33290,64875,61241,75204,29568,13922,88443,69475,91945,57748,82554,49528,93941,88678,21713,88431,89858,21010,92711,36807,49032,38016,29174,41560,74296,27557,67608,32008,79966,76265,59141,37695,55477,32134,93316,23173,71525,58082,51073,91222,85816,20141,56603,54482,68977,18743,90339,32806,60751,62886,39808,75823,52260,73903,73876,72439,26450,21031,64286,12224,59046,36249,11020,54937,13582,81712,99611,35917,61935,75202,56574,62929,12389,94284,46870,35409,25741,45031,52369,51501,65765,55167,62732,57475,32300,58447,98088,83989,36314,18168,53268,94667,64435,41928,64728,58020,89807,20050,57383,72028,93412,44292,42028,48580,19916,12222,71313,43934,51116,95097,19551,98897,16867,42493,94915,70788,55303,43111,22250,19145,53502,39154,96223,19801,95116,38189,14703,80269,30705,74892,11813,72882,64036,19150,16480,58610,81934,42879,94704,53755,68696,70887,20160,17697,90753,20285,24698,90923,45213,63453,72670,17719,17102,89912,85404,76280,16260,30554,18439,56397,30227,71347,32503,25185,65737,65894,23075,53371,65307,37328,19338,15988,88012,67527,29573,72733,70706,79646,93965,58155,68179,29592,73618,58884,40648,59080,36955,68091,61128,70048,52891,34256,92169,11547,18107,40716,50503,60429,47965,72696,24636,31070,23511,97099,33394,42471,90713,30503,68060,66140,70280,29622,34295,89038,67721,41277,37482,39364,90471,12862,89257,30279,88999,81739,93195,62764,30611,14506,93614,43839,86191,90558,69703,91805,73031,14215,76287,57999,41681,94208,18628,62709,21189,76582,22050,96976,97975,22354,47568,91054,10858,47844,11659,34414,48345,20620,58624,44436,39090,26260,58700,23048,77598,93943,80187,96709,40523,34478,58939,10716,99769,32304,91341,26633,53154,87989,98267,24434,49924,94377,78517,41377,52881,54180,69710,89887,36924,70239,36674,48905,60435,51801,47147,50192,15958,74240,46524,89852,78976,60379,82254,29962,31894,54481,80178,61131,84631,94901,82181,74342,78101,19351,16318,78456,16553,77865,50914,44549,60767,44566,92337,15578,70141,43027,54927,10393,74091,33971,16997,81266,82230,53466,81506,50342,22614,99640,64910,38037,67821,93406,25742,17045,72086,68549,47530,68839,79365,53686,23916,63107,38503,54724,54951,56646,93997,50762,68105,34986,71034,99518,99928,21495,85691,31550,56289,31050,32704,90680,59750,18938,19420,29474,64410,79275,44525,99986,79686,66489,79958,75142,78336,69791,37352,84738,33752,29615,27219,16508,88036,92612,85566,20448,55091,35886,74378,69154,35932,76174,59564,63173,54856,70607,48907,82506,77824,31660,55938,43747,23309,56896,17357,90427,88480,48326,52116,34906,68331,53592,27781,36698,82912,76661,73173,65844,94058,46877,18581,74515,52392,32877,24050,50061,39215,24691,24302,56319,81274,26064,98210,42538,56605,56705,28166,60625,60143,90713,47935,80867,29262,27717,14869,86963,90581,76224,18000,89243,81144,13533,24310,51798,82167,37739,66773,39442,93218,28217,94136,70438,92519,57937,93782,86900,40933,56025,12696,31479,82954,86488,57634,61193,32730,72937,42907,31753,12664,46338,75897,63019,86306,98186,35154,77072,98729,97009,43283,36121,86523,53952,30539,15578,19459,65848,15365,57285,55278,26980,26679,59052,98887,34047,48768,88746,65628,10775,68756,63616,33908,76416,89009,75515,13068,36399,52769,81637,65782,66414,17360,41433,48742,65757,23491,98136,95820,83244,31710,79845,17552,68334,28395,44756,48608,77943,48343,88628,36748,26507,34489,43669,72680,46031,42650,41952,74934,12550,49467,25314,52461,16601,90979,25282,52734,59152,54912,66609,10108,75488,16952,61783,16543,55080,43032,53589,36211,28558,65250,40991,45215,10308,44617,24221,46587,36941,66769,15277,12781,44990,68781,47015,32876,49652,44723,38970,43952,91615,66418,32136,57578,28517,89129,73375,49086,40400,55185,22563,19477,18305,45005,67729,46113,38753,86959,24407,47843,84632,45948,52244,54446,83955,70385,28644,29598,66838,48468,72005,59481,75598,74552,65950,60152,22519,89079,34235,97923,31516,10030,48175,90478,82337,78957,74684,77586,12061,93501,84565,57840,65676,24967,85633,53957,84024,66287,30501,56497,93333,35424,46405,22879,74137,83446,68683,42056,23334,99315,18472,13555,91788,19392,20059,91925,34784,95050,17822,40439,16934,61231,72732,32707,55466,14350,71286,75738,70985,57558,18006,79343,83354,28522,76940,74921,54851,37729,99893,82282,28418,42306,56499,82423,32698,58013,89382,54359,49620,35992,58448,98279,42928,30366,64599,48316,49066,52413,90629,71529,92758,16790,41210,37931,88694,25601,20103,33454,37291,19220,94372,22702,84421,54309,85713,71875,59250,77325,23748,84205,11496,75148,32723,76036,63680,46926,16248,20766,92666,47978,16063,56254,82142,72447,62201,39666,76760,64975,81135,36054,62389,47923,34172,70859,28155,49316,63243,31420,75595,94349,34144,98651,54173,97636,52587,82766,46837,82667,40995,33694,24643,53787,47306,36271,95045,52021,54412,35299,21249,85274,70491,49288,71715,60741,30440,36885,90169,41958,69034,33582,97525,69231,44405,33341,19626,66599,60124,16242,77819,34192,46920,22641,96316,27241,86585,40484,47001,55179,20621,14887,73741,63160,16903,19096,12039,33424,79611,48194,27942,51991,39496,13167,45246,20199,80289,34678,12715,20398,78625,46704,66296,31914,26843,19329,38535,39926,33452,58410,24739,81588,52211,89075,62081,56192,67219,78531,88088,35759,41598,69292,22776,10704,49949,37141,62270,65739,41031,73420,23926,62023,70234,30218,49433,28733,72639,54372,14773,91012,74688,16456,39144,65286,31450,79965,43246,57157,57128,47079,20398,44581,93753,84434,85470,22420,59311,86695,82162,64079,88563,31678,75806,10728,32184,82579,48559,34248,73029,99281,61685,56514,21272,21128,92545,97681,10913,89494,40378,87127,79899,12237,29274,86947,60776,72346,53079,86429,22962,93017,30393,93490,64376,12123,70952,12912,48145,28621,84703,70114,76749,46444,62286,23960,90388,40001,10700,77933,42813,17300,16139,59214,59673,82931,67088,43752,23941,45137,40658,54763,43214,28100,55770,14682,57899,18763,59167,80791,87012,31872,11742,39778,11053,73194,38623,77256,23054,63000,70575,93258,91736,81008,59869,15613,44884,67897,25508,72162,44523,86946,74582,13132,31287,83720,92742,69309,84685,62629,63702,41291,27353,44320,81157,44936,39193,48507,33587,44195,73766,36969,89801,64465,51015,55910,39148,12693,33587,90495,19880,55535,91606,17474,39394,66582,51543,96135,15053,56041,61050,71984,72191,82567,29687,48968,51271,52223,54673,14394,65159,31152,23983,33341,22932,64369,92442,13677,62287,29893,74209,83512,34611,56199,12642,63754,43951,63355,15908,40136,72168,53289,80922,90288,56060,39109,98419,77769,37878,51027,75269,33990,69643,42174,98252,54514,68877,78796,60634,50528,21839,66748,48604,46838,56023,15079,27313,28970,57440,81933,63501,44045,17950,55382,56499,81408,48171,38504,64765,74430,74644,62544,84538,95039,65418,61210,12208,92212,70500,45509,35711,52403,87650,35367,73596,36639,42121,90678,70458,68259,87954,15684,99431,77744,92637,91177,38277,58275,55924,37096,19199,68980,35487,37679,42368,71486,54842,50664,97915,36279,72295,25258,14788,84511,83980,31985,23522,37330,10980,64722,81155,83872,18303,10603,52551,34294,91301,18714,69986,56670,77992,72131,63493,34458,60622,42163,27416,33680,40447,24577,77947,68458,46354,22742,37274,30489,64516,56778,68098,14769,16332,24205,77927,53342,55882,97657,37624,65600,73894,49888,82230,76841,84786,74009,28813,81496,50810,32190,20890,14385,88682,78986,14375,45381,60594,33756,60518,19426,58891,11894,29688,82319,73011,75472,36439,65177,18562,59756,54156,36392,88335,46444,70916,13132,98729,48073,44645,64881,20358,93268,98566,12515,97977,55639,27683,22170,22663,68249,95481,53607,81011,71360,70247,34847,85689,36533,43262,47262,27797,34012,10120,13656,74436,35312,26611,66686,72627,68710,48105,73001,96711,35807,19749,74551,88323,97833,72094,81091,89828,69346,32169,98445,82922,60344,65392,12090,70304,61298,72080,11937,99835,23583,63594,75235,45097,54219,21844,78953,51832,13432,88531,22953,29166,65618,51416,13408,27813,24687,22857,80105,29235,79996,58437,48152,21965,51706,96618,63563,77547,97438,43153,26035,99770,56423,49019,82552,97099,66045,97094,35849,84156,90283,94257,93824,67695,77597,17915,39702,81735,21791,83892,55870,38036,48204,39701,61898,66429,39702,51918,71806,60343,72805,14293,53300,78297,95768,34003,17766,89860,55375,36037,28479,70310,29890,36126,69136,13595,13506,50234,86809,47943,52255,98810,12907,70443,83812,59044,74792,78821,41191,79447,87466,30551,97684,26290,74550,88039,95892,30168,17726,61695,77343,46250,63371,51859,79153,60047,99245,90250,61133,20661,12092,80289,37049,75342,24176,19453,68198,52197,79947,31735,31201,89574,13932,76395,65128,51371,31722,85599,81621,98030,24151,99960,13214,66135,47970,96430,19682,39574,36834,93239,33274,22587,60228,88601,74584,15038,91175,36346,12535,48305,15011,61205,13504,53764,33782,63326,82941,90451,39531,82609,66313,21560,98657,31199,99381,49379,11575,38015,90970,88319,64188,66774,78866,36640,31315,53038,25966,15984,84313,22917,27278,75622,21148,27029,41495,77695,74194,67802,73583,19576,37449,15607,39140,42546,24710,89956,27422,86188,74434,77418,73853,55698,11332,30079,85269,35787,45505,63845,81021,41646,93296,97662,69321,30936,63955,47020,37634,36165,72973,87435,59807,22093,28968,46740,74434,10984,12857,92773,90750,53167,84121,26224,66907,20216,74635,23548,73997,42395,73912,89661,90572,86400,20628,24854,74141,11970,31787,27970,73202,31728,51206,57943,92838,92944,10230,46048,20099,68500,40525,90839,16215,60493,48614,78991,98731,42092,11445,32840,41650,23548,71160,48394,25004,16855,47604,90135,77497,27880,16444,47397,97441,58465,42457,55145,27193,58716,52257,99449,59280,50162,30505,54040,55231,62801,80184,79857,51261,98113,30696,47795,95110,33019,51310,33192,70966,78202,53468,34835,76778,23699,31051,16703,50689,18268,13766,47023,84357,41916,57728,22449,24784,22639,90660,66925,41912,49627,41067,98727,45740,44337,76837,24266,17031,72862,86433,47232,98123,85583,77557,41872,75645,42913,49339,99726,76564,84194,87367,50528,11357,28465,25666,26050,41176,19936,52166,72009,37799,27618,87100,26763,29418,13423,68705,15205,85569,92877,15191,86408,51293,60656,99773,60451,93567,51426,96113,10869,86701,79220,29666,74961,70965,69140,14422,92366,39410,96372,99511,52318,74690,11403,71997,55037,12625,68615,67613,63454,24339,17640,41538,77768,39265,56185,77001,25983,60564,92108,93280,60486,81980,95343,19907,64864,37911,77105,16533,70612,46107,23873,74822,67756,81303,88191,23036,81155,13621,17499,45064,21311,20897,62155,76702,77570,61954,21822,72082,17337,22516,57060,47748,44640,36242,51165,83960,37103,84482,22951,79767,95113,65395,30600,77314,40654,40458,93256,87032,47969,11064,98122,40482,45337,33696,88419,82620,26204,70238,27555,74901,13433,65753,66868,92536,37121,57582,83043,41084,38659,62451,32046,88229,27632,47688,19487,42093,95056,64566,11472,80844,27396,55016,86056,98420,98871,77466,17731,81105,24123,54210,17799,95935,50643,85744,69034,92629,93326,29156,97244,40700,77304,38914,20360,93933,52552,32059,29153,73782,81478,84173,56053,88362,41273,43945,71688,89978,26242,40186,55637,90670,13464,71806,26649,20143,32652,63632,85585,43815,90004,13983,68222,37718,42730,59742,28818,86151,74223,45357,74784,44067,57056,15546,31412,91171,92237,48567,74972,92833,34904,70380,77550,29175,13525,19548,52499,45759,21067,64358,11936,94235,70610,48375,30308,18554,86434,73837,55806,95367,80359,38096,17939,44855,34126,33915,28785,33612,27336,42516,19316,70294,37993,47345,81966,20319,37691,82327,60826,13352,93463,86372,18575,79322,70209,60629,47212,53545,47187,90467,41845,65854,20922,33753,10195,75107,89004,87532,39617,66233,72909,87934,54665,31048,74731,69037,48444,56501,67133,48856,36563,64989,45736,77180,82399,90900,81709,10688,35379,34631,24670,52455,98638,54996,71721,21834,83600,88397,44484,69739,92920,70005,72174,96063,63585,29062,38789,72574,20013,64009,35202,14211,26972,54162,25412,25264,39079,47498,26891,82024,11059,34343,64552,24502,51672,42761,60442,44794,32080,50467,39823,18350,60988,69312,54896,69944,97951,71129,40095,48508,97106,76707,66319,97060,22136,16130,74806,13496,55306,24323,49402,66483,23187,56825,72213,25585,58087,76937,50166,12091,86086,81387,45957,88000,21913,74539,59690,88106,21932,51673,99971,91279,55942,36871,81620,94108,34064,12440,56636,91879,37600,86756,36504,73252,34144,79482,87650,52812,49594,62400,42043,29742,65036,80975,13078,57725,49227,85265,41108,33477,77027,50207,88814,26802,67884,41273,18291,25112,39854,85051,68251,62872,22602,37686,90637,22888,73382,23239,55107,34144,55531,65719,34719,52914,27136,55543,95863,47517,27363,34194,43674,80610,48095,21680,27544,54405,83964,27221,26051,45237,14098,84361,50783,99995,27306,14508,25524,52971,79403,63994,30487,22159,88411,21387,41138,23902,86570,83759,42116,92114,52870,40391,26855,35015,84685,24261,63437,74585,24195,93592,22226,16477,71348,59603,98772,67909,60037,77683,49122,13536,74941,47159,44591,32772,49665,51527,64387,42207,84053,88145,26969,18111,95474,52111,66274,30043,55549,64979,24157,10632,92224,59215,61615,69098,54194,39300,41975,82281,41157,59239,19891,75598,51312,65603,11952,20531,23818,42217,73203,65609,26149,84377,95543,96023,19505,21574,18773,83048,98146,71998,98342,43615,72565,49204,88285,58970,37248,37520,23987,41843,21637,46041,76175,36860,99825,78260,68549,47280,98979,33599,64385,91261,41746,32238,67497,46178,69643,53847,42843,46185,96708,92524,71687,23953,11559,36613,94168,60881,75892,66831,65054,18592,25341,35737,36558,80394,62190,29804,24956,20966,79437,14318,50200,18750,70069,22220,69401,82313,29648,75370,37956,43034,75623,81028,48594,68442,60351,84587,36007,56800,27099,75394,21108,42638,33547,45889,36492,77595,85946,78954,36363,54396,57524,85332,57554,53829,33381,52455,17184,78675,23639,68587,54124,56282,20680,75837,55001,44410,57732,12314,10773,29849,74365,33656,90466,29623,85838,94102,69602,42125,75157,55921,51974,40752,46089,50889,63753,23896,80903,32368,66454,85203,32199,83640,50397,11901,55811,50312,53418,23688,44175,84968,21900,72876,65089,41234,32351,98556,72388,62793,99186,15893,11913,95204,65247,74891,81433,76549,37205,96695,10033,14838,62884,19207,98777,84540,60729,25477,76456,45789,53971,10720,62444,95177,82506,19478,10970,88004,90954,28613,91373,48467,23965,34930,80801,49060,66007,87193,12457,20282,22720,28563,78602,39803,39292,62136,78820,18978,63155,92484,31703,99667,98611,41594,58975,35423,34624,41761,15835,58401,57834,50508,26760,98524,44689,28248,23383,31956,50536,23191,38048,91846,42756,69201,37232,41228,56428,18246,16827,66845,15099,15823,37058,97698,55333,24292,15375,61248,43241,54834,97497,99543,75790,10904,42752,11930,61872,56667,10126,22864,97605,99492,83077,64375,11504,72282,29096,45944,91767,14694,78874,79597,25136,47511,72891,37313,98406,63503,66137,69739,76470,50329,63971,21636,22330,37074,18322,56457,47881,41491,52769,60909,14158,89267,15186,18291,64715,64843,70865,63328,66453,33382,58303,15840,93919,13390,39320,60379,15725,10620,62539,18724,86970,55567,77845,24400,52124,88266,60254,14412,61536,87292,90306,57394,94632,42576,66283,81129,93639,46031,32962,83671,94631,70116,95832,90190,90331,81720,18094,45989,44789,25391,53146,65439,38409,68535,88080,47275,80049,88302,99054,51043,31799,37029,81424,44581,86882,37183,96382,37544,48384,61071,42508,87165,98048,27220,92057,52922,91764,74573,97885,50821,19772,60345,95272,96600,81777,16055,83435,68285,56654,71880,75589,38152,61143,98625,77332,87879,44958,11627,88447,41370,97858,88390,32457,21185,82286,90574,64529,22715,63179,88542,76223,86692,58318,19082,82044,18248,21040,77897,53900,85539,18329,29013,94783,48336,75117,36329,10978,50457,91965,36999,56113,62288,81663,77313,16147,70470,25226,26248,83047,12118,16697,25644,50554,73579,95438,23297,63877,86868,64058,73066,97009,52220,55063,63163,40735,82779,52121,87773,94912,70856,13002,81258,73485,88146,47541,20262,81114,12202,80812,88308,82077,41062,97528,43829,80496,26107,35346,92379,18127,56030,32798,71353,27856,64562,11622,68800,43785,28624,18286,92254,63781,16677,74469,96258,66424,36844,47043,67710,95678,81608,95856,27644,67909,61260,39377,65353,95251,76545,18422,68740,92129,22098,36296,19107,40618,34092,48152,51277,31322,16891,65381,72179,29749,24544,73056,49905,15524,43990,41016,76061,77287,19781,72561,59159,83850,25199,46155,56896,80866,53593,41652,56804,89694,36630,93365,20796,17387,42305,63782,98971,63565,34073,99826,91105,42851,16258,53259,18397,46500,53758,32049,68652,40634,23713,52403,65060,65186,56764,41783,85426,42443,19763,99363,56773,73593,46790,78300,41240,37531,58553,44134,80175,81809,81766,70240,47915,97117,95320,22892,19084,35603,73223,92909,23061,70757,64694,76581,12162,73951,88485,28061,57698,66085,44760,92737,29143,64338,54307,35648,11901,97134,83489,39266,56384,95763,58862,63839,92262,17466,56845,36223,42162,88107,40887,10701,46949,78159,74598,79844,71949,52929,54947,95831,46370,63264,72139,49884,82113,23733,87212,39015,66663,52939,84626,54837,73469,32353,78404,56878,10163,24628,44960,13613,81989,96802,69651,96158,64477,78063,31364,87418,35822,25991,20369,72947,36001,13675,28183,40942,61240,32965,36576,74846,59721,21008,37327,86044,92875,13737,86367,95136,43016,70068,54834,26323,27673,80273,81003,79003,36311,12381,61410,82856,53620,88643,99166,22219,46249,43956,91508,62154,87754,92514,92582,14784,61151,67611,45428,15205,53331,87353,37123,63511,87293,93598,83025,26801,99778,19381,85869,87919,63056,68132,85912,66650,80371,36561,20743,70531,49888,56025,47282,97552,45802,45418,52407,99333,44635,84963,85803,42980,92080,26946,84852,48710,87574,68185,87628,67879,78069,16166,50722,95329,89888,75514,10288,46867,14090,33145,13586,86979,43562,36787,33910,33257,44041,71045,59052,58740,17028,61439,68599,24930,97947,85002,57492,83269,39461,54777,86446,79278,81248,35152,11064,86112,80403,90117,29924,67630,77707,63915,78726,82499,79745,59590,52414,89785,94039,37843,55581,92107,40691,87084,88761,62487,50455,46823,61616,44462,49921,85417,71901,74754,54320,13776,49612,95431,75784,66585,80414,86557,69782,92414,39361,25637,57788,84183,14012,44939,26951,84610,79204,97397,42076,16005,22445,89291,45629,22578,72621,51978,93447,23088,34185,96804,58398,89643,66252,58063,68349,51525,53343,63501,27703,60604,31771,61913,18795,90812,21164,60528,62221,14546,19025,20057,78155,56577,62533,65588,27964,87087,55348,79966,46041,35476,58221,57329,96104,63797,60962,67661,70517,54369,87735,74341,33977,37202,52575,17972,37315,98157,75626,33669,65236,17200,37970,47931,90507,13472,60105,53505,19875,13281,79582,90104,47032,96987,52367,47667,98409,64489,51097,21165,49362,82257,81733,72321,64916,10830,98870,79314,97289,34821,15932,81929,12369,39573,63035,82831,99841,74377,14107,75903,85998,87548,14960,51289,84953,24084,97304,36273,26228,62343,63798,46135,74694,66934,89641,52976,40224,87329,33290,55687,25813,57500,38277,10199,89650,92847,65851,80185,96245,69243,60955,92454,79058,23977,80612,98490,13737,92103,51131,27640,71271,17317,82403,38827,19082,93837,40129,65201,26793,25324,51515,18501,47354,40307,63142,66921,46976,60222,76533,31020,72130,84435,68768,90474,85159,55297,89838,96720,87380,75904,40721,89016,15239,60424,83145,70789,53987,85930,35668,48799,57662,30012,90604,26644,13349,32885,36910,34615,92892,15961,96325,93591,13517,38142,58474,33768,60749,92323,35440,43948,27432,43189,18004,99983,96840,20776,63601,91316,73980,22527,41412,71128,99806,59865,26460,33454,15233,31316,86079,28334,22048,63745,42426,90079,37487,82446,83686,37527,46507,14077,59473,75822,98691,99017,74360,84776,16017,66338,98271,36661,78401,39647,71932,14015,51130,69598,11414,37297,96521,98840,74090,90535,89957,96025,71908,56639,69681,21000,15670,60509,92221,13633,11397,31831,79591,66270,60610,23653,95126,46874,97012,40215,10974,59142,36486,74981,14459,75702,94139,48038,87048,72890,60751,28053,13145,14977,65446,15585,11022,66894,98661,71675,71370,72619,81280,78702,69300,27918,80638,84202,84036,31293,49671,61168,87207,83489,60764,93988,86401,70826,34015,49448,89382,69311,34675,36439,86697,97778,24316,35151,73689,65610,22361,60586,16139,89780,63574,93950,75471,60158,18037,84433,13680,89730,74070,41113,77015,69125,88759,27143,60459,12849,77195,92345,26765,27452,81893,14962,38608,53075,56206,38579,64187,21034,12398,35977,78101,19012,68303,87200,28032,34086,89100,54697,23634,80095,50576,77249,69126,51762,17157,33469,66560,66635,57429,36579,51957,53363,33207,11926,37212,19064,95718,86196,52053,90105,83615,33449,37809,64700,67990,63952,25250,94819,27792,67337,91538,92767,55015,13533,93036,34050,74747,39755,30513,96648,87107,93669,53382,30122,45659,63486,92052,29591,15988,66657,38910,22950,32918,26865,59055,11938,52922,15890,17159,73711,71460,34432,37006,38310,40474,52142,25630,87993,64809,32906,35929,71335,89540,19313,62625,81460,94499,91544,81789,66186,87961,26109,98482,81993,78342,93145,53611,11267,10808,57796,21340,51386,28417,48547,87208,44319,74862,63581,16638,34708,22980,32730,64729,66481,98416,40833,20049,35092,96852,70363,38847,76382,51567,57518,82247,19058,15228,44764,95849,77021,53315,25640,71569,79404,39929,76188,15468,48953,91247,47428,89332,11218,77373,34806,77246,89122,74604,21799,83837,76702,54390,40420,94643,70222,39571,89456,51803,31036,79573,30419,15458,93177,42415,94942,11300,30386,49209,66792,44588,30122,79273,85207,85296,16353,57786,56836,66633,30722,60989,20269,55188,81146,28562,39140,31526,69093,92589,60906,84940,77513,54884,72374,79592,21519,76717,59042,15219,69678,82613,42390,76205,21292,32917,86151,72861,45263,83017,59132,86162,60481,93398,39521,95319,18925,67492,99383,95342,83614,92553,21561,33046,94443,77667,18719,21686,60834,32467,61484,75049,86896,14836,20154,29164,56743,75507,77228,18824,34780,41604,45039,78052,59709,90632,14747,32707,46028,56095,93476,65892,79555,98351,65752,78921,83209,70848,43114,67148,65448,83063,27314,30333,41002,80713,23155,56554,39261,80916,66533,29669,93076,55132,93730,27082,94435,85739,55374,20000,25018,41251,98863,78052,37479,58180,18134,27499,36212,89144,86618,33673,90028,32170,83559,35307,83569,51180,12992,82794,33516,60547,12699,29309,70240,39614,50287,24971,91058,84538,15138,36970,15648,13010,13644,76676,49295,22229,66857,99837,69253,55860,21984,29628,62335,78628,93856,35050,78421,50497,92920,96384,34485,23371,18584,56743,16861,32808,51270,13592,22043,46833,20452,82299,38544,48525,72658,10774,46580,56160,48769,75772,23000,36508,55557,17548,20816,16727,39013,51966,79976,41151,54490,25642,84504,48776,25992,34100,30657,84389,86329,16542,98912,76431,30003,90222,64892,45750,56833,13904,41957,54216,44170,11294,43033,63879,35381,30605,51266,63403,57836,29991,65150,10877,48434,32708,39647,52209,17758,76664,40694,79342,14394,86054,12066,63728,88860,66372,55904,43188,34067,49106,58596,58815,78699,48023,74105,73389,38691,71960,28245,60982,23101,38964,87572,51010,33984,53772,47035,74092,38551,88681,36969,17142,99772,63780,78067,47907,51081,37611,26860,14915,35552,56266,58504,24505,20515,85026,21870,44049,63781,57562,69929,92903,31154,85983,49202,47273,11509,83445,48254,56845,45819,47285,82193,26385,43884,40810,16406,94934,70860,17370,57582,93305,72811,62820,42620,96130,10072,22105,11627,35371,10205,93935,81196,13633,35644,87084,31355,77162,96030,98217,36983,64775,79892,13428,70053,41009,90031,63719,15393,33952,51923,85715,58250,32457,97782,11835,42723,65689,58531,62687,57084,89192,73229,77859,33959,76609,49146,86700,19102,13807,46364,29068,12496,20259,51501,83344,33853,83758,41350,76825,92012,16476,85070,89453,56778,71524,43582,12120,73322,29174,36386,90323,85020,77501,42261,40648,65403,43642,45529,69395,43956,76162,71504,65775,38412,25418,94259,70337,52289,68856,78820,90545,13816,88219,95688,67821,41201,50693,31553,43480,90315,98507,47936,72601,93652,53102,17314,79002,42053,77944,97704,69222,20489,70994,45008,98612,20384,12677,36686,18006,55943,78519,14902,89148,79463,64249,79004,71667,64250,37302,30530,50793,58863,29153,40615,87823,73640,53620,29887,88748,76741,64846,74314,61360,91479,13907,89122,52466,47362,88156,34765,17977,17077,32290,50366,58765,77516,89103,21227,10443,64024,79051,64912,65821,86629,72020,35889,47441,86365,45746,77739,31256,75324,92755,81447,69302,92568,73237,26974,92242,92012,62192,42322,74330,89867,33639,72483,41101,78126,20985,42976,74131,85707,48269,77604,79286,46681,30614,31084,23365,40068,26083,77122,10156,31273,90667,30979,83093,64975,36378,32907,82066,26278,78014,88482,55906,93800,45271,50908,93483,19408,74930,91913,20714,42560,97018,65553,80365,91517,20338,38963,58753,16893,38464,30635,17595,39803,72029,94988,81783,23043,22376,79677,26811,82641,27666,62786,87084,33070,12053,95974,48970,40642,73514,83611,23701,67563,84176,12234,74748,56065,84244,49806,40066,70235,30927,48684,75049,84307,19624,90871,94377,25176,71753,83368,81745,13038,58158,69289,36693,95338,90840,93735,32763,27644,53401,60655,35357,49483,78636,10759,29674,37853,19445,18024,30318,31715,62104,68072,26278,32613,40497,51061,63037,75057,11841,48251,77506,90876,47309,93225,65720,54408,60220,65210,56897,58113,33357,48763,13916,30015,91043,77223,20265,77479,98730,38260,58045,51335,40397,96800,16231,83664,98586,42113,74190,35752,41892,83823,72821,99211,62727,18892,71533,30027,89676,90918,71660,38913,15094,16067,64080,94490,54758,41533,55570,35636,76371,72292,74411,19817,16759,47221,19262,95905,59297,79295,21872,77998,62880,72201,17650,26487,16578,41529,75196,53573,75972,91083,43206,18195,90321,66124,57681,51800,49928,87803,34556,44494,66500,45313,76478,60396,48664,36337,83965,35332,25455,32983,47850,33284,80041,10860,39231,89920,81934,91497,49577,38789,56509,99981,91352,59058,95709,59482,28728,89207,47911,61298,52335,24357,39560,60775,76284,64070,72561,80977,69957,71006,17184,26620,63238,72916,38889,40138,86465,35816,35012,69248,31143,93363,24526,82553,81415,82933,85583,81653,58481,68920,13724,64345,92827,92613,44572,41937,26183,84425,97418,19434,70935,79739,18268,40750,63732,53641,72352,70106,40852,76524,35194,20118,56200,99327,10307,25458,96307,61665,74456,80967,98709,71720,48643,86987,50554,45525,22743,59091,12699,53586,25539,38540,78450,40113,99220,12674,45359,66104,58743,66517,32547,91963,10944,78328,88845,84758,99342,68779,99930,13491,65828,11310,51291,29766,29207,50970,68271,91393,79160,60751,73088,43899,59810,33811,59688,63312,30440,52152,42267,63438,58984,68520,97123,51277,37487,47910,97668,15405,81526,93595,83779,20004,35175,62027,90387,94897,56147,67418,49156,11782,12983,22025,37850,87845,12511,44707,31685,48599,29101,73071,73725,36801,35827,21794,67507,16599,91018,13501,59729,95474,96209,89818,53595,23893,30140,46884,47021,13311,17401,18623,95924,96023,41762,80255,71715,92887,78693,66846,99958,64310,58570,42502,36274,86183,21992,44284,94833,69125,27362,59475,89550,89986,16016,19220,16148,77319,24063,35478,55433,50403,88418,30781,73963,35758,67055,11147,97895,87234,30413,63093,81966,50119,56421,13689,97851,80363,93597,89568,39211,30814,44795,43014,47592,80345,91969,26430,40677,49921,31440,32500,60514,23618,13813,93982,54954,19164,62207,60598,75611,69212,26542,91802,12635,21041,82369,87759,90842,46359,63102,65980,20947,83651,61351,74536,13182,23089,97657,90016,36790,77024,85385,19330,36707,91825,39598,66622,49167,28418,80945,28245,27160,68038,30253,93918,62796,67199,47600,62115,55903,44537,14576,70804,72636,26781,19214,52682,83699,64046,72347,30195,76041,17812,20215,72445,68364,10842,27180,65087,85446,42815,62323,80379,29705,49518,43548,82132,78999,81964,70702,48476,35654,18276,70446,93865,72479,15991,59791,80132,16247,15797,92268,30950,74181,68170,38452,43693,39392,58722,40910,52255,40032,31387,34363,43082,50740,95812,22386,46899,95957,40406,58921,53418,56722,30015,46964,63683,61397,76664,71096,50991,52008,42709,74686,21195,67715,91214,59556,90445,23473,26103,82844,78810,28557,22665,18302,88101,19422,50071,66057,26558,44306,32583,29670,21494,46380,48810,27974,91179,57126,80218,75067,13195,77233,45870,84664,36549,19141,73724,89247,33133,43534,99321,90948,24446,14644,37717,61323,35536,44641,62477,72890,77197,82386,21314,64896,64827,78444,59560,15085,70510,75535,80103,65465,11252,81167,98948,81205,51135,31976,54325,51083,35844,89024,93199,98836,86868,67295,72397,15435,88048,25056,49660,56566,85913,66514,13171,92447,12520,35297,84616,91596,80032,27931,32758,58883,83694,78915,99297,67706,88011,34968,92915,15148,37098,18447,64906,89287,30878,86924,94295,87212,62084,48143,11934,36793,89693,97855,66238,84173,48265,38802,29616,87387,77226,60570,70774,77118,57103,98655,90071,54996,49730,87524,73252,30594,64140,84355,56120,89085,23669,97379,37386,21291,52123,26137,24228,27354,20094,88887,69470,36750,99671,12976,42775,46058,89848,17592,77060,91362,66630,24642,59213,32507,59672,40420,58829,36465,17529,97619,78858,39222,79749,41995,89858,53258,44043,37087,61236,65712,75059,39984,29142,13639,91175,38647,97667,10784,31961,35682,51553,20126,19641,70529,60999,66268,79883,92971,19254,12930,86776,89840,29858,48795,12646,53913,61242,17918,26801,27172,54037,85485,96903,78463,75792,45872,17078,80612,37772,70618,39449,86863,33384,18431,87294,50909,20080,48274,57362,67527,27791,17086,81651,39147,26919,59725,10153,15131,26465,91199,15756,40750,40898,42552,14323,40435,76496,36227,91428,90381,29392,91417,63419,74529,37217,72297,35417,14794,81475,38263,40159,66355,93946,95728,73565,82069,31028,68019,87231,47102,16478,52770,63708,22062,11925,76306,58000,21339,25702,67687,61285,82926,49474,99645,54044,24955,52260,85733,68553,39331,13055,30039,85254,16378,78364,97167,93806,53287,96653,62205,79745,37481,49135,52253,12850,67179,99168,82749,53147,15239,67507,80100,89340,48922,69414,18605,17530,53898,58479,16941,65162,90849,93480,54621,18659,72085,38128,16630,65398,59939,89867,71005,81866,50826,86491,93944,30041,19692,23656,99654,75014,16461,83869,42195,86844,62468,38925,52623,84118,98901,53934,66485,43042,28657,23946,81334,46381,87997,39201,70980,89111,48874,39989,58686,22966,37948,94847,97213,17789,30843,15718,45176,93782,43513,59406,49479,32749,53543,27963,52897,84380,89173,20069,16031,44808,83959,75116,34939,49078,84982,11918,66528,63224,58615,60795,89392,28833,16302,16218,40760,76255,74513,45973,21705,48408,16442,24491,24780,72074,76038,89460,20655,42067,84492,84262,82437,67726,83937,42967,74343,80821,96196,71149,68750,61568,79749,23688,40074,42106,30341,89925,33689,80314,70401,71614,30856,84533,62129,67494,10224,47035,79735,85074,75987,80932,89836,52596,68070,38312,37606,65591,35943,49189,57861,64879,70479,57834,50112,28088,89379,94575,62229,50546,50814,58092,74952,18791,49341,56085,50647,12589,59237,77422,67480,16648,50606,34815,95085,99822,14592,35458,41697,21930,20785,79148,90517,41452,31786,17679,84646,44332,89303,86415,88405,59803,50453,49563,12848,49283,24761,78776,94776,44386,76846,17654,30518,97427,35214,76605,96847,65087,47413,62211,26319,70787,18423,36969,55668,54884,17929,35085,18134,61174,14760,31760,69605,90573,40750,10513,72566,72787,38863,43882,40366,38375,47642,64375,27768,29728,88110,24082,37533,89599,10121,38150,40034,23688,61292,74548,41816,94061,60470,92182,36384,21861,12140,74564,11183,96695,87598,97485,76487,48348,77695,51863,46885,28016,12306,96041,70390,39432,29661,35499,57347,18237,43273,25190,70428,41271,53058,92722,91909,32993,84937,53802,29052,79462,85527,45461,85416,60769,11553,75414,30567,47716,63255,63827,56093,15163,91318,36786,44789,19520,94738,79830,32737,12901,65962,68512,27106,62452,45095,95906,54733,33324,39236,73023,59111,99392,45438,62672,87155,73813,17653,85277,38561,98398,81440,94346,51485,99551,92213,84683,64776,16537,76461,98332,88230,41913,82762,50129,44991,81506,63902,58147,94252,94663,53470,85189,57082,59736,91960,13147,75950,75741,26606,50556,37113,80826,94725,15012,68888,27004,55051,70990,76370,21853,52042,53863,23727,96984,68969,92916,86214,87927,69507,57661,54640,62641,38220,72434,58979,65073,61444,87544,44264,11419,56176,75933,62170,12283,27685,84799,11559,58229,13567,77390,52484,26880,20907,14145,36694,88702,96336,98420,94110,41165,44885,73208,63178,67633,13177,38391,77983,65963,45367,33077,53709,72604,75597,79986,73066,66026,11775,64782,39302,96535,59434,44416,72349,12981,15118,53586,38321,29241,60724,95603,82815,72702,73673,51402,15017,82645,40228,94703,38673,46781,14084,75729,32084,51850,57319,27062,44738,36309,75205,31898,37107,43157,49007,82182,57720,48451,96498,48420,10764,94267,81351,69050,36210,21705,17631,69952,60015,63016,32854,38904,80912,71937,57247,59970,44370,23811,23221,13950,67992,80599,10884,20569,43736,45027,24163,63269,32887,47509,12486,36739,29487,34033,47344,16028,51148,34649,56736,53079,41992,52349,41675,74714,89349,53933,40321,37350,85775,80546,74098,55745,33699,47940,26971,76620,39920,38504,65718,99470,73581,32580,99164,68406,36319,47646,76100,42975,60345,35165,84641,26887,20488,88553,10861,77826,47715,91419,53001,57895,14928,66703,95376,80626,38611,31281,82653,16129,47222,55537,91031,89940,68964,52840,57336,67118,50652,66656,15014,48198,34644,74299,36050,89863,60429,33131,27745,68819,82947,16819,10784,65722,44244,47331,98492,10881,62188,21695,14801,95673,94219,67173,65657,66578,82277,57309,82756,60625,62863,27363,51922,76246,21338,34356,18087,85965,75165,87810,41433,51185,79874,71805,63132,44269,87328,96556,71628,74094,37112,40157,44320,94641,41735,73803,79773,85354,46339,15027,59290,69141,22546,86331,39737,49056,63883,24378,34699,53381,27901,58298,65158,49504,40131,57363,68845,62196,42847,71991,24632,19240,66733,13432,86476,65948,88514,73600,33566,50509,92944,26318,70676,93670,16163,23504,88051,89471,15349,18487,84939,21109,29027,38383,69086,26742,59570,26515,36365,83161,35811,49501,69308,65812,70342,50777,15751,46342,87464,35376,84939,36246,22939,33428,93288,58832,72993,60146,54133,97425,93182,69254,74930,95818,69217,61463,64378,67789,15281,21417,20468,62330,61067,95604,95226,19213,62116,62977,81998,85711,49062,56484,79409,11727,43843,71206,63709,97636,25415,48997,14336,48898,37227,45106,86421,48663,32277,12347,17181,12160,13443,41666,96270,49548,76731,75047,48618,75065,27526,33825,81410,15408,49007,77124,65315,86397,13416,20837,17008,20099,85238,46815,53887,16842,53563,78341,68884,49242,38068,77706,86963,70541,18680,50656,71196,15346,14638,20083,16378,32615,62558,33856,48582,24808,98872,62431,34038,64306,24741,22054,18490,58662,27032,29314,67030,64720,67745,53002,57666,29489,16913,22439,56447,69874,99713,82048,63859,77379,88271,25427,63452,49601,69168,19530,98179,45645,24623,50668,10781,77459,20076,27531,51924,13900,37824,48982,65859,77016,99171,69492,20120,95945,53389,13482,40069,71047,95867,43792,47925,81292,78622,63458,27519,35492,23497,84650,72093,38834,45320,91412,12172,98473,53613,24047,21426,43471,66017,55882,44292,38213,84258,36730,98076,80207,53559,46750,10033,41871,96310,59230,82183,10905,89031,57391,35071,81379,60853,26151,78566,85192,22091,83098,69396,70726,64056,62966,29731,55373,25227,50786,98474,30446,38586,53832,51163,98300,45204,60943,32830,68190,41875,77336,70750,98912,24449,15432,62873,28165,98650,76158,37619,62352,60794,54447,90279,21223,78627,93833,33259,91142,98717,61585,54062,13435,28873,15378,84266,78480,10523,40525,86222,67600,94177,30334,30601,35033,15886,38278,30991,46625,21559,12718,17013,11723,87320,25832,45918,69895,30476,61704,22143,39501,40347,27394,79904,41762,14387,43299,21840,43375,57609,25368,33160,59686,25586,98961,33202,36157,61479,41902,81671,24827,63458,20193,92599,68248,92104,26474,99474,35969,37907,72005,95505,41873,10701,83944,15787,44327,38315,36291,48728,39061,71097,45053,66861,83335,84940,83831,93147,93985,90885,89085,27073,35484,86075,40312,24516,17243,86910,34271,89482,52001,77407,26649,99977,22315,32102,77795,68322,48513,21033,40409,45322,73955,31555,97867,53552,26002,86377,94969,18160,79301,99374,28049,17604,95572,38854,93402,31060,11871,72044,54450,11731,77223,66571,62693,12717,23413,86102,99668,27676,29428,57006,16089,15155,64025,49350,27664,20920,21472,60747,42077,53018,74021,61342,19774,31040,83081,64967,54866,54364,81702,74734,40301,80458,28714,21877,58894,72889,68416,87200,68321,69961,27474,51896,67115,51027,53657,91412,25325,85875,82877,26514,60443,65055,95183,32898,95667,27946,92607,21946,37697,33880,66027,48318,46848,78480,46851,15166,93356,40201,46675,89785,66123,77752,13489,33392,28178,25177,21491,60854,33125,72292,28598,53208,48375,54288,44940,80047,82708,72602,44214,70417,55723,32371,76853,96659,58190,79516,61377,34232,80249,22200,45223,72417,78725,81661,70679,70722,89579,64737,99626,47090,92310,40088,55586,70663,55530,65265,38841,11481,60710,24166,55569,20169,10891,38977,13411,32619,86524,28072,59243,41312,62286,27019,46587,69758,40393,68413,79725,88438,26056,28424,15553,50358,46961,87596,84786,47836,60812,57458,49798,29759,59618,32642,40906,83591,34139,36263,53995,35865,42086,58924,53291,71766,88273,72377,99933,66343,11246,29459,35728,64646,96118,98962,67955,49649,69501,78504,31068,99092,64377,85168,49907,82955,70446,69667,83974,79113,47407,32315,87994,66134,94925,67896,94754,78408,64723,73515,53315,36252,94674,33948,38136,98557,31364,42014,35358,91913,30841,91727,43779,72697,22591,95448,82142,70425,55299,56787,45658,51399,66350,52174,73521,37022,42173,22218,77630,68412,24212,42374,13859,71260,27802,77013,67506,17595,58026,81793,21641,78834,96332,96885,96747,76034,50111,98569,52167,79411,92651,77592,88811,98998,11057,13577,90506,44941,86482,29375,40140,98457,81021,41924,53229,76886,86913,28418,63714,96964,78930,20835,83475,42712,96778,93453,58192,29248,25508,60195,77158,88079,69503,34639,47503,18024,50240,24910,19445,57352,16914,55174,77499,57443,92252,57157,38977,28718,11534,83696,91369,47634,14885,76056,81952,28745,75048,10607,92989,70353,36209,23832,51765,11187,17399,74923,77973,53741,22112,45249,73980,16954,73407,32672,43170,40237,61025,78017,30658,85603,83222,89411,75672,57489,32129,57169,74689,51843,17703,30772,49044,46161,32670,62867,71744,98945,93671,51941,25285,29593,15173,48657,42668,98229,60985,60103,76026,82187,48674,91490,69748,21081,16067,48479,34667,70048,46625,93670,86690,36900,58765,21803,52167,22177,93131,93681,27330,91843,37094,72525,18202,98054,12563,57401,91620,63119,90991,43420,26529,57370,31593,67893,35481,86462,64262,10342,41376,85645,39142,98412,99704,64870,56091,93088,80687,92779,30773,15156,12814,34530,37603,62676,85245,78548,22708,26264,17434,97996,93649,76549,15724,43647,54218,34912,58086,40703,32667,56641,38393,39347,68021,11557,86493,66787,28370,23591,24619,62211,19327,35314,88235,99082,87144,64164,74185,85395,16240,33923,32076,27269,70308,28155,59218,39046,88434,31243,92971,34516,34848,11540,32576,23381,72540,81427,34789,14466,62888,65365,18400,32280,64896,45163,66082,12216,83628,60941,57054,47197,55476,85179,66193,79177,12544,15078,40505,91010,71337,29602,85041,88960,22381,28796,50181,85851,79266,95291,97275,31347,66585,44063,29819,61465,43948,87136,50942,98045,20129,21758,78977,72919,95029,10391,28172,69346,69635,54308,57969,86515,97480,58464,43622,85151,30230,46827,26336,17909,25203,52890,87480,63309,28722,20835,48263,23136,40827,26305,97638,11286,60508,55628,10190,41662,71074,16705,89668,67936,22191,18673,46474,14919,39350,27327,24457,93386,15976,47606,88837,33909,99837,94520,98667,41601,90400,48862,68988,84834,33798,94397,68389,55028,37363,42762,24074,55334,32105,12125,68591,38457,85387,23033,75910,32443,20704,55308,30921,12879,56007,94271,86086,12112,86124,11688,15543,89666,16445,65456,73768,23969,26062,72667,91327,30520,41625,97988,35856,82199,70410,63398,25742,39921,29903,10897,11216,22592,41541,83819,26244,15672,43433,73612,24486,56226,39853,73014,82783,27397,40422,28645,33153,39962,62830,26998,96887,87445,35645,67667,20929,64893,86293,16301,59779,33851,75966,14012,32841,93362,93841,51604,65764,65200,74385,38238,61136,12349,16100,78562,76646,43434,63145,30010,33858,67658,39338,33238,61612,98001,82619,82625,70235,19869,48544,16504,59380,47416,74861,64194,31653,19511,66699,35741,63208,98157,95666,81616,14989,55000,85163,36955,55942,26451,22152,46410,76924,53722,90819,41747,29120,72602,99142,63201,28515,58649,91163,69403,22956,38470,98847,48859,49630,82094,74667,15955,33688,73941,10644,19257,45482,81111,29081,60118,18846,18182,83234,70161,72639,73742,98612,30296,62936,53390,56740,34613,49413,79959,76977,75166,37502,18827,25225,55255,64209,82440,89784,35381,42799,87808,35000,90797,64131,64593,75665,49152,27075,26773,22659,89932,77561,46861,46738,48514,13367,59946,19954,20641,97214,42077,63213,85468,38341,54307,52374,47814,71701,56508,25699,97794,86084,74955,32775,50934,64389,61088,86315,84214,26859,49926,33784,35030,58855,33359,82678,23395,94828,87872,35554,27044,99006,26144,91250,68228,31921,95087,46939,85132,88166,93762,17555,97936,63358,50285,15202,73801,25724,86934,25789,77718,87503,44557,92680,77734,29375,35631,23821,11797,44187,76805,31996,87798,17894,92929,70835,65784,68090,51612,30716,93610,70185,39394,28670,37428,96580,26253,86038,55952,50765,86879,52799,38425,48427,65136,63352,34336,77176,57584,33692,53519,69937,61449,97615,47492,66004,22048,57305,48810,93729,48271,10482,14662,69140,85453,36140,26778,86111,67126,55039,62598,34360,69191,93413,95095,48163,97082,75660,88164,38239,77048,41433,95620,29181,22040,89190,51838,30575,23406,49615,16555,71606,85979,43046,85689,50657,41131,57327,29626,28192,32334,79487,68893,72043,50813,74314,18519,31873,27761,34340,17792,16311,90684,24079,98707,20420,24891,87398,76842,23536,36394,77720,83174,79139,85156,50660,61432,90906,22357,64660,28068,34700,77202,94235,71823,72785,54120,41604,30268,72661,46074,68919,96594,32588,56172,48455,92097,83554,83852,45329,29985,95550,21056,17269,41979,87282,16754,29685,54840,77762,30851,16758,10914,49599,97163,85651,35790,98378,78721,95085,84587,57203,51348,77140,27233,34893,52544,96714,69387,24322,10418,57078,32777,66129,92196,75507,53537,82795,96612,52689,34051,60302,81581,45904,51984,62194,54403,92802,44708,46954,31569,63739,25340,24330,10813,86690,27301,18578,99532,85500,63942,78099,93713,26143,30195,84601,51712,22660,77047,72733,97758,84614,22801,84791,13708,32469,65395,41817,37046,17952,53807,71312,43740,81302,73897,37919,96091,32261,18917,85415,92527,19959,87843,13228,23136,71101,91280,39034,49985,14792,46891,76335,90334,30993,15179,93723,32108,53792,13801,75112,34779,93234,33373,54207,63619,99565,44850,29515,83512,31782,34198,72197,69491,77865,87484,55958,18142,80454,88852,33038,78898,36901,25400,54409,57649,94260,40345,30706,17012,52067,85500,77131,15846,59255,50172,38522,89534,24770,70495,24266,91923,82190,44315,63268,84707,47050,65773,11043,39942,44929,74203,43924,76048,33458,79793,60503,49209,56317,16587,12260,22447,34126,67212,24699,56529,81444,65685,43481,27876,62835,42329,99322,43972,92313,42901,76029,89056,52216,93201,61769,86057,54049,53714,76602,75037,14738,90830,73817,29370,52926,52244,49301,67005,41220,24108,37019,40147,61069,14167,53305,98437,45656,11291,15711,87816,27523,98221,41044,65039,79757,31534,30599,48207,71018,71976,30264,37315,34031,13897,28158,29999,38161,54447,63342,16487,85155,84927,69347,17762,20781,87431,50127,18680,99909,40630,71407,98670,64111,25208,54112,12597,48309,90012,52599,83715,17708,91939,14716,89542,75024,56883,59123,77650,59297,56608,19565,80792,44712,94891,83725,90128,62599,16981,60788,79232,93907,66896,74294,58752,92138,31853,62607,31810,63634,80351,74591,78653,51122,56207,92642,30356,58090,48865,51522,77009,90273,16936,89261,28803,99527,75853,19540,63834,32241,19906,13078,61363,39012,33769,86980,39617,97653,87935,46473,97331,93462,54723,22005,67652,50823,24161,63677,36241,16926,57212,23485,72611,30818,72197,19669,55106,88159,91574,57381,15764,89412,80072,63375,55583,88624,63093,32406,13059,48355,81515,62727,63936,10069,32519,25205,50944,58932,75096,46311,67214,90735,87640,77100,77481,33224,19932,18346,17886,88829,33956,21909,50150,29029,31024,94322,54700,56208,17413,34725,16462,64713,62628,15872,39084,90591,77138,33419,22206,73746,56546,47731,96835,28281,78145,50532,39073,19642,80962,39938,70907,21429,44910,94203,12465,98518,56965,70128,71832,49310,15314,90103,87258,16333,30987,52878,95434,12242,83388,56719,64921,70542,61699,30866,11857,31242,79470,13831,16100,95236,92156,64919,15234,35707,22256,34190,75619,31332,64057,55358,55712,92643,79244,22437,36731,15832,16732,63133,98855,69015,84045,76390,49741,30503,15226,86965,92908,32909,36222,27877,17068,32632,43525,21084,17325,56993,26870,42175,63898,35630,37092,25667,80521,60036,45155,21448,90239,62218,29239,83423,32477,37948,27328,85268,40281,73344,41311,52653,19337,94995,13127,46840,16150,47978,66379,84987,72311,86208,98344,11394,69666,92017,96743,98948,89689,80717,15804,30981,55982,70160,57862,60543,18523,80218,65066,91731,64755,36041,23995,51403,36578,13414,59366,31461,38818,70518,20545,28241,84998,75904,62122,24865,21482,76884,74746,98240,66667,39683,24223,53192,38390,96084,46330,44348,51151,21353,44829,89998,94537,35469,56687,63413,20808,29852,97696,71073,52878,97970,84740,85544,85689,55258,50302,58166,38591,37417,37663,87538,59528,57750,37629,83761,82511,58948,92716,86858,43558,62658,70112,50402,36808,96818,57883,66343,25591,73532,21815,32734,71983,45026,81614,95762,62629,88206,24553,52412,16765,80813,93466,79641,31830,33333,40644,30497,50752,28263,18565,14220,93465,33379,59327,48698,96135,63938,20545,69269,55244,40260,20600,52173,91164,59685,44156,37702,66429,73567,40602,11807,22382,99793,96802,64735,95539,19243,91287,88493,15064,15154,54867,26297,83837,65087,52364,69423,12074,94876,96217,38828,99579,20233,62737,58651,93389,82540,33796,68106,42676,65388,65771,21464,55103,31805,48401,83758,22238,78837,89821,98521,99268,24609,49356,39290,17657,41257,28821,83782,92833,17479,30354,88279,57424,80898,79302,26863,35008,10726,67336,69676,71213,76746,13535,86673,79062,33098,16614,64945,30074,20024,44972,94219,67441,66028,46508,17327,91582,48364,79298,37047,67097,58963,74664,49644,58714,98421,55548,14304,28138,80208,49218,82754,16231,10338,70641,22412,10898,79924,94442,11136,68692,65526,84763,95719,98047,47993,23947,50685,47939,92363,73281,38174,32484,69563,22546,26127,62467,87393,74925,73157,92663,89918,13112,97392,14088,78165,74350,51549,89236,65548,29274,52268,67202,40165,94128,85623,78586,87506,77236,29488,45432,86393,14201,68366,99499,23498,81962,10495,77298,60294,41341,68076,80093,66033,28556,40235,71836,88153,49693,48802,90112,54914,48012,69745,10311,96945,74782,75256,20466,81141,41625,45877,39630,13233,88674,55973,30825,99294,41665,70980,61628,94373,62318,15503,50532,88323,95511,29587,80129,85886,63933,31672,79423,13100,26722,78081,79328,84674,22225,18422,23942,67545,48176,74701,77742,33231,69519,30268,45736,39083,77926,88489,84407,91645,37849,40182,38075,72714,23575,57665,18174,76097,97624,47793,63183,62856,58701,60459,60068,78300,74105,72720,70654,83625,85788,58037,66853,38999,57677,22312,79171,35684,12392,62706,43594,32415,17897,50316,12603,19023,67880,23072,37605,28952,59232,28776,58838,25279,80325,14265,24622,76160,24447,75382,59378,89188,65163,78325,26693,88498,66846,44125,78893,14901,93075,49192,55643,77320,47466,29430,18866,33155,25100,66979,78944,76850,74623,14303,54082,11652,91283,76997,75974,34800,59112,12705,25630,19326,33164,90092,33021,16246,65020,18980,88079,50937,61791,24228,21164,74616,45479,50443,28873,70203,27126,49315,38127,15624,18298,48837,24363,65871,24937,15910,74039,79154,52031,80148,64642,26222,70839,17886,21484,56742,52720,63929,70020,69020,69568,59917,16314,71789,67132,18200,31517,27350,12303,82041,62495,88464,60494,67006,83917,34608,27930,32832,87992,91978,24339,37581,33080,93683,93205,38908,14977,53432,14527,51876,35285,34242,18932,62417,35836,54118,49778,45196,87184,58172,13789,41589,67892,30005,29766,60673,15307,54848,42392,21673,50009,24020,16587,22788,53783,73581,62780,20576,72867,29705,29406,31079,62590,79160,12916,79501,53651,44936,89486,72128,34610,94872,88854,85620,57412,96159,87708,33850,71336,46967,13682,24168,73279,51848,56153,42800,49445,52500,88872,82590,32163,74592,65335,74898,41230,29141,20460,16650,32907,43314,22308,52353,55615,53235,72343,60783,64066,83146,31737,62074,29180,69755,13923,69647,13622,67509,57337,18164,71330,99400,64482,34872,22887,57554,75359,49533,83631,94294,76711,74862,18242,81017,47096,76700,78503,79221,14565,89487,48289,12237,39798,40087,10469,68394,90630,18171,40055,75981,84443,38922,54532,97042,87864,97894,85205,34526,70084,93682,90696,87605,40505,14772,15384,50363,60281,20112,79298,52694,32765,42681,17584,97480,40123,37026,17143,96000,83556,93021,11830,70176,74507,22769,22296,79799,83106,21954,58152,12349,91850,63778,18794,12980,44597,61280,85489,83922,60369,69854,50779,88310,63842,42433,38094,26167,23797,72751,76573,81650,51444,15942,97875,59194,96471,45365,55180,60563,92506,61411,96304,39974,97878,62122,41778,13481,53613,35742,45866,50136,21344,70473,97939,43634,47837,58162,26668,36899,80352,59749,72077,19589,76576,99606,92835,95364,69994,37834,13553,93024,30662,37844,28975,55090,13278,46366,89797,74398,46517,59538,64283,88007,90911,56918,34685,10445,10214,78116,19454,97125,25218,94348,12104,18691,19584,36929,45653,10334,98456,73580,52972,53882,62703,31519,70070,26925,28420,52211,34718,68287,42064,75066,68383,48783,44098,79775,10488,58732,83758,19914,25842,62063,52790,57584,25461,14655,76503,18615,51169,37367,74449,12214,69448,52345,45221,83897,17953,66582,85273,91283,11334,32952,20492,16793,52293,51442,44565,73536,12025,98990,22128,31742,44555,87673,51434,12256,80036,15014,68425,61375,95784,44088,21489,83990,26403,30569,72507,58443,58023,33698,84773,89868,98618,54486,26224,17349,41210,95576,64727,34653,16929,87474,25193,62579,35420,78523,80297,92130,26393,45799,38967,91964,52015,65125,41904,76425,38914,64635,84550,62372,60234,75261,96186,36096,51360,71522,13652,85399,14566,61421,64064,98509,51504,86142,62822,19485,36682,53656,89247,93697,97543,58518,14174,83635,39016,13514,74945,11163,75283,66719,17447,67344,80377,31726,92497,12664,72366,65600,53821,19912,81965,24423,51515,52901,89983,97877,64654,96221,26223,70921,95839,28326,90454,49287,27161,44493,81860,23097,93384,70893,12449,10278,96293,33533,73827,33459,53850,27858,31931,36253,61393,81737,18481,55983,39295,46677,51009,47953,18274,37996,13184,52595,26610,16647,51801,91486,38928,22648,22188,53343,29245,14220,33070,89332,40812,62005,27073,31504,39657,52088,11060,10857,75277,96259,44383,16252,11085,37419,19269,96551,94385,45449,90220,92694,13078,74992,44845,32106,43229,76625,39996,27398,21301,55530,45471,37088,75806,30387,12760,91451,83378,36046,34534,21745,59864,52870,81267,21812,12090,57382,70415,28927,57496,37342,20662,56542,99740,70157,58137,37060,67733,64126,45323,31361,34259,24468,57549,34404,67819,23730,21773,62784,66009,40435,64557,60931,64988,90984,58655,46245,79217,15011,69198,43363,10815,49616,31753,52203,12573,81963,99601,95531,97947,40955,63051,56023,31270,21561,16319,80132,91138,97406,24576,24853,85085,15412,36039,38119,78148,40756,82832,91472,11294,87108,93394,47549,35086,20859,25062,75731,23681,25084,67725,95510,29781,52053,96850,63169,36044,56526,76298,46946,36338,43104,46193,63462,24350,71289,48156,29455,10889,41530,58020,22583,34325,44761,98518,59384,65638,97040,71932,93066,53929,79099,10328,56176,37454,51733,92997,47056,79373,26955,75484,60343,18902,51368,83038,39974,45037,30325,20509,71511,69731,29992,39058,61515,93212,37374,19044,58953,57625,92335,91280,17931,37204,46708,30455,90949,62137,46572,19921,48346,31261,69049,66489,89786,25807,50265,28046,45435,41032,83490,81135,68379,46331,43684,97208,85123,51856,47178,14547,45492,49467,18585,36855,32846,64179,23533,53115,65310,86542,52098,64889,37077,53897,30825,36316,23287,38051,62194,41076,67664,43901,67970,51326,94979,89192,88784,59332,85222,41335,30746,73047,23018,75722,46967,20275,55488,87015,75380,87872,28359,69392,66410,96954,61285,89101,34901,22129,54259,63102,94821,57175,79084,38272,70932,21249,10509,72562,66532,13924,90469,70414,56439,87774,63932,83496,72348,89827,76310,28466,24358,37831,18408,99174,13619,22148,68716,85314,40709,47764,94433,54187,25306,83364,31677,70330,87791,75365,35309,53593,86814,54904,89565,76273,90087,35026,39839,98220,64023,94887,28064,79785,13407,74505,95599,29985,71074,48734,98917,51992,92783,57010,50632,24092,47309,99644,38496,28233,14083,10586,42435,82288,65530,38722,51267,63776,77509,50119,26460,75171,88252,18254,68674,18384,71026,70590,72526,37687,13961,33094,70216,54501,10602,99560,64123,93463,36656,49748,89513,29313,33784,35143,78093,58028,52754,10515,51073,91587,75561,69233,17316,60224,35051,21690,40904,90313,42329,95716,67431,36575,57792,34495,75622,31253,44343,42827,34798,23255,32449,11553,38135,72811,51489,57592,77455,49404,95182,26393,80907,92953,69191,79553,45798,26240,77280,43393,68971,12408,83610,81857,21434,63673,78005,55841,26400,58580,20279,27194,25316,91068,72939,37534,34901,94252,47459,55674,13651,71876,92223,48796,17648,17102,25574,18518,20975,51767,43072,86934,97090,70712,72838,67799,17921,72546,64789,61805,60698,31807,96658,17671,37763,29842,65161,40674,96940,42921,97796,47517,21377,32408,85174,62502,60695,70390,86344,82064,30729,33537,10156,57812,11337,22220,11632,99274,97309,26505,50916,32315,82087,23585,14986,15790,45807,17083,38643,46711,45618,31380,67960,87775,95022,31477,71228,48834,15036,50398,64429,98641,64282,76632,76003,69522,80697,32405,59241,42094,36951,41450,96341,69119,21850,85044,93044,99553,88341,35847,46292,84312,57378,75557,62236,14211,38110,53051,34806,52987,82032,29290,70245,42144,17508,41548,53898,21716,61579,51118,41626,36721,18567,42562,65073,53343,72150,32570,69498,73364,48366,14866,25003,71289,63765,68597,99475,54982,43226,21314,74766,34022,65432,14871,44686,18305,36347,55609,33500,45661,23860,84896,43557,69305,85107,29899,41487,65624,43846,56101,32864,58543,65840,75595,82539,46890,63149,64066,54500,15098,33501,47880,25203,57129,95596,15505,68295,19799,66729,44377,15838,23806,95555,28367,54222,61987,85215,69306,79727,50717,62824,80527,94401,24089,52224,61483,66633,44526,41810,23158,55432,62682,92075,87012,96561,77059,13104,41239,14537,39561,42722,86017,12029,77498,23113,14479,84442,11476,76838,33675,41188,26297,86390,16179,90903,45651,31441,56315,24152,10508,20204,12585,92851,20895,37790,93091,27949,27979,25086,74190,50233,29484,38799,71861,51719,53831,76875,58010,96714,87993,82067,92128,79483,75092,62920,31204,77479,34275,28279,45276,76459,36174,47537,83314,18131,73342,22282,21572,53426,56062,95264,20137,83281,43907,36875,96361,61047,57966,80627,96515,65196,50362,48656,36205,34044,71133,86719,97834,38722,53567,20189,23009,63313,16597,27203,30189,87071,23635,63107,15026,42279,18662,26797,67753,87954,87693,80332,22348,82139,99903,94926,80511,54752,34101,85071,19438,63753,36451,78383,23567,14430,74975,81646,99901,53693,43581,13670,39066,67296,61056,38288,15536,92802,71331,22747,30600,28373,84452,28134,47426,91678,13829,18761,12093,26072,14377,81851,95265,23660,63432,36482,85506,27412,50266,59447,57306,16872,51538,20022,69784,63865,58091,11763,59917,33763,14553,39812,46464,21068,62905,13545,25559,77037,34527,70419,82679,53596,20689,18384,59762,98179,65273,52629,64703,78835,22492,91043,73490,33577,61254,36716,89304,66246,24458,70035,82832,26580,12218,11943,80458,60500,47788,65172,74208,96365,73244,61815,99694,89733,27945,64344,49414,81376,61019,48728,70981,31186,24245,76374,54836,66229,82189,78140,30901,82799,12070,85386,69235,31986,65839,39579,31563,37946,56703,20528,73232,24293,78282,99095,48056,76374,51163,57917,28350,52777,29660,44890,74540,94035,27771,48569,57629,89073,80140,59450,32642,29504,40334,26207,78822,94796,23337,20635,99590,84874,24884,15463,76689,64305,75912,10407,11218,66653,40296,59456,35371,40196,68207,77697,47507,49487,19218,32814,27172,62201,49482,85338,21343,49915,51375,77249,26253,21291,73039,32259,45722,27966,78109,84553,31161,66005,14189,40785,13651,34737,73095,30639,23734,52136,90454,64655,99564,87265,87904,26187,51115,82372,95456,54365,84576,66005,71522,92561,92281,24913,11157,81355,61755,11079,43978,54608,43792,39868,27828,48401,31078,42945,34477,76955,55698,47420,94846,59645,53433,96341,86999,23672,73693,99955,19962,76961,51839,34275,24162,56149,58298,30759,71861,85301,80178,49079,22409,63435,83608,60782,81264,81774,76220,74190,49671,61503,52288,99321,42419,41830,14348,31831,19737,58544,76862,16974,71147,59989,69588,52673,15354,29361,43079,10594,68074,32253,68106,72235,17696,88643,28488,74067,43376,59248,17427,24443,38382,71148,62954,76435,78488,50487,34203,27148,43805,23838,31677,73773,64981,11479,59577,82225,50777,43016,38535,73435,34891,65654,81290,51295,71320,30606,23629,98192,18007,19512,30618,64918,15428,76001,86432,33801,49682,63834,74388,48630,63286,75496,26086,64553,34972,63042,79344,15383,50206,70693,53458,51102,59872,23168,27229,84356,68726,89256,26287,76638,79061,42356,58859,27155,11194,85116,22821,71172,49303,40734,90358,82627,84765,12905,38297,54515,36716,30818,79573,54524,59788,83386,79928,31144,16994,18129,30097,14888,25057,39498,83559,11428,92032,63932,51391,14945,38985,32093,70996,98524,19023,73900,81877,59199,42880,84967,39356,17773,29980,11635,54701,96848,63559,81132,49837,34127,53484,88340,21155,92953,66158,43229,30193,91384,81461,26627,44143,14143,35371,58149,41079,58987,40679,24192,12565,10743,46009,37695,63017,60116,49170,18141,43801,80847,97156,63647,85446,52023,49760,19062,92258,63847,82347,98385,88902,18846,42229,93346,27536,63055,27116,86615,21277,80811,83106,61354,18126,83205,89245,60465,49082,33911,59754,37496,31077,34064,35198,92267,51361,35762,55424,82171,97288,33254,89041,65176,66173,65250,60496,83363,95049,62162,97691,11172,69569,14050,33736,41178,80306,77303,11237,61134,98934,65339,21718,43920,50037,17057,28818,57667,67127,21324,90968,35774,94777,89502,65102,72149,26148,81207,67963,47687,45062,69707,65855,26975,92895,33295,35499,59788,61596,82569,56245,86032,92921,29971,56143,47002,11145,34724,15137,49591,21619,95967,51602,77132,88601,11608,22050,48472,86758,39172,79220,39618,86697,73767,64197,39023,92064,22517,18069,71253,36717,21325,40792,44056,36622,89821,72053,51700,87465,56757,95449,29037,27164,87544,82825,98642,61014,20715,13511,29686,71095,46171,85028,86052,11700,35156,63551,77542,90052,73553,16412,64732,89843,90425,20133,98010,19998,56338,51082,49049,51722,68436,83721,51060,14711,57617,32926,19101,46193,60910,55606,95749,49750,54064,60739,87896,52010,81956,91451,14043,31294,68384,62019,99060,68692,17152,76571,71043,66394,51722,81668,95478,97344,87077,14508,45106,59948,78653,42541,44282,29850,35681,97740,20787,70971,36266,60734,15435,76125,43499,27830,34548,93831,63592,69648,66786,50821,80565,44084,19894,34889,18003,14926,48578,55099,24908,21750,33098,91312,27007,80600,40570,34911,88641,31192,24191,38992,53705,47630,82874,10155,12401,67616,44383,69746,37546,52196,85247,62461,59944,99660,85505,35426,54106,87591,56341,27697,13653,79447,35742,22539,52023,27159,98239,98826,76607,63691,80394,44341,20160,56159,81055,27882,79047,98256,29253,23963,64635,68295,26373,21671,74271,87224,58939,72663,25910,75355,24560,71737,96883,78464,96640,77030,10282,99284,25014,55702,99889,26131,98255,17140,60136,63280,88425,83851,40959,41142,48051,17275,84307,75866,57388,92772,83421,14474,29789,16773,44601,12025,34461,87369,92416,62907,64373,32633,96420,88935,72337,56786,76479,92763,95274,22745,31819,32668,58846,46398,37728,87881,22289,87651,85101,50580,40777,89259,86762,17970,27400,79035,98539,81722,58465,80320,16858,13256,70458,80705,65458,46188,24541,19066,94340,99139,11456,24451,59268,78458,98809,99133,63441,65378,18991,24641,91149,65969,31619,80668,96525,40444,37728,91395,88169,64613,94282,49469,47509,95853,25957,26881,65043,93521,26640,43965,91799,74249,27415,96958,22135,65999,39079,83497,90207,49086,31210,22009,30796,52080,62618,19864,37410,17337,30590,64728,86209,33355,94409,46866,69541,90091,33744,80850,15025,46748,70040,11931,39680,95461,27958,51107,12735,86858,75591,86355,20633,81223,68934,92567,67966,90668,34798,46833,21649,93924,13134,53979,40272,52245,22688,65334,83262,47567,85181,60993,20623,26406,51270,94035,89417,88668,27855,41892,61560,96618,28778,78148,47504,43348,65651,84113,88824,35769,92843,32846,50196,86310,95705,74325,65813,35335,31029,81674,94774,30460,45536,62524,28819,18616,90045,41737,82174,89259,33872,53159,55585,92644,49643,62459,53421,61991,67023,25694,62360,70317,45970,38072,96797,25397,99542,68771,30499,79088,13944,82387,93935,53811,77142,55542,37454,16664,51986,40270,87938,27476,94039,82458,10121,62233,50268,97445,16626,31814,50347,81732,58055,75170,77270,55292,65812,97458,46467,42248,92307,28398,22236,85789,55979,24728,61306,42278,17446,96289,72882,25135,62428,95634,47717,17287,37740,91328,79049,40565,46282,27992,43569,26658,53389,82780,27984,35469,67566,54195,13399,58712,12092,43362,80286,61642,28135,38634,66665,37829,93383,68747,71152,37124,75648,45651,60595,89361,44419,74160,40140,20572,45015,50473,58772,86039,80819,33731,18302,70070,87642,44895,61118,72100,24295,53903,17373,77736,91447,26781,57120,59472,91572,28547,25862,34010,55474,89321,75190,66511,69200,23064,73149,94379,37459,91057,44824,55073,87861,31210,44212,64158,30478,72075,39463,26074,58693,69514,71168,95856,67200,35671,15192,96748,52172,34103,52243,56257,63742,69609,98227,57430,46929,32789,93595,41799,53716,49812,97097,14460,84501,67752,28099,61122,67753,94511,76273,50318,17526,47282,39742,61043,71074,60462,40962,63855,83751,70656,90132,32294,84908,49554,17252,86487,63473,61234,89627,10811,95283,40589,19613,85331,97167,91698,99586,59466,28353,38258,50476,14897,46618,54581,56982,32178,78290,65991,36921,45162,11765,45446,90558,33912,22479,72235,83264,52625,60380,91885,89478,66575,51151,61091,73169,20046,96259,26563,17074,70029,59806,17352,92860,19881,22458,11585,63097,96800,36701,39181,62173,96108,42196,66279,69793,56655,41245,45537,90756,19197,43572,49145,43901,86779,44329,97198,46665,46068,29742,13478,85039,52491,37248,96039,12069,61291,96831,93366,34960,71118,17497,22226,30598,77703,21082,13612,81250,38499,52033,27065,88241,79629,27728,37093,17528,23235,71402,71181,95377,53160,63130,22313,47609,91740,82397,35884,66375,91093,39663,61657,87884,89167,70024,16392,34991,92615,81331,50898,18129,99607,42203,14750,75854,51299,83436,93827,41728,65044,79440,98812,55132,46925,69403,67196,41546,76795,95234,14679,86252,70596,25271,61510,71365,27336,86367,69565,74229,82330,70050,67332,14404,33362,46196,59686,60303,25747,84848,98490,44227,28771,81153,31440,90715,83949,26588,45385,95810,39633,50452,85149,26236,56250,68449,31786,62621,61933,70454,21934,62052,70782,64607,55166,85560,68123,27047,83333,37831,90491,15824,90436,31852,51965,85452,31534,45497,17727,18611,77302,54003,67596,88075,87888,70256,74170,13381,99517,22594,93097,97927,14920,15164,12887,90245,48154,53256,15972,46417,11190,52537,64839,68074,25297,46698,75180,55569,75285,76901,75752,34915,73093,97528,11718,20891,63085,42603,14751,23678,94317,81074,32936,70788,88587,33955,74386,45335,80276,93371,42203,50113,37203,32987,36609,29557,35423,51538,49528,65768,11213,72933,66423,78644,87657,78602,83216,36558,81300,94194,82815,54897,96722,84481,63344,43247,64582,93493,11995,66668,70150,65423,20443,16131,82304,29500,19271,44934,10816,71707,66244,27201,66639,63580,65103,41979,67009,27205,10176,70504,10211,36693,26394,91827,52585,78631,25736,22508,75817,16981,81043,89985,39951,91250,67758,96298,46293,69582,81058,42067,24279,83156,26263,94898,29783,92622,74370,68327,93704,89813,77980,62192,49797,10415,18309,73888,52729,36142,50683,11821,11068,81189,71277,51330,35895,33611,43358,98875,35709,78902,11687,78243,29640,85472,44269,17537,19252,37012,84587,61231,97769,10684,34882,32722,50503,36561,36689,41692,55628,84184,15052,51316,11859,40506,95688,12338,21044,38503,60760,59772,16661,69844,34123,13659,25797,48113,39370,64070,16980,54501,46103,36550,74817,26880,24234,21202,50667,10325,34508,78321,42562,31121,72832,54239,41671,43310,49533,61134,10173,98813,66459,35322,48988,46266,99738,92548,89233,12951,42603,13038,14566,18623,46601,79067,17580,86652,93534,90329,29674,33819,90775,48888,94429,54990,84042,86478,42956,17023,47043,65769,63244,27064,35769,26819,96626,75857,67004,15676,63999,36878,77146,18558,31353,94706,98989,68009,47300,77071,57916,94602,26576,11164,42059,43674,10595,19880,29292,34949,78435,49119,26276,90595,71262,36715,49861,14132,72024,29261,98667,29214,81685,98706,42075,43914,60935,66425,29510,83520,95999,76618,14217,57598,71482,45030,50588,96159,44076,69176,86165,13009,33622,42031,59634,29455,93497,53710,19794,12227,72647,37331,96391,69168,17289,84232,25233,75542,28413,67764,22949,12463,91394,80701,11438,95555,46794,48249,10461,40295,81210,30439,71604,94952,45006,11437,61134,25887,27312,66453,12520,72676,18115,72875,55977,94311,12173,21680,16889,48942,96031,85446,38141,33074,76479,55342,30604,59836,55040,79878,47113,36583,25959,86735,54569,53399,76069,91021,74616,39302,30977,40479,58415,61379,37801,17123,72124,14780,88290,33585,83804,66544,69976,30017,10844,79219,60061,96978,55333,11900,29352,84188,32118,85056,71109,79505,60210,68911,92681,14745,26821,80552,11394,84388,26225,49747,86763,88402,34522,27323,75812,91667,16378,11095,54562,82931,19601,83397,86123,13206,87098,41354,71549,90650,27907,81673,79814,74637,57987,69796,27684,31053,42664,85044,58451,55214,70013,94796,59302,29792,46521,95969,63055,41549,43275,77512,77423,54571,21469,39081,50083,78082,96406,51424,48240,34414,64026,54821,86346,91245,12578,95747,66500,61850,83716,59312,89357,93059,47797,96702,14092,80944,21324,28382,96718,82702,84223,43344,90342,25864,95919,66494,15526,90754,88568,86879,55360,12752,19614,15007,52808,15317,68626,59649,11653,13699,56321,23904,31938,29561,48299,83219,78349,43988,45352,26802,71327,45489,21659,48572,66668,57652,63676,44338,42498,72607,52194,58978,73106,74767,62114,20208,31266,48142,59071,21769,90108,14347,13259,83582,34026,60525,31583,44143,51876,28089,32292,25337,76440,79126,81095,68214,65632,29537,19820,85883,26928,57683,55105,89411,67738,47385,99878,94832,78229,29335,30281,85597,74908,82996,59403,98142,56930,76783,85259,60878,85095,90046,66318,94118,29716,34457,98177,24874,84022,69696,11765,20137,65963,55282,12184,43353,32975,34943,16228,24527,72602,33315,34539,31439,29487,60116,39484,15811,71463,75697,75105,53778,19086,49356,57176,70924,24319,44301,94847,98914,99800,26623,82780,33354,47294,85100,84824,97978,58205,77100,10274,10172,65338,22744,75663,95028,21915,73258,14847,15517,21179,13841,32543,12911,84004,29664,26238,45046,54420,12270,35177,78126,44437,38664,86152,76474,24549,69471,58831,52139,79473,71621,38621,68610,70303,58922,40561,29523,72275,45723,68844,37212,28729,81416,55392,14830,89522,98795,71119,85359,29867,69842,14223,81347,94101,77556,10558,34251,26730,83596,18919,88264,45742,63645,67183,24459,95737,26388,20580,84732,99990,39459,86586,56089,63746,24879,56490,40178,18786,59042,12213,34970,71699,89446,20047,35695,37768,46895,31456,46238,20553,11451,64368,78298,46361,49821,72362,30199,95258,73904,99785,92785,47434,42071,87982,42285,89375,35572,73761,73056,50658,46029,56357,53953,15994,98993,59328,31242,90153,28376,96640,75572,12327,10662,66719,76465,91904,64717,78832,42974,87115,77993,26881,31679,10945,58397,92511,94094,64056,84262,62295,72684,63744,88494,89762,22584,65338,73855,80806,94522,74427,64011,35108,17577,83773,22913,24934,39274,68597,67806,97208,47259,19398,68012,42122,85660,31900,80269,16919,13274,86394,81466,40250,17576,54592,58666,56560,77532,65151,53110,67983,52309,71221,28483,66419,70227,26712,34408,71610,85257,28842,51558,91594,34667,25976,86951,66558,24815,59684,93364,28195,57096,77433,65183,27464,27079,96704,17305,89792,41846,67300,79586,86009,65484,49812,86628,16046,48898,43903,40965,72983,78141,52349,61341,48744,93069,41978,53135,13829,15705,79094,35432,34899,83118,89165,31180,46714,30237,54297,99148,98095,67476,87123,80392,42709,69755,10570,70544,77496,69051,77963,24755,39465,86504,55323,91985,94798,67738,30534,74630,95368,69304,52701,21978,98296,27118,65235,51929,47993,32537,95804,34380,92299,15558,24148,25909,47149,73135,61789,99910,42617,92270,65324,14082,20459,48856,16559,14019,92943,83169,17642,14735,76647,53670,29275,32296,33156,32925,98789,19207,93995,64312,83415,12983,51528,99737,39636,70897,66865,13880,43222,43901,94156,92944,57620,67642,24609,31868,61697,55716,30932,67093,68596,87433,22471,52337,57632,58801,87589,77878,28603,16212,30961,72264,60279,56824,58708,87869,22570,42512,32818,79561,73041,55226,65984,77144,35161,70086,22888,99923,36588,44915,49642,69664,94615,57076,81663,13488,15890,41761,74587,28332,78934,84132,51837,33183,22118,18483,37897,52717,78327,83211,58001,27938,76854,66352,10703,44914,83053,38263,80354,13485,34028,10951,46679,74515,89560,18945,70572,65024,22948,90114,38151,16710,89225,96705,23098,87982,41881,29884,38391,55383,93589,96516,17094,46493,58139,91569,64079,17201,95199,27374,14012,81015,75988,31821,12975,43607,71592,97394,56233,69413,28666,44429,17593,31958,57369,62351,11268,49337,50464,81473,32294,48882,96871,60026,38418,39706,78942,18130,70593,94897,81362,59477,97109,45174,29599,90853,70667,86355,82938,78774,30850,15278,35047,86859,78811,53829,64909,52301,75086,72782,46040,85309,58652,50235,92355,30343,19923,15441,48136,30218,75868,63316,22302,34726,15431,30845,29651,55239,60513,30348,68153,59802,67607,92701,16725,35950,30485,25942,54778,17072,20068,52799,84715,63000,17595,64381,75220,38194,24818,16785,92988,90579,82157,75904,97464,82375,17988,45039,77119,66266,64253,44532,62003,56014,49116,16699,80476,31914,16894,62493,13952,70232,45007,71649,86602,61833,16295,85896,42695,37498,67439,64020,29657,43797,85847,34773,98049,58602,39459,38567,80559,72159,90004,62537,86799,48759,85433,22587,49860,10473,18392,24716,60082,25623,17442,79474,67913,45908,68630,41924,32520,37149,22762,86605,94956,80826,87062,35322,72690,12216,41187,20065,14086,84562,61563,18858,42132,69006,54564,96195,55477,77721,36649,25271,76652,69915,99847,70392,43009,45562,62165,63814,43458,84366,83496,24842,41157,97717,22529,25543,17725,53022,72894,14763,81952,16559,41546,31833,19078,80722,31753,50541,16091,10862,18702,72978,51061,14984,51227,60156,80400,89279,47641,13346,54866,88816,73810,77305,24629,99802,22546,74202,55115,13901,71455,78007,72663,41885,13145,81330,97563,79666,35952,97283,66155,10493,19079,41376,57822,46710,68864,50102,47670,39033,84492,18875,15143,16546,92182,20351,64879,72096,34965,77318,90293,48613,71844,62019,16497,85884,53354,55409,93303,45656,61420,75700,52488,39656,63161,54055,92113,40046,38457,47317,27555,35157,19226,27398,69412,47316,72394,64347,96001,48975,92162,85289,99673,40547,63954,41248,74108,87984,19950,12913,72074,35205,23792,40111,47511,67006,62858,28284,82017,49670,85282,87931,16913,59344,83764,82175,52546,65708,83192,97974,95116,65857,46495,25585,21455,30189,39789,71419,14805,29795,26806,27656,68649,98187,53974,90935,11581,95346,12140,72889,87804,96884,73294,19418,82576,36423,75465,33540,25967,39291,29193,94118,45906,72609,89717,58203,85149,77333,18087,74203,78925,19544,97858,79043,11035,84393,25376,54873,17558,55471,89905,39358,82898,85335,51549,35810,71840,51473,87113,54077,84951,87210,40125,55826,59742,35065,27088,59240,32598,86886,44142,28733,82200,57287,67254,65631,50309,31848,18125,39575,79132,46343,80414,50264,67412,70773,24178,90368,78648,19587,34335,27235,94656,73357,18720,28483,96903,84878,54805,33561,72968,97096,38684,46910,67949,74739,20822,70711,71165,28374,20846,17816,58385,33629,28423,67662,55858,61907,15638,98864,79732,90847,71202,91189,38205,24545,33012,79480,95070,92950,78348,78192,16007,76624,88001,56364,45135,48274,35440,49755,15646,33134,57109,85331,19995,11753,42725,14701,44306,42719,64559,55825,88657,75196,69537,70994,43466,40716,24566,92111,10809,98763,76062,23414,56051,88903,64428,44271,77480,55807,32244,71167,31265,36116,65770,50792,62859,92601,20406,47208,16006,33807,96382,80144,73100,62270,45287,69323,91230,66712,36309,43595,49481,97326,95796,74695,17044,73400,28742,33687,52619,17855,18564,83472,94836,71375,90886,15742,15229,96283,27788,25288,69819,40204,26917,41408,24962,68395,51618,25885,12970,74612,25687,80258,91678,56437,74382,63221,36025,30970,11969,52324,77329,18214,11233,50978,20597,68830,67420,24086,52569,56382,41184,23469,23560,93694,38513,61248,86601,77922,31248,75836,66000,20881,97848,61667,13837,57744,72150,67674,16892,56431,89334,67169,37078,97754,48686,85779,54534,31855,49544,15526,14438,62866,41055,52035,23605,25453,43485,96451,55635,42924,66299,52273,34427,98911,19983,50706,92804,42785,82075,17234,51747,48185,22308,54205,45066,10556,87905,79861,42169,69735,18384,26723,28603,12627,23986,22644,72129,62448,34303,27168,96789,83186,13224,49080,70988,24151,77710,32118,73815,13094,10365,98824,59891,49354,64285,83213,25162,43842,38675,87591,31755,60799,12840,53357,27016,35314,12024,93327,42350,63304,30191,39712,47549,61847,93851,85432,34206,90402,50591,42970,75855,64821,98438,80331,69770,26800,89675,57652,11787,85820,65733,17079,51068,78921,13401,30144,31106,79160,58246,37551,98911,57071,98999,68937,86847,82011,85636,12527,82668,78144,62197,33735,63982,72008,70747,72573,73998,39906,77585,41156,90441,60611,41997,72176,17476,38017,20313,75496,34882,54706,23350,13950,72889,87079,57191,11908,44900,47359,14401,80293,53138,20753,13463,81614,49058,16778,47675,81277,72897,61318,40849,83712,26613,14600,19485,59157,16897,38694,90234,81877,88366,47322,29155,35086,23726,94549,87380,41700,70559,37097,81172,27344,89684,83218,23379,31016,93312,34742,70421,52710,56890,69098,86272,59026,97955,48660,25662,94924,11521,23953,37194,59682,83283,14054,20850,19156,70112,45168,40097,83763,87722,54165,52071,19416,61685,82926,80523,49337,59255,97998,18954,11150,84161,69684,38645,86474,94468,55409,56008,97894,94593,65298,22953,58667,67978,43165,28569,89364,72116,50638,47626,95409,31312,20668,27610,44550,76766,92581,16407,58918,54911,15588,13959,84241,74691,79488,10920,81547,30352,72687,12478,48846,78349,42745,85550,22794,27026,15856,75831,65797,89701,51289,41702,74089,52946,30029,56402,60766,99374,74017,37720,16197,19936,96737,44915,49359,87983,75088,49909,52317,79753,21406,86329,23390,87373,74772,62472,56404,51359,46170,54659,29064,74608,59941,33990,62021,23307,39756,26521,88434,50833,68521,15139,81012,93590,33139,38143,15075,43332,83597,61948,72499,85952,40467,98946,12689,52815,62833,67933,48966,32583,50393,72559,82452,36109,59377,41147,35699,31298,97538,40280,38010,62651,48115,45856,17717,17120,56177,22040,93864,89793,92353,83291,43947,66681,97141,33889,37402,90256,77212,75296,84421,22982,36513,37092,26792,34570,28355,33766,72804,40141,48539,99791,25829,23195,25900,58680,83794,86390,57334,21120,43649,36899,14433,88247,29576,93865,67900,44679,44543,29122,76817,24007,32175,95697,18049,39675,93072,92424,60289,71972,33962,75530,26671,46512,16708,95449,91961,55836,55223,66233,78020,65684,92073,10061,58956,54644,11271,83386,66104,52543,75150,98711,34635,96683,56050,40354,73658,43379,73623,76847,15838,79082,12773,85238,47736,38861,55345,94597,77550,89977,70843,63609,94597,42946,52999,23979,47005,97820,66373,46967,93633,49053,92154,69378,76445,99806,63068,24691,89857,90544,18382,12676,15888,45278,87200,81741,36430,23227,95196,40228,95853,45112,58742,52501,43088,26935,20874,71660,26537,30478,39597,56693,43114,54720,10691,87464,64000,47469,24511,82815,47642,43942,85243,49162,64289,85157,73114,40235,38252,47974,79998,69143,43142,67182,36052,36241,12111,76382,52665,64231,35495,61516,88218,94048,39207,63701,34936,87446,25885,51710,15579,18713,82305,24136,99807,64673,90406,31180,30010,40036,55672,70415,31607,86664,63731,26051,94229,58683,81012,97803,40307,26569,81326,26269,20358,24783,40053,38764,76135,30968,36034,46476,59952,59045,71577,66594,22784,65371,67317,30960,62480,33661,12841,68724,81377,94520,54485,37336,12113,55063,29712,26933,95466,29334,46592,54517,10312,78927,38441,50409,63586,54633,58680,88770,65212,27998,17185,71435,52842,83064,47422,17930,15827,33729,59497,29877,54139,55124,75245,28067,52600,42331,49467,98739,95358,44671,33412,88799,31937,45247,43409,95774,55293,51561,22651,61901,40333,55828,34043,13184,35961,66664,18847,60259,43899,97969,97812,44640,33213,26973,15136,33459,88164,89397,89414,30838,64685,99334,10996,20030,33091,50856,58796,87467,54914,32471,29588,45317,17854,26712,99748,93101,14341,66113,63247,99819,70491,59092,87988,42682,78918,13574,65292,41585,72613,66051,45691,87302,14619,32767,41675,27246,33809,97237,17994,49183,67308,25680,88689,25497,72330,81555,62382,39622,26574,84917,68690,11956,90071,72805,72751,95435,15653,51921,33920,44373,28123,82303,74758,30768,70883,82094,65517,41467,61210,33808,51752,63199,98471,64371,57089,77629,13786,44738,12367,97380,42091,61105,85003,88127,47850,54784,25332,86503,13004,19676,16621,69147,29962,68040,99014,90784,58406,84192,29245,87265,26831,41221,52479,20176,41935,84574,14837,37631,76895,67013,34287,81474,64973,43673,17032,29259,68016,37559,35970,73554,46074,75246,96322,87403,90648,93557,24365,21471,92272,65714,56141,29098,99641,27331,41036,78351,42322,21892,77148,22589,89911,81780,51650,69227,36932,90807,66536,20374,50755,78611,68754,48844,99598,31081,88322,54313,67480,82462,80648,43610,78014,46800,84930,93367,58985,25027,55387,71277,97987,20395,71771,25500,30404,52650,76287,63235,14145,63599,48465,96544,90266,31106,45714,72765,21286,87074,31009,14664,80371,82898,62040,52539,34813,34596,55156,99233,68002,46137,44567,97823,34580,41924,27075,42383,73964,59598,79805,68534,48468,97374,60790,67482,16885,72210,30735,16896,35377,20564,39966,25410,29962,33163,84846,20963,55283,46025,16023,95800,64417,34993,89765,95102,56862,75636,43794,69856,44899,56827,68172,73704,50620,95555,50719,37847,65075,86895,60718,74743,74027,93831,85779,63254,11201,38093,45533,57177,24418,61412,41871,28380,95771,36647,73602,53210,75388,49480,37420,61733,68450,47628,89757,47617,47901,21327,60840,43439,54711,41193,14527,44827,32097,33963,70239,25838,77682,56868,58097,45008,74028,76175,89252,26099,98080,83014,68675,77259,72667,43594,63711,39032,13909,59631,25092,67066,51717,61841,94217,48626,93420,17161,50029,89847,81170,40591,40709,81098,36634,27459,67114,50015,74104,58950,15169,56023,27521,83219,29368,30793,67461,58881,92225,37361,56438,70123,86214,87334,61277,25992,78370,89265,73764,11709,62558,66609,52312,79417,36679,23354,48418,13451,66861,35853,56138,79473,46180,99806,59021,10988,95622,60828,28497,96361,98048,30588,38940,53911,49090,73854,78596,16764,22438,80546,23108,53760,90949,75268,42400,12750,80081,48372,25124,21981,64108,82783,32285,59566,42052,80983,23423,69564,33785,55179,17151,69882,21902,69345,45595,23186,41838,86373,89649,49078,68180,77122,86141,32382,99091,59514,23068,21625,89131,75490,46438,48538,45718,75065,22999,42641,21642,22899,60587,43472,36841,82470,33492,62337,17827,58168,56178,33298,35742,71460,61701,83604,75104,70407,69932,11954,77758,59820,92998,58560,46777,61537,50125,35392,65195,25797,10278,51986,97740,38580,88405,60094,68471,96708,89094,53776,40074,11117,74404,51892,71520,66864,93888,39766,16170,92260,44271,49760,25473,67520,85722,17482,28589,30288,52657,70824,85421,31707,90037,58524,20423,69630,47793,41033,84557,85888,59513,57898,19383,83668,17621,39064,53477,36281,30221,98435,45927,54490,33563,19284,48301,39569,67354,18467,29727,27152,66389,48651,14470,83942,94397,98364,83888,78238,66478,15863,96680,13937,43771,38971,73439,84299,94306,41033,73023,27847,96144,79505,21795,83885,65670,42750,34667,60225,73473,53561,22764,14114,67091,62917,68215,84763,89549,42722,96897,98554,36581,20278,19282,17675,73051,84198,23736,43197,20691,24129,13427,15946,43437,81654,25866,36079,88113,45323,97869,22631,20968,22847,72049,48142,28550,88708,94698,12129,78352,53237,85540,92582,94971,81886,25965,92616,18744,42784,84051,26165,43205,80883,20770,10016,54941,34057,99883,14950,56808,66152,47041,88658,59312,95823,92145,15923,20209,92712,42387,18935,44595,43411,55384,86282,29014,46759,89145,20659,48187,47778,85863,90184,38735,99277,48803,48302,48460,12471,85206,68405,91474,20950,96648,57018,37758,97751,94084,28203,57417,39372,73113,25539,44688,83047,35084,88742,93794,12751,27776,42931,38364,16682,82657,57556,52378,77024,91746,61413,28076,62306,59487,62099,60572,78464,72215,31730,64026,74012,37881,52381,66459,86059,77242,73842,24488,81542,96246,62717,49502,99887,38518,42132,28452,95328,98429,93654,84205,45019,90936,91724,12129,40077,68204,13206,54242,70486,55310,41891,71268,59281,71059,57199,36298,39366,64821,65758,71719,99072,35923,17989,33205,84312,85341,32475,64579,43225,41012,30753,99882,94754,79559,70856,47644,23715,11564,90036,70788,99462,36368,22661,46751,17970,93106,57543,69606,66960,96938,65747,27236,83608,62479,25201,29353,23112,82455,55512,12397,11756,77550,13993,37733,28374,31833,40505,16018,67002,20557,84950,55758,59162,53879,81452,87908,28887,80445,91284,68176,38999,74493,45349,12534,58987,99675,52412,97669,58969,27841,88317,27089,22695,13670,98062,79877,65301,30439,40354,24049,61853,19985,68847,60695,82882,69981,82964,38813,81595,96473,57055,81989,80871,32652,10855,15405,99133,36380,33933,32919,75500,66567,14599,55669,54897,54825,65394,32333,48305,33577,69268,42273,47017,81693,65722,53814,55001,73846,15085,12642,48241,83753,91720,23303,31631,54159,67265,40561,82691,20175,85293,99812,99281,18088,87046,83878,56325,52466,69554,88728,69226,83893,34161,54473,96664,27073,88493,12505,94409,25865,68190,65628,89598,75424,73183,36055,96093,47064,30097,27264,67874,27547,65411,52242,77885,91284,49088,70148,28402,83156,27327,87807,62220,74575,48358,51949,79771,34617,56033,35528,91217,79314,57410,12683,32462,46755,53353,29613,98044,47741,78433,71177,18427,41740,97720,48175,99007,46729,19342,36513,62001,40901,34336,24465,45451,88863,92955,73602,59437,48555,70336,31532,17338,96295,71913,29742,82766,96183,61495,33376,44819,42398,85251,20364,93314,14451,89292,75239,79062,41941,99109,67879,98232,56959,20474,58633,95296,25772,74471,53558,15060,59082,23578,66874,38110,66626,72112,10935,54017,45511,57411,36729,69809,30797,29998,67157,58853,54878,18586,54904,64602,12459,24248,47652,96265,63399,29529,96871,22682,66102,68215,54559,92671,80362,70394,35907,62794,38411,93150,32539,35179,48325,19620,89540,10497,90696,77283,76506,50974,56987,86891,35174,92046,42240,82710,57634,16393,52698,93748,51373,81652,78205,22859,47013,39643,70398,71690,41542,44055,83395,89048,92393,53784,88214,45379,23818,91012,71188,98924,35262,46552,12704,18932,44282,46598,43454,84066,45409,35117,18503,96567,58077,67757,73717,87825,46007,47463,27120,24608,23044,46206,24475,43402,40502,43780,93477,76607,36018,47873,83202,93501,72252,36905,50512,67303,82342,43308,23717,15841,57554,74782,44573,53300,17446,37660,18646,11153,55645,65667,28711,24698,52433,21067,55579,49505,11671,16503,13772,18534,77618,89536,40250,63499,21743,37520,49185,93045,94478,75669,70742,18372,10642,83269,44937,81297,98187,97949,10252,97936,24806,16293,14879,72458,22686,82538,62328,29352,15219,42993,45881,39893,79869,43977,46596,69012,71991,39822,66136,37874,46664,19169,64014,87306,57188,49079,28054,59434,60702,14916,85315,39142,97835,31505,38570,60418,38491,39283,27521,85930,60142,30335,49041,86187,68102,42276,64514,69747,40560,67264,71285,78923,64871,73008,94863,53782,24707,41075,62960,76979,42730,81212,99561,67071,14717,14328,37214,26487,27913,82112,36647,31503,73958,26879,36448,38663,24420,13202,71359,42917,67212,39932,69193,67112,34474,80112,36140,66106,11929,48710,92557,25093,89103,60886,55534,92046,96004,96230,32091,35630,12326,65090,60445,65572,14869,69255,85650,55115,89627,13083,84575,55346,26697,24991,68173,27822,48008,99310,12835,42038,44078,22469,48878,60887,69690,19647,89416,94256,50050,62350,16982,94196,75855,88080,30150,43549,71037,36175,56325,22135,81491,74689,56212,77110,40955,34373,67194,73341,63458,56542,81459,26506,79112,96704,68314,79246,76197,63644,62133,20502,80188,31359,23240,90618,42015,35612,65917,89219,41697,87223,17026,56923,27324,98303,99729,99322,56643,83249,80764,41732,12537,38270,27318,31851,63932,37538,71811,62194,60837,34835,54377,35633,79600,87746,69658,34831,71485,24951,97462,81721,34212,94759,15052,16249,14511,39377,22538,32834,74376,49132,51826,78062,23205,69975,62048,24820,49213,57777,74245,37652,50355,21186,82387,25428,54770,28660,86644,15731,18549,23663,78230,53217,42987,61576,33111,33328,10161,48110,49202,67763,17944,80239,17957,41189,85161,28482,26431,85811,37553,50129,62987,90521,21566,23848,19695,42810,86328,12721,51648,97248,42061,61303,37432,73516,25598,73221,59533,66122,89753,83169,53797,79586,28477,36263,47815,36586,48752,23571,79393,70933,82318,98671,93308,56132,66132,37750,55847,11098,65486,43815,96097,56154,96824,15475,90854,61428,79555,22507,91436,42340,34834,76021,45690,21661,26678,14616,91052,21372,27686,20973,81586,48245,86010,56128,51930,19670,17260,24929,30524,48231,78786,26327,75098,30170,11833,61187,33634,98780,37307,13738,11293,36473,38356,84682,14902,17337,16865,69442,65435,40669,47281,52618,67516,31313,14466,50568,84640,34287,33003,58522,57204,60279,48172,83224,51291,24378,72218,22821,28369,99244,73783,10556,72852,14550,86167,85556,42106,61983,38746,20230,21414,30935,17481,90702,81470,44180,50456,99634,62637,19247,28275,91761,81751,29938,89404,90589,55663,71658,44299,18249,48310,49220,28086,31026,20535,40952,74924,14208,10749,45681,84431,89279,32268,69666,19093,26089,15186,85916,56263,51689,92513,43386,31938,60454,86688,59736,98404,11861,58455,40820,40685,74464,62354,37440,27512,31026,53609,24407,64665,18620,36675,64503,84178,96694,30588,61156,80890,52393,73588,29954,75192,35717,44973,62244,60668,98780,67463,95837,93544,48631,27805,17545,42277,14063,83409,56037,36708,81986,33755,37551,33653,79045,27548,86581,62454,49620,82868,62695,38934,30348,43724,26608,57729,63630,29035,54413,99183,61291,90926,29096,94136,69169,70673,38383,85090,30889,51971,66981,51250,29276,15513,10786,56500,76496,80833,69831,79124,88686,17670,92910,78612,35278,88617,28386,21726,96961,99064,83866,99769,37431,36486,71930,92566,35693,26258,56645,89563,92513,22851,61231,65585,48450,46413,29031,70966,71778,28391,37470,35800,44351,67425,28607,75291,46633,18945,89569,66375,70445,89016,19507,21028,95424,71876,81708,55467,33809,13241,79816,18584,98465,80830,38363,74449,94154,63396,28360,50884,22380,77154,39556,47020,33933,96050,41567,65683,23117,46500,94440,86611,54279,18922,15716,51304,88688,30292,62592,53688,62319,10812,58379,17746,74206,65990,66892,80829,17852,54258,51987,55549,11236,82049,97084,47126,57669,26545,49546,97783,25251,63699,65974,32435,48146,90177,26136,27036,87054,41952,38800,48122,64404,66074,13323,42074,70515,58750,60781,45224,26225,92318,88700,44900,55928,55099,89649,44995,87553,54148,46395,23461,77450,10418,80606,14367,66073,38632,44796,68148,54696,25302,95827,59983,95027,45422,78681,32516,87157,62869,58364,97919,97499,19366,25954,29958,88446,12335,41070,18554,70309,18752,53083,75579,77698,23072,64097,69961,95196,35719,36949,54314,77075,87869,81815,78912,41374,72150,27133,42818,50516,36933,17957,99755,68736,66693,46230,47010,69278,44046,83346,42283,68366,69561,77864,81509,83543,93375,97200,30297,59849,34741,30659,19231,94068,77084,46396,49056,30285,19433,76256,45050,86808,70607,19949,13197,93502,75515,85066,14751,31067,25417,68394,66099,92280,17697,95373,59520,87049,23637,46949,96783,36193,87028,42022,90754,90299,37867,90050,82591,31727,72480,43369,33070,44806,70150,66822,42569,96084,84516,77029,97209,51404,27913,23666,57928,71752,63777,96548,32521,11191,76128,18934,99777,84979,66201,68910,96323,34843,40516,88471,79857,98247,63532,79990,99042,89107,69624,26358,15714,26273,71879,40820,84509,96148,50063,26160,12521,16293,25906,60966,77665,28682,48789,63379,45335,89652,45670,24882,25840,39491,55829,20643,77135,18090,62104,43243,54078,35445,34461,34846,18947,19930,24293,61030,46075,24627,46674,66981,12477,89934,54532,52320,83107,83633,65854,10626,35916,18594,29605,49687,17595,53275,73128,17397,61040,69796,41977,96207,53850,74884,21329,11916,25512,18149,45714,47733,73268,31539,89303,28840,42739,92905,55757,93966,54312,72640,91877,23775,99414,42843,51751,27572,74700,14642,37720,11324,46468,59721,79829,45406,94095,32299,68445,65661,87225,12653,69604,98773,27200,95460,41964,32383,68389,28495,52914,47420,66279,82776,82491,50537,80617,80094,64010,74616,58746,13018,22729,70322,13614,24901,27035,97182,95955,52476,28289,57338,61348,21896,74530,87667,21120,67568,44938,74636,13393,26502,30164,34609,17251,26514,67708,50815,89107,40120,43905,70051,50615,83815,42429,83395,50072,88225,34208,26057,31616,46095,22780,56877,72359,99998,36023,81223,71023,72562,40441,31057,18920,89583,92653,80572,91122,56981,94512,87105,99384,57286,44551,34901,23220,22228,99410,79984,66496,17852,31759,17289,28287,60301,99233,27520,79596,45604,22042,31020,91277,37246,80627,29637,66476,57890,73217,12283,40330,26834,64198,79533,11515,52286,34032,10793,27318,90770,25834,46594,41986,49461,42576,15067,13813,55877,49649,41984,25923,23283,19333,57226,81446,38535,29967,60471,86395,48724,83951,51345,27984,23871,77631,62179,13439,79670,66369,13524,15286,25121,70529,59364,84204,55457,88891,38066,30576,62287,12328,19153,46127,53264,98582,89739,77452,92278,59020,62395,32434,89936,61354,11952,74429,20786,82073,99435,91604,53324,61238,90029,31646,70861,21398,75918,99922,34881,43564,28333,68603,75934,20588,86244,99304,56865,72225,38817,10465,25407,31597,58941,46212,63051,55465,54738,98940,77983,69035,18436,35339,20956,56293,87629,15747,87527,89442,49457,20986,91717,37405,21933,79059,98669,99977,43749,24633,61783,60650,30861,69436,86751,26333,82514,81276,60039,16224,50189,43467,22462,96115,82446,74904,53722,33996,68583,99446,72356,68083,41874,48344,88577,77585,55821,64763,45490,62435,25755,29690,29826,64259,85671,96506,34749,12082,35795,93518,81016,15870,40297,58006,28048,72966,34100,38850,18619,93034,32934,94068,87548,61129,80962,65923,42613,40705,82315,38959,82177,56288,68564,89262,61564,61308,36265,39345,59467,18610,67756,84031,95245,94157,93578,13280,50169,58899,40330,79423,61949,65111,46224,91061,90881,17634,94598,12937,73921,18544,75584,16831,61512,39268,52484,32743,70006,17244,30297,91635,93378,68093,42078,92899,23612,13828,19035,68257,33278,68986,73824,40940,10232,19501,39359,55780,12325,84472,38512,30029,67218,99265,49205,21073,91605,82560,97898,15773,98516,86466,57691,16434,38996,32718,80974,18016,93025,19447,58791,32807,57537,63171,82161,22008,71998,14298,23200,54893,33050,95739,76732,58869,47077,12740,89728,81248,97260,63057,81423,41211,80364,39977,62019,69864,21987,72984,66616,21790,34676,52710,19646,10372,11828,86628,40578,51098,81728,18780,46322,36390,83162,64086,53586,59234,82593,30995,87155,80817,26542,78437,91139,80100,56673,73309,86409,52363,99211,43230,71134,88214,40868,36641,47303,19674,82960,86602,58519,16224,39642,44506,33461,85512,40745,81408,38296,19046,55971,80360,32149,34434,70217,29219,91423,49830,39107,47274,57809,35031,28289,56051,54130,15243,33383,49738,86125,17784,33040,69634,24316,49466,68289,82371,87153,95055,30441,93560,76900,96408,65375,81082,16036,36289,47294,68579,14379,78195,77852,64647,42246,18146,93977,52481,65649,21713,25958,33821,90955,95141,54375,93152,17109,58987,82251,89430,84725,16654,85524,60300,56386,42578,47877,64447,95126,21416,70978,36262,26664,45723,52745,72536,37143,51141,33847,21054,67776,74319,55272,70153,79521,63360,35397,26752,37892,83901,62246,30074,31553,53375,10452,27929,34123,74447,29894,89692,38398,61207,21611,76421,79862,10860,71536,38043,21096,10880,97041,35425,35404,87525,55999,41369,94378,89582,64585,35686,16145,23486,57240,69278,94639,27049,69499,81682,41289,54164,87817,88699,39279,29338,25293,17807,43690,82089,38876,30592,50261,46804,75639,84140,80560,75209,16497,57387,76987,41681,29456,58089,60238,67283,48434,96413,55512,78829,25962,40982,14383,93611,43221,39948,86551,65768,56975,91575,11894,87013,34111,30862,59771,25838,26925,48341,83976,83291,93392,61063,64985,98940,26134,57426,20221,83038,70002,40253,17022,68761,44368,17137,72485,16860,98172,49616,12941,29609,45950,72570,53713,63022,70378,74157,12932,74773,65799,35445,21371,44165,23495,42854,13828,16486,79228,52225,99394,26346,59216,54173,68884,29656,94074,56024,41681,47069,30579,72121,11244,19150,19132,58906,90767,53823,44756,59336,68005,54250,90358,60379,17219,87686,59852,61153,52484,79603,30352,36466,78664,71950,20118,22238,94121,51778,54674,33903,11300,92473,86900,30660,13966,81782,30001,57695,54771,90388,66367,46491,64664,71129,82158,54012,30531,44863,57274,36507,11056,64581,40135,99960,35606,34543,43509,73901,93286,41217,70971,14272,87219,66808,32527,21418,39300,98291,72173,56988,45009,24694,39200,30931,40853,51654,12236,73178,70594,63085,47130,50899,12794,77720,48991,81227,81903,22774,57572,36568,46166,28967,73045,26627,80365,65607,22997,43695,50836,26092,25493,63554,19926,50740,20969,35683,96216,50254,21791,32778,39936,91120,73851,72957,28285,33810,36054,77559,77814,40648,95764,70457,74291,82228,11061,52565,40467,38645,71763,57548,20695,24894,21009,57146,67152,49777,66949,23604,90610,72924,68699,75409,59924,89419,49283,67169,24997,63470,24494,45931,44584,63021,39804,72030,39247,53255,86303,13735,46920,51554,79728,12177,47405,14162,50571,67178,28966,18942,65477,90611,98327,62152,48295,80725,89344,83541,79245,19143,27003,32657,10751,41587,63126,42655,90039,36036,78835,99966,73982,61005,46219,89988,52669,65270,59074,91593,33613,10146,49841,27879,88785,63451,70150,51393,12081,11497,33333,46387,91285,28492,17207,72734,95436,98746,18134,67549,38617,89212,21598,99494,31633,27248,72469,16394,65138,94220,27107,26561,32694,23674,64158,87593,79944,79993,65315,27255,60892,52332,99721,90664,19771,61436,19826,48239,32436,22072,54946,81549,67256,54178,88287,68181,76342,79259,85043,90148,95486,28695,51795,88493,86211,61357,10869,47310,92874,83426,88592,41447,92157,90493,94213,89772,46144,83885,75686,91541,88373,92281,98831,91129,27614,41178,83230,90798,58213,80125,34801,15177,71229,74140,11239,34378,37637,90737,96773,30491,51452,46960,87138,25714,83208,64999,93524,95828,75650,82645,17914,88097,55999,53936,62386,73283,79800,98775,49291,21730,22135,16980,25168,64139,14086,46234,37297,92973,43973,44677,41883,87567,15844,37564,45226,67482,38139,44147,20932,22028,20985,72307,56123,57423,72044,37193,78940,65353,71887,80337,46798,91220,41218,36940,73968,20927,65259,62780,33373,72261,81695,12807,86968,10312,44485,66867,34611,28926,97142,94503,16791,66464,84504,81997,43002,50718,28920,41543,39851,58099,16110,30304,91986,12064,13133,69028,10480,46198,28439,59863,65960,59091,53685,37340,75413,96088,67515,74290,81191,80415,25329,65355,53246,50589,14495,16248,92271,34759,98983,37328,68682,73033,37163,62362,56975,78931,75438,66667,82126,99084,47957,78036,29896,42292,61882,82822,34282,38337,74131,49938,51021,61874,20009,41118,23069,17662,50303,28225,55985,82358,41709,15396,34695,19007,11192,72493,55436,82776,54817,23049,75662,51493,79030,42061,75720,64378,32200,92870,35833,74762,51523,98342,14078,27690,31237,35831,74621,63331,61575,37476,50792,81748,63686,94620,18679,30491,64174,77191,63309,53329,67063,14697,90470,28638,83807,14274,79692,61741,30321,76115,40704,59136,77435,49732,71934,15531,26869,69109,32209,34426,79086,13299,86227,94113,51084,57162,72303,12834,51739,82047,64885,75727,83592,70891,66333,89966,15587,58221,56621,71582,76021,83490,20838,73164,52718,18478,62473,35708,39080,18028,52171,44536,99466,75904,51790,62815,30402,80705,84573,77567,48645,71941,53297,92845,48772,17379,72672,45922,31757,56068,29530,61247,80356,90066,49429,55856,75712,52971,76271,92628,30875,28658,70972,35387,94692,35818,27825,91039,80599,98256,15394,19492,88443,77149,16704,84304,70343,11126,57599,11673,97085,95690,11269,10325,48534,62191,23049,70642,54535,72129,38084,67317,67925,96298,62728,78651,92086,82824,61821,86520,50403,90330,62371,63524,25864,56998,49760,29859,31282,73761,67931,78787,42825,33181,46502,81196,93152,23755,57423,75314,14552,60508,99209,68688,20918,57098,37101,61091,16886,15958,12150,33802,27410,60171,66774,31018,41323,90679,33277,22924,47062,44177,51515,54309,65079,69409,65771,73982,99935,49010,46798,59983,35747,96456,91630,64895,79642,67097,38237,70458,81709,21269,58549,58705,24778,79813,30131,80118,74589,81507,76446,55768,18391,28292,46493,94269,82205,59410,44501,99931,13974,96490,45313,62586,33726,69051,52666,54062,16482,88040,73019,86218,87047,98075,59031,34891,45135,37088,20594,38125,26726,86414,67888,59111,23426,64668,71898,36049,27207,62521,54636,96091,72881,51511,53701,53422,48396,63101,69932,55955,22473,11638,41400,52233,23387,61612,56545,96299,79111,94383,61289,55254,70756,57120,85659,93482,49972,34844,15974,62611,87654,75942,25037,85837,16665,88449,44794,52916,16491,36871,18322,38896,51464,71635,98423,10448,63426,39118,83030,93219,30330,13421,24234,81628,57494,69276,31609,82024,14331,59400,93529,20013,30415,87040,56158,95169,36853,41951,24481,45754,80737,29524,69409,98595,96757,73953,21564,58477,26580,85015,73809,34293,69152,54418,22307,63006,95402,30437,37471,63986,26099,41149,81723,66890,12446,95164,51895,77630,16104,96735,10677,20859,35756,96392,49220,93580,59880,79492,67201,61763,81156,33841,50189,40109,96436,59174,32140,31191,88092,42104,74145,95897,63648,45849,19645,18602,37680,70542,80319,74552,78694,81282,73299,67645,32296,56387,69138,16310,21434,67970,71297,55787,57897,77162,28193,28927,36494,25486,22690,48531,21692,23708,50693,57548,68859,67704,41131,51129,21721,89005,92967,55328,26179,22546,24905,72742,50019,22347,46591,21721,27369,72635,22489,67006,40088,19389,53535,83229,76336,94021,67839,34491,87847,33980,38606,99028,96539,44416,62595,26829,68976,37377,10162,18196,65879,60698,61952,70988,33917,33104,95579,70441,60189,28648,84533,95258,14591,24226,48989,24426,88077,96027,17141,20852,20526,52673,56307,69572,95916,87654,79200,77517,43240,51252,41898,45373,78801,61425,78576,11693,39143,67000,69579,24775,42910,70389,95900,93507,55637,36055,71928,46990,81024,79830,58174,44185,10978,13356,27021,30296,77240,43920,86869,42392,99750,84606,36231,87016,31397,43490,77609,61152,72219,53445,83043,42743,77195,40665,92284,19151,17269,83337,97759,22070,48632,76386,53979,69343,58446,16299,94034,61519,37997,22404,21325,83059,95407,26688,80168,70122,70688,47824,13104,68007,86794,59054,12533,77176,56480,74250,49178,58261,36703,16740,20375,90340,33043,86961,55756,88382,36948,35742,57211,72032,88772,84185,40493,32521,99241,93221,31770,83106,63851,85610,31958,40262,58753,67362,11401,33878,75813,74269,19713,26246,98100,50167,95689,84948,44485,37073,99025,67803,74074,91415,13577,66225,41502,43770,81425,63615,70322,87444,54248,20495,54941,33844,62641,45381,12556,16461,52910,14475,66572,86336,42994,23274,94829,76854,61414,48677,34142,50433,58847,26094,94102,45718,17541,48195,37695,59231,88755,74034,76745,61152,32018,46105,86621,41639,46503,30097,96077,84965,38119,36174,19415,91515,61467,62091,97799,14548,86849,69451,41041,11099,78688,78892,77376,34429,46012,89640,72283,62658,82094,33913,17650,79996,22695,51298,46069,22502,50775,10344,85617,52748,19247,33599,72886,88193,65882,57351,18911,69131,17242,71696,18463,55293,21200,97034,41696,34518,23060,60574,61453,21200,24157,82175,18463,93142,71256,76472,40947,52264,95200,27242,46277,63596,94639,38957,17220,16539,11904,62418,42448,35907,83602,76802,28936,87741,96021,80429,26354,94964,80530,84994,65482,38912,58011,31826,68486,26466,15342,11389,87767,96885,80399,25974,10982,71579,85074,50701,78219,44226,37073,23677,81316,76062,54875,67599,30979,32494,37465,95800,36256,87688,93962,32231,12012,68175,81530,92070,86624,47898,98485,55106,90713,41527,40998,22843,81796,44713,81703,44704,18006,22104,91479,45976,43485,29014,28981,20241,40996,21045,79464,46689,98601,11126,82341,69123,48133,94221,86262,94044,83439,33759,14754,52319,11383,54633,50075,70577,70319,37358,73858,40552,81382,35105,38870,91988,52026,41514,71184,10167,73310,42278,52906,17450,25142,35040,72510,67750,16110,62906,73080,27336,35856,80075,59626,94245,83333,52719,90075,27694,90316,53621,47961,63857,45841,61640,45628,96317,87211,65337,34995,17476,39227,90292,78754,91270,32840,65463,90569,70625,63488,86618,74019,11930,27374,23642,92703,23391,69712,89097,11606,27925,99597,93228,24250,72009,80371,13570,13198,67105,68469,11352,74908,64287,17278,48331,34429,32603,63609,87659,81817,72892,25570,51284,97288,14009,25280,51636,48238,44732,26821,49336,35944,56373,12425,24653,13600,61110,17698,43363,67577,90123,62833,77847,88869,64745,62843,44152,78592,17131,86904,37062,64800,11143,16512,92667,34140,97847,12979,94580,30855,13663,40249,50724,46395,41777,78143,35751,95668,13707,48087,83299,70170,82870,75093,59998,69709,45058,84812,86935,55002,82957,86448,49157,22023,47998,12579,12179,44100,15234,32802,69993,39413,93437,64891,78012,77891,65195,30799,38614,79835,98080,52035,72980,66328,25286,19692,13106,58933,14957,76921,20916,20348,38853,73875,24008,29245,73976,58249,77570,53717,82441,77204,18667,52164,57194,49445,13255,18631,72445,42973,73999,24389,44341,73778,82007,97764,35234,46383,29255,24178,26343,26484,85024,87770,63945,76769,31835,22187,18312,83391,20980,88236,46089,67829,20360,32356,24400,92990,53796,11679,46516,73892,61255,68838,22507,22548,16728,88013,36630,43836,43205,83666,91802,29798,54054,67539,31610,59187,77172,27817,51772,28423,67992,86964,36354,55130,91031,54680,41722,68424,14427,96787,62639,25170,24832,97524,78130,67426,24666,49254,32729,81406,88104,86458,15661,39825,31377,60321,64303,21696,73602,32108,95152,84278,42058,74460,14932,54843,12173,79659,86584,96200,45965,50023,87454,92743,55218,35334,53637,83214,25622,87414,39222,27368,22614,15156,73360,70556,87826,95015,34563,33131,50566,37953,29205,80703,88698,52376,73448,47728,96808,79618,66618,15087,13097,54429,96101,10825,75345,83504,73756,40295,17794,11332,40923,55158,31788,13320,64286,91121,12536,34087,29883,57060,92099,73651,95528,26328,17295,84016,91726,27086,87265,26935,80362,28554,30571,29933,62883,23045,40137,52337,26570,74543,24909,13121,78800,34703,23530,62297,12295,11880,36582,31662,48226,72416,42517,14164,33304,70069,98220,80871,54007,48731,68558,21649,90545,83010,27024,60762,74551,87713,68207,32557,52976,24226,13730,75315,21195,18795,54601,78514,27710,44825,31808,65790,28338,97922,61669,21417,88219,73325,75846,77508,65076,14338,56481,25696,55263,26142,34807,83479,12746,31423,83427,63169,98426,76885,51637,12853,82079,81451,42237,26684,27901,68556,67092,25694,14142,18726,84616,38608,96064,70147,14337,66948,21119,91758,58840,85670,33592,16360,25155,57909,68741,45812,57728,25491,77759,85966,98499,86706,40905,42630,22052,56444,16890,84530,59752,35342,33190,22798,96629,72627,79474,56125,53361,10786,36294,34990,95503,10342,48152,24209,97306,80190,78460,44412,60990,73825,19348,45291,22349,46633,47550,70850,52398,61618,59106,62031,59544,72955,43408,10192,51906,91081,21132,91894,67734,26148,22792,92097,90232,47127,73132,50440,75814,13608,87671,95518,53495,64832,91167,70692,78409,29326,61601,96680,84478,35878,16347,12665,79582,88882,49998,75134,67014,31242,66486,26283,45007,21391,90551,84797,36957,59727,66680,80614,62118,68104,83850,11153,17909,39373,14004,89910,37251,59123,65780,91654,20102,23258,67301,78584,31916,18647,23125,85864,40762,83671,47271,44765,28371,12275,71676,47047,14108,77937,63864,96452,49133,90437,62571,60509,44089,31581,36988,71302,94541,64520,30304,50175,37753,87707,75131,43791,65486,39160,58127,40571,48748,39819,22002,92539,11167,37251,87204,66597,93956,94498,14483,51911,88570,46529,81570,54559,63054,12841,22923,26969,19089,92190,57883,46364,68473,12706,48409,90811,76098,82963,46627,87872,23093,59869,82324,59587,11078,41430,94286,46335,77618,55295,36592,24816,98221,81362,24701,43710,98863,47805,41311,61094,35393,76779,11089,10034,24266,90471,79528,56932,86734,84302,84305,55382,33304,55040,40215,21940,83205,46625,47789,73959,95594,41422,34293,92867,51520,98967,63390,89674,21239,62745,11976,51634,18634,90458,51817,13840,88505,50369,90362,93768,44661,58908,76945,50787,51244,35965,24037,11910,46262,54292,70640,33076,57164,60412,35973,55669,76069,99955,74154,54464,54333,82673,63289,47674,39821,39153,46024,82601,13392,52580,65428,15915,65027,57220,57334,47913,12324,30183,43265,27697,58398,74255,85562,89789,79128,74268,38679,96845,45429,83297,19830,35144,83042,72004,19262,92620,86326,35083,14489,70064,82894,35466,81127,40071,59581,89241,42843,41238,77344,61168,65792,94470,90379,83752,67818,50590,20127,59440,60775,41209,92301,87393,19306,68235,87230,18468,36802,31510,74749,11747,27544,97109,68151,52535,82997,47821,86423,65112,12892,54164,26465,68372,63586,18028,59262,71734,10149,73729,70435,79831,18403,16540,13127,63654,18835,16746,62495,29626,66498,15010,14611,38468,39997,69255,93736,81454,11660,96107,21644,60865,25928,17597,67588,18868,31092,85596,12213,84182,98049,75856,84061,79371,56981,47364,75225,37612,65308,73832,65463,82223,15130,19560,97605,43827,84467,64576,46318,18676,95247,72985,74922,89731,86769,83148,42937,29117,75379,53474,91482,61301,85026,26949,82076,60619,84803,95209,75370,45903,76810,26791,66326,70970,97833,45528,56974,42164,97601,58931,43093,71220,74812,53197,62239,50492,22929,47860,66382,64901,95714,41001,79037,22555,76377,26535,47768,40683,31698,24100,17900,75278,99612,59598,55391,43687,52254,96183,60504,17273,12955,87217,49031,50816,67615,64605,12850,23911,91999,47758,78706,80433,69147,76881,40282,27976,72528,91693,87999,96291,20955,29557,72666,78069,21025,92299,73716,46948,46936,60536,33421,46480,23942,17397,33255,85777,38044,94442,82919,59158,44394,53759,36652,50646,81971,83197,86908,73861,58209,14217,43174,24489,32544,75723,45560,86222,38258,87608,53017,15377,31949,80416,43093,12190,55365,81262,91272,59091,85701,55643,43284,60176,57545,43500,30707,26983,79288,31218,31346,74079,76744,27953,15644,17115,71278,32800,64340,24251,65451,65544,66136,65895,46830,66401,13891,25600,46221,82767,21358,71225,35240,43712,71783,70943,33920,43176,35166,27118,14458,24232,58655,21182,55524,18735,47304,26670,88675,58904,21691,60548,74648,20945,95031,93944,80235,10708,96175,87036,23928,98974,69569,39249,97824,81851,39790,43232,65415,29419,20369,17139,36189,65827,30872,84757,17301,11497,16275,94407,60753,72214,68451,94148,57956,38641,41395,51082,42687,43998,43637,57038,25081,50274,26676,19536,30770,48075,58885,43599,79123,46375,90591,91078,27343,76281,81918,75167,92973,44300,28868,21063,12101,61634,39638,85159,55594,39172,38867,86816,53741,82362,72223,89073,97658,97219,31882,78034,14250,20267,30436,26382,44521,90887,60284,73247,36328,35455,82186,37074,37069,97384,33684,86836,74695,77460,43496,61602,12742,64569,61347,29497,60954,71689,29243,25520,59488,18811,49732,38388,47376,51885,27479,48298,35812,26226,82738,38869,19265,44719,66180,60857,32036,16642,39223,38206,38767,11715,19004,73207,18535,41037,44772,45619,18041,14173,68958,84554,67140,24198,66306,92461,33862,35822,98731,21553,88584,78619,84409,93071,73654,79637,50111,99722,71164,33454,94044,65660,89202,19584,48257,91198,32047,96370,62347,24866,47730,61756,73796,87416,38440,47361,99913,17042,73703,44258,11468,92106,31246,14614,73443,53207,66232,88522,40033,56947,42833,57203,85018,70350,22219,23800,30226,40941,21414,98906,69045,90843,16231,99211,80054,39904,61971,44979,15807,53706,28003,79320,35194,99288,64574,67227,99948,96688,77287,45635,75855,87756,42612,37534,10378,66475,51828,21800,32629,50651,54999,23437,97418,86199,19863,38430,36341,76630,52948,74537,61352,18501,24051,51655,84738,56299,31534,14472,43763,11918,24243,49871,96658,54992,52679,62899,81547,61423,85196,71566,33330,55350,70432,21650,26078,30665,75380,73366,60857,15279,39098,33925,20182,46826,57710,27818,53063,85542,38438,43449,80351,45624,53358,80118,67201,22177,62028,59557,96162,50476,72019,83632,80919,48357,59689,14763,80467,78995,87535,51100,31264,67014,88741,59972,49220,71471,84186,71354,14499,89752,22471,75561,70291,47668,76733,53297,11911,34263,48165,38486,55282,80429,84083,76460,13923,51738,63650,71445,53112,78434,62422,21199,51758,83162,94970,61493,75898,52047,27032,15886,81396,85201,42588,78024,80668,55646,20745,20820,26448,38567,68480,85043,60845,99007,32680,86446,85562,48323,71517,72752,70895,96073,10810,25444,44167,14209,71039,72574,56086,86595,52456,51565,92396,36931,77610,95812,57746,87353,85674,92092,39661,16157,81130,33129,16922,77823,86682,86997,77139,71926,16603,12755,32901,40823,98719,62301,50913,96708,40065,20706,38713,13982,66985,90064,87770,93113,89536,40721,68804,20936,91777,45442,22739,92440,65511,88872,13545,38457,34325,70173,27604,69460,26432,96372,23298,41973,27031,79294,30271,41882,77819,60977,13917,16790,41316,68130,90995,64373,25648,60479,27292,63814,77396,12003,77185,29627,71323,26015,22464,55144,62368,85868,50604,80754,55772,26956,13081,48026,54977,79187,26856,36994,95887,21371,36167,67994,24545,61246,64534,18001,97226,54410,62826,22576,28309,78384,95190,66912,22980,43452,90540,27236,34623,87396,93678,49346,81965,75461,23306,60855,74929,90387,16745,69948,70286,35403,78113,45901,81195,23536,80439,40250,33614,67091,80525,70962,15005,69279,86966,69281,73581,10132,92892,27114,23548,68342,23214,88501,37019,59392,93838,11532,78041,72189,26757,43072,46544,43691,26629,79010,57118,54977,85370,56674,68318,70460,14784,36086,24279,83876,57432,91504,45368,47385,81146,40361,61398,46909,38484,31703,69407,69062,96754,83435,51554,51918,12452,10379,78296,15009,63178,43322,39589,87354,96642,37749,68788,61219,74847,93148,97032,21118,64318,16252,16711,51972,21567,77921,18760,45820,53814,70377,20268,87398,12894,61247,18900,24204,11328,33011,24493,72128,13452,10984,89663,47810,55518,62506,21369,51966,36662,15051,33125,45398,45993,92180,24205,34010,41482,53445,49786,83028,82644,16473,12103,53533,69820,55490,68242,16435,40643,19136,40547,46517,33810,69709,39853,40125,13061,99892,91507,66175,50038,17895,10615,91377,62446,13393,37708,70016,62886,24846,99490,33071,74232,98295,42464,98254,99932,33510,70187,31952,70892,60070,46926,23046,49399,86189,20994,64955,28512,33224,27259,64339,18829,79948,51879,19224,41798,37613,42854,25662,13875,67984,25496,71231,86415,79738,64537,71644,12789,13942,94363,45456,97360,79194,89093,10197,49719,24261,41290,55027,97554,79583,56773,90477,97032,76494,68844,86860,13175,21148,17585,74895,43701,82487,10028,14641,42100,53205,79180,66091,49222,71821,72975,73795,18308,50744,54096,34573,82465,53650,11337,75752,98373,22158,76432,70106,68613,30458,13389,48331,36577,18479,67043,38032,61289,55150,17712,45791,34167,24495,93782,58344,39222,27932,95419,96535,97332,10965,24808,18887,32058,77703,10280,19758,62379,54678,93251,28222,84040,88077,91042,52041,10592,53597,54931,52428,78122,94591,95962,49712,46941,95465,91083,54334,54623,40170,22477,66164,18373,45133,56618,55315,18761,25698,73162,35210,28912,33845,17559,28478,25582,94775,35664,65855,53167,43058,43465,53453,93304,58631,88626,67842,76921,98408,17577,65893,78330,13290,22372,56031,12040,29606,34948,91313,92039,58471,45741,88021,36971,35486,87543,51931,61376,52043,86810,72666,92302,58625,25670,68891,29119,40291,23276,73353,96903,76472,71960,77724,82427,20280,11699,18407,77311,15569,91405,71595,35848,71016,35236,86869,42618,33823,81575,85952,68196,49797,87583,70598,84541,74676,83936,48436,38454,36335,16356,97016,44995,73765,13978,92693,35717,90368,26822,69719,77121,67244,98019,92746,37968,72569,52300,69420,58236,62785,51433,21512,37923,20575,44097,17611,77469,78539,85155,84505,18326,54764,72841,22265,14688,85897,38369,69173,47289,63736,31223,50111,18239,36530,57444,20216,67439,67878,82214,18677,93936,41032,50632,99562,92557,37359,29373,90009,47119,94606,44696,48079,35070,41957,25834,20670,51571,37536,15887,18226,83709,53428,42944,54501,23770,75930,52377,38624,11278,28398,31625,87446,15529,61376,74128,61169,50328,27933,19426,28742,95184,16481,14267,16526,79896,83585,49832,27769,25641,70999,53708,73802,84882,58889,55610,87337,41664,56240,61374,18299,27283,25768,69048,38701,40105,66937,73997,59817,60143,84731,16118,17661,35874,92854,43044,95165,49888,44277,84551,59855,30587,58057,76927,19665,55736,34918,60098,66077,48902,98745,61138,96435,14864,87804,38485,99459,18867,70714,53286,43471,14631,92186,33801,17230,97629,51246,61312,45724,57858,99389,46875,57130,49710,87984,86584,99306,12925,46920,26996,59636,95638,41915,20559,29428,71560,78551,92191,75836,47028,34081,31706,94126,13015,23732,26299,54746,22154,50490,69708,16914,14246,88513,20212,18578,38066,70130,64721,91815,21484,88970,46255,51622,35715,81176,14092,12133,90991,90732,31789,29571,25044,95185,51270,48204,31109,28672,18068,51878,85713,46396,63748,19478,25907,54484,82136,73499,32168,84583,35261,18551,31769,97859,58988,97401,78484,29554,37853,19742,81278,14347,46179,20539,58686,57386,87868,80934,41671,20585,70597,41688,44926,11678,41850,66422,30678,83575,17681,37331,61652,15566,12832,72897,83235,99255,28794,24663,96033,35251,95457,80475,45007,17832,96664,38897,35604,92680,10031,71064,96823,58183,58115,11385,38263,65280,49334,70778,78257,96650,58736,95329,47283,85855,81674,11964,44957,86005,60228,12510,75123,72909,52086,92341,27305,17847,35899,88244,68715,19268,51149,81649,14120,95681,33806,89044,77176,21192,59860,11596,47129,55216,70795,68544,93997,64580,77489,25220,27544,29595,16754,69136,98442,41080,24955,69249,56942,38448,84227,19677,98955,42406,18368,85070,51514,27854,20240,24169,92011,97295,80409,73950,49619,82817,34949,90582,46524,34249,60356,33285,72765,35140,77524,42412,23738,52437,96155,24479,91436,40773,86777,68711,75407,81871,55520,56260,79529,40146,96265,84335,45193,34868,80570,11487,24893,57146,31504,17643,65448,64433,72407,34708,92823,18130,96277,87994,38635,42039,44343,71097,63553,68280,91255,23746,20102,69545,41152,85954,30314,50950,84530,29697,22379,29877,37670,73387,38257,17262,31959,95339,86243,80441,92014,99368,11705,21445,14992,24718,64914,61302,98731,90529,20295,37101,92216,85631,15632,98894,32250,16977,41327,53732,25756,36188,32889,20319,56309,32308,76930,70700,99857,87231,44224,31301,44063,39851,17847,63558,81577,16766,96998,83301,25517,43903,33673,31441,40292,89816,84615,69718,10184,36377,54142,87445,34621,82490,30522,12185,72395,35310,18111,88768,95081,36948,47105,20053,65107,58697,98429,77617,13564,57274,88192,22843,22657,76448,44086,92141,19502,90546,23523,29589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8371,52173,75209,65862,34909,56503,53284,77062,83973,27478,46848,47058,53504,27083,74476,81759,50949,96536,96068,15467,37224,58566,70470,85977,35224,36442,81529,66875,56336,44061,21895,80016,62866,69691,34855,81639,20474,37985,34645,17498,14812,59679,53060,95118,69769,28876,50471,45007,43229,43956,81024,38601,53908,40992,10172,95007,97159,60572,70167,41279,30674,89321,48940,70444,49364,63501,51928,17316,55889,13460,47352,66719,56377,60554,79524,59311,57345,51423,73277,90289,37615,53912,38043,48667,78616,38525,55962,93290,42192,49249,26639,86643,17540,35361,83912,97778,95378,80165,41312,55160,25271,12379,95794,40575,54116,72514,83980,96627,75128,54898,22484,71420,66793,72736,69246,24660,52816,65322,73488,39834,15500,78581,25806,13137,76369,61129,34310,81729,81724,50856,54560,40081,96663,97309,91024,48488,24099,98549,42448,11180,76126,35657,24051,70453,66465,61831,31366,49875,65155,68838,10187,36077,63199,56975,98674,63088,19694,42732,35273,18391,64458,17636,83729,62881,47388,29452,74909,60354,37862,36246,27753,40974,70517,24906,11242,79069,30075,87121,69501,76780,37208,26869,57134,81355,68923,54662,93107,49076,13978,62788,51683,17407,36199,93335,53637,77181,71547,50249,96724,48880,47585,44589,87072,31887,91557,93419,21777,60326,62857,63686,84233,21863,58429,72138,19186,29916,50603,33634,27779,66487,56461,89318,26451,69572,87552,87877,85779,81329,65144,31956,63040,29277,94389,26246,31478,78945,70353,24675,16282,59849,83504,74637,61940,61036,80424,49024,39191,21246,75332,85469,51178,38241,27832,34524,78691,40234,69611,10385,66420,17542,23709,22543,93866,68167,24117,52293,35101,86209,43360,24882,67373,87613,99744,96176,90193,72408,60309,69728,70916,59051,35108,25594,77427,52987,91974,47729,55913,23782,27921,97035,14735,86287,90002,92505,45517,16335,65000,94050,63571,97883,61654,67649,86097,60268,45712,18166,90377,37837,75107,79846,57192,18465,10662,47100,52755,51285,99968,22434,21417,34978,69990,78290,51019,51796,18627,16389,32512,59988,19116,74626,13853,18991,82495,88362,64341,63199,73586,47781,12981,83197,73209,51919,63352,40423,58555,69153,88767,10944,98116,38329,93600,88620,15343,18965,40772,80620,82072,52291,59140,83529,15160,85008,80414,43210,44257,69287,76638,50655,42543,83758,58510,48477,23267,78266,12971,95291,23736,35883,96401,29475,45429,50606,95508,32079,94327,93358,42617,38581,17640,37245,31439,84465,76240,66606,32493,83661,25928,62197,80572,47264,69865,82605,26358,68153,51432,69658,54055,30921,56079,35226,20143,53800,49776,96248,51028,37756,23241,75298,49483,85042,50465,96716,23474,74860,22995,68418,80018,81866,15951,52897,23608,38045,94851,49909,20826,69029,95743,83540,64412,37258,81823,45185,11234,19545,14774,98435,11161,13473,47861,14982,36745,91209,28225,60860,67279,43458,92687,30859,77246,72274,31711,87755,67152,73291,45752,47979,46128,70281,65120,71611,42234,55235,43840,55819,88894,76376,98110,97867,10200,34872,33242,69513,45060,20463,54606,63332,52718,52069,79065,18275,15303,89888,33401,56979,34160,10626,31236,62922,75813,54397,17039,35899,38719,25979,98357,82213,59931,43454,84288,73606,83151,65051,38005,29446,91906,16378,56224,63349,54691,40154,58187,87371,91467,83397,11296,16445,61278,53357,27924,70638,35808,67309,70849,20977,73594,45732,83113,37025,14254,44116,96371,28261,59910,25673,20164,21291,56777,49143,97539,30270,39743,86514,92406,11886,14761,74642,69732,98930,99850,25824,72488,68526,51979,30889,72271,31493,15109,37566,24899,67677,60617,18818,78613,17272,87460,78396,26970,67032,72183,65699,54233,96793,21655,78814,63024,87696,10518,34512,95677,48197,31580,32316,76142,45477,70510,88764,15147,60603,59030,70932,42006,35681,99562,18237,30063,40183,78242,74113,95831,98945,55540,45908,78078,47770,12844,98357,73658,88118,26356,77239,27323,25901,45992,76238,56818,43580,23512,19893,68972,87158,51601,25173,31543,78626,66249,84277,69858,70576,36278,39518,27148,21393,98102,21958,57784,29549,19897,66091,40468,99342,40801,43372,79944,66540,88710,53720,83222,89568,41952,62368,96442,29589,19340,64046,38307,66441,35611,16815,74249,25294,81058,18410,95123,38136,52978,58392,23354,21798,84268,25194,62562,64013,61445,97901,89395,23151,96297,57111,78949,94319,54640,64774,85313,25212,58002,97678,34777,55848,37054,31735,26922,80625,93963,24479,49378,60695,39446,83147,33761,92284,32679,17234,66056,16771,75389,44447,59872,99906,27101,98527,17037,49044,56982,33351,99471,63494,58956,25035,64828,40040,79344,55434,13589,33084,13117,24647,72837,68292,88281,11945,52195,81650,52699,17011,90564,44040,16417,99053,82593,65770,19383,88626,26249,25148,16863,99287,98908,97492,64100,86739,64055,56863,91770,61097,37974,58927,68825,95116,95245,83148,78901,65344,90117,95490,14612,48328,56304,80908,54692,46455,63107,15558,49191,43960,84367,99380,69016,98182,60515,38099,25086,24021,78796,32131,25690,55275,23485,58732,65982,32460,56074,57864,52510,48438,88246,35922,16538,62106,13436,12229,95839,76232,97418,10140,54348,32624,31206,69706,47486,14218,60379,35546,52083,64735,78461,70372,51219,39230,25278,18816,26779,99452,39997,30617,80575,73209,92875,48525,88911,70792,74001,76638,19510,64596,19335,34100,57649,70321,88000,81395,33371,98840,67533,31610,60051,90471,20597,74893,24608,96592,49050,76687,62909,46513,99677,81761,24510,21659,60414,56017,61963,15829,57355,25992,33850,12759,73847,45359,21767,41372,85448,97099,56801,53115,70631,25817,17608,55251,25859,89074,72327,84094,16314,19725,71473,52203,23543,69238,20024,42945,84432,75123,27733,38098,60281,47133,89610,19324,76211,22476,82234,76511,80033,82831,27028,90130,79295,35040,17982,88576,19664,87307,84277,66460,45415,20745,71882,53824,85572,82128,18614,82296,94405,51926,16526,84816,57157,19330,30066,12830,56269,84380,46277,86685,14298,78280,31815,35480,60871,77693,39985,83920,90999,95645,34555,32829,77466,71900,35590,57751,15109,91765,32525,59780,51122,19456,12073,54173,20455,83894,13522,90273,66330,95152,63543,68109,27651,89372,30753,87634,56313,98835,33267,73187,23240,54141,37829,23497,64412,23124,67709,41376,19671,51606,98619,46737,63934,32328,30418,90714,54238,55917,27490,91526,48776,88259,74485,33661,84592,18830,44667,28118,74797,20984,56100,56696,10854,58714,82758,94922,97402,33150,10123,94145,12117,53639,31643,12447,80570,76879,78063,97343,10237,64330,40077,14689,67710,19992,57503,76335,60910,14768,31885,82828,30622,61473,17812,24031,59074,60460,41636,58263,61058,72159,98364,52085,72303,13320,79255,97577,65768,32899,97492,86848,65602,43189,85704,88131,90432,93420,26795,97482,57986,36931,75537,15064,57740,56718,30430,62425,44223,98337,46204,20966,21029,65222,67825,81633,54610,67121,66358,66952,31499,79026,61776,89190,39759,17773,88436,21865,33981,73531,90634,34338,29803,54514,70809,62001,39803,90050,98711,32099,81476,11054,60813,55966,89726,11286,79395,20278,15926,97371,47778,71597,46541,51522,60074,81365,70370,99486,56127,10130,55404,71411,99124,21612,69491,12137,70110,73397,10864,26575,81968,76580,78148,63322,75084,92247,66842,17312,70843,61261,22063,85507,12895,45464,83282,53276,25805,17981,69626,92063,62045,60276,18822,98674,26239,52003,34541,31846,83966,17591,27272,82688,19528,28784,74427,71595,71394,90045,20193,60181,15834,53228,38491,98224,27799,96812,75881,48678,66261,73592,20264,28941,41308,52145,24603,81031,58833,85254,86269,72755,78118,91134,23733,61195,59168,51564,75075,55104,88282,64630,51014,47175,76419,66235,64965,17946,13573,30894,50108,60049,16141,89043,16012,61789,50589,55430,69336,98186,18965,64516,77248,46680,29056,61867,60960,45502,37292,78768,60891,10068,69172,74970,59311,85435,83762,91956,15064,29268,89597,91203,11919,11694,42373,41211,47870,92509,94909,59005,32222,13247,91179,81774,75696,17039,70826,72167,46971,45765,48197,52050,43708,94982,52027,93310,46590,15677,64755,79107,27384,68800,88910,92259,17820,24059,42981,28057,24766,63694,43169,24664,34577,81032,81660,32036,68567,18515,94361,27435,96130,22038,93748,98019,44629,24701,47131,43480,45507,45788,34670,21061,34871,91445,52585,85054,39674,63014,76147,55857,50420,33135,54483,46517,88833,28179,21807,90385,82880,99932,50515,96624,92270,63274,45775,12165,53380,50602,95200,90704,37563,30139,26910,62742,31890,43838,75037,68064,47975,72319,50558,36032,94303,46507,66695,57897,82960,91463,75198,93586,63014,80848,42998,63931,72161,27386,73354,10319,77907,90041,99070,98909,49990,36939,63901,13542,74403,65278,95106,75649,30890,20361,73477,83853,80523,30964,99093,90526,92547,64599,36435,81423,26372,83394,90456,33812,33818,70994,87590,11468,89053,62863,33239,96767,70625,58895,91229,64999,89132,69496,38472,33345,84183,24472,81909,71672,15480,77195,99015,29956,46527,35760,43906,68611,23128,67940,38640,92437,48036,77608,24759,84085,32904,74069,84270,85529,43655,42551,96258,80405,30349,69231,86841,27055,98780,65789,74577,30013,39772,29656,55420,30464,46740,31735,41268,83414,34066,37688,39208,37461,72127,34743,60017,26868,47876,70605,75847,53060,45002,32639,92833,17729,62672,67600,50541,66147,37693,44502,89761,83195,63948,57045,12169,82959,66318,35049,89858,61411,93521,75092,70330,48402,27358,43878,72910,27870,29124,27785,14809,58819,25063,33896,98220,12081,42087,57521,54906,82620,13396,12620,34005,31601,40340,43060,28928,78327,50878,43836,84473,41042,63219,67265,84384,86299,49799,38599,66774,26957,83274,62188,21699,41646,36016,57125,90362,21161,23458,36242,81166,96916,31223,23302,12627,15720,70027,17194,60126,82543,32314,58757,43029,42612,55916,89570,39107,53977,49879,17812,12555,49574,97839,46781,97711,12175,42046,95956,63393,72526,79117,97117,46143,98243,20581,68271,26767,34571,34385,84302,97729,70579,32501,41147,54407,79637,58069,19430,72522,61456,39167,57604,49904,70607,84334,69686,84391,89699,70267,36610,62163,34291,80603,44223,91520,79595,59748,66580,38551,68322,72740,38788,61241,99766,68714,10536,46179,86353,45961,70751,72370,80468,40003,37989,80611,15192,38131,90145,97583,95038,16630,87641,45880,69135,45468,13217,71182,69938,78134,62498,28553,62964,39509,66931,25152,45635,11303,88252,32189,62400,91133,51545,73450,56651,51160,82703,99563,27195,24263,16069,94767,61665,47663,48091,86055,18568,57246,86544,49401,20455,15522,53926,53614,37614,20973,33419,28487,46577,42187,12027,50423,33124,31090,40978,30558,87579,77526,47572,45656,66337,40902,91581,58414,70085,47305,80686,97775,53948,43170,32428,21989,64107,55774,38885,65061,48930,39529,65159,67254,99946,54448,49076,30090,60432,13395,61006,28599,21631,90056,16218,32880,83265,30145,91616,56201,32302,91481,29035,47123,97684,48087,45926,61950,40666,68336,88590,63793,28050,14282,99016,23149,70873,72135,88879,96511,62914,98976,35971,10240,46121,44446,89431,33494,47602,71459,94898,81982,88857,24937,18577,81621,21191,65746,91681,83087,79321,78789,53254,67017,44680,66936,14521,25607,60030,66458,41745,89070,97779,75950,99413,95089,99298,48698,62143,12788,65294,40246,81080,55082,15314,41050,95727,12378,25090,59151,52438,45624,53880,10269,75511,46356,44177,82079,38944,34033,71439,24814,59660,28799,78529,74015,91104,60937,97278,51337,34306,56319,96995,39728,22348,35341,93704,28448,66891,66321,42963,87045,61559,10044,38904,51949,23669,42427,87541,81504,60959,43838,94522,86350,84912,15096,45386,37142,67575,44937,36078,28014,63699,15919,21163,85674,52041,15144,40890,36832,52167,55018,11100,77528,71745,34744,46995,11366,87522,83656,71820,70736,92637,96351,25616,38559,37771,28853,67127,40213,61360,79869,25512,69712,70474,18852,54287,32898,74887,67358,25358,50695,60472,33543,49923,31203,60749,93908,14922,68094,77349,75494,55360,75611,59789,97694,62855,97627,51290,11694,38020,68745,44986,47449,36270,26913,29171,10791,78963,12893,31822,26477,21615,38150,43431,89863,57575,21110,86807,37983,28659,77825,82457,79828,17574,44658,62584,93273,75117,58329,46828,20705,33331,80391,78519,31864,57815,41967,22285,20122,94655,51531,18642,22468,71874,95254,65691,67691,20275,78416,42972,37281,31683,87227,81425,59443,58514,22975,27281,86724,29153,75444,17017,91618,35013,36784,29214,34113,53244,32280,23487,37698,47039,11902,64135,21782,74396,46779,32939,65426,44585,48505,65089,18656,36198,41871,52493,54728,40105,96579,90461,30313,55896,96323,78404,87262,17137,85577,76857,15475,39785,46168,65556,86909,70325,43742,57193,30257,36291,51328,58619,67893,78141,35905,29059,32885,81955,53604,76407,47119,29589,91389,56026,90508,54889,15650,26563,89840,90729,97100,40301,85642,79632,85249,81878,19485,67899,49350,60793,62386,38478,41850,80594,80594,89629,21663,90222,56994,26874,61081,13272,97810,75618,54519,51056,31794,18755,51032,78797,61197,23687,81711,89859,68046,91877,18188,27426,88256,93066,36942,33754,91684,10961,84023,19632,19856,60809,45101,98352,31170,94948,78012,78994,82597,38053,68457,46470,46386,21068,87792,28251,80319,10957,97810,52629,94797,96434,27819,33163,24534,32262,35502,42137,56855,58254,90551,44449,15652,97991,78184,58025,36291,34996,11333,25360,63958,51271,38590,23443,67261,74848,21435,10463,36150,80901,36689,75812,70814,26846,77900,30401,81211,33241,30687,37602,63692,20768,65697,86853,73638,35000,97991,38344,37566,27307,25596,89756,19184,37765,36226,45400,48484,24060,22238,59182,34923,89573,92046,19529,62164,71187,32876,74348,90983,75298,22214,48165,22715,11097,37888,23746,65717,48093,84223,11667,80309,57640,23162,92086,11559,21349,49138,77304,53408,51358,42185,59513,63131,40359,75119,28856,89931,98660,69565,94061,38463,70650,91923,54778,76755,83359,12731,38687,41759,74768,46645,40067,31788,63573,55358,41032,41937,78452,85523,60262,52905,36686,69432,92757,30826,36437,61991,30593,51284,70075,53141,59955,27373,66462,18211,30085,13564,41294,65260,27426,99912,76146,63566,39697,99569,91411,93336,53657,66084,36861,32734,94408,13900,65618,64519,98996,61704,60680,19119,59461,14717,53271,53652,47677,87489,44418,42977,88790,86095,83007,90240,49793,93010,66175,59241,64797,49429,85700,40213,87830,56480,82607,38508,59295,44743,50884,12536,48079,33980,19014,60699,17983,82456,96978,49844,61415,80417,12644,53555,42094,82373,71181,44449,17026,71707,36324,92185,29936,22144,53869,57351,96520,65726,37127,77017,72041,76646,62422,15190,98758,84470,28801,31501,71122,84517,23513,85564,23911,87158,87200,95185,36778,79247,18279,22357,64809,22914,20446,43595,57218,83874,60270,24700,13779,97852,67943,75747,59205,28349,40783,53843,13700,35854,85213,98799,96426,96697,70622,96314,14468,94062,73948,59386,51545,74650,72204,94138,91459,37869,49865,94469,64265,79435,32214,37603,84167,61021,82426,23410,57847,80128,53110,41906,59129,91202,71584,15390,74005,44140,12714,65687,96290,43930,54849,11767,66572,73117,89687,54664,84386,32097,89141,76475,43630,97079,39350,86133,63722,86186,31150,93429,56812,31737,20136,36734,92819,23047,77300,25172,28059,99235,29614,82158,75779,88787,58536,39619,80768,88757,34844,41577,86199,78789,13841,63685,81047,88003,53650,68270,52490,78428,93929,99321,97304,91640,30640,20828,63479,93162,93416,96114,20454,83265,61897,36552,31695,88197,87941,78043,23207,20492,22389,88967,47803,48230,79103,55623,65358,26445,34155,58746,60194,66598,31329,29082,59808,41469,23227,66955,15139,95490,11072,98195,10418,47404,93451,92038,13429,53198,32354,26820,76425,89930,84784,59809,48780,57893,45497,15412,59247,11100,47811,63940,89938,89375,21942,73741,43252,64269,67884,55665,83650,82381,79483,37022,72237,27777,23195,38566,64151,39415,40283,50217,47426,86053,14479,26829,49431,44664,40960,22537,40765,41168,37068,11713,46673,19415,74496,14335,27731,56948,58787,85050,57956,66635,19938,49571,69862,39724,44658,46534,31937,20469,14596,43630,59494,72955,11902,40965,74867,11723,13409,50117,72454,19791,88921,70785,19172,10689,58748,60154,47525,94949,82136,30996,36750,31704,17078,10333,84157,10194,60256,80247,94545,12683,50066,72357,77088,29748,34018,72021,33274,39513,73067,43615,37821,35757,27784,80301,60176,86862,18716,19544,26568,77865,90230,82893,54739,33620,55662,80792,26999,31285,17755,41248,90524,26537,33708,93312,98027,51635,71132,78441,35356,23582,57873,76907,49324,42441,20829,92769,69204,65892,86207,12716,62202,30627,69257,21026,14537,56813,42088,15826,80296,70342,39934,40682,91021,23038,99589,50962,54413,52920,22353,79269,68609,52767,27265,86375,94910,10911,56010,74973,80713,15851,30093,13323,46760,80060,16991,37272,60720,22433,61291,30056,49243,39499,47399,59832,35329,23591,81180,91651,96987,10848,31368,13003,45648,62048,30703,63403,69171,44993,76343,20384,44877,44112,57959,63067,45080,82792,42297,57915,17154,70819,34725,94970,70172,17512,26031,88229,89528,52611,76506,29045,67184,34845,20277,76283,35076,54833,80437,56371,80166,49064,20531,78039,72837,36213,47362,41409,17076,65376,19996,15416,89601,21291,29348,58661,47503,97835,61867,18530,77332,73493,97756,57341,20196,30617,22944,57926,71563,27674,27508,58272,75822,21209,41665,40449,95950,49432,92033,44033,36638,51655,11030,47871,17812,93030,15527,36424,45401,51529,59752,87370,89415,33596,19132,67367,45950,47198,19096,32624,73797,64982,88960,33843,71286,43667,91367,86568,97456,67676,30201,83993,76687,37378,24989,67909,58464,73611,19966,34437,71634,59864,43980,89946,88113,71619,83836,62835,94750,65977,28187,98929,82247,58913,29453,24844,97032,28104,52426,56332,49033,75643,95711,84158,50350,23607,18441,17286,22703,31521,11220,46656,97092,11716,27378,33937,42874,93870,28175,81845,86591,21559,68833,90911,50276,52191,67232,97418,46117,21739,38680,56295,28066,46038,37603,10675,55416,74414,63334,86708,41580,29800,74130,56603,51171,32896,64700,17571,73358,35731,32013,98238,77023,57346,39329,59579,38397,71464,89233,72247,14790,16872,35212,69641,40584,28664,63012,16462,54733,60550,58700,70793,34990,52014,34922,47914,62567,12291,51387,88063,84462,36686,99067,44347,13563,15464,53432,72004,38269,11913,60961,60804,47693,29123,16362,53033,64913,22002,79450,71368,74511,10363,81886,64391,35517,23289,95184,75331,74870,69842,50946,10187,63083,54847,91178,68946,23437,79207,32958,26570,75811,52804,61389,42673,13744,53920,51846,86943,43611,43573,95501,43784,42733,28588,31623,44145,52622,39027,31022,66652,60293,39489,93399,49067,47726,47973,18698,99052,67103,37637,42565,15664,18291,97199,15499,40405,25782,29538,97262,17693,29904,65520,47049,59201,13272,52453,67564,47866,38813,22697,64319,36297,44346,76011,85577,16087,20086,90178,70748,39551,95108,98905,22276,29976,95697,34646,44928,14912,96967,28102,54169,87665,86857,25199,84346,94141,80727,16895,69441,41199,29855,63190,96153,25069,49822,82094,65270,31869,97624,43323,44975,91256,78266,86628,86845,61416,43449,61072,65732,64447,10353,35908,42852,66847,28329,89093,56646,92100,77585,26593,19588,27771,71709,81815,46752,74888,80056,11638,39496,89508,36571,60918,35229,33395,43820,52341,40416,13249,10658,58151,26762,67962,18716,98893,40261,18943,87547,61710,10493,59175,82990,65850,10831,94292,11769,55599,93751,76343,23181,48137,15186,74539,10114,32460,27036,80324,31087,72076,54619,93546,36195,97528,54548,28031,83955,34249,79534,89394,15543,69633,90307,25246,18504,79916,31427,66453,47145,39275,18571,18720,64602,97370,21391,84305,23139,84412,61558,41019,95814,30973,97506,86819,50681,95364,67856,57186,63218,59342,24569,71566,74934,62070,27244,83604,85648,68935,69315,43498,23971,70190,35809,45600,59345,34622,94149,92566,19961,83535,84145,10223,95824,66796,96315,10549,69350,11626,24500,66165,55526,89001,90622,65930,13298,81924,71550,74424,15754,71612,32617,36943,30620,81782,76418,85926,79114,27422,60582,81115,31080,13982,73350,35828,14732,35960,60043,63731,83151,26946,16493,80456,57671,93025,57191,77220,71624,26715,18630,43485,79784,35588,99124,58824,24335,13119,72320,64637,60071,42913,19860,57142,73524,84695,66129,40133,78988,29291,72855,18860,98037,31865,21969,52726,99998,41377,24759,85035,76487,45324,14029,92535,87448,66865,26209,40098,70975,50868,55699,10337,89904,64615,69906,47054,55628,56334,66710,93533,50607,13417,21696,99378,60559,63561,82636,64321,92369,58084,72893,45982,22374,41482,69412,79912,84710,60499,55777,82839,25004,38565,98810,70054,17978,15322,91617,42195,67613,27909,84194,80579,50893,32042,79092,98989,65987,55761,51564,55486,32313,10405,79952,30743,21949,90633,41792,18887,35803,53522,15151,70262,78747,92774,78357,50383,76485,34683,71212,87285,52812,95630,46244,19131,89265,70424,84215,40236,91055,89445,98488,24142,42466,68088,39973,51628,29619,74246,12159,14373,53267,64486,49768,71430,85747,22229,12722,26148,40578,27093,22646,20561,73614,64201,65596,32707,83480,40633,74386,26293,62736,72593,31101,74722,71259,31466,78930,81022,76941,30214,95826,31335,47602,53961,61009,61721,90530,27841,96735,48534,34891,57051,60395,19992,32785,38779,40216,92079,82742,33082,82168,11101,88873,22098,67770,48466,10084,70761,54829,61821,28576,60503,27307,74266,47680,87293,47727,33391,84865,75591,74509,44331,52417,28865,94131,15387,97166,95713,52321,57957,98152,20187,97469,72941,81997,29436,34390,10225,73173,73062,95096,38728,67572,52034,43735,11279,95815,62038,42121,88352,26717,68149,28697,67659,30101,91323,63965,28149,73367,53449,30799,78168,14734,55508,73004,58685,35980,94197,38866,12155,89463,90371,75535,85513,97224,97759,51350,77812,26122,49341,37766,28330,32609,87964,98708,38082,65347,26148,58296,89476,27705,11440,57058,58289,25305,35341,89644,25982,28962,72570,81569,57141,65018,50912,41924,81144,95762,55597,38029,96275,75569,85808,86069,31565,53538,11206,88792,65032,46126,24748,96595,78594,81791,35311,79881,72392,73144,31266,46386,97139,46108,70506,17526,28278,30778,35235,66787,97305,43160,32644,83669,82202,29681,90640,71169,91747,34765,45285,10606,60142,59713,16614,12382,17352,14551,98969,52384,33913,35992,50057,91685,57263,46633,58767,77424,26408,69710,49711,12026,59785,33777,17361,59138,69503,98873,23673,53471,98858,70882,97540,89724,48688,11078,55407,20021,90402,84955,76906,53321,39647,51308,66622,31488,63117,47653,89492,78497,96894,34884,29577,22343,26480,82974,40538,53804,61559,61721,80274,57738,81580,40545,64160,13532,26893,56326,62620,34656,26048,44316,34812,36808,99009,55838,36006,79642,37786,24201,61403,56452,73559,70663,44839,78773,22863,54347,94379,25942,15850,35566,51095,17857,26785,44718,10465,85507,43249,52380,30430,75295,73706,86871,25601,68298,88678,93125,45657,81422,57995,98840,73642,56343,91485,96404,97522,87132,47083,36922,87139,52887,23588,84171,49698,52028,85004,94283,40163,28125,35713,53328,79486,42229,80424,54450,31681,15558,78764,79162,32337,86868,21580,94844,19255,13701,54913,18553,58874,16369,91628,21365,48105,29077,43005,45697,48510,13364,87982,32621,26990,97684,56701,56810,54455,97645,38001,63974,38150,67203,97936,36505,16878,20636,85125,67980,59616,60649,51020,80908,75589,43770,87325,69475,37972,31732,33566,11639,31678,77419,45544,60664,68815,78377,88697,55369,18750,26893,49183,93508,30646,48049,83541,40133,65737,68858,38400,93174,14247,87918,65593,29140,62149,77427,74553,51886,27583,97660,88864,61444,95328,28181,80424,50025,90184,21224,21756,91543,33643,41713,64882,25346,23489,58415,78908,27161,16909,69794,62750,66254,41100,66384,56421,74167,30237,30899,50225,77287,62966,20043,14807,93184,63549,71225,34409,59066,70895,82565,28484,77004,27446,91879,62153,25510,20356,31120,65379,17679,33563,12008,93465,39139,25438,10815,20582,72329,68251,85122,85656,43608,73201,70354,75283,95950,73680,24588,52471,48373,62841,46690,47165,71120,69594,72748,43830,93289,22744,74965,97853,73094,64219,13093,12354,68021,80065,71003,35174,96506,74083,48039,76309,63430,16278,69914,36194,15545,19238,86623,94669,18159,91807,41601,34389,43319,12049,72539,30639,14616,61960,48930,13833,16303,62835,51250,59056,14407,62158,60700,91063,84368,61519,82560,12066,60616,38017,19507,95064,38859,14008,55912,48913,52075,84537,41821,96609,26252,51869,50481,88577,92602,26501,20308,51894,59004,67077,95469,76951,58427,62749,79257,32414,20103,23581,83002,24122,93488,84512,55841,91042,13814,71169,31737,19478,61976,18933,60908,60120,45813,57139,72318,52236,97288,18886,55695,73322,29442,47093,74980,86562,33567,84031,19131,92705,86869,40235,91447,88663,19711,17280,56951,11728,61670,28152,26692,80410,99275,81495,54938,14186,43788,37071,20900,52942,68141,97870,85693,60171,81926,87831,73057,81242,15482,63736,17371,70627,81998,99235,79299,22436,87264,47628,59806,35788,50625,68958,98924,56266,43075,93221,73014,25020,92111,33506,75044,48706,33237,20289,29448,61567,67129,43218,21097,50746,37689,74820,66003,40238,18512,33249,11603,88763,39148,36172,23349,64763,46848,80777,77805,68784,32030,93533,32714,89900,51657,19353,55964,10344,21039,73295,54239,39748,10792,75311,80721,97899,30933,80053,82987,52126,55313,54202,40775,71391,41360,31142,29734,83418,32774,69149,51029,91693,81864,40686,18843,55579,92325,50951,24843,42299,72328,65385,79018,53488,57971,36425,64410,66796,85043,69585,63830,48594,11574,40616,22852,11861,45267,51073,27726,67119,52986,32812,90672,57869,44018,17883,30395,31350,75140,31120,74882,31524,86451,60784,19529,80270,55996,64354,97974,30818,95659,59813,87050,30883,13071,32468,10238,17991,21264,54880,30425,81156,66745,52342,47511,43925,31355,74957,67638,96934,32384,73132,48276,59483,18797,87907,50839,60755,76960,22352,97032,70282,37352,70199,96748,68273,13708,85399,22784,96220,70050,45797,82593,52515,72022,12275,46976,51992,61615,98533,30137,16385,66755,34461,47400,46424,61441,22760,87145,97061,48493,45520,42060,91803,81879,44811,71187,33252,35075,38670,97898,67119,24503,15698,38038,31195,57254,64719,33966,28775,17793,25268,59427,83991,86683,51021,89872,27611,76841,83039,80239,25032,88135,13695,92894,73039,73161,28346,52528,94089,31696,57948,48983,16841,18166,86195,38269,21826,57701,65216,76607,73586,47746,87205,49642,26463,38563,98987,30832,11908,81601,59693,92069,45406,52000,49214,55621,46080,44247,75822,20776,54396,14189,56134,50641,85999,68404,23292,99351,26932,73943,17983,62238,73352,64257,37778,13589,49181,33860,90235,42759,80427,66845,16240,72775,19186,71486,23360,18180,24207,62291,33546,29273,75155,21763,82914,87334,26968,76411,25607,60667,31989,76392,29678,28750,81292,41969,11442,21063,14158,44884,70396,84134,19247,10524,28758,66473,78876,13157,97435,70995,60503,14399,20674,94097,26741,35703,46397,47843,84535,12160,19387,39947,49031,24480,90551,42154,72066,11417,87883,35440,17134,31093,71191,32795,32781,24825,91759,20535,38044,93167,50311,88034,19668,43711,96111,62792,46476,44344,29727,35492,80793,69066,92275,95615,32005,84652,21098,43100,25122,78566,58943,68921,37857,32218,42298,54854,53179,34242,94100,72528,59459,39167,46622,10970,40246,84967,56386,97756,45109,24444,57132,76461,22760,68021,44641,90127,66382,22510,91828,46743,61151,65151,83507,29192,21303,21876,61611,67165,48171,28472,41498,64869,42188,40262,29518,26639,56360,75269,53178,76273,46882,41354,94670,95121,45352,29014,46517,36203,38182,10739,91728,39818,55831,38164,87224,56321,30486,33732,24015,67395,45382,62646,84522,15960,56848,64323,12751,26443,42575,62173,15510,46521,50012,33717,80983,58105,25210,70262,84809,14625,95144,29038,67187,15843,87821,55726,63913,72123,33022,70001,98931,30464,25397,18284,41008,94808,36706,91577,12989,41576,47251,59887,98334,31729,69207,62996,52933,16079,20669,33777,53803,11331,45625,64007,82310,82991,33106,93559,89776,10550,92973,25845,95375,79428,11051,43190,49994,45830,43227,58724,79327,62486,81425,29498,49308,92449,74870,57444,31961,64556,45108,71907,73616,61481,93628,16060,78959,18026,91733,30217,15145,50313,72444,11740,84580,46648,52684,38296,16323,36933,96080,35850,89376,56785,12716,67896,28596,78603,14338,16092,39430,96194,94725,18433,50465,14811,92287,61446,66555,12562,57342,93757,12344,71699,66442,51135,54239,23821,49801,54168,76401,75004,23654,24128,58256,17992,58682,99324,81879,54270,62841,68166,96255,58295,42068,91397,22781,70795,51066,12900,38337,94269,74068,71282,67952,25110,71158,56718,32916,62394,52447,41199,32647,60179,60057,71135,75161,60336,87769,55873,72481,22219,30024,74863,66646,76570,23005,76529,85715,23544,70463,28021,86173,78174,65239,15011,96162,24281,53208,23676,44918,12000,84549,10211,82398,78208,62329,84396,89747,16986,34198,66897,36945,36532,91677,99673,63920,99690,79101,59048,41916,42513,42152,43994,33508,69170,92675,36156,25921,63499,24502,99969,63604,80469,96577,17337,42746,41900,34149,43922,50284,65380,77393,17228,86337,56098,88013,17014,65280,94664,78797,79128,37423,37658,79557,19599,27086,20925,26174,57924,94836,64148,55343,69341,65038,20574,77716,74101,71985,57444,21336,61967,40337,23954,68177,80808,56851,95127,41854,30253,92904,23044,18654,26516,30333,73438,29034,94734,63143,55234,24808,23291,36184,16920,77711,42730,59390,92267,19908,85065,88033,25462,65452,29436,77284,22115,80161,80551,86904,76260,29171,66682,96000,47923,75012,23848,30435,28935,85943,97333,60974,27053,26591,93888,23832,63756,51264,55051,78167,65250,77003,89088,35088,97097,50270,52842,13663,27106,96144,79641,24532,17400,15361,26751,10650,99846,77849,45327,55774,26184,40807,21517,18313,83589,83285,84585,73056,94114,86152,85864,55536,25390,54609,77162,62984,51108,73165,95541,19353,53836,25650,12036,51534,30607,73925,81355,22484,46745,22855,56163,54076,29838,75004,61609,54259,78183,19033,34005,79554,13791,18397,19283,50779,39114,80251,48187,38795,93732,38227,45467,71471,12944,56749,20333,37211,78442,29882,83832,27212,49348,60801,51881,61780,73112,17967,94162,37838,95543,17508,50784,82526,62875,45082,87624,55511,49926,95781,13441,30303,47148,68659,34857,69001,13418,13334,53956,66873,54326,35587,97917,49308,39670,67919,24491,48324,72429,72893,69403,27549,41863,22750,27720,89393,17604,58647,99430,26721,35290,91586,28445,45444,62890,56625,97681,66824,22175,93732,93383,82115,56563,81135,91173,39725,59587,53895,52115,30121,98691,74185,21654,99624,95825,93014,61703,72220,16644,26794,79722,58255,99325,98807,66198,15850,43752,59592,82009,20585,61840,85407,39850,89530,94539,28240,98205,52143,77639,10838,89710,85806,68407,45171,98825,14213,11978,35240,20977,51477,89352,56063,64140,55901,79064,51352,90332,74199,12219,11969,25649,46090,84733,79845,88622,15696,95729,69028,35874,69574,18996,51062,41705,29292,53858,99696,55151,37821,40566,38694,27992,57638,73755,19230,67409,55870,52854,93727,75540,13978,60557,58920,86705,60451,54738,63738,18853,41881,23672,77053,46495,68255,90598,27306,21879,47840,41213,37733,65179,12620,50040,69137,72551,84577,84232,90536,94030,47834,65684,46020,13491,16872,70714,71785,54467,77969,91943,38506,75065,41921,35795,79461,68624,60275,56466,90311,20094,28923,40757,15977,22844,99512,99043,22678,72771,38026,55482,71238,58733,10177,19379,74173,81139,26898,89312,14512,52679,46515,31437,81582,68237,61506,69929,84993,57656,60115,21925,56060,36420,12754,34745,16733,99982,72349,75169,92722,79064,16249,50176,11685,56076,38019,27616,85283,60205,58311,97764,76863,88747,89886,57674,58663,21368,12668,87763,90132,69561,30711,58375,73456,25660,32121,14611,31554,48677,47757,61616,26520,32969,88421,58519,92297,37841,21834,75258,50026,67912,91408,16527,51213,89303,11305,92302,35289,32292,57431,66479,21028,42497,71149,92040,86535,25836,14657,76339,69485,67086,40086,71042,20252,67533,16941,43467,98990,91171,14217,98879,45704,81231,30943,90222,32478,46228,34140,96031,89524,76004,10978,27665,15638,79543,27279,64640,18929,34794,94372,66365,21635,50641,76170,62164,66870,12147,13058,98677,73738,21942,23886,83603,24215,78792,48145,79819,73125,99512,86807,27567,75078,69582,67309,92358,84813,38348,55100,71702,80635,52907,75318,68352,98229,62217,77165,38193,78679,12632,89116,70751,36822,10043,89963,96076,69693,32266,45602,11547,19201,20311,95518,70801,63473,24191,16253,80973,55782,89534,87149,31679,65794,89916,45477,27953,32425,81310,17994,47234,18692,82679,74971,13224,59923,15844,85741,28336,94326,21614,79937,15619,77217,67935,12730,94281,36228,27511,60705,75639,86877,67704,46432,56129,93097,44619,86854,67303,38666,84456,73761,89382,44572,68321,58356,13287,78319,41838,22715,51579,21965,49010,63389,10284,23652,40009,84757,94461,86172,44561,18141,10775,46191,39229,55402,33120,55538,49164,92156,89862,91183,40249,22485,96477,90334,71083,67831,45749,29463,71693,71527,14218,82573,20889,13173,56690,73843,43558,39170,72868,48050,53220,30567,53820,20833,81685,44902,96284,27587,35111,38845,49935,60666,16750,47540,34919,41258,77069,54986,86486,72861,17982,98279,66229,59451,79739,12034,61079,36835,65346,95198,93086,77007,60747,82890,10670,62590,75503,38599,14305,92699,61490,82290,22925,97826,40707,98387,68600,17870,90540,51500,89427,53342,93783,80841,38303,87803,82788,67347,23361,10829,39577,59905,59934,89885,50860,86472,12733,43552,65622,80510,83910,88114,33381,81437,67236,17424,22370,71557,56934,33065,68312,23590,44287,56153,92123,39474,39152,23227,73340,22834,82880,96079,21051,73269,64753,68982,40041,91087,43976,79053,40243,55060,38155,95547,64656,27377,36351,74840,86376,45045,37825,63868,13198,81745,55452,35937,93983,52430,22940,46460,24487,96836,21747,13161,57309,80014,59139,57256,45555,52117,66955,98308,46189,36678,69779,36092,81228,36740,82312,63098,55829,24294,21759,14246,80047,81811,72573,34576,80282,49648,80079,40681,31773,12228,19052,56135,42685,19595,10753,54261,28209,43116,17160,41930,83632,88954,55540,79451,97418,45603,91748,15871,24724,91564,47340,89143,81530,84777,19407,42083,23510,70761,31432,36342,78640,33975,60457,44874,15525,28467,54099,84669,51772,57064,42657,43909,28566,71941,93270,88574,19463,86707,28284,78736,35708,88404,19237,25385,53484,21510,44324,48658,38389,32150,34627,16969,14832,65820,43896,32118,78733,56254,25586,68986,67934,88057,17684,48308,20158,81584,97636,69253,23801,97464,67759,35396,28418,73789,90499,25793,75284,88923,12338,97225,33101,63351,30601,12159,97148,72745,90651,85155,28681,71783,60524,52002,89822,89490,19789,74115,73784,63694,97912,32929,13362,56995,41011,47694,95606,12734,65713,86395,89477,75929,14268,82732,25398,78115,39404,27417,28119,90928,42849,35376,99390,69279,23834,43360,37363,57124,74741,95003,97512,75711,82864,42449,50256,89964,74724,66158,77362,65547,65908,53405,80599,35537,21069,78818,99093,50989,91926,57183,30165,53577,80572,57883,32140,77126,93050,51137,59437,18735,11091,40634,49404,20236,93323,34130,28601,73326,63551,98202,94864,51912,97153,28160,16255,74232,75906,34647,23642,56424,48401,73876,77568,10058,28792,51351,98565,70207,14625,51723,60042,33409,82999,76173,53983,62302,26618,52907,30647,74860,67351,80625,88239,23514,39535,69178,51874,91040,16162,12229,71317,25674,54281,23512,67799,89926,42822,65049,98364,69777,64253,65892,62205,40923,49661,14431,96224,80098,57554,19675,74692,44318,27346,20126,42443,97728,21901,18177,60841,96627,39455,94166,77144,56005,70729,82308,77571,66877,69925,50918,29814,71838,42467,29725,88133,17700,52628,42089,98141,99765,33480,24965,77181,45125,16788,37416,76969,80263,41986,24131,77024,34436,16264,39539,99280,19942,12549,35204,63531,11829,50405,24341,85405,71232,25030,73191,75657,75421,88726,75566,40008,78209,23340,46611,25748,23843,70509,26085,45408,97077,17011,11917,27652,57393,56164,50968,17045,98751,74136,85229,95937,10214,66543,87182,60903,17179,59273,26595,24098,19844,49059,42792,22370,80912,88855,65704,10351,20894,45112,81687,99277,67522,84030,66375,39262,59397,29578,17112,78551,86055,42013,98635,63792,76946,61409,29472,88987,89502,92722,67072,68037,36569,62942,64082,49088,57735,94973,56146,14522,24593,78893,51308,87165,90931,57844,11537,59007,34297,72190,43190,27919,85213,89731,38231,97708,73428,97879,35145,44327,14143,84272,32591,26271,80915,81180,96077,81655,24496,86434,85512,49149,16852,55949,47489,70008,99739,13516,97510,57989,37600,40818,36458,36890,84056,96140,32802,92828,83234,94624,91416,34504,51489,99194,74395,28217,95057,98233,75383,36702,51705,78025,90902,43683,15873,14246,88985,52106,48737,20864,90043,23695,34262,88239,58659,67883,30863,39159,13768,44314,11610,34200,70711,52736,17586,91618,62590,93354,12240,44451,13669,84751,48157,19794,51179,19566,39223,21027,60751,52601,78661,85821,84548,25189,66474,72149,31992,98376,34194,99231,83106,25778,17109,13920,39916,32370,98105,23056,68912,14816,11554,38545,15518,75973,70471,98304,27542,81754,71413,81920,88897,49291,40125,68222,89630,80046,26169,24881,95050,80653,80584,72646,85338,64057,69829,23936,23704,98615,66126,75393,61022,69487,44552,72401,74425,19310,47494,90227,37517,90800,83400,86032,43410,25942,48612,91430,67191,80676,17290,88495,80757,58859,24346,92220,20966,54323,14193,11357,40342,93474,10201,21405,57105,74878,14814,95357,67856,68439,86054,28429,77194,18708,95736,81070,25876,22464,31308,61372,95098,29164,67281,10734,80532,61883,18718,56157,59892,27972,66457,51435,82082,41363,59533,24366,72934,37148,66287,65022,77133,49296,25374,37337,81053,29422,17167,47553,50344,46924,57453,40561,47542,61506,88546,45423,61524,95072,53614,63211,10565,97732,14959,77560,57344,61536,65634,28918,88029,35678,42833,71166,36378,20391,87376,78624,52599,95839,62900,80907,71200,87523,39422,58454,39648,74193,53656,84871,56968,74264,43028,35507,60103,90060,14748,26752,92051,71299,72717,33167,88589,78732,75728,14869,58690,59418,27878,83974,81759,63964,78096,24882,11546,62827,87483,91223,31992,52641,95017,42223,56950,53701,65271,65389,85414,51627,61215,48395,26180,63442,53994,38997,75742,30476,43702,64867,24619,79187,59877,74992,71723,74051,23173,87299,89632,82767,10335,60575,65088,91589,71157,64978,28034,57603,10066,68317,23188,12154,62059,56857,65270,92070,28294,35471,10187,14632,55932,61432,13029,90952,45074,11587,30430,15529,39885,36976,47716,42228,69324,19336,69303,28022,57149,26500,83272,15616,35684,54103,66751,67243,29916,85302,44855,38819,98013,10082,98788,88660,45285,72765,47049,51233,57880,14534,79679,95711,87626,42443,14038,23884,55504,88143,18364,20219,28090,77293,54600,22456,18493,10294,19290,32351,62026,71115,12904,32963,31758,80164,78161,44220,12806,56736,63559,80809,64411,69513,22966,28139,15168,29631,13331,54079,66700,97347,26304,10988,13501,55590,45726,54239,61074,80935,15986,19341,73338,88217,87067,99591,88851,38187,65495,62226,16718,12373,83458,52765,32135,65333,64242,20525,96542,66586,39638,26531,89373,14181,52779,51904,35833,11672,43274,69697,59579,46920,42604,81310,14859,18216,76323,39252,12981,25478,31260,17923,24834,24933,58116,74572,87613,23159,71123,35976,10505,19237,93539,63046,11599,77480,35079,29154,84790,47178,65104,53394,98782,17424,81517,89387,80599,81117,62061,60485,81129,43775,68013,49117,52314,48087,27785,47736,65730,43981,94227,85242,72652,22555,58526,56293,34886,33936,15715,14370,98083,47368,62968,50932,71087,33887,21883,69117,53785,56244,77622,60125,74816,13190,95473,37427,95147,34603,55555,97483,30514,12787,96225,39253,57625,89880,75179,72021,44197,16673,88356,87595,11802,44614,74558,30869,82846,45398,46460,97112,88234,30362,76066,99511,47379,63266,88959,53396,50575,90283,77572,10739,67247,73602,70911,24261,32849,81572,74079,51810,71740,44949,75515,42676,42942,85462,42785,19330,78295,38713,71473,99706,76768,15712,65395,93605,87346,62759,71586,77648,42431,68792,22180,55646,74222,66782,49008,94487,17722,28168,47361,37671,34089,81590,60164,72106,59941,77088,59282,19100,35918,90511,56947,42718,35031,52522,29806,45309,68712,79988,26050,30053,94181,78307,10762,79343,59032,13412,57690,24034,42604,54061,61026,96714,47891,41771,33653,44233,25461,76348,62604,93540,94469,81199,64670,63734,56573,54832,11266,13261,13151,23314,19533,51326,21016,77232,10718,62761,66637,18428,80646,77321,54688,90829,49320,84950,31089,55511,72859,88595,25146,81362,19380,85401,73388,32723,17026,48027,75172,97170,68003,76229,77256,46867,83017,33786,32566,53063,10905,72256,97790,10363,60652,47497,37100,73537,41416,97987,84721,97820,63161,26818,51595,13037,71310,29973,77628,68300,46030,96509,87889,37869,54450,65619,89354,13032,83590,23259,45730,61570,96943,17251,27879,73394,37246,77429,88264,38566,25915,96065,65853,42814,97119,70545,77414,46860,32451,63006,81308,39816,38027,95181,10213,51696,78394,52127,53070,73030,61466,76272,63203,30753,28926,78317,65718,60590,62093,14317,50408,90539,41848,24385,67715,51378,25621,68652,45086,46817,24307,11712,55582,12480,99884,33047,28259,68075,40085,61519,67190,68335,69967,23580,63060,15969,45780,76509,38392,12584,58108,72819,73335,12635,13965,76622,49811,33474,95471,81319,37134,68874,18124,31523,16498,75944,29234,44097,72199,90980,94962,36712,38070,59982,20068,71281,80031,39868,75985,68070,27607,66186,60269,68220,20070,27461,86024,33200,91833,36977,15628,36550,29507,15338,64287,62974,12032,45277,72774,21915,43460,12493,68425,85438,67589,26660,53844,95968,20496,49447,52960,56343,64429,72017,94508,54987,12393,56724,67323,76180,47580,65143,80441,91800,32114,30513,42196,36479,15805,44609,64355,75427,83695,68405,28112,85943,86780,36505,68730,33245,58392,77907,49813,86451,90163,45308,11941,23918,98853,47056,35298,93592,42761,49563,16098,80322,15790,76075,77023,95422,63310,24385,63894,30945,61009,67558,31885,11973,78993,63654,84858,70580,47173,92426,30757,71271,55974,46150,42726,53451,57097,14258,83099,99342,23485,87664,21746,43798,55110,35567,28776,86996,19175,99866,36076,92611,13486,63000,41776,20170,70874,78837,55158,11451,74697,57021,62585,48176,12570,17243,41188,80855,14981,88188,65234,86431,75519,40183,90394,82487,43526,11252,86216,53941,60934,74678,41444,92245,50111,93196,35434,74888,76669,20125,39541,41391,10868,53619,29687,78147,80959,93754,59240,94896,47837,74233,56430,81844,96043,26276,56604,95989,54070,43262,25070,23204,88030,85911,62617,60484,85207,61271,31460,63165,54789,28832,63367,26523,52096,20460,42528,73212,11299,39974,14202,57973,19301,99013,95466,24055,50719,58487,61948,20767,25365,29331,34056,24430,27712,48350,92452,29447,90852,38604,75900,92631,66699,84821,55630,29424,57819,86768,10954,76225,24464,45125,18053,28027,17399,35866,74340,87814,62711,38254,51597,53650,54770,65701,35616,29048,11396,42272,99422,44401,17525,46952,29875,95874,55736,35652,57511,50743,15196,98899,79774,98888,43929,85164,65243,50091,26123,81949,47742,17874,40874,80041,72316,71923,42846,66243,79931,22742,42003,47927,42380,26199,11268,88776,73467,65992,87186,75512,76356,29409,23538,71030,91639,65231,65447,45579,98516,57464,90212,52885,21275,29471,26918,45469,67436,15324,36547,71292,43342,11738,82440,68849,70308,98475,29617,88636,23326,16315,80295,67243,86388,30665,68212,41325,50676,68034,23722,12336,85673,60780,82597,44987,90378,68105,61872,20050,94898,15404,15794,87600,16630,48168,80183,72127,19321,20753,80128,48694,36870,23239,81881,89053,61261,82775,82925,85470,66000,74493,52548,22487,80205,37489,23423,96246,93973,36261,82820,38555,20235,34114,67572,31219,39376,23091,72444,68888,80077,77499,72791,31986,90805,97868,25623,55946,19956,79169,81816,77487,67291,87697,19314,75384,78178,32975,95316,14429,94640,93687,42758,81444,41198,97506,73195,44155,96291,99623,92009,95202,41742,42278,73259,31993,64699,31488,56579,90148,36926,51000,32360,17086,96857,35312,32589,82924,65704,69961,39704,76550,92940,24124,88341,80826,81845,45206,12964,10094,46927,45380,99483,40163,19659,89152,93676,15838,56460,66562,12409,87078,30076,48941,95052,87060,16311,28247,77100,79862,99609,89217,40432,46769,97701,28813,56306,85557,51946,62574,22715,71085,12052,52201,39240,92201,91384,43169,45595,80666,26898,46550,71376,14378,43983,21020,64838,48489,65099,54274,40279,60958,85709,57440,45621,22046,39904,35621,27451,39285,49685,60323,23629,21359,43049,25761,80108,38273,39271,94942,70466,92299,70032,18614,28418,73859,54857,14738,40544,76234,64922,32738,52095,74595,40094,81496,32572,92595,65760,10566,91733,11087,92889,23396,69802,95073,36913,61612,72837,84534,70458,47143,35053,97955,11333,53966,98071,56088,87981,39098,61079,35467,84654,73761,96716,12196,46178,13991,53348,67228,80153,97026,40799,87504,47542,82233,57403,80278,16383,71219,69175,24212,39847,39383,46049,95068,10999,83401,32378,83651,95674,51737,57601,86938,30096,58449,23977,14295,26669,47471,86029,60011,62351,66974,17876,76276,78891,32622,48383,81060,45604,21254,30111,44205,34181,30382,50124,47363,69608,65616,17379,46267,28676,47917,22010,28515,59738,52685,21894,19403,28649,94067,67770,69683,41437,54056,84276,85070,22625,91882,75119,38630,94063,16237,67050,19905,52913,81813,44807,75303,86716,98841,60249,50963,36311,58074,82687,38126,69647,25546,47371,42773,92036,17957,55789,95147,86905,25893,37317,67889,73866,23378,49297,73797,80018,52900,14792,76556,83004,38647,85638,78547,12366,33250,39295,42466,11008,41243,74359,23062,28307,40066,33898,24547,10787,40245,99823,22221,12483,69347,14423,71850,57504,45414,94394,54595,25242,37118,22705,56535,73116,71095,45363,49499,29914,77733,63654,59672,84820,30422,28615,20027,30884,45512,44051,50695,90572,50255,49472,87768,70791,83560,58364,77289,77403,11607,13052,39613,26256,84006,86088,20111,86869,35482,84809,83317,75858,83161,98276,54899,34627,61598,74342,25300,44197,86858,94960,63944,67504,85760,82160,87315,13063,34320,51714,40861,85399,50823,60783,67079,55766,51618,15334,91841,13640,66136,65971,63461,60657,26669,47388,15872,18147,35849,15884,57294,74269,41360,98945,87346,26681,95252,82804,18281,49399,55411,25377,62218,36005,30492,76242,96796,92201,90636,83458,73465,93800,93161,24260,33824,45104,48811,71860,18588,88443,64222,39813,28562,99719,43169,32597,46296,98297,28509,71919,56057,69452,30456,23329,54506,43732,27487,16660,14497,52959,67159,75620,27025,46348,86629,28398,43534,67370,38167,71005,51691,79405,91672,49542,15519,73450,46115,62851,69768,65355,16303,74423,87007,28954,74079,79241,26189,44838,10404,96665,34011,50889,80684,27059,11110,38435,71547,59221,78541,14924,96226,98569,64593,90577,83391,93304,69448,44619,82308,23458,18478,36864,70520,87701,55342,81721,19363,83987,68661,83734,43702,53024,38036,30005,70052,85492,90647,90738,82372,17699,45779,87437,33310,70219,12159,71746,33450,26965,39530,94215,96918,14012,30580,96990,11390,88596,13598,90203,24266,35260,91494,29342,49350,14598,98342,76182,74215,29225,71322,76278,67159,81258,50070,48357,60489,12521,26253,30906,38405,85239,61581,67583,92275,50538,37066,20689,93915,73116,70627,89896,54861,20962,60409,59072,78943,76184,24018,93002,78834,87299,69965,55940,27569,16742,65928,20470,75999,73503,53774,52715,24397,75462,54897,85707,90875,16778,11204,16436,80835,62983,70485,41277,44611,20052,49265,23425,67628,89894,49454,68144,94102,64918,92383,55151,61656,99375,22653,70700,85152,70248,75103,77460,81939,45344,13201,13513,86535,44441,46618,59785,19869,35396,71143,81756,30971,27198,45359,36486,63948,92192,98335,32673,22380,87486,95482,89790,85426,55359,14892,32277,73723,32314,84835,17446,64818,78608,61285,15060,64813,97329,31084,86454,40839,38663,81953,68043,32906,97201,92037,44581,42666,18505,38251,52673,44757,38293,41180,60428,39114,89482,82774,95462,82909,58693,38550,17271,47846,26140,71356,44451,61951,18954,15336,19695,91862,63344,91264,32202,34927,61351,17757,91247,71258,51294,50065,41749,27049,29846,86512,11151,50961,58956,36587,12964,49293,37428,14952,97149,32490,22717,98552,27340,43888,39026,51003,13881,45151,29382,35645,63907,38627,71277,35525,37741,50717,34877,76710,72832,41826,16651,53562,73169,59602,64548,22499,65452,20113,51318,56417,62264,53455,83427,38054,16461,34703,81455,51389,64656,63367,24661,37048,26091,15450,26267,58272,71634,89739,45541,40816,98476,94216,39858,17244,58204,49220,49430,83810,24872,25297,72604,28704,29507,37926,50292,30682,61957,85134,60696,91425,21735,91093,94880,84908,88773,58003,59857,94432,45435,83252,41776,27716,86448,28459,72168,77325,77352,23863,50466,30811,52356,91363,94995,49475,63512,75412,33157,62852,78151,26915,96417,36429,35097,96429,66905,52450,68682,46949,30884,84040,18770,75254,36357,20386,86104,27793,57134,44837,15142,17656,85287,69530,74697,42016,17966,76628,99557,94659,19668,40472,68641,18247,17729,35649,24725,27681,72495,17026,93750,40690,21433,16667,28732,98380,15488,73207,76938,61781,24956,60316,68055,77235,35722,21727,40833,34128,97721,64768,90328,28176,50017,99039,21163,12104,51901,29247,53388,21610,28892,98446,60776,49516,32443,55907,98578,56841,51360,69099,76746,82735,14492,32493,33198,64029,43241,79582,31658,70256,88304,80519,48617,96931,97525,37760,24973,77883,30385,48376,39756,91601,86747,33867,90215,11212,98884,77614,42643,25584,25509,67755,70315,97050,44589,90048,93064,28493,68677,89633,14942,97457,97261,61792,99333,14603,30967,95815,22268,67902,53523,84726,43194,97562,81122,20087,59764,58104,78159,32556,18157,19660,93342,98153,61119,46284,38612,78000,98061,46705,75137,41602,39975,49044,24120,40749,94809,67174,27183,15830,48890,86432,93468,89117,15733,10292,66772,58657,68949,19941,21420,52547,65599,70897,74528,52366,11229,71558,86367,71769,86960,56027,23355,11690,51297,92456,56300,56084,20757,21334,86751,99967,61656,16837,67022,52148,12529,11830,24199,92508,35026,19140,41039,64367,12803,42468,77867,77890,85699,43653,67309,99479,62160,27618,90241,73267,44107,80861,28900,49550,86908,82036,80301,52591,56222,84660,49790,32860,85979,38222,44011,51993,80615,52480,67439,49913,92871,77384,10803,47710,24103,81396,40120,99519,95218,18561,48691,83534,57915,89354,52683,88909,34729,13361,39696,70647,49103,24281,90716,91468,77461,41287,65572,55284,74079,67815,17871,43083,70252,91968,89482,17332,47377,10620,78945,80301,80611,53459,57526,80369,71042,11429,38270,53712,31921,96852,80890,97782,70092,74220,23577,22428,94279,94639,22015,47404,80455,47742,65048,17067,27711,91472,27715,99357,14268,62600,82099,28633,63946,33365,10986,86793,97638,37792,40212,85969,52761,90067,75021,35986,30311,40636,13869,79722,67216,65537,93440,91955,64865,18860,26920,76457,30656,42215,41513,52860,91509,97155,61851,58963,82340,29252,78928,34366,30597,30023,96874,84533,29851,10715,20143,79025,21580,86682,65586,62799,85296,78241,12095,63269,24262,94883,51946,36097,23583,91644,26458,40157,25250,29830,97225,48843,45300,42180,79858,55033,66653,95413,56736,50563,36517,57558,30465,80921,56459,57655,92338,90737,56977,89406,24456,60850,16041,29566,13545,97494,74753,64124,56949,11128,56792,59334,94749,24007,20444,40811,88223,74638,19674,63421,52890,92612,44590,42555,43265,78368,11497,47921,35140,16075,40351,36668,10780,75637,24119,35243,66467,59065,65628,44464,70030,88663,51240,67606,54325,21597,21515,46388,82058,47620,28647,52668,13381,33775,87724,50236,98994,51436,58454,88003,14734,91683,70832,13636,57550,84516,45629,21746,71618,13105,99147,47917,50255,23276,96160,41465,70725,42247,10624,14556,57577,80707,44906,29523,90092,72935,14617,71756,80810,86709,32120,21503,44786,46807,25229,94830,29877,65758,95711,54022,71468,33297,46005,14406,55859,91480,83293,23929,17462,59465,75172,63033,92860,47417,68007,74801,31184,63355,16333,79295,97286,57651,68049,78657,33784,26263,12398,93058,79293,89468,11270,66869,64291,53152,13746,90578,92290,56091,77440,13822,93921,39387,43770,42524,35225,30280,83326,72909,74668,59880,72144,83418,88869,17477,13340,82004,51323,54586,13896,48029,33120,47590,62092,62457,76258,43080,18207,38796,73094,88144,35402,91960,90524,17626,92875,77353,48541,17042,62080,30510,18731,31199,55996,70191,73150,63660,36807,62887,95364,63067,55730,61578,40579,36733,84193,65041,37207,41394,19420,56734,61233,13194,49702,63349,78629,49367,88476,14932,12778,71942,32459,39876,13285,20296,93285,52645,15877,40789,69854,77661,27475,98479,32030,10029,24590,65115,85546,11092,74963,86330,27780,50738,80844,82402,27912,40744,29270,15553,96198,10235,27841,93639,12090,26247,92315,95674,67130,52514,33962,69849,31803,14561,63819,52666,51748,84981,91012,11759,73034,39214,70955,84723,52583,31803,64478,57792,27197,54840,53346,97007,50789,56223,93365,29237,55191,59491,89185,57224,34024,70676,89307,72517,63543,17831,20417,82871,65542,34609,43588,21492,40589,16666,18983,36232,56914,27201,50638,43750,56998,83514,85008,90344,43029,18028,21774,45862,96553,78026,98964,34637,24105,90202,96373,51580,48513,15289,80377,95319,47449,54254,45512,95759,88968,92006,56978,64936,73892,86207,91179,36986,88772,73861,94883,41130,30783,67785,41373,14421,90145,94247,79772,35352,43993,15345,32795,89430,10284,36796,37249,53190,60555,49451,24717,58837,54978,25503,58895,81664,51227,50081,93821,25730,49902,36814,79851,79528,55072,39069,12184,44460,39222,84091,35440,33186,11392,82143,41710,40029,64386,79810,99450,55446,27795,69513,45344,50035,96230,44795,22374,48592,42516,92016,85458,90686,70670,68374,46817,33276,37467,22919,44879,36903,52576,55131,64942,33527,91280,34990,89942,30494,60113,80051,22501,16150,68767,89776,63437,31752,82054,23781,42404,66866,64203,34060,51889,83559,38108,42209,72349,47783,98108,16256,24154,50706,97982,25626,32887,34652,81639,57562,82701,51961,26625,27543,35913,73671,59683,16128,89166,51141,84117,60478,55879,95122,77577,49078,10726,69633,52699,26589,36453,90365,52335,91486,11943,58839,77426,20813,96809,30943,26580,27661,35010,25741,39076,50129,59713,89370,25942,73232,15862,60979,96348,94508,38899,93397,57269,81899,65111,79125,31305,15510,96929,43313,10550,94709,87477,21934,21242,41077,80856,58751,81933,85964,54614,48701,66998,34544,82383,48679,52982,11164,88595,92403,42103,52598,94787,26186,38227,53214,21757,80196,91466,36980,10439,97287,19254,25987,30807,82942,71477,77034,88082,25288,34549,90608,26067,12208,24841,87312,86167,72917,48456,73449,88007,39153,33455,42815,28175,31431,43652,85875,99299,38278,26145,92296,11701,13993,21928,90256,55309,38260,99349,19673,94769,81696,87124,41993,21051,76132,59189,52197,83242,92741,52935,81781,39099,45836,76391,96553,87745,83689,41755,40682,19657,96512,95176,59227,66515,26813,38643,50516,13100,23847,60232,64051,50959,74296,36913,34080,86509,99628,29884,31673,96733,32106,17336,54585,49272,54371,66478,51593,49803,85648,80707,13772,54302,22149,63063,23382,78491,46680,40262,73236,71137,73450,70240,48998,65677,36719,92734,61849,32047,56171,76315,88140,55141,98689,73211,37139,70276,23727,52927,97075,28672,69015,58866,54210,24354,49529,69704,59108,82831,97955,79613,50991,36825,29333,67281,26255,75733,85651,68959,96361,97050,18992,41616,34610,32053,66241,17157,13240,22669,61839,24730,40776,23889,63064,72650,90240,68518,78364,37646,63502,75386,16413,43044,84354,49255,77453,57993,85222,33979,49022,68857,17848,12098,48798,15746,33198,58561,83681,34234,43580,79665,22952,30856,55560,96473,28396,97592,75617,24625,72888,52710,12568,34776,76817,44155,50815,32702,90203,68899,12647,42185,66136,16630,18340,18949,34312,57762,98293,40601,51039,15142,29608,16295,84552,59344,48483,44658,18306,82641,22911,13181,16929,38647,66861,90008,41746,29583,54565,91586,96021,48012,99625,85345,65924,64963,40275,69316,95488,21241,32572,80517,35715,27305,18883,39365,63672,85414,31487,15988,20937,30153,82977,89060,30907,89299,36961,51157,63155,30936,16182,60024,49136,51632,96110,63816,67116,25043,80518,79355,69643,73515,29126,53987,68149,59743,95006,18222,54838,28509,42724,59062,21798,94570,39415,90411,95121,92070,92364,51393,33619,44661,86105,24100,37598,35322,50532,25231,11661,61995,81317,85851,53456,73188,87834,66458,16804,32877,41204,91672,32319,46056,19741,34171,98210,67346,65860,39411,72277,52517,21697,61016,74124,37471,56854,64265,31503,78766,41622,55288,73404,19305,58451,39220,12307,48414,63587,53732,49006,20416,58008,70552,94467,76728,21806,83005,13258,57088,89088,54547,70641,70657,67144,51618,35713,43079,74168,79671,80072,72696,85509,91463,71100,32471,84008,54880,88247,62669,41683,95717,64007,25904,14307,22502,21093,41104,35161,24336,86650,31156,20947,20017,87828,98731,77071,56968,41527,35812,67267,57592,65500,14289,65766,90995,16754,31529,17047,92222,16065,92271,18582,12576,92724,89831,48794,97262,84387,85486,15786,93817,95328,12942,22367,74383,80794,67374,74976,67729,20205,58209,69451,69792,88912,69366,90095,48978,26220,85206,98414,35891,19914,73333,42660,26933,11246,52928,97257,93947,94321,61394,85515,19649,58438,94370,93766,32166,16544,54342,23738,27286,33359,89472,14429,18839,20063,93879,23850,66442,61869,54022,51894,10423,43788,79991,85599,96531,13381,35372,22892,20973,21362,48691,88115,98911,95885,26693,18609,78487,75167,78914,46068,59123,32949,94036,42938,14331,43894,73427,43840,42299,89938,26605,53845,62525,44542,89888,41163,49459,56717,89440,55834,72279,39394,28426,43437,77456,29544,37318,89903,81984,58722,39549,51674,38305,37779,52357,69679,30799,66125,99581,11637,99766,98334,33384,28839,91056,65882,57690,33199,37514,44983,83986,62308,40281,26212,24180,17253,41989,81308,99161,29766,47436,93842,31694,73990,63657,27011,53899,98581,83776,95767,83785,26035,23770,46190,26500,27297,73414,97455,13256,21122,31123,83936,90382,28573,89646,69759,38688,48032,32198,61250,61196,28498,61152,22912,21196,10545,20113,77809,16143,36936,62679,46801,78585,83757,25459,82998,82371,67722,37254,46299,60346,77738,82575,40397,97294,34254,35719,83108,41609,21814,91160,77823,34986,56679,22492,20370,67302,24454,63727,16427,48734,49543,90167,70969,93802,67725,56002,79320,34440,73139,58007,93106,87809,36675,87891,30706,97402,57643,55790,62077,23575,92949,83307,94340,78608,78042,27393,47359,88930,97933,49156,42121,82248,70703,34868,83735,61737,83860,69039,25160,58253,72390,60585,87837,49846,24051,61823,45313,36396,92569,54589,49498,99458,55627,45569,52503,94569,84320,62390,66954,98444,50293,19313,50923,88918,90876,59476,76637,40671,23704,13760,95315,96674,87862,63702,95423,77909,23898,88260,61306,11174,58769,45682,48235,85246,97415,15178,83992,13810,52821,64330,58651,87667,35758,37705,18359,57928,34122,56229,33997,29679,32786,47155,73073,77606,35472,69424,54104,66629,15388,13526,59218,40641,51461,48686,27106,90338,51805,20198,12409,10225,69348,35458,56001,62472,82737,17054,66407,16690,49624,67100,73175,46475,76907,59216,72299,21978,19645,97885,60374,66168,88416,11870,56541,45349,89262,55783,38070,13120,75970,74774,40178,37467,24384,87814,59163,90957,36997,29929,75939,67227,45032,83569,92764,56943,47959,84088,95678,18159,16107,49211,90499,32656,70732,72254,99888,76013,67474,40188,65048,39483,96309,39512,86706,75927,73352,69945,73338,22040,37109,86908,31295,14681,91202,14308,66732,31164,53398,75327,78297,31187,72664,11600,92018,49293,27879,19890,18532,18849,53589,72994,99365,14614,97077,31567,58780,46508,15411,79055,58750,41821,22669,49484,10214,99176,67305,75910,94160,45782,43670,15460,18627,51226,71576,15171,35567,63137,44860,54123,69294,18856,62431,45441,71578,76638,43712,91766,52322,88840,24347,53899,92469,67496,30043,84307,88004,31089,65956,46640,34037,87290,10594,65772,49496,13006,88148,51386,56235,91656,33653,56972,94051,78546,55098,50702,86951,61481,46259,78398,25130,29931,12790,33822,69768,47795,30894,60600,60568,77264,67486,94207,48694,81872,19692,76395,62521,97046,78101,14752,18387,35166,80063,59977,10261,40824,31679,74238,13974,68295,68010,48777,30249,72609,12386,65450,66413,40261,97569,78583,11230,11560,89605,35451,64102,50628,80220,19853,42373,28190,96619,30671,48991,49163,89960,87915,39574,14557,27206,92704,27193,40677,44697,52552,55758,18406,37526,42138,29279,74206,59825,76883,29223,56605,78222,18138,37039,13372,58509,95642,68980,73698,35263,12899,79889,12461,28975,29243,58604,65131,48410,11598,41782,10074,15767,90723,89727,91920,44388,26403,10698,26146,21946,31571,74829,41962,65562,56382,23236,24484,91503,28277,91285,33819,80369,89050,12972,18593,22650,38167,87349,12941,65304,59370,73752,75054,41626,63092,73333,57154,38487,59945,44372,17234,68262,33592,96586,15363,17925,22934,42511,95817,10708,27439,71643,56177,13665,53411,38185,32634,76154,29537,38459,13853,52701,31311,78913,87357,48514,45003,91109,17707,59335,74231,46267,28626,82569,74331,24666,98961,98000,35953,52856,27244,47947,23837,22469,12172,27942,91835,36649,60680,18430,11505,65284,61606,96209,94974,32887,73975,99221,60956,77861,20133,67264,48210,27376,72653,26619,89385,69798,94697,62896,13691,98900,77705,47585,41187,60826,46739,36250,71285,97681,25627,97179,40387,60180,27986,56624,76675,72931,33225,50186,85065,54029,29699,52435,81042,14708,95569,18881,60546,17786,77834,48041,96050,55567,11768,95314,48455,15085,74548,16472,47834,67652,85162,99446,81462,25759,19990,37145,71791,31989,85757,58719,29444,78541,18302,37532,47645,47198,73731,91676,61202,28658,22844,59406,16650,62002,68716,44496,88453,69452,23115,89153,51250,94090,77528,27212,39637,90438,78264,46501,74850,74901,59386,20951,47400,59309,47116,27631,42305,95094,95028,13906,44256,18659,10960,83337,54619,64510,75886,91620,51901,11377,93548,13209,28216,36425,38014,64602,54863,58188,72863,18613,43466,89867,58178,31363,10025,86040,19466,64804,17244,48329,49798,47456,57571,68365,19757,21106,13562,74360,82672,27296,81449,80285,55870,28912,77755,39882,45732,46566,88735,98335,38064,72154,47386,18070,91954,37351,56048,56928,46695,60730,86527,91897,92700,51180,27254,33381,31058,73844,71724,18188,35162,33731,19113,94459,45251,51049,57711,20669,74478,15145,75194,72818,84487,88816,55868,97230,45480,46473,21374,93892,18093,44267,61572,84965,54215,72482,28227,85700,85336,55054,82213,72861,57881,61141,51534,33593,16472,84864,59215,58254,22330,41332,25578,28616,81309,99196,20578,78205,97522,68512,75867,50872,83501,44003,18433,62779,89098,98758,31310,46549,40875,79953,34642,35277,54062,40074,46284,78594,89238,36797,62557,78411,21000,88511,85789,85778,49217,75515,88246,73322,79374,61552,28534,23400,39852,96954,70576,83797,20014,79623,96471,18405,44068,22585,30364,65975,30479,95913,19806,78950,99270,72393,40064,31024,93709,20706,32603,24087,67143,89505,24111,28993,34821,16842,62045,30909,52449,31755,29681,29419,37542,51492,25751,91554,23777,72097,98336,91760,98671,15362,49277,95446,45834,31317,59773,45593,62486,31082,41609,18598,77498,47332,87038,82278,89717,16245,30088,81225,41256,51541,17127,55754,74199,86726,19584,40327,23303,74489,44187,88505,11770,45858,67508,10812,54540,66264,18070,14433,47707,66812,92116,57795,13093,71169,78187,10851,15568,32571,37713,32595,31093,58932,69788,80157,92378,94339,85995,51037,89587,10938,23037,21861,32066,40287,44214,10122,18155,63101,12298,21627,36291,12156,29499,43721,13195,46791,88763,95934,35916,14204,33238,57179,18511,43582,67947,90485,91756,45569,68132,25685,91168,78836,62592,57304,78143,58302,51647,95704,56076,94914,66787,90354,34026,79557,43520,73390,86601,51615,13546,15484,30483,27084,75395,37403,51858,82456,27827,77162,95893,74404,80197,44044,73171,68628,55910,15728,68269,34506,76229,32876,16973,60938,93080,52463,36445,93437,47364,14154,27851,23381,49482,11327,54156,23085,73634,21804,41081,42993,32131,42621,21048,42352,55413,90577,73188,21077,72995,72896,31383,58160,64627,90752,72510,51783,49360,38919,38006,80506,59401,46924,92670,24907,44674,11207,85121,95347,14019,10932,49490,18645,17316,97995,78117,86877,75856,93140,83596,45352,14624,67704,69946,66250,79361,45761,51004,21331,64805,39278,47935,82336,87555,24614,75644,76132,21429,86722,15534,13505,12501,47743,22864,75242,80195,92036,19257,62697,11255,65613,96910,40539,38860,15920,75989,51857,76360,38510,41713,31062,66926,87276,78217,51816,48303,24589,41545,23261,64096,19100,29549,27901,85940,48002,17788,61428,51198,91412,28006,45741,93922,27253,26871,98784,62365,21518,85926,51302,21735,44810,58960,45454,77343,50095,86210,36511,41509,37912,78017,62907,93505,15992,70233,95183,69784,42336,71490,59358,17522,67617,89503,38153,73871,20624,99455,56908,90766,18005,71481,62490,51455,13264,78922,22271,84946,33223,13240,61218,98236,15612,94975,27704,65005,44966,10309,46280,87509,86718,41732,57550,14491,25246,18885,31368,77209,47938,38908,94424,86460,42655,93853,67117,83310,68574,17035,72672,46342,57469,91832,60372,14725,14115,55729,71032,70064,59052,86272,63466,99552,28107,16449,71938,55512,24450,43577,62549,76113,54602,48506,55121,50828,30410,50379,27618,39208,77012,26255,23490,42400,95227,50883,55940,14721,62472,49618,90386,11459,82142,79278,14546,14607,88095,11783,23165,95092,53735,66511,27054,23468,37433,37437,68381,50798,21369,68908,62436,89763,99242,71677,88968,93271,20214,16296,57637,62327,67130,96256,56353,80715,36661,95523,90870,34739,17544,50988,96791,49545,67915,91065,31391,53055,66740,15813,53429,37216,94983,27763,51230,50133,94046,98337,47958,30433,13254,27839,86721,29989,53418,88921,78944,42341,76226,93981,25665,56815,25833,13543,77364,34878,23954,93780,25964,45169,70785,84156,42491,17547,77110,34579,21459,71484,60758,97792,79731,52116,85746,70335,30905,87192,11547,59130,11729,81060,49006,93840,64148,67375,10556,73453,16877,24028,34333,20814,19645,43295,55162,68354,22035,52677,32033,95324,13973,14595,51018,23702,60769,48021,36437,77270,26679,41314,25416,66605,64703,94535,95637,69066,30043,76756,23516,50375,95339,79141,93037,26271,72823,90893,72885,11330,16036,41598,12623,79155,41243,49252,90582,91542,98051,82040,19632,57708,20864,83520,91309,70480,43438,20417,50283,32034,88623,66586,49996,74323,71111,74619,66023,86065,31306,16133,13080,57971,67961,85759,20217,44222,93680,68769,84304,53766,84050,91324,89751,72132,89597,86964,48240,20031,78165,40850,31476,15811,79467,87570,75015,36125,31915,26603,88665,53063,68661,43171,16695,65757,73434,68299,75366,25704,30174,19207,66290,31742,94377,29935,55270,46373,40470,50182,30807,83426,20175,45786,64471,15784,38800,99498,89171,67005,83706,42738,36873,21777,29563,35280,67969,96599,77879,34407,72221,58999,32365,82242,14251,99607,42037,84171,88804,44887,89524,13467,56395,41353,99977,40274,37110,97820,44689,75762,83368,99527,81600,37226,71790,65775,56612,18172,58286,64288,33035,79351,43530,69739,59641,84175,80191,29924,27904,73477,75505,27182,41620,92856,89555,28043,74581,83417,86997,22530,50938,83942,80951,52613,69573,24202,68261,76491,43227,42135,43767,61595,87548,26184,36451,35420,50074,63198,15555,18170,44463,39151,55298,53399,22617,25417,74875,56330,47310,86793,77549,79665,14920,29124,87588,71099,24479,87738,13568,85951,66860,63340,75667,37647,63417,56500,74374,99087,83643,87273,78673,67739,54122,28347,77182,93281,91909,73982,20417,94774,51926,41282,79096,56946,41150,88600,73306,95659,71168,96923,84039,62909,98661,92844,63895,49569,73362,93491,71584,35542,94359,66094,95211,83230,53630,54635,81667,11747,64422,22721,73200,59695,67835,71876,66611,24583,68455,25002,96169,52234,40604,65382,10026,55203,95250,79278,20866,40213,73108,21451,86210,69220,21149,30478,72481,43315,34325,27645,38496,84633,93986,49361,61945,88601,94423,93316,76126,76784,87633,91325,96912,97886,66073,50325,36664,22589,47478,89592,73226,50349,96473,76694,52624,45786,75528,21545,51019,81427,77817,33161,86178,13682,98505,60469,96774,83907,47426,26654,20628,80772,29888,59587,27380,85086,47780,28581,80400,42459,30721,95548,40550,64674,66848,37900,37073,25048,77902,97073,73471,61055,20407,65942,88135,41528,68823,16602,53366,56355,82238,90487,86323,92836,22979,76119,18712,10816,67265,35419,40703,67106,15072,33483,68841,55753,18628,64119,19737,47667,86187,93442,39910,54944,68802,15704,46649,13301,43324,89970,47143,35893,96337,37472,66985,87165,31521,74799,69035,24147,50141,21672,66235,88290,46583,47223,10289,70970,30335,13646,43013,37657,52570,47825,94361,64056,39916,87771,91811,67970,74063,39955,75796,75386,10376,55043,45321,81211,62081,22717,24353,71219,48613,88431,90889,47763,84835,21329,21491,62139,27260,10010,88917,31087,88946,43672,36465,63439,80808,94227,78669,67930,98970,95685,49486,79806,27171,84247,12812,64932,26972,10947,72114,93064,51296,43871,72791,62392,17700,81945,69161,96905,91143,69562,52439,75710,57912,37708,98475,80933,33713,92725,82411,96310,75576,95675,75678,72656,10738,16884,69873,24504,71389,88002,52053,33972,30040,55196,25903,84801,40257,73278,37103,25723,95442,72209,27161,31999,87978,78271,75416,54581,70942,86896,13143,90379,23992,48350,76441,28561,62185,58617,45545,71970,31984,41642,11912,18625,80381,53640,38915,21780,37836,75447,80640,21392,78881,53288,23445,19003,14908,19621,84125,93828,64122,22636,10670,35639,22477,66983,12738,74311,15736,35281,32395,53342,81781,81112,25237,21455,48389,52268,67052,35424,19827,43841,97495,31654,57315,23702,44646,86003,53271,50395,57763,53959,19271,76197,33027,38898,92111,29658,10430,89258,49275,42319,64323,54655,28162,14172,87773,65103,70733,84949,78443,42967,28708,38766,47348,11958,56936,32939,13038,35376,47319,32828,78386,43086,65591,20640,89322,33971,95776,21185,32638,12249,95831,88301,70114,76234,57451,98706,89753,13373,94212,71241,33798,52979,41837,94085,85800,27270,76744,32507,21066,70079,99699,62834,74575,83724,63743,99518,66825,84055,59986,60968,35144,87581,55695,57409,54368,67038,16384,50430,77014,75175,29975,27593,48335,14284,95881,32046,44203,26259,91062,36245,47544,42356,48995,28910,10911,64501,85811,15796,46241,51753,95001,76930,30946,51067,69562,93114,90865,54384,58108,31378,17253,66786,10804,18417,20438,32043,28749,46769,13763,56814,60013,56330,42614,24542,36688,22078,23738,90026,31115,50194,16688,27842,49583,99239,82094,71125,69878,97170,18559,71153,91158,81936,25102,28626,67721,85619,46393,84598,18701,63615,95001,47676,90294,84707,97308,85960,33392,34785,57438,18852,57585,50846,18646,15747,43729,11928,88225,10847,69097,33620,11771,76643,32427,38738,66542,55724,30523,87161,11458,64027,77790,78702,76781,49281,54785,77792,48642,23427,68624,62776,98257,66189,37196,76115,68063,61693,24770,14786,39661,43499,50452,28384,63440,46252,47923,80336,35060,40776,77651,59582,74720,25808,26629,14767,29071,22154,73870,63443,52416,87550,72248,24306,49263,72962,80841,17389,97536,52620,32630,36501,69001,38126,25036,21642,83196,87299,19109,41564,61703,61145,28237,41718,34727,10266,94373,82772,22812,90246,11579,74859,13622,46082,65509,36765,38836,44383,57422,98308,96367,19705,38648,19507,84623,59278,54819,21168,97977,88396,54806,13866,75557,57737,27795,17573,99531,12594,68651,97723,97925,43766,79299,82353,72576,22494,49743,60294,28386,17566,61101,62782,15203,30100,49475,99056,46162,74713,47395,25878,80444,91387,30434,89492,72688,65610,23603,96574,27262,79530,72479,72981,40421,42451,56223,87533,63003,92244,69976,64295,16562,13397,17750,55418,36236,49881,81113,28486,68183,54572,81884,10458,15940,77831,57937,79651,32365,81301,21155,45303,92613,92671,69761,12259,43745,95221,82307,74577,86732,78944,31502,40968,60511,50501,75026,19412,72268,47423,29718,73713,51555,99189,95146,31758,76797,73448,87196,84875,47965,24776,76741,63405,97125,14232,52646,82835,21642,52013,74767,26123,23388,25866,78079,59804,32652,89123,15499,81382,31192,59020,97457,57656,25473,35303,92063,55988,96511,17002,69580,55159,42992,50109,89958,53726,74621,74042,96626,87572,26088,72531,72397,28782,44256,12839,42601,14547,79161,67250,91605,76104,84515,66149,91678,19936,83134,77938,73866,60879,34876,54842,12758,99218,16735,59530,14255,67688,69444,87957,55219,93583,62133,68139,43714,72184,42354,52642,49568,87902,41177,46344,59282,81287,97466,95791,81209,19351,39256,89062,11358,30786,35440,67309,35922,26827,66763,94840,82484,89015,60715,14750,86154,42505,11662,49020,99165,62782,21391,81499,45134,97210,65739,34762,28527,73273,50251,52739,39963,71495,58294,34630,26655,15337,70465,13215,17945,36028,13766,34272,30324,57639,82347,88611,50677,69616,42287,38274,31991,71503,23688,37841,50190,25187,76847,31357,51313,98027,77170,51469,87687,82845,34498,45500,86573,48347,69515,50564,93012,44946,63323,15012,38400,22599,45551,68286,32619,89203,99475,75703,60522,15510,83580,30074,23877,90106,19651,25000,56406,94758,61188,63697,48781,72564,17918,18739,57382,59187,91080,48665,55723,90635,18948,52981,96117,45874,41174,23089,39522,69372,13641,51398,99065,90546,83953,20755,36736,30760,28181,88582,12804,86785,94830,15981,43647,59152,33231,33387,27950,82149,71813,67726,83558,69592,90483,80823,61468,86665,84736,28614,90723,64582,31214,58650,94158,16907,39745,92869,72539,51881,60718,40130,21577,98945,98304,52767,69142,50491,17073,94855,11477,90422,86292,29348,34485,11346,46248,54678,27889,36363,85178,13371,41628,26804,70337,70694,86485,64684,58602,99367,76388,72523,14258,25655,12703,35125,74826,16644,96477,70326,52491,81095,30452,42366,22854,25880,97807,97711,66121,24255,10874,53215,14399,10208,40791,80965,22719,79332,68226,62460,16498,84729,30057,75477,28526,88149,14266,28751,80408,37706,32364,59834,67414,56410,90905,18155,84567,27446,11621,27345,17746,56765,82000,46442,47805,36156,41706,44952,26665,45440,15123,22266,90049,24517,73412,83869,76652,24704,68839,79352,27587,89603,74178,96099,70795,60819,74745,75964,15949,77907,37320,73160,23478,60656,66183,30716,40758,92259,56224,43290,91029,41491,29793,89229,32711,24566,62601,80880,67689,46121,16121,77797,35924,51823,89517,19354,41076,78477,31354,68504,27155,45622,35408,41267,47579,80472,80904,27291,96323,26139,87031,25494,53082,11371,32653,63895,79451,86026,88550,26436,70779,48131,48100,70951,66379,80828,50160,23625,34472,66033,41905,38299,39979,92639,95641,85024,27152,34270,68422,50274,96682,90412,68630,83773,20996,20666,74629,32512,55768,10170,21759,48443,35521,10050,14405,82257,94502,87606,83763,44917,36197,14148,29665,82504,14978,63756,27245,17733,47808,78200,29126,35460,67713,94969,34267,55522,97582,93801,32011,45118,95182,33257,69790,11000,73857,21349,38487,98509,79320,41824,68743,22753,43391,95641,66651,14788,93145,57421,78888,70717,25797,37313,23779,44605,63973,39237,36919,19093,76786,20432,66914,79079,51821,50189,81416,54821,96133,69076,19499,17829,38861,78224,73175,63872,98247,77299,72953,88883,69109,53085,29802,89523,45820,75709,34288,58889,17624,36065,78225,62061,79639,14157,59073,92229,93724,64798,43832,27943,32664,84718,14375,63000,48286,45299,35912,14913,53927,98883,64150,28992,72881,40346,71400,41322,37315,59359,93284,67102,10954,19206,94528,77813,95738,22292,47321,27664,25310,42132,30669,40167,23179,75500,90612,96113,92333,92862,37572,82806,50664,23103,26384,53114,14457,17698,78900,65234,56234,20105,89375,94765,54906,14617,37227,73722,20820,53608,51057,62368,68240,92588,56094,99551,76765,50187,29113,29046,15489,12573,44695,76076,27023,74170,48503,55331,69570,24513,96616,48138,87936,25467,57687,49729,64978,81488,77242,67731,82942,85012,41394,41230,57267,88022,92846,48672,44328,26823,25182,38799,96540,76169,93029,20319,15415,34529,61313,83034,19008,42396,59055,36013,63546,84693,74716,54273,69088,55681,20936,18010,13969,49407,57818,17737,64831,91677,42198,13445,52787,25812,25396,64582,89837,71036,32032,48525,42119,85596,22105,10413,43923,15553,68932,20681,63472,11357,84269,85136,30445,14394,56580,62835,41247,15601,19807,53701,38100,80996,38199,74298,75960,25459,52445,73716,70769,63770,20969,94373,61642,32793,87583,83066,39890,93207,25988,72565,55381,24915,54587,13589,91464,80977,65043,94572,46577,29133,83011,74433,31648,33826,40631,13595,98050,98729,93461,83172,84554,72750,27114,66005,59062,20937,40339,64962,84966,95082,70388,72212,34514,96740,96357,79336,12837,63586,24473,83085,16618,68937,79894,46682,49873,12596,79558,26053,47177,16202,87860,40837,70368,30091,33023,38941,97347,41745,23782,64979,62531,72846,60454,67714,57728,11980,39075,53569,89234,76105,67412,77424,48808,51040,48077,40945,91648,70242,93254,75759,82335,28929,22027,38140,23260,58108,61908,28918,62410,95327,46216,79397,21499,75351,31877,73747,74329,34240,50338,32724,46394,26668,99146,77647,14941,98136,27407,39930,25594,54294,51927,75559,14437,30339,91116,79913,95532,44480,98823,26974,69833,19886,95329,82760,65938,29373,55708,25081,56167,86449,82885,96959,81533,86278,49651,30182,96840,51275,44311,71322,83307,97999,57720,32394,11184,84213,13581,71027,33022,90777,58151,36111,63642,29562,71126,13221,25075,25064,54703,89507,52328,81057,85447,61435,68318,33096,18231,13145,37276,29397,90942,24550,63812,28658,53108,27042,27521,44090,23126,83443,91166,25706,74122,59201,36605,18663,27628,75641,78275,20334,42872,30499,81266,40024,15282,23126,96294,14939,15090,96929,74056,95578,55308,66095,96766,11809,66341,67254,33710,70292,78145,24101,49389,82627,99340,42977,26927,97815,62698,71459,30886,29470,94984,42132,59490,70846,17524,19903,42711,92183,12970,11376,86817,27752,12325,15785,44224,58604,28193,83435,36435,51284,61974,42388,64993,25602,64816,78042,31737,11721,42676,30335,58785,44891,97220,21835,15107,78486,18439,59568,42422,38373,50743,53120,20247,65850,38265,28619,13418,95760,68654,86650,94178,54430,97708,75455,92318,23899,78192,61449,22327,99676,98223,14996,45997,52233,39618,92928,73261,32843,30784,22538,53218,62218,57917,89235,67740,33944,84624,32224,14639,13959,67040,59270,65666,97973,99672,86759,16301,91875,38857,23289,78118,92772,65328,43313,72388,64692,64058,65841,47334,43331,74425,73734,14895,18771,26798,47815,96612,34450,66736,24951,22865,53037,50744,83463,88420,63425,38599,99184,42035,21520,90370,73464,81467,28238,76439,96540,33572,69096,67518,70155,11441,26737,49988,32044,29799,80833,23850,53284,18768,64510,51439,10679,24174,20713,62819,34456,50025,81175,95831,61296,27546,15554,66796,33166,56528,16628,32822,10207,83874,61363,38857,25894,57458,51558,92888,22345,23012,44895,29506,41507,22586,74950,91391,91513,71546,88551,59419,70257,14225,60540,33613,47638,64669,57666,21252,54271,97178,36783,22882,77317,73549,39285,17463,75156,51223,87915,27094,28110,47124,82362,87747,43116,89285,46568,14749,56723,84160,20649,75441,53963,38335,47830,89394,49200,64026,59702,15563,87944,49951,51479,42237,40433,51251,93189,83085,19673,98137,64242,24079,29128,77334,42412,44716,64561,81758,20976,15275,54113,87782,27454,53727,17901,52674,72200,23168,77641,34832,97616,93107,44236,83230,63193,87176,64144,89417,27701,73506,53762,46685,98125,49679,57381,13756,35448,21262,59678,97012,12829,25949,44039,21518,51503,77105,69406,55206,52026,60981,85740,17239,70632,99038,65035,78718,78794,11261,91049,16406,26940,64587,49889,62178,65713,71426,81288,98994,15188,34679,76207,87488,15604,74351,10137,30600,53376,31278,15902,21304,23797,95442,52916,22804,63940,80944,81717,72737,49417,41322,39721,41619,34213,89982,32822,24005,85462,18958,11970,38697,55602,87508,14309,97118,25427,90087,74500,83221,65410,42048,89800,31621,22476,45166,52812,79692,71537,80161,15826,44837,79941,96980,29494,56384,51974,36747,55828,53296,13678,80471,13939,49973,66754,49174,79488,44290,64494,14295,15554,85484,32958,32263,92658,21197,39290,70308,98618,84229,78471,39766,61951,28047,42508,73437,65950,55465,46813,38528,53080,88847,38887,39222,17880,32700,11361,79001,23995,16949,20828,95442,62355,16332,37644,48169,47425,82717,60053,42922,66391,83501,35964,41403,39796,36215,72183,56149,33750,68483,27335,91819,74687,43624,68446,52347,59650,73898,32358,73213,33084,31478,78413,55793,13803,85249,77134,58563,98827,42331,20103,13691,95418,45206,44284,10868,26147,74345,63132,65425,14703,16493,28116,93784,18642,18334,34461,32385,58439,14154,90108,84802,50437,99283,16124,33037,59565,79159,42917,21422,89495,61947,46576,60032,72149,94625,27548,36780,10174,10427,75986,13200,44694,64726,92199,20623,65364,49474,27840,50450,92275,18032,85529,55206,92838,18103,96117,44696,29275,97159,66683,22703,49163,90435,38874,53766,70063,12672,21292,64898,36207,34991,22097,64191,59256,72167,36572,76237,87217,87481,59877,88920,59879,83898,61662,74617,83017,71260,78918,92789,52934,57756,87196,63929,44193,53989,86221,76369,60603,29149,89300,90283,30895,46388,57214,53068,59677,35484,58420,46104,30602,45344,81135,17205,17289,56082,11540,59061,12432,42633,23349,30976,39915,86323,20212,44636,97555,36792,20128,52557,99201,70652,60862,60919,21952,87240,28196,19885,31680,75298,64202,61340,24661,90406,42798,93284,95005,21844,11912,27017,11574,44807,41928,69722,88348,48058,86188,16124,99273,28950,55351,42302,92451,62508,91539,52250,49981,95981,68544,24623,21250,43350,46301,91897,52457,77529,37418,93754,92665,32605,42079,23362,79612,85541,12648,20035,17466,21842,96956,42903,89559,48627,48526,21866,49465,86804,24521,17786,20120,76640,51933,42557,78060,15804,51918,76570,58353,26189,16914,14496,38417,47548,50520,71857,80323,12023,85075,35071,27053,65086,75837,63243,39109,36936,57264,72134,50608,11897,85067,90860,75646,17912,11961,67805,51236,71304,30959,18537,81525,92894,17713,61577,27071,51536,63985,79645,54619,15936,97368,67139,95367,23648,90044,93017,44760,27345,59654,60812,62228,52379,43801,78857,39714,80869,34547,54368,88449,13543,83289,81293,29629,85391,99522,89121,71893,76613,40631,41727,76319,48315,26057,12586,86565,13078,80448,44529,67996,18492,82113,35281,48842,92561,26056,74546,28250,85926,60976,17657,56895,40629,91909,22483,55744,67892,27698,17737,20512,76769,29350,88931,57501,18226,54658,49626,83043,57723,95379,77354,91198,24874,53269,71956,88509,31113,73236,69989,30218,18208,94419,28358,66094,56510,77034,63029,22330,48535,83449,89734,86352,10153,90786,81638,59499,73017,85920,31079,73370,26490,65432,23333,77307,79703,44796,79884,70357,10058,90685,44693,64215,57544,22573,23288,44307,43336,75024,43946,43523,57795,49510,35904,41120,94757,56143,23350,45879,88311,77961,68015,91619,38716,48997,77330,98322,44372,37609,92000,56712,52705,70036,84552,70365,85562,70128,14277,40743,27453,10512,84965,83756,63936,73626,65799,54473,60313,71252,15829,14586,25821,37067,54147,76631,67287,94303,39773,42479,55728,68471,33936,32077,98704,16137,40385,72641,91418,55582,99599,78417,56358,77790,33370,73543,76839,32706,92900,42188,51391,12556,82669,63200,36398,96588,40628,70701,16809,20886,43877,31620,99496,83621,43988,11325,80507,63094,60140,98419,12773,37477,14407,24429,96937,77386,59495,96638,45503,31466,82847,33713,12595,75251,41275,93341,18293,50514,17658,72112,26776,55615,28741,80072,92432,48437,21826,98756,51049,64390,94147,18304,66915,88685,66402,26350,85029,15712,86783,59053,21400,94951,46434,19535,56974,72272,85103,62768,56358,95221,91874,29514,45589,33164,80446,73648,20942,32209,21938,32290,90979,78223,23149,48513,11285,45158,40579,26232,72631,48930,88354,81014,45008,14050,14203,19930,55358,48269,15193,85462,30723,23953,80517,90684,15314,71806,49530,75812,30919,70667,71178,96443,41598,92167,52930,17868,66395,71148,73183,20697,43176,82496,37421,72105,36733,49230,53578,33161,25283,49477,24872,53249,35237,93521,48114,66532,50703,25329,98427,86008,87885,12844,99558,80239,49409,39847,67130,47207,59519,35585,70236,60581,81319,40652,82669,45609,67788,77781,64863,20743,93220,51340,12415,55461,97371,24157,59776,53371,72190,87088,44640,96544,20707,25158,59170,20900,80010,37439,68401,49940,91324,70881,50390,70720,47659,21285,77345,39592,36913,10774,17027,16285,17650,61029,98102,32977,68801,91191,55595,98681,14798,72521,24200,79250,60656,27642,15589,36295,22886,39087,28741,78368,49120,50267,72459,23250,58772,82603,86945,46453,66197,21800,71074,10738,13897,80509,43360,87839,68689,84273,25492,14788,56969,57367,44742,78028,67112,16425,28032,90305,18991,96134,92020,30392,48692,58570,54375,40652,80602,79217,52306,47622,56562,47697,40329,72604,86506,75166,86964,62313,13930,36360,86533,11690,52726,55476,96021,76786,21747,74239,19373,61599,71258,19142,10107,96645,98500,55657,26432,13499,32865,35335,56766,45154,75263,85858,92099,18125,45363,84604,78813,98751,80523,86384,24462,21987,18396,95873,37218,63604,78527,21904,62124,76021,15784,47057,45098,25924,68970,34852,80755,78751,75412,18107,97831,27942,42604,45692,97293,50621,74840,93095,70079,81535,24465,83380,72752,90622,77977,90207,53916,84002,62194,61600,82206,38540,78217,51366,47030,43309,79136,84992,19429,90712,42801,65473,97444,17449,59475,73958,57996,86420,13973,89958,40055,49132,68783,17827,11192,66648,45585,67707,60704,34406,80140,56773,57819,10653,99952,25399,35352,87348,76209,17745,37718,24049,79351,88853,10896,23168,11471,48468,40571,35283,32845,51349,52237,81817,51812,78194,83868,77070,39157,51022,81136,62449,52171,32441,86507,80219,47672,32119,57913,62118,50108,12548,22758,27393,44285,39331,99820,89150,49897,72515,25699,66414,79293,94428,47052,82537,24805,49981,67621,34414,79099,44888,41352,78042,56756,60962,26346,53975,95916,50718,88571,45609,42505,57817,49909,85453,20773,38825,65232,60750,52460,65222,63495,62237,23408,35966,37873,25410,12962,44678,99746,24041,79188,28342,49083,40521,10843,38490,25303,26814,54285,71920,76070,93464,24952,23382,78194,11348,42139,10262,74757,80467,23679,31910,72684,96105,47486,39293,58502,66996,78818,87920,22225,49845,83643,34369,97152,23892,39312,99324,70368,35815,81449,31909,40974,13372,13024,43836,98514,89160,53285,45945,43662,96597,35937,32389,43999,92698,37290,22048,46647,13435,55721,90559,74853,53547,73290,11835,92031,22865,56062,62834,32319,94905,33821,98044,87482,67191,57270,30420,19911,30109,19860,61524,67689,48829,45925,55899,13259,52438,98563,91142,15566,73745,13579,61654,43548,80674,28108,97104,29634,67960,19070,75137,21711,97783,99242,32720,90318,14960,41541,43491,84336,57346,44233,27082,46305,58055,19770,36695,33237,16401,48645,25400,35750,73222,30940,51868,93073,87034,21959,13423,75818,13079,65557,58139,49765,71198,75972,23225,36688,28041,30623,72520,47347,73618,82949,14373,38894,58021,80622,89591,44855,32252,66316,67111,75277,94729,82087,60397,35034,64256,64457,29536,67922,14054,15999,61318,18838,58333,88037,95443,47975,61444,75987,45190,93547,90550,16053,45182,69581,31020,78477,91154,64179,56387,38414,77919,61813,49635,83226,90708,23383,26219,13321,30594,49373,22600,87944,24045,79442,74967,86882,74853,65379,58117,35603,11160,24697,40785,84604,59219,43745,47648,26284,49892,44285,64351,76604,82596,21994,97170,32991,97607,96640,62099,33379,19996,10031,46029,70167,88927,95285,49997,86383,53878,25363,60807,41781,67273,85386,83446,50190,50031,87246,95115,56860,76582,56184,95633,30826,64721,76189,99832,54553,97435,36765,15057,94566,53415,97280,27466,29320,65181,86940,13592,91209,76647,79952,67779,25833,81541,43879,31117,67186,82759,10991,46739,19124,30030,85547,23533,92858,76703,68942,63323,66332,49673,19325,80144,14204,44296,10611,86236,34932,95502,70702,52949,88490,11431,52408,26283,52042,29469,26102,65353,97241,49205,64921,68778,92295,92513,19650,63523,24529,31178,52856,34638,17403,47284,66495,21170,81926,80465,65129,39130,28596,89213,80320,60346,59393,37036,64565,72424,51729,15840,22253,38987,65653,23509,94497,36169,10661,45777,51016,91739,25293,10145,53220,59864,22393,68489,56106,35797,98675,44367,94052,56511,46769,13187,81938,73567,12800,82765,90515,71030,66518,72825,67711,96377,80486,21763,15416,54659,25357,36947,24882,38653,51459,92400,73964,72330,59247,24040,84178,22477,73464,91029,13008,86081,49356,84289,99919,60143,15912,33371,34005,96086,14463,59071,65942,96794,32614,66356,18884,30158,92323,92358,47074,64998,72635,14404,83885,44648,23742,60835,80893,88684,14185,14684,96547,38526,13000,71286,12685,13985,92474,86927,73084,92298,56775,95989,31345,30699,22309,87072,21157,33389,46778,53056,42507,60026,35675,19082,61582,88918,67983,41004,29013,73341,88892,63969,93394,62856,94681,35606,33726,42629,19616,48425,55118,49172,52410,43007,87745,24249,68733,65057,64302,86033,13584,76482,71518,99819,52269,97103,92076,61452,48726,39700,67988,61194,53132,82941,12682,53721,38507,75947,60018,58985,10111,53865,55574,69528,69269,46002,85513,24914,83507,22788,25494,81391,16241,72750,43779,19390,45884,40039,54792,30416,85967,77740,72005,26804,87133,76443,39138,13318,99350,44584,89732,12652,62164,20601,58640,42553,37951,64422,79060,67582,98259,14674,65057,96643,40182,30239,78235,74409,63932,38314,19032,59018,61509,89484,59170,69028,72578,92766,58545,92211,91137,88089,60154,72678,48054,57114,52226,96746,54313,85154,10547,36871,90786,52910,21775,24191,28015,77290,14240,92940,76195,13582,60320,22578,20967,41439,15059,92974,92453,48424,83016,14449,59369,52384,66092,72318,38502,89632,53991,53238,40009,55388,12555,85550,69984,36614,19687,59071,22196,44410,51149,86105,59260,46893,73010,95300,40439,57120,63951,97445,51441,51522,28664,20289,43063,50116,69063,48720,92987,74636,72408,13522,25145,57909,50711,89982,76143,88247,75285,65159,81787,69574,62232,27414,59565,24302,81370,47195,13990,21392,18229,53070,97170,96264,30725,85059,16138,63337,94304,93561,91997,44108,43778,40337,80243,49510,48764,47572,82529,31887,50669,74388,39037,84569,22706,35566,84616,59568,71041,58923,87843,96321,15095,68342,83046,88491,77459,14472,46476,65502,41591,16614,59749,82144,61295,99381,75513,30645,57686,85248,56568,56630,58508,72430,16033,49766,68204,12555,80300,46170,21940,89980,18674,84758,69218,66551,21679,35104,67443,52732,38181,87818,19892,24588,86833,51562,50896,21760,67771,41355,37886,75101,39089,79475,52055,98914,83192,15018,24830,14318,35133,30422,91348,51212,34198,98596,66647,51159,27162,62694,57498,23121,62263,35012,86717,62837,19611,32906,75314,45191,37493,88398,49700,76031,81896,86936,60851,19408,51172,39296,67273,64647,60464,25179,88754,33160,72078,58841,23635,55491,57901,50097,65148,16782,31129,99841,21466,32340,42266,67534,66130,20934,94818,10804,64289,95471,89036,58003,25527,27978,80330,42054,43024,63196,36235,35038,16809,33731,77793,37227,27047,41015,49743,73024,62911,87178,37671,54952,75653,20766,59351,37998,77296,11623,23746,16202,56609,47191,76307,77068,26994,71385,24058,82562,37524,30088,32567,51018,46805,35339,16956,88117,90343,85788,30990,78262,50370,62891,63742,83529,20829,51672,55653,68891,27360,55815,68272,89431,40348,73342,51080,45382,17625,48313,54300,86905,33424,19926,34017,72232,31041,18512,44021,83721,22207,20346,16047,27584,91053,96110,21893,17527,67697,64042,49631,43693,81105,43923,28836,29008,72450,36989,11385,47683,22566,42021,57582,47080,10837,58547,15522,51934,69300,52795,93264,43556,54497,76881,16429,19705,56014,82170,51225,70341,41341,97046,28369,32698,83586,46086,68075,13029,71386,43166,72441,76695,47948,97943,47529,96656,88697,21619,59487,10607,44041,56320,41564,62047,37551,15572,98554,26879,31779,49905,72883,23379,29289,87388,19155,95966,29034,83901,28063,64578,88185,64415,38522,77492,19556,27279,63602,63192,40008,79067,97940,70819,74524,79092,81042,37203,66770,61982,31399,74542,42706,30305,27080,83479,22447,89842,76826,30929,39363,78981,77841,91757,17601,19316,60263,92177,64708,54117,37236,76743,36742,82836,78902,87712,34502,52833,79661,30478,87665,73273,83744,55634,57356,45396,18657,42886,16912,72084,55309,42427,86717,24870,22947,95109,58969,92936,53123,84921,82435,34221,38037,67002,49650,93602,95026,56458,37815,52963,50056,12747,31020,83605,91928,69562,89300,58090,26622,19053,25693,93600,87999,12357,57563,38310,22256,38770,28523,50640,24668,59992,39908,24852,64352,19976,73774,34227,85665,36478,89297,21280,31150,86561,84440,26943,39325,15562,28529,87351,33726,38733,76712,12728,97962,50332,94335,42513,79615,66590,61334,96114,50820,31918,43528,96981,17304,21120,22532,62545,38059,31698,27049,32010,41758,93257,57827,61051,55256,26133,48547,36284,38238,33448,34273,61813,22771,57739,90965,70494,27579,81226,12870,30941,21226,44411,38117,64681,25341,39907,76784,65065,67387,72097,51903,81871,28362,91465,59272,71257,14221,12958,47346,47863,18893,36685,46554,72093,97895,21255,61686,79049,38459,34577,63197,21291,57856,91230,74801,51974,17543,39659,90497,84568,79778,10400,59828,53032,10166,29021,49899,10446,68316,61521,67371,52094,51206,87241,13041,90449,73198,94495,41380,34377,60650,41448,65261,80857,64498,94405,15436,31105,10263,45003,37743,56085,67061,75326,93577,93487,15375,38659,35240,21682,55483,81745,62648,67647,44160,67339,57383,93933,13847,28694,10100,37928,21502,37048,30999,42910,92607,60912,64636,63699,98574,56187,48956,45071,73703,43090,37107,75753,82529,56389,83408,94884,81296,54226,77202,66800,54796,56583,86011,40105,84629,35170,23947,10938,18954,77685,18147,16116,93518,75555,80331,19848,52924,21578,35854,18686,33665,45007,94529,72051,59209,96168,52760,82544,16763,90263,28060,33422,85634,87607,63655,50599,36784,78797,60821,16744,92962,98047,49529,64400,54029,41979,90046,79092,16424,20923,28658,56273,99997,21040,97074,27120,17414,53644,48978,68569,23511,28110,51152,59995,66263,27761,69071,64329,68432,75281,62785,78179,89906,82307,44870,26609,18029,93813,48598,91096,19304,37984,37146,24098,78589,99151,53240,96481,73310,60328,72710,99632,18267,69552,85630,71621,43616,73853,12617,30278,13328,41654,10163,15781,10800,29874,68299,20373,95215,22524,12586,44700,20615,85509,14958,49761,16379,42708,85467,97786,71459,45182,94742,79464,86568,54946,27691,11751,35983,62186,86238,78596,39675,97572,43393,80764,46502,92285,54361,16115,80381,86606,90300,40269,73469,68374,26343,94207,52233,12849,56897,66175,13803,69388,95035,90805,52851,11886,47642,10434,23116,52652,52857,85313,47628,77733,69163,89748,95638,39232,57572,23959,38161,51708,32567,79801,83799,86159,76381,29846,33382,77425,95457,19896,28302,73861,87917,82493,39461,67207,46766,47965,98537,70368,80491,74761,47235,72018,85912,17783,71241,98955,19972,55047,69913,18100,35603,90659,89676,57172,39237,26421,65001,93959,14390,38025,76859,34135,33877,34964,36919,62769,97831,92041,33669,96946,29514,86205,70703,12538,27976,97650,65515,10998,91391,44079,84461,91371,52973,23853,94901,76844,42504,17521,38089,45471,69101,72449,61286,43923,89495,40434,98108,33547,77120,26514,55456,42714,83416,61428,39366,99034,33361,21218,98198,50850,37135,26298,47531,83538,18617,10651,78795,92603,81182,38051,89629,56486,29395,47315,12515,22650,71088,90753,64619,73845,74699,18135,50162,46404,19957,90830,87881,28431,36489,59612,63856,25435,89935,38793,38780,52290,95400,20578,16824,63890,13622,53654,74042,88255,77279,26929,16294,31593,40665,50878,48186,82567,17937,39308,71970,71698,52626,65191,53720,99626,88195,88660,29785,18254,24594,22943,35731,72495,39236,68612,76110,49392,11747,18990,70257,53998,22827,24818,82873,46586,39623,82400,38888,61858,73862,22210,86143,63166,54009,95447,71597,33939,94976,54732,80514,46540,52236,97429,85293,34607,65284,52681,55824,52292,21656,64467,15505,59079,92146,56262,42928,78512,55962,11379,71328,82991,93755,45619,49649,27332,91582,92650,39942,99754,88298,37698,63677,58312,80919,52451,74805,10821,80919,73704,74931,31157,59366,98855,35800,61206,70866,93767,68192,21379,86243,76899,77912,26231,34481,10182,89153,86732,42612,61658,55977,36166,63572,88768,51663,79415,87822,35121,49476,89826,54296,53180,28907,37465,61575,58451,69305,49569,99068,30840,32905,94767,58093,49648,47297,93578,30393,62613,67725,17626,74123,38054,77785,18843,61547,71081,96556,85561,45662,12813,82694,96649,53740,88849,24633,41954,43770,99746,37456,89221,34617,51995,68963,92379,60057,89219,92952,74553,33083,71369,61088,72421,60671,24627,75826,18988,52719,31663,82005,52941,80028,69553,52832,46281,55675,18971,99722,31905,24635,15161,51270,38164,28432,41254,43109,97115,93830,57041,53577,50470,48601,74630,85988,97257,54067,55147,34909,66419,17787,37182,38946,34521,32542,85254,25601,13722,45489,15280,92445,84876,47981,21553,59467,47720,57658,29126,28210,94979,51154,53276,25420,20448,74669,98399,18844,82200,82732,14065,21958,49467,47764,86797,87481,77682,10528,19267,75437,50351,31692,50945,38967,74774,38065,10764,52240,90801,54100,16848,46546,75182,54529,75625,45803,43120,80322,46987,48943,96797,18120,84880,78290,58466,99736,89073,43631,88004,65908,16512,98740,65022,97804,79720,24930,63534,34917,81467,45786,43384,75966,18281,67667,87771,22729,10016,88247,90023,56416,58308,38920,92624,58026,29739,89946,18500,46425,56989,33975,23947,73766,23696,42601,76718,21703,18294,28046,12637,49979,40196,86220,21295,36268,10207,38188,68828,75171,52593,13548,87911,56340,29139,42329,25983,20277,75196,86759,79139,44117,85631,54948,65799,91817,23756,95399,37393,72121,34087,60706,19694,59268,12968,13800,48808,44897,36163,82351,87971,58792,11563,53598,65667,25714,99202,50265,57161,37463,58154,56844,31666,22399,99800,80702,75498,78012,91171,78596,82892,14975,87034,41499,19090,74608,61121,71299,78864,64115,84865,34808,60066,75123,75003,58790,90246,45997,32947,45362,35392,74536,25490,54969,91564,24741,67154,92305,90910,79472,69573,31702,43620,58148,27493,78121,68639,21698,21570,72732,93560,20066,14771,50827,65019,92273,87676,88323,59071,43097,33484,12140,32076,94053,39997,51275,13161,38732,70667,76818,94669,39322,58515,55876,35512,44472,78377,61826,93380,78669,17072,60259,50805,83511,45541,69278,86008,46002,35015,15021,28506,59343,68299,45575,35338,60029,75866,84714,28226,78743,58715,92585,16126,29408,26468,40681,87392,32357,75467,87090,98077,10124,29923,18140,41210,38376,71247,89580,83785,53444,50056,27862,80944,79070,92982,60488,90834,88147,58005,56921,97754,34608,94756,96556,96394,51319,52997,41223,32631,18536,98193,60429,25088,14198,52002,18682,38577,95338,71410,54222,11619,99288,28794,22486,88867,26315,55833,90592,67538,80962,12836,86095,75112,80679,54349,80894,54845,33305,85011,51238,26192,99859,91218,45043,70839,96517,40632,18612,85238,55823,56269,12848,22598,32403,35559,43127,11933,37860,38805,48204,22865,38419,13600,71262,84441,19978,87416,68137,99266,37191,88506,40733,78500,46159,47377,90706,37837,30518,76449,88951,97944,73463,67061,13539,17399,88428,48699,94294,95672,20555,76231,78630,94604,14646,84519,58100,90854,55381,36864,53147,85135,75414,77902,91519,39884,77820,73337,25211,20034,22122,60207,43995,19389,16548,57849,83735,65095,77204,89972,58557,42045,28716,80532,64253,69191,88374,18734,34885,64032,92959,39130,30821,42256,23714,23779,14389,93143,29512,84390,36312,63981,64655,26541,47839,49137,81489,30422,24869,38538,22257,96235,23637,63938,43097,35193,79249,49069,79844,79662,14560,91202,10672,35436,63933,13887,11412,14999,96205,42654,60402,25529,42908,14541,14299,68529,53028,71634,16168,28959,21710,94371,74904,71287,52115,77267,52867,24639,52638,99185,39830,72739,12656,87729,55190,10761,66596,70756,41459,43928,86281,62967,17499,92192,60846,94334,39563,13208,49553,10041,78990,50430,51598,14236,20817,95478,60993,25372,22273,50555,24497,74787,40507,34083,54072,98972,34887,36363,51028,23559,62259,94489,32817,49091,64680,79908,16375,99830,64176,82356,34773,71288,93613,83996,25501,21724,69601,91344,69219,68043,49728,21847,40266,28843,66770,48168,17580,21990,19626,49967,50102,84652,87113,61387,91449,31410,46839,18252,81868,24592,59640,79618,95327,98525,64557,57790,63906,89456,47751,72058,25155,46376,70883,59541,13953,51564,54675,30047,30464,22213,38367,40725,75121,81384,32201,87738,31131,14506,25281,62311,27756,30236,17162,49869,21986,21644,28827,50856,73384,90164,86964,28581,98286,31434,11557,95562,35270,48179,15143,57424,68159,91364,74156,98101,76216,91806,93205,48867,73738,65039,87748,85550,66377,88090,71291,44964,19922,19554,35019,70828,48839,21115,26245,68014,42240,79219,36816,41431,89484,26882,65010,40331,13490,30874,88311,46607,59276,74242,49734,22296,99780,73531,72494,23204,75753,70687,25132,65166,62518,12451,21642,86522,13243,52567,41970,18733,72181,46443,84837,58551,35270,93908,78918,59857,86621,78421,57891,40923,10489,80897,94294,14769,49042,86538,28263,95791,17343,79850,43921,23944,16529,67470,88703,87584,83890,10133,12656,81774,98967,61629,99982,18527,63773,94766,16044,56861,37297,57119,86121,93102,71733,97098,80066,98470,49216,29038,23632,91519,59895,58696,94775,87037,63499,92657,64108,40429,68639,84409,57006,84645,51549,83661,80777,10041,89767,31993,94880,79399,42077,91141,48431,35872,82735,34723,89884,74882,30045,90866,56066,19965,18893,91203,22217,48319,34076,50584,96321,15437,18648,37114,66010,89529,66819,38273,98835,32318,81414,30637,89964,63976,25724,12384,62522,74907,44362,48598,88841,88478,90064,35887,52807,70226,71793,71907,47619,30656,62778,56403,38039,33457,48133,82478,98325,29259,25110,13525,22235,71336,75796,68227,81291,10960,97292,77950,99830,18103,27657,71889,15277,83119,16683,73852,90996,69384,83880,38166,88774,64332,74351,98720,77937,74888,73683,89385,88900,12267,30678,58871,96354,88319,78061,64061,86557,45531,68556,66983,15620,98481,34813,28560,50836,87287,14921,18172,58184,50096,31034,99281,85321,42380,43064,51103,93391,82692,28477,77776,99843,19251,48124,44133,12770,27714,50336,74621,40952,68171,80411,32733,17240,65014,26500,71642,99614,86642,43384,60170,84849,61950,70822,60981,98290,53867,48940,11518,66901,11874,97758,91996,66356,97756,17340,39253,78804,26439,51351,97627,16585,80870,12671,94822,78279,42565,57658,41204,11732,18384,68964,90461,13399,41245,20288,46960,60480,98194,24169,75480,33068,89287,39406,17074,12384,64566,53488,76379,26782,61116,47949,11331,32812,42606,51947,46360,13342,98763,25193,14511,54910,85523,73241,38283,87570,36003,39046,44946,14113,25657,91477,83129,73289,49068,15144,68351,77549,94459,64857,69394,89763,70604,68741,47631,50768,56074,94493,68382,82766,90560,79988,33719,43002,34851,58926,69159,56703,39228,51913,35963,31433,31917,33980,16077,85147,10317,63505,86794,46531,91399,39129,94792,26891,70857,84980,29463,13224,79404,44891,19315,96412,73158,17531,19530,31953,29859,14081,33174,61193,86255,79964,87826,40361,72079,12171,46234,45449,74370,60966,66387,57016,39835,73087,44595,65473,40663,49303,94292,15688,17919,86412,73317,85000,13655,35958,11155,95031,17724,42772,70676,39112,44376,26480,45650,86171,58408,68619,23864,46291,59322,84753,56818,50470,82237,76597,59135,97009,93840,55874,49183,96851,39321,70536,75396,61504,45520,79903,80203,33564,85771,92114,28959,92344,15434,53935,96789,40979,53662,43226,16679,26205,30093,73257,63547,85931,46652,51275,52457,99009,26419,57184,26076,28261,40247,93174,96955,54802,97649,50204,33172,22855,83875,91372,76829,88927,81421,44880,31572,74374,76182,59336,50425,20212,72414,43128,93106,39889,22070,28873,82190,40441,38873,60170,65727,82170,58982,86039,28621,13095,68633,59508,68909,16513,51612,81140,45583,46126,45343,62427,20250,63379,22217,31913,32900,27854,41946,51671,16705,23402,22273,40060,81917,68498,85201,63575,39456,47647,68860,16811,98552,17075,87248,97557,36441,42703,77837,26393,94199,19784,49597,73994,83141,20564,29332,28627,75423,32000,18659,77478,33819,19545,80793,57125,76544,57052,35597,61631,30950,35122,22315,55136,27570,20677,28055,18692,92924,11260,99943,47475,12441,79634,79674,37857,84277,14399,10800,64417,14478,55087,34701,57304,86733,38313,52941,74168,30147,97743,40553,15822,90132,75309,95847,53838,48132,51154,92695,75573,95351,78894,13481,21409,10140,31724,77765,35496,68780,30711,81957,50309,82153,27633,37601,32505,33121,88044,75024,13060,30806,40143,65613,95130,15042,30551,60074,41307,88512,42697,69109,54977,45606,87073,23007,72018,32931,75232,59838,56610,38923,48445,77804,13882,24475,26759,31322,93071,11016,63780,52010,81207,32869,90764,15177,71566,62931,31514,45015,57155,53378,10627,16200,63005,47341,19030,52058,91494,81622,41581,10888,21501,66792,37986,31039,13224,77724,67541,86422,67224,71147,90019,35640,49773,61427,15625,92168,11796,39183,75054,47231,73085,17240,80832,30339,97009,26784,60612,49108,67617,16525,98323,68251,41305,72028,63195,36723,63734,74686,62223,21899,22754,11930,24291,68655,36582,69257,76167,57834,38307,41226,36049,66793,76518,85711,34716,60344,76547,87803,25949,58095,85614,43695,74402,59145,36215,95243,52115,60483,71589,32098,21489,39769,42376,13040,33713,48013,34703,47355,74208,45660,43138,61316,53731,36431,99711,43357,88481,84695,45418,90299,73131,20148,26969,45351,14200,74969,31971,14274,96749,18704,81535,23751,88692,27863,32663,43956,61667,64854,90026,41804,83727,28883,70111,15046,74527,42793,80005,49497,99339,32661,89137,29748,11538,92620,88577,11540,97549,76138,70058,75101,24733,25966,10628,47296,96794,32953,89881,66261,37144,94729,17305,52191,34933,30824,42047,73628,26589,31445,53072,65958,74620,33492,21688,34219,47561,69272,47379,94509,79908,91610,55190,77831,96294,69927,18637,87449,75327,41583,77758,98876,34208,32395,49423,78785,15199,89610,15215,37916,15573,72321,73571,56096,77205,45821,83025,90730,71192,27291,20288,53837,18336,34472,89730,27788,73507,60919,96530,13980,10473,47690,79885,41049,13002,30085,63313,98838,43059,65104,14826,28515,21579,92854,16507,71616,78589,23648,35477,97037,80495,54251,49009,40323,41265,47230,45227,92287,36085,55030,88577,43039,52151,79500,33082,40210,40659,20430,67450,90933,51299,47350,30935,81311,17058,53441,64721,83084,92263,97499,96468,37146,57938,38494,26441,38411,60721,29316,32276,49691,67814,41888,51176,48413,64534,98245,98694,27207,13741,53025,57102,48584,13868,77939,94313,53135,78415,57218,18226,15558,69067,61946,86680,97533,21538,30439,16771,53305,99054,53633,31146,79713,63891,21458,28207,26555,52855,12788,36083,78697,14562,11241,96752,67292,76584,19458,26260,60969,30674,96332,76585,31682,48339,69343,11578,18709,58236,34387,69465,54862,51297,50657,73978,39633,26046,26587,85480,51294,67964,41189,33592,28452,67952,49448,66174,78068,44167,69933,78210,34235,32896,77186,70560,82611,48611,16735,50183,45704,56184,67788,71062,91304,72209,83432,50188,35419,12675,35342,92608,39827,11136,97971,65926,63210,53135,95853,87746,25547,10920,69503,60578,66572,93699,15476,35396,10171,43136,58561,75930,61678,19858,94814,60976,49203,25472,42547,77379,72763,63079,13957,27587,82158,87052,60939,58536,86713,11237,97261,49780,33212,82882,45591,80451,18159,26120,11061,82967,75054,85399,85898,20992,81202,99047,38426,18891,84239,54827,72481,89534,79713,45726,84381,10319,78940,10630,15963,71862,31254,87826,84509,84307,48790,67865,92144,39970,81888,39031,29981,54879,85565,30478,56583,91083,20782,52260,86514,37040,29840,11766,82768,89292,13738,29335,96781,96651,22751,62602,87314,44670,23537,20188,98362,34063,76642,63309,35441,99313,44276,39509,91600,55135,15724,88882,48924,77979,82205,90308,91149,23468,83332,90527,17415,81901,47618,65324,25761,70338,91240,56251,36440,27175,11365,48997,68062,45556,98039,77764,97342,81957,59058,60790,13126,85932,24102,90545,22517,80929,56351,93348,63942,56561,37221,30621,85778,86373,44331,12528,52644,16188,17585,90555,53585,27473,76370,42355,82310,25370,60682,70728,31966,12094,50021,68568,48760,10639,80178,23840,27830,34598,58647,38878,57382,81923,75053,48105,57961,51746,81627,91059,41411,26002,81672,90388,59682,67492,45743,65138,79133,86259,73505,84776,74373,81125,67310,84679,87696,99034,72079,55195,42496,35505,58118,42178,43036,74328,79067,83788,99922,84673,15569,99463,92453,59849,31765,65725,97952,10707,54833,32585,18339,45411,69591,11973,83515,63823,47122,36062,15939,28541,63036,39834,84830,83366,37528,67441,35216,30403,71389,68103,55607,14935,35350,26987,61267,33683,23138,84351,69099,16337,40345,28366,75459,25947,74427,39092,80587,65652,92572,88156,91542,10919,95729,22659,26890,27376,96835,64690,67619,77697,86440,21838,19893,66745,44906,48579,16775,90478,93992,43729,76462,87062,95180,48493,12108,84932,69915,38145,68079,95728,38426,85529,98901,85934,17583,53996,40033,25181,30266,61357,36448,89892,36955,94722,21581,89477,85914,44128,44397,41737,33591,48384,61125,23279,27312,48803,77368,79097,59803,60674,70207,31766,52043,11515,60126,68070,13338,57386,47352,38358,43760,84165,70267,43202,15700,96722,51404,19503,92441,63386,34714,54447,56629,59510,38622,23240,13487,31164,94647,66799,15460,11343,37702,10199,38212,37367,52205,66252,23611,97780,90366,10655,56265,69941,53747,10420,93797,10995,54201,79901,36748,32906,70814,80257,23861,97591,35519,49097,68379,46652,77610,91154,56865,13985,93952,91103,45275,95635,21164,61521,43930,22997,14129,76128,11445,57978,20778,69667,31664,85485,87602,92480,35993,89735,91682,87189,23368,61692,32139,60763,89935,64714,91797,79507,11363,45459,69155,74073,53093,43655,42590,32235,26147,93242,63423,51452,83975,41455,44324,47166,61790,68834,65725,86565,48212,92609,80168,64788,54530,47656,28145,43649,96191,27458,36449,46728,97643,91381,74072,72247,24758,34499,84529,51369,54624,25126,39555,12355,28702,47788,66896,46526,32606,64587,69068,80947,48908,54645,95103,13135,42005,73423,68740,39328,14094,43551,27871,35711,43634,60973,67038,87837,32945,14575,97860,22222,52125,28041,64805,39346,30332,83394,50062,40360,85612,83470,58757,37294,90739,57021,30299,22965,62409,90844,41427,58578,17127,12221,17288,38623,62170,85238,47895,75037,25567,97340,61387,60713,59174,75821,23407,98140,64544,39518,77698,68495,94163,20267,15057,31307,57813,77343,47186,58675,52876,60492,77300,72773,90827,57009,97444,29355,46213,87589,49803,93118,73600,69146,55369,25982,58523,63596,14874,57082,24755,99022,60690,13223,82013,79457,74370,24829,67901,30522,12255,62473,77685,86833,56384,10265,30200,21307,68476,96277,42260,56208,65578,52676,59831,90652,67864,91000,52002,36639,87635,93563,61275,79788,53833,85256,52747,26704,98612,15133,40614,80673,17658,87602,91102,65263,49269,93101,78846,40303,68037,97591,86989,62294,72632,15443,57602,75935,87770,31463,84837,14506,20279,35739,11773,76276,85024,93397,14650,17753,23776,29202,85766,51010,38220,10941,88895,90348,75219,74336,80687,81371,14914,43947,41020,86825,29469,26582,22304,17500,93059,15429,40555,69542,52439,10259,56560,17268,95120,83321,58055,62848,47295,66005,28385,75706,89489,20460,89857,18165,64174,57955,18284,80636,54370,59285,32076,72395,34326,18981,24444,46850,97519,43204,54043,37820,46455,57681,86962,11711,62019,34223,71746,22803,25275,72719,66050,14246,26124,94043,97858,17236,42104,76328,82554,94455,48973,38884,42671,76406,75904,55877,34349,64514,38539,27737,74144,32029,36458,18474,25125,69790,50726,84574,21054,28976,26478,16651,34592,83420,70514,83936,40753,66498,36789,44844,90078,17881,93575,29348,87250,40008,66701,92284,56102,32403,55262,90695,42176,29811,37646,13570,16042,85627,68002,44324,68297,72949,64970,93982,66707,40949,98442,69359,55936,87638,80245,40410,47610,56357,91011,74041,19711,79128,70447,29070,65839,19973,61090,33345,34719,91500,82702,37057,98011,35477,59221,71378,26130,89945,30358,84486,93354,65410,41994,10554,14161,49259,69611,82374,49248,10694,46270,48069,76232,89524,87389,59704,31046,22541,19967,83835,86170,66409,11577,38928,23225,64514,55367,42108,35279,90176,37699,63215,65119,74872,90446,99858,83373,20543,42862,29910,94269,31643,97914,37435,73754,16997,36520,15303,10045,63702,80784,68048,34599,60840,70559,77003,60712,62662,23524,58623,13174,92033,71470,83382,44807,57741,14158,94735,73684,72860,94322,78918,41248,43956,14138,79075,66617,82760,36522,87385,22280,11585,42535,83452,19371,87422,30999,85543,77159,99693,50914,52162,93271,62454,59207,25513,19159,23833,14327,25790,43944,97614,81051,72480,48012,29965,49213,45623,21912,36876,29240,18463,52483,82522,88647,34817,59206,41124,28946,96886,15676,97191,85465,44113,23308,93479,65523,16442,31775,65200,38106,66175,30180,35236,85908,84152,74504,94524,14595,99955,20219,25078,12573,53553,34848,23569,56785,91431,10695,26432,12848,74170,12345,46849,76210,76592,86885,95875,60860,39203,94705,26938,29402,57749,79151,90511,89592,73021,38510,47448,69045,49955,87173,70084,98446,69642,87569,90419,82270,38837,41986,33096,28450,14412,69149,24235,41194,60230,65327,29875,85020,32326,85167,49259,34134,77388,69578,65035,33740,97307,14659,55388,77170,50200,57190,50145,68539,77441,13284,86613,27256,78726,55430,77917,35209,57928,16698,89445,97131,34666,88567,19207,74112,68771,67470,85833,29794,73260,42487,95549,11072,20176,19679,29762,31539,79437,38815,14600,18309,57823,96366,26380,44475,96563,54866,28231,64516,55798,40828,42907,79581,87569,60508,62768,86342,89525,77639,99436,21833,13714,20097,81606,86088,32837,52157,56007,64133,96880,96116,76210,96570,78689,51518,39250,17875,37921,74223,16849,18161,14438,42765,16014,67519,11185,22332,78612,73027,28564,62963,31616,75344,49942,81111,36890,54190,43540,98509,40761,92486,21986,38868,38699,32252,69646,29146,92724,88564,21961,64100,46724,51926,81678,18943,35813,18321,49547,20338,20787,55710,43814,69786,20857,79887,17075,47777,40276,38198,30397,25806,51466,55343,16750,69065,61762,35672,37039,68467,47130,80640,33091,49234,30417,48279,11450,50027,57784,27096,61111,58567,59312,54710,74170,62629,58261,17849,55535,36714,60925,95436,26484,62573,23579,37481,40015,44252,77362,15438,90609,56934,34793,84303,59631,64146,42202,89698,14120,66839,45313,39175,59707,73252,13608,17752,68431,73844,17080,15134,58661,16386,56652,66378,86319,77254,30201,89032,31854,41480,70638,42522,78962,35510,58757,16399,42845,80050,37797,80424,16844,73503,89378,40507,62864,91298,99099,90484,73891,80482,18679,76291,74913,55390,78789,79494,52757,93941,74913,13645,23059,95564,11709,59720,53903,53615,44672,35200,10033,49794,71679,21604,65999,93764,28508,13038,88125,61920,62605,58935,40592,61632,43586,94763,16540,30488,11210,41202,94199,60163,12553,67331,80976,68417,13022,88367,56623,19493,99865,17329,42871,92682,40978,12078,78252,54361,19128,20479,69989,16511,80636,38364,86846,50550,36931,75796,28072,64606,49299,14998,25624,12672,72407,98862,13542,89835,50375,98808,23975,72489,89198,36703,91406,60281,10183,65561,89157,16494,70676,43743,29024,36215,38682,68089,26169,40981,98738,98837,50685,17341,57875,68923,23953,40588,47648,19237,81828,71105,52749,46404,16840,40860,39672,30592,27183,97369,86416,49801,80360,49936,94542,78453,34264,37097,34202,59452,89712,92402,58857,95550,60776,55974,39407,90741,29186,90729,87078,40257,34301,69446,51012,32466,77841,34381,52567,15107,94089,55422,18250,38387,52630,16121,98984,58299,13516,23994,73278,82700,29783,99683,97761,81592,49298,95347,32457,57042,10487,96247,49248,23057,31718,73222,41256,94208,14221,11953,44704,31157,87367,66061,92403,74408,15566,51924,94358,37514,96443,33590,77307,29088,72581,52600,39457,80971,73048,61226,88379,30365,88222,64052,38195,84837,84461,47240,80577,60648,29346,89643,53948,14348,70676,25520,24617,93591,57959,59075,82160,75740,12675,76410,34667,11527,96864,98961,89760,75709,12156,14257,49329,15408,17737,31612,74979,67745,46706,65932,62140,45390,94790,77454,22448,69890,33797,71018,13075,93562,41004,79032,59547,14134,61603,51529,78974,16813,27355,20754,82365,86306,76860,68922,59478,17034,62405,80363,94920,41657,28594,35541,51971,56959,22028,32440,33813,70810,58495,48243,55270,18159,63038,66761,39594,74753,48123,90745,10244,60099,39648,19144,60720,21385,89659,16035,92331,54028,11757,76209,96734,17976,80395,34437,33141,29677,89049,13412,87322,23076,44991,27400,53454,31939,49550,24555,61251,78797,72897,61865,76056,57494,74422,10695,32370,42895,35418,69694,17289,73032,26813,20047,23125,87193,96560,89135,31800,47875,77120,43288,55548,42927,40653,47733,17781,73430,89553,36244,10345,26507,66896,64842,96117,49805,32941,37986,23161,60571,25348,26754,64107,39386,90477,97202,24109,40815,51808,56255,22769,41858,90138,18082,44473,83603,31685,39250,17531,89487,67167,73473,57464,61996,88390,43681,67841,38438,18868,21565,71847,42749,76874,23796,73387,86607,14139,66436,32599,38273,45091,62095,84796,38482,84290,80431,51305,74305,53256,69910,19332,62114,90468,93904,24263,31463,98359,95509,10407,15915,66084,19621,62465,58599,24373,19690,98950,13711,93242,38238,78599,87256,41705,43726,62034,40483,71163,28792,60346,94766,38916,99250,36453,48039,19588,34601,39363,89444,27715,95164,47909,39913,51932,64595,90657,64092,33692,25224,80753,97845,13732,74656,43271,94009,53499,43290,38313,54112,23756,14616,73703,81265,88946,65705,26649,68353,82601,42463,92878,49847,38699,29080,64646,61998,85086,53343,76046,99121,34861,63601,71135,51219,95637,46302,96211,33985,40679,96882,70945,59887,98250,37608,12507,77858,87277,31628,74623,92124,63694,12525,57932,93355,46513,63352,36735,60963,98295,89733,36074,20839,21673,10551,99872,29586,85111,74555,45396,40586,48578,79420,37177,27345,84693,70617,89097,18345,95020,66578,82031,89086,57561,33185,95635,64091,28679,30589,83737,66437,45852,62001,68517,42100,64347,46684,59149,46376,56937,53745,25966,73290,42905,76772,91709,35137,64770,27707,39282,98293,98845,56110,89201,92569,26336,61614,69411,76647,79047,83032,48977,23327,28732,96735,68793,34481,36536,95627,26952,49888,70275,67575,60930,36363,23372,17757,45352,60410,43552,98168,91730,57313,43146,74036,47961,69594,54644,53688,35436,19606,21308,82426,57115,26029,41786,92214,52397,63817,43471,45409,47932,51140,26473,47932,24817,98330,63765,47091,64069,35599,21924,84801,40268,13583,68675,50238,88377,16869,88639,39896,96525,35971,40961,75332,97080,82833,96763,33904,56912,40053,86782,97842,69370,24015,98613,81146,94202,17845,72340,15733,81499,39870,87491,12423,61951,88976,35005,84005,90677,54430,67835,54198,50851,91114,32943,36358,10510,93881,74330,50725,75364,99065,75071,63869,86054,84763,55408,21991,39709,58447,84707,69853,19785,78742,39615,51628,90110,11976,28543,13118,32498,37175,54717,93232,19446,57439,51683,18127,62838,26403,45973,35077,58458,31789,86345,54513,73831,47432,67280,66790,24644,60441,79187,79986,78394,49500,73860,46510,20096,79535,13923,84414,91192,79159,70216,26414,33691,33290,31583,29141,72826,25339,57157,75054,94184,89547,55111,80168,72382,46978,59518,67701,10216,84323,24486,13101,68545,63240,74475,61175,75072,11353,49488,93808,84285,81619,12263,95895,90575,73554,78954,56989,84772,51099,62522,20484,23556,64000,64472,76712,82523,84213,41631,65836,90282,83618,63858,65403,44209,72779,64081,53239,68892,81704,39854,69948,61571,26334,45546,79067,53344,20562,79171,25818,47149,38704,58461,56217,22212,23675,15797,76391,98394,98574,25627,13279,92093,48454,28119,57879,88397,55738,20582,16289,47240,18496,24602,59769,15776,17986,48176,50975,27208,56770,51412,30427,27730,45372,37899,97293,79879,43033,93726,29743,18071,76443,99126,33771,32709,34135,79533,87827,43503,71164,24351,50050,61538,53530,84363,77986,63319,38259,56155,93371,20121,16666,69837,31949,46765,10086,52503,19299,37313,62783,44516,44395,16377,43530,16640,70533,84600,72174,73964,39075,66375,60295,22220,64513,24695,61335,79416,54460,87859,16819,23677,40121,18241,99050,81714,66147,73569,94768,18332,39916,51464,39047,21389,66455,87376,44942,10074,31703,66337,33800,13113,87371,64717,58187,37513,32259,34678,42591,75851,90159,23861,94499,63580,14406,25953,82577,68841,55413,46520,84576,72253,85964,97152,73999,90779,12321,65118,38791,58957,52860,53766,99796,54199,80559,37855,14054,16879,20347,94941,48665,98852,74047,16228,76608,35738,27587,87976,24273,28277,15968,27649,42415,31539,81066,78800,91080,17432,55044,18373,29975,90236,58971,44246,21380,62747,65531,55035,40106,85553,46423,87795,47330,87862,45644,78459,12432,67700,27909,44766,43802,78329,73385,90483,26664,62784,45559,40198,96901,60181,96186,47152,87496,18139,92320,14882,45080,86406,46906,23942,49050,16614,76932,10343,20244,25665,94440,28503,43158,96307,54789,34974,96019,57802,31446,58691,67193,75427,21662,75756,24245,20227,12663,30166,75149,72256,62212,42662,22726,21949,52286,52333,84894,68511,32879,59973,95105,72021,41137,20470,51938,97392,57525,29368,15889,66315,20723,42995,64810,47858,84022,26560,13809,77519,51618,89094,58835,90767,16981,26702,60903,87206,50890,81305,10173,25254,92000,65062,43475,15101,33109,89088,24019,70353,67320,99122,50363,52140,68001,38120,46072,16584,81120,29240,21062,71112,23073,65995,42236,79191,55833,47424,33970,46585,81035,84310,15557,77765,53274,93294,14740,22693,69838,59940,74574,33798,76100,29221,64841,56314,63473,16220,78725,41193,63112,73366,89627,66257,76296,49371,86668,80332,13408,90845,70158,43252,84693,54969,23426,33763,62543,14156,71814,97574,68760,62584,55713,11257,17634,80400,33833,56887,63804,53510,80360,36112,93984,72666,44458,30450,68584,20346,68322,46962,51763,46303,93400,40542,25848,63282,18329,60474,74190,41520,17150,10762,21600,95992,78259,38815,66734,93760,75429,60467,78073,35182,77572,63823,80757,81369,35064,84743,95560,30586,53511,69324,58860,40654,82073,85924,49802,32989,79600,20556,71874,79228,90595,38267,89589,49372,97294,67815,93233,61996,82208,28538,85519,27635,76094,41290,58657,48117,72989,98612,29690,87461,47354,20504,40141,56430,72831,95426,81455,57312,67705,58392,13655,37753,66453,89553,35381,55312,30556,76880,15365,32020,20007,26970,69628,84501,66694,48627,25479,80385,91961,57133,66126,46922,66355,82428,37556,32869,70743,65821,16951,60451,37403,64585,89802,90692,16217,91770,48342,48921,33026,20449,75685,52360,46295,28426,94030,64488,90612,77037,81537,48575,64421,23360,26911,24962,37469,28277,97784,63698,77625,61414,23578,14541,16810,56844,69109,57972,48001,69407,93884,26926,29920,20967,95890,34709,87936,89529,59133,44184,35543,44429,58711,24076,18106,30523,57478,47913,74332,67450,58032,62872,41926,74750,12737,28406,16486,74149,84703,60271,76703,98299,40031,69992,49567,64012,76606,48742,61760,55246,52654,21172,67501,27958,72703,26744,80052,99915,19171,68029,46698,72209,14745,54989,89643,30976,91309,23601,13940,34790,96327,82094,79631,37478,95235,85672,22265,78583,17320,36972,58685,85887,47292,83227,72230,16571,22186,63528,32440,32854,68758,92468,96549,70749,13688,37563,43402,10004,36407,51379,76704,75987,62337,37826,29893,55272,62854,48188,56627,47450,17693,63479,72350,43810,10280,86518,95197,88500,64362,74954,11512,63229,93415,85695,87814,23818,98810,59057,76606,92372,63014,76228,89583,45841,12007,51938,10082,69290,14399,24691,48057,90522,64281,44639,92642,98944,52228,60911,18289,90454,46747,18765,75301,54537,60062,33530,73324,21881,43145,31724,64355,10899,19484,63365,17761,35010,37913,81180,52875,46261,73298,83033,93586,51672,53444,62033,86453,32371,52586,49405,61534,44782,69324,26105,11920,97280,34129,40951,84300,71122,91934,29647,79585,70629,76278,19404,42722,87032,50513,21998,70422,10678,77433,46534,28649,71490,72450,15354,95246,34453,10655,26616,81810,43726,43707,65569,19937,11841,57251,78934,31986,42492,42924,50430,86775,34583,95823,25010,82785,46381,41794,25573,21609,78575,90653,84392,37327,46077,35973,26794,79801,70180,21620,70483,22414,94727,85142,18853,66945,97161,94872,55079,60580,96502,82837,36060,92933,38245,76854,14568,13721,66873,82802,11903,46948,26050,49266,91054,73971,11478,77228,50069,61074,75998,69921,36297,37601,59508,99099,56343,96445,89289,19273,46882,57905,75440,69344,77986,40383,39844,82260,40418,44680,61460,15926,39476,84231,62345,63650,83970,71472,64239,82575,21080,32713,20032,41319,67308,97682,78270,73774,88500,32469,46976,73276,60305,46278,43183,42918,63776,83823,10113,35644,41719,21612,79112,86341,59140,80820,51366,20489,70815,61653,39318,73143,85873,34902,20991,83544,96455,26729,80552,56005,96291,21200,20450,78306,16383,38954,27465,79416,71059,40974,31243,66643,13886,43428,75568,14902,46632,49725,83770,52722,67883,60808,82642,18439,99321,72875,96317,82342,38275,63778,55676,49293,57558,29123,34255,99969,68522,68279,44575,98728,47073,11621,51878,45090,41540,98640,55879,81816,13563,57164,29531,27971,16996,42841,83447,15493,69387,10934,25694,43572,93959,10354,81845,15837,14488,73181,39233,23112,26593,82460,50771,40593,40849,24861,22092,63857,77417,80194,86338,97877,29030,38765,57033,95393,46984,84447,79628,75059,78047,29090,76699,28909,11165,24798,65276,38023,85300,57329,19913,87738,11155,16281,26798,65832,28456,95859,54841,41638,31420,77984,44478,30893,66238,53137,77799,20227,58015,16952,59613,38609,78245,86948,71304,59328,33718,56346,27718,46103,90203,36814,87292,24372,80721,39505,91041,70036,67873,49519,46609,42338,25955,56258,12935,17627,57900,36208,63671,57286,14001,89249,46573,38166,66443,67377,19596,38386,76378,37637,21005,49573,75274,35749,87531,94555,65928,59437,90960,18817,65059,74955,39429,70809,58807,68684,77536,64475,96277,30909,83320,45300,41826,87963,48356,51135,35909,49759,47623,51088,11079,28525,60144,19830,59024,46473,87612,92125,91820,45249,60904,38125,38503,78126,74597,72176,30607,14531,37329,30276,46662,38493,98445,86527,33542,77645,96274,38805,30968,80418,42959,44259,89370,46072,23126,39111,14502,23766,90793,65951,76143,70426,60669,43329,83322,34325,42768,87343,94287,68816,11292,93731,73543,80128,85386,85745,85368,24680,96203,33265,88141,99436,53872,36137,86872,38528,75776,74597,33302,24699,34752,51564,30192,88666,29643,55237,76093,30300,85636,75912,56249,33649,74226,19538,21375,71704,65844,96319,26252,53741,42501,53285,92624,53721,49741,73006,62799,80885,16664,66820,79417,10249,45992,27940,27411,33424,78465,95661,24128,94435,53187,81649,70356,25872,85678,84813,60008,93669,33268,82308,65586,61590,27240,72710,72143,74226,23618,99958,91982,71912,77052,10566,38633,15505,35776,78733,56797,73253,44044,96246,98643,18930,57803,29731,18652,82808,62950,15523,28517,13468,86774,67077,13885,20407,72373,94813,45617,46286,59972,93090,85346,55789,97083,89005,86697,35701,96019,35281,54515,58017,68697,64640,76127,35063,77262,45852,29198,46881,96155,49843,82585,98972,79001,18524,88612,87458,45776,46976,30250,94174,55901,37959,54903,69708,13667,67982,15494,50512,44041,87897,89586,61907,77098,81302,79329,70561,32562,43606,99162,49708,90464,97461,89993,19951,62820,82709,89062,15151,55160,82956,40770,17416,29137,57051,60399,79878,61792,15674,92797,84638,89893,38339,29257,27457,33608,98462,53870,98859,23481,26184,11777,55592,58502,62929,65571,62625,52816,61618,51083,11735,62672,60933,59788,12128,53488,20566,82430,13265,47403,21871,21872,10584,65684,91926,86203,99424,62701,70389,80085,48905,59035,60808,64762,39433,55535,90996,21929,44961,22212,98345,13484,57454,27144,56568,64940,77360,12579,96110,24780,55652,35771,62137,80755,77944,68589,58702,51547,51426,87283,70290,74774,38446,63723,80062,95184,68537,48300,57417,86267,32063,84175,77751,24482,31529,99019,49933,39955,34271,67642,69399,82240,59194,53159,24197,96582,63928,88155,35929,73935,46461,64799,52082,70772,34574,31446,58698,70356,11000,46297,87123,90782,50374,33053,77813,32590,26399,43314,48742,65751,69717,56263,63175,46610,30774,24513,11499,88520,67155,48711,92517,61504,81532,22340,29350,46085,73680,36580,87483,95247,59014,87233,49551,87621,23893,17789,56697,87694,52669,14289,16898,21786,40642,54791,25963,28416,50677,15606,75444,31375,91961,93339,15873,69062,94363,42943,31733,34882,58228,96249,30482,46923,31116,12974,85715,60207,54947,72542,96238,79470,35750,19916,93052,19002,79669,28445,73288,91230,59679,35361,55448,69936,41977,68811,76389,50202,87785,83644,66067,12373,51060,98582,50964,43604,64967,17218,54433,99091,99778,27134,43469,47530,63508,61025,94716,28318,92727,18513,17357,83854,91385,42125,52200,51780,74240,38995,46687,63771,96973,73710,61141,31243,99487,93591,56435,65255,15707,51326,84187,16365,37584,62188,91368,14431,11069,43297,67313,56429,43797,85839,49777,51615,98315,26622,75321,68567,40121,83424,42069,13627,50469,13254,98493,94658,31244,86821,80524,61657,97880,43384,85985,50078,38740,52423,70964,51955,16474,10465,82177,50877,34334,71321,86585,73731,67604,10793,26522,57325,83339,54090,73281,37576,56380,78429,82625,86497,91421,71587,34629,16755,73295,87385,53408,73118,29768,55065,74614,95381,52299,84472,16317,42878,45680,32843,78391,16566,31821,17730,83131,92431,87361,28448,66251,36125,67740,95899,27479,39131,87697,39870,59992,71604,90483,85064,38129,88232,55025,28651,96090,40941,10236,37439,17636,65978,18514,45696,34299,88395,60055,87323,84572,55323,72571,54803,57286,49109,76728,22174,99384,17496,79861,27819,81950,74390,18479,61380,75689,74747,40206,37828,67109,97315,81719,74414,13759,19584,18264,72494,49266,33755,73279,85619,95762,52118,59419,44370,89129,39509,17262,80563,83207,39831,87232,16834,66062,92035,42661,78678,10825,89888,23018,98179,26752,51865,32320,52438,64631,77956,47971,74882,78630,55545,14096,61844,89701,97510,50299,47131,41978,26735,30002,99496,17914,88816,28713,91057,80294,61411,22778,68637,40065,33069,16886,49628,41680,31508,62891,51458,19995,42861,94611,59325,39023,96467,75897,36119,61385,97235,98902,19099,13096,15671,84887,80245,69578,26667,11074,51729,40929,24810,58894,59687,70557,96899,14603,64233,92202,74977,82194,48161,21767,67957,77182,42628,35175,71678,94869,14999,83105,10599,65427,13765,19874,73266,44623,10127,66091,90916,33088,91195,27407,65075,18347,22687,70217,47598,51348,84506,85083,61169,71481,80140,77690,46030,54586,98434,54965,65313,17854,98532,74655,41418,92827,40278,66675,39034,47917,11567,23267,74683,19503,88666,17279,80431,57923,31432,29315,75608,95010,35231,19529,51567,79069,95849,88939,51001,17105,31123,80455,47620,32162,92556,34210,88169,94411,17633,84403,84113,33963,70918,33558,21260,40263,93486,72601,61010,81846,26224,79497,71734,21770,14217,17316,46458,56485,73114,32548,48432,17927,62604,65729,53082,29967,46315,32277,75869,67589,12053,81787,86552,24168,75698,46558,13504,66525,83325,27360,83924,15612,82274,97493,73405,93334,52271,88566,87900,44509,57990,80392,11371,21512,12206,48707,52095,24689,76279,62092,18171,88064,98950,29185,36495,49863,56694,49169,65413,52138,77892,57194,91785,36062,56012,29467,83952,64488,23442,41142,13709,58992,55835,58024,33232,50423,14434,37766,39291,88954,25394,77444,70829,87106,25609,96051,17433,62085,81538,55410,17494,38209,40119,38284,72651,47336,54774,56278,48635,10058,51999,11920,56993,32714,20767,20551,63781,17439,94248,66240,93706,47501,32714,64914,12176,85417,62684,50733,88231,89726,74317,20230,26490,61989,61838,45739,91777,84126,89479,63625,84361,74060,69694,27252,88589,35221,13613,74323,30429,20640,62116,31160,94710,79353,29021,16031,11033,99104,51927,47334,83917,53375,94586,42915,19324,60125,85248,55980,39708,72411,97777,42414,22471,20865,94255,67082,48755,10238,44192,13563,79118,26795,72905,39234,41024,78249,42578,80900,67356,87026,22008,15444,18853,97394,79407,21994,62808,32524,40753,48443,19041,69098,33798,20620,34553,80539,13764,81572,12780,17638,63978,25599,63150,63064,65094,71010,65332,16696,80341,59632,51237,29712,88583,66961,41632,53598,15775,54204,78658,60984,25834,96698,18832,91051,57156,50132,57624,15580,19470,89401,11065,88128,96774,20603,47489,36154,13093,39169,77244,18015,76457,75576,93092,39644,15546,71555,15865,94759,29379,57449,47284,97652,72504,38455,83613,55686,37725,55066,78741,87757,64466,64044,39864,84851,74710,66345,82002,60536,59540,98000,55564,76795,55041,14200,42937,31828,63873,17168,33279,94036,35229,40985,46707,22863,23558,28854,18552,23958,92483,11630,20225,68730,79483,36211,21369,27754,21749,49267,44527,47182,71462,70119,69338,70174,71370,68572,30654,46784,50251,21492,81801,73084,60917,92779,35890,62618,25962,22089,51533,91869,27599,90645,50650,42156,88926,38993,67942,35044,40060,45976,84184,57911,25962,99328,74999,67330,89203,86396,44005,61564,65904,61071,74128,96039,55866,39327,84947,29253,57521,35226,39174,77967,87128,81926,15070,95005,80789,16032,19893,49671,69514,76493,10985,23644,73404,44071,67979,73675,84570,38134,71750,20435,41602,85253,71188,14475,40772,58817,87061,13488,14283,43052,35255,52757,69840,71188,12026,34352,95854,89976,80510,98191,10796,19602,68241,74354,24071,54421,19517,37942,90333,67720,54249,78468,80616,64918,47562,28297,91310,70601,10351,70646,74146,77287,34287,32035,97014,74607,71263,51665,98935,62313,54982,74688,29465,71521,66760,59342,19400,24343,89928,29444,65671,78336,39224,62662,62520,57764,13683,63008,82289,71346,53244,17186,29279,23230,28436,67334,64825,54878,31348,19230,44389,21290,85511,28867,17146,47344,12772,20200,50056,58278,22480,88049,81679,59551,31196,64997,50879,18215,40284,94279,81042,22142,19051,14603,65815,68033,75122,84882,86583,32208,14964,36249,42128,47272,34889,65791,45792,34568,13787,17935,78486,16502,54888,59196,49466,91495,67658,96846,79837,41030,29478,40945,25017,61544,37180,61567,90581,84052,73018,21317,76354,50117,23810,20659,84314,72727,87593,32479,79532,17177,99896,30759,41683,88173,62195,28821,38981,10361,12805,75034,36790,73389,14796,45261,63942,92328,14303,93819,73870,78300,97684,75266,63141,17837,35463,80344,85335,33849,47535,98315,78112,46214,33286,83679,75337,69260,70225,81087,89833,90638,31698,73214,95910,67022,46029,41178,27367,84873,73913,62432,67741,56378,94727,77022,34109,46541,35225,51655,44086,84209,78761,11602,92047,95447,13120,16658,29322,53496,44825,98937,45227,72180,34711,31184,22622,97030,10391,86199,82221,21339,86495,84161,20614,21214,23327,52665,83507,54229,28544,39107,81688,51055,72291,31923,37079,90400,63869,59320,84773,56284,84593,79753,99993,35628,31366,75812,36965,56826,21866,94486,49278,19188,70321,92563,91207,64248,83889,33128,93886,15080,96545,79566,24354,82821,23300,50848,40081,25860,52834,87537,71844,19813,18859,13683,83792,49004,83465,87095,64559,64559,72564,54722,26764,55882,26012,24583,65213,96004,99724,25757,84023,34160,78621,33231,51235,23454,46646,31577,94265,48211,59765,26630,69497,34681,83048,82517,63083,82339,51253,99860,74339,83199,81837,71597,54046,41636,31800,79833,64665,54011,73089,53635,14861,50197,88215,93065,28458,48537,92794,79498,62414,29426,94695,58503,63637,37225,72156,38680,86086,97016,42074,24677,70514,47610,71812,21606,22476,67046,86079,85882,44879,22422,70697,71263,63865,72544,79986,61241,80553,77589,40654,31189,95128,24297,40114,88032,56833,73401,51032,77967,37755,75524,73667,55241,57538,43957,59330,14743,25743,35290,70328,97740,73778,29113,47193,13208,32489,24952,31081,12529,50635,47677,85716,96992,64943,99258,21015,29834,32444,43243,11246,96813,52977,59770,31909,40246,41339,33371,75382,83747,25164,24550,83669,53172,91919,96756,13767,35987,15562,70877,92663,83396,88632,82323,61568,51656,49060,91975,32764,76759,65303,52544,14694,29638,36081,63228,59824,60059,79727,23421,98213,34214,83038,61879,15032,82606,75884,86506,13439,27974,98506,30849,13799,57806,37937,69299,92013,11051,90588,63509,58948,95006,54031,47817,86939,24697,17016,82272,72467,74168,37771,87710,28021,80445,58272,36158,32790,39004,24055,37293,37773,89727,49614,30611,41407,13858,86733,25843,96293,67203,42831,93187,22656,84331,29440,24544,36683,75391,76464,72725,64303,90027,80050,62143,91469,75964,79905,62553,78355,37955,31109,21290,39080,73882,65407,20924,31065,32554,28277,58344,27201,81489,56410,52806,32363,39114,11873,54223,72409,64141,81246,95027,40732,64714,53920,79146,69057,40321,56462,61414,92058,73520,81210,71251,83472,72087,70001,96103,71753,42746,67971,58324,11338,50883,32835,22376,75495,41416,67159,86603,79896,51216,47584,82574,26524,46274,76911,50939,25523,83782,85311,69451,98535,67807,89795,90992,84594,56673,81593,76224,58223,10059,20099,92829,19468,40166,56514,71949,44379,68051,10124,67146,58855,33884,18119,93864,37244,96489,64550,73060,97436,79142,56405,65966,98525,31781,77081,59974,70120,92351,87048,31031,27342,18813,86397,85131,60700,24429,23303,45003,79197,68210,47890,95657,70803,68345,61339,72901,57191,52815,62908,46084,23662,55505,91543,98392,41873,68379,45607,30200,38161,77395,99517,41425,36948,54106,85217,19255,72872,69088,41385,35966,97070,60711,88299,92683,59337,39236,71734,63573,12074,51954,43553,60200,90653,99733,39557,39143,37623,95893,28954,85432,90509,49800,21919,89187,55845,97641,80849,52006,28672,83489,52225,92825,21364,62876,10781,87829,97643,78038,87527,11668,72262,38080,32756,86004,34729,88477,73518,33528,16219,71113,54009,37682,52308,91933,81547,15785,59558,69205,13870,60298,55294,50410,78801,38555,19888,71991,24690,59845,43750,55353,11260,48291,84040,53293,27174,12342,58317,25434,51745,72257,34639,62461,73707,64773,66673,23140,91686,28328,38582,12479,54056,55751,84764,55099,20285,16962,22482,80296,77699,27648,69572,46005,10224,70048,32699,59844,56909,86717,47997,49069,59335,16904,45508,30335,62195,59358,47794,67639,69355,69001,30071,30885,58125,28002,16964,62786,85347,61817,61854,91952,93912,85730,60192,93019,79158,59145,14790,77381,97176,68017,70703,12972,29437,86917,16396,35574,69916,84828,25507,16987,21715,15019,30083,90558,37603,34918,95049,83147,77352,86447,69930,39129,59097,70003,80083,84471,67605,92872,62654,47440,13306,49360,10048,79796,58330,52932,21350,58527,66000,56155,22162,89540,47289,95157,94343,71340,93071,31230,31532,53651,27418,10391,95076,92982,27610,67149,73983,65873,11573,66463,73618,66443,72437,54994,30633,28667,92005,86288,26833,53914,61411,84305,86974,93647,99585,39411,27135,69057,36431,97061,82656,39404,47029,82759,65638,28606,54647,49466,76550,97123,78219,78798,17442,48284,83333,88409,98966,54763,50432,68469,17491,92289,84155,54673,66283,31911,35380,84014,15741,91632,29865,18626,34881,71123,69043,96138,88408,87159,18440,30565,70489,69641,85887,21947,38578,65492,12561,60039,42134,65542,71578,49929,84089,75749,18323,25255,72024,30012,98574,26315,44590,21490,13002,22305,57206,25462,36918,78380,42577,42617,40234,67712,41104,75573,49138,43641,40350,77543,53268,47949,46710,77541,52188,48898,49885,22331,32164,63740,97413,46237,15136,78367,46327,30790,56080,69457,80991,38296,30746,13851,48976,95128,47356,62420,92614,70559,22794,40780,92158,29161,20555,27428,62822,51817,97542,53715,10964,22226,29378,67156,42541,84336,63651,20975,85652,18104,17690,86017,28574,68766,73927,27695,49456,58894,94081,57290,99069,96358,34460,18280,69062,48437,30031,22342,73648,24014,70400,46209,51645,32794,55906,84641,18764,26461,24347,63711,76125,18169,78802,75212,48659,96794,23692,52449,43343,10829,26763,52227,77877,18162,16035,55239,77122,36809,85027,22805,84684,94269,48956,19256,56266,36757,57014,80020,18954,63616,39135,77037,23643,48218,34142,91089,21609,24814,18382,30592,61194,28143,71303,32973,87376,46406,81160,77816,38765,63842,69224,96276,25588,47919,12851,36744,47740,15731,52013,74498,65130,77078,32749,37617,58196,53805,47212,79788,76979,61191,37360,18790,93845,67944,15490,51992,87477,82510,40709,38194,68080,81257,75771,65245,17307,81504,69392,42667,17301,67869,44649,63009,67474,16441,89307,45274,24114,79172,97911,31568,74691,66539,68205,13154,33735,27761,99301,66904,70218,56297,58902,21251,50066,90873,46971,13344,53353,15127,26045,18183,16294,20559,29773,47958,73219,93187,47862,62481,81677,26396,53785,70518,28211,77617,57391,88782,17634,57558,54128,65559,48172,85655,82425,10521,58344,65861,23773,74554,58002,27505,23178,44298,73315,76837,59147,35221,30382,81673,68189,88927,96096,96216,55321,29769,20250,94793,60813,54230,10456,96670,25488,97703,46718,26304,29848,35964,77934,73390,88718,58107,13292,82785,93974,64902,30516,48234,29407,30001,19661,66030,91486,38407,60765,11555,55994,18009,29800,74560,98747,95133,88146,66354,99402,38356,30187,55030,25433,24546,46221,25168,99415,77888,14575,78992,24365,87677,63059,45378,90960,92791,73906,84704,93930,88266,83893,36587,64254,43180,33641,92212,67742,72717,57759,39243,37208,25727,99977,48921,27416,44267,43738,61344,53724,30644,54106,98009,63408,45172,16299,74639,49171,45055,80289,80650,56383,23061,79523,48492,18634,62712,65907,83961,34798,91991,86052,97215,41191,75423,97840,71779,59021,92948,72339,85140,33056,97624,70118,24015,30478,29491,83272,18700,57842,86130,94316,12850,62200,65773,64942,86288,67339,55528,70498,62987,60266,41476,98853,21936,23426,45269,82850,34839,35636,31191,35555,32282,87311,33811,70173,60953,22871,82548,53979,79205,54274,13258,85991,72583,61983,22514,87649,66399,92847,27434,52819,29417,41647,74743,94000,76388,41015,58297,17865,20877,73028,27433,24639,23611,23405,48823,43759,26897,53478,16838,91644,88539,88199,91844,69530,80826,56741,50724,33388,42334,64520,73255,20496,54520,71710,63022,95739,88926,43111,12248,40089,21739,45524,38381,77681,64065,94524,20463,29290,50006,38335,58213,81072,45472,94190,86251,58651,24946,20771,75817,87443,62903,30701,16839,98026,71533,11866,81201,25006,50515,40206,91659,71690,27630,22266,72604,97793,23156,62611,34454,65449,93625,23106,65468,34779,94833,61067,21692,92901,51137,63360,85384,59611,52216,19977,19783,94991,62814,44100,36865,45088,89338,87981,97604,35212,68624,95452,68584,37370,73476,94654,98522,17521,21325,84479,49602,37930,89405,14181,48191,12509,77129,65109,27825,42541,20210,49863,78517,20634,14269,65030,38613,31286,46714,85865,54867,99976,99852,31823,64643,86655,46211,46730,11278,80606,75930,36350,73258,32415,91332,82159,77166,30907,81021,27924,61157,89655,73639,67882,54561,99573,76032,87503,79548,30441,89058,64286,89047,17326,83112,36934,44637,44715,13229,45245,35631,54194,44288,58257,76357,56357,92505,94904,63128,68133,92562,67177,91815,88570,43993,34642,94747,81498,26160,27250,99363,73606,83448,75992,37299,32819,21693,70596,32533,99389,91028,32871,76254,44366,66319,89744,91410,45431,84116,90496,65719,28327,27151,44494,15279,67838,11552,29895,11487,77723,78483,51662,51843,69761,83832,43240,61154,59883,65802,23295,93041,37658,13319,55546,79563,13298,50410,54433,55464,65966,60174,55964,75497,48126,51279,39649,99124,99618,85265,88338,39978,79550,93364,73742,48406,54678,90289,83966,13723,67569,48943,92746,59064,98888,38615,91664,10252,11413,50591,34968,37984,47296,74486,19156,41450,13487,77913,74366,99372,45778,32134,69766,95615,90069,99240,67495,54378,55425,68542,83694,36121,77675,50992,39951,54918,48583,36528,13591,52626,37861,52503,60666,52486,56986,14571,63476,27690,61699,79624,46532,61912,63986,49375,61096,42205,24083,62435,28602,42456,29146,73936,14147,99232,14068,29266,99888,54892,53639,66818,43330,46163,33537,93884,15807,41110,62041,28959,11421,18238,45821,27690,21169,25858,19310,78880,95623,50585,57085,26814,43513,42347,47669,81084,49085,16803,14912,83614,29502,82512,73753,46617,85276,11066,82587,64965,19484,61458,94657,37902,29968,98611,95951,18071,68748,90486,76149,54064,10091,16177,59435,13007,40622,23874,80358,42651,87000,34179,72492,23858,55635,57075,66665,22594,96736,99021,87682,83513,38335,30679,53649,27895,81013,21872,72656,31517,58675,77098,78723,78861,81878,98201,63804,37155,33626,62538,13904,21069,88903,90985,57234,67080,61179,81258,59972,80768,78210,93537,34500,39048,35204,92701,81210,18311,43312,29011,67347,88506,94226,67660,58676,68857,95135,14164,20392,78236,86889,94247,30268,51670,18135,97281,49138,53750,19503,84769,34034,63072,52731,19990,17337,80337,97272,29917,22350,86549,60816,38053,63585,70068,18127,14731,72651,75302,24121,89571,53035,38010,37153,50184,82594,23897,57224,62822,79183,25038,79264,87594,90370,60759,83552,21319,23128,80013,59033,60265,27858,64860,70409,97088,58113,22922,63708,40899,84781,25939,10887,82006,79835,64954,15688,30959,87700,25035,53337,44650,76247,63231,44758,37457,73397,96430,87442,56850,80903,95231,31561,26671,96111,64158,54967,89219,15890,26664,19883,19427,35970,77464,18708,79474,51375,60064,38006,99096,12955,99604,44533,96656,56974,50953,87090,31910,48321,61586,33219,55772,72039,21323,52798,22328,36902,14725,49077,72092,73410,81353,15708,97943,11443,82643,52172,53331,88718,50108,80279,44155,91590,15859,51117,23323,44557,67653,79459,34698,33085,53052,37208,72409,86962,10427,85685,25706,61189,50715,61866,23890,75077,95813,79228,50991,54333,87006,47330,88295,49700,94882,44313,83382,10993,21253,16717,45398,43390,12219,90486,88430,71620,94401,98382,43139,97604,76274,54873,97244,55757,79032,99289,23381,92342,25038,13692,76662,10595,52860,17320,84363,63307,13479,67215,50536,66025,24420,91991,32701,79534,62815,96098,59274,47457,93734,14939,59059,86902,55516,44518,69101,13999,20911,96713,74150,83254,66058,52541,34914,22112,81769,66604,23836,16000,35103,92462,95582,12844,88229,18617,29864,63337,49315,39362,91599,63281,54280,38059,45660,62533,72827,30962,38487,54180,80774,56063,41956,72487,33407,39490,94919,70126,37430,22436,63108,18684,72709,47236,63760,17753,71149,14709,26313,43879,31228,63900,44243,37795,55087,38715,71871,53624,91143,78679,50883,96250,49515,64289,16987,59478,63379,81972,62474,43014,94731,37389,39603,75712,19734,80630,19351,92189,81670,31098,24653,43730,62679,26752,70069,81102,37945,97522,58167,93295,80725,20175,22928,34311,47333,62789,43039,83127,99207,50074,95129,24630,70969,82183,86240,27817,88198,28740,54015,52152,31410,85963,27850,37879,48218,81328,41055,66747,98278,15837,91005,91398,45695,56256,17999,37857,90215,65834,30013,37537,61354,50963,94862,13333,85423,48417,32599,22238,40495,92568,65298,97220,90503,51800,16493,47461,31092,22725,74469,85031,62010,55208,47825,23880,73384,48865,57427,71448,26044,22831,85882,84979,34815,67798,96247,69094,74356,56593,49638,76564,66703,96113,96603,58918,83183,16456,36659,40362,65613,30232,31421,16016,18149,64168,12490,66007,78028,67145,39779,18129,67871,30227,55232,97250,53874,99496,27537,46702,50250,92164,58178,51970,40602,29526,55590,70306,27396,87802,85039,38871,98797,55666,95027,96156,95259,53248,89713,60487,17923,27272,87212,57431,43177,65526,48490,59437,80941,22302,43436,27815,56318,97199,49208,37107,61480,54182,31790,27351,42028,79865,70418,35089,53544,82272,92784,19897,54044,27164,80532,73095,99829,45585,36048,88856,20251,94826,42930,33672,17213,39857,43735,71717,63861,17281,89743,84325,48213,80862,14876,56245,43019,57683,75914,28258,76656,49418,18417,68536,85551,30121,71355,42593,58355,93000,86288,45593,89262,56612,88998,17377,37147,24385,39949,48578,33174,67416,44616,88278,35631,48674,10466,97513,44176,73634,30912,22333,31279,68190,98315,38771,22011,58483,52564,28710,65003,47628,21394,32124,64011,28597,13758,45427,90679,91359,54308,49810,81959,13031,18785,45669,91942,50263,77169,38683,27518,39869,75311,54711,53298,94759,78205,31194,80765,96371,43120,30549,91247,20772,85897,24485,62643,55001,91576,68039,55852,18247,77874,27015,61576,51789,95965,30154,72879,16271,97413,99813,68107,83171,14982,92912,84408,35345,20821,63272,73572,24282,20130,66801,36337,43705,85258,77693,26827,68357,92937,70464,27433,76069,92208,60405,29936,24451,42467,31424,98097,57773,57121,74353,27305,54851,34007,47815,52057,44962,99736,53549,88348,78665,18668,26424,49195,58982,60483,24909,30775,33564,65354,97800,66856,33702,40924,49974,16621,35656,79456,37994,35084,76203,71494,50827,15213,14649,88148,60034,62193,20372,90720,37220,86295,35282,45336,84244,70171,63131,44516,42520,76308,92410,57779,76800,84232,36396,40435,36062,86131,70169,70249,10453,30140,77977,56174,62874,26080,91428,52002,51921,94489,88124,15470,16802,85210,12549,99785,95505,89522,81970,50644,36169,95432,11085,86822,19597,13208,47009,98313,13172,60670,74755,55330,81783,31523,46002,30580,94919,69384,89392,11068,71464,70727,10308,79045,85211,93734,85260,70969,77546,46815,78925,87286,44153,18498,66737,83899,37228,87836,39635,87288,99679,43222,95236,32381,94545,16815,29305,98827,18530,54073,84626,26973,32244,41542,35843,37337,79367,46960,70137,74332,76715,20986,96694,31531,79760,76657,16367,38128,97564,25111,63999,62182,26209,97970,17535,60186,50857,46388,84429,40484,42183,73906,36311,68904,41579,93419,36565,58722,33974,69877,15124,59606,81038,42407,99544,52531,12505,35493,20161,24534,28269,75451,82785,32487,21035,18730,62332,80173,20935,71299,60666,33654,61007,87942,36829,81899,50856,23983,46166,98062,19193,34961,48913,39857,83237,61987,22596,87527,29574,82644,61313,48931,81926,80278,48898,93110,98415,12439,15945,96027,76738,92664,43531,71068,59294,13306,17060,61783,62425,56097,21530,16182,96635,17077,59861,91708,22663,91805,22708,47161,46633,75148,73890,78758,64184,70863,49085,18135,47377,60049,45264,45287,80287,44932,58315,82236,66637,50754,46014,31724,78034,24457,61243,32717,54261,84542,63546,64199,91532,75617,57510,74132,38183,36002,67200,57479,29192,15151,44924,38904,26819,67393,84364,77555,73167,61237,57880,92897,44992,38375,99400,45386,33915,34342,79459,99829,63552,44682,15751,91479,46051,61154,47751,73255,62976,63671,46892,37883,95253,77478,17313,72527,88783,53843,35238,70105,13065,17002,77779,24383,46972,85467,71616,58367,51842,76603,48077,29921,34512,33658,35828,31041,73104,76962,66016,71704,90488,41049,97646,83068,98546,62833,19201,49491,96799,79525,35079,54569,56548,78665,51684,47012,45679,69217,49022,37354,27988,30933,43681,52006,22402,43125,10125,26430,30051,87021,51919,25935,60391,68552,40058,36378,59709,86576,27514,19699,31035,52875,28966,88636,65458,11449,17597,94434,75617,89732,59797,99443,74991,91753,23442,87935,54955,78251,71314,95125,67917,26324,31665,71872,70167,64695,16774,42066,73146,79699,50236,65124,92543,79500,97792,45196,25594,74854,38323,27099,73754,83486,54764,41842,11754,46749,99070,20847,12719,62675,54951,33438,59826,56938,75815,38123,37692,80579,30976,45555,92245,36378,62676,49161,76225,68495,98746,75636,92759,63841,94985,31435,80308,11084,60408,53930,19816,35926,62354,54027,72130,31328,17567,47658,58988,90412,83127,62771,55142,72280,50103,72805,55858,30707,40078,20460,64056,93702,29261,34197,37869,13035,92885,36237,86398,83923,16518,70957,26328,18481,67244,66464,49137,25585,23240,79295,47854,94621,96871,62785,48852,54942,33594,90927,31401,89672,94479,99628,36858,84755,97835,52605,68496,87890,74644,56798,72510,28545,54275,89425,27954,10504,73563,36286,96907,63772,36541,59436,75467,84750,14734,10043,40351,58061,50514,52841,34094,76762,15148,20093,59534,39809,97390,22178,53486,99823,64811,42621,28638,68829,11225,46991,74066,57984,46013,23529,30642,42052,91455,10093,18749,63167,68124,65830,21290,29398,84811,21447,81464,68581,41457,62422,16471,40730,98875,56534,88722,17638,63926,77247,11314,66325,56631,51361,52112,46862,35815,37520,34546,97885,54778,45506,55473,59133,14542,31602,69198,17557,31311,53998,13011,45265,16939,53650,42529,87464,52260,23923,10897,22782,94583,30302,65627,54639,84908,69398,47844,34624,22631,35965,63404,96969,63490,38913,98391,74925,87295,17871,87852,80343,23507,80470,27608,12528,66495,64047,50662,49899,11168,67630,48167,28727,81817,84691,73366,32835,92967,66605,71832,46056,42720,57433,42129,56507,96106,94161,98082,77034,63576,87612,58328,16688,64735,64855,71797,31774,99963,98900,60593,45938,44467,27927,81556,36672,91974,16014,74475,63351,42120,99010,58296,58838,40062,69379,31379,30349,84876,70428,21734,99156,40157,90390,65140,64361,28151,16930,57763,26956,89253,26661,89035,12335,97792,10284,40541,12299,47562,19849,69940,45059,60372,15246,31117,35581,42514,52114,16980,98148,87085,33179,72127,70206,65575,88601,95098,54455,44064,64909,87037,17626,39957,25307,30221,24186,28527,95541,43193,26079,32403,84924,61798,29554,76367,51403,75433,97918,12039,86372,23989,57800,92958,98487,89510,27997,24608,33955,84026,22579,71031,71648,51593,32699,27757,51808,56504,12293,71266,81004,25977,81193,30398,90113,31822,39476,48692,51483,50738,63931,54118,19296,63843,42522,44622,96918,43740,21765,97564,43459,27727,85452,96404,83949,71308,73635,33643,47636,44747,83267,57064,93271,29119,79709,57389,13534,45487,98694,78247,44381,69537,58110,51377,95170,49521,53294,26323,74995,89269,50049,92721,28935,57443,63834,13466,10266,91169,73526,56858,25634,69267,16997,52468,70468,86410,66757,21043,19329,94940,79035,93259,82047,37155,28820,77301,19403,97318,96399,43817,24513,72830,40880,38483,57019,97277,90998,81655,80999,49427,74410,76033,46641,20297,10111,31150,24995,97403,54070,22074,64948,44929,32134,81810,80487,96849,96480,70671,76619,34541,46565,45765,32426,43966,40238,40802,51672,34525,54381,14693,66309,94881,44954,70648,96847,22462,89143,77860,28872,46689,18732,68423,25620,18783,51194,94808,38988,92067,60869,27907,87680,22839,54425,17199,79028,41529,67957,26335,25649,88603,56475,66890,30828,18895,46052,13023,64769,54680,49864,86142,98486,44455,37960,19625,87035,38713,26808,17118,53558,58147,70298,93445,70835,17124,41990,86114,79780,15169,61929,51742,52833,17288,96430,39140,66272,81899,71952,62406,55085,91544,90227,40205,20235,67259,86836,12851,91824,64733,21135,15249,73594,92717,57316,17636,17900,62300,47029,33597,17606,57722,60704,96165,89007,71853,72508,22175,15257,10824,42868,48110,49796,28876,78921,77118,41386,83611,37370,15513,94325,26214,68255,87543,25276,65772,53102,39074,67961,19822,41791,69972,71489,51463,12222,10329,71998,66514,83397,29341,83782,68111,21629,34426,45791,31047,59803,95481,56277,11663,60762,66579,54961,13647,94684,58786,13635,54093,55552,43563,35489,90160,67889,13925,21711,17883,49705,78047,20526,38399,34225,50064,82466,29313,26954,53450,98133,23476,73058,22280,22578,92079,57217,77754,76519,83054,32812,55673,72673,23222,90291,96123,35160,62815,12340,92192,26102,15050,99502,80377,79947,94718,53093,64356,51562,50667,91214,34550,68742,70245,68201,37967,61630,59252,16497,84002,12466,44173,50606,63873,41969,41352,92022,58130,76133,28827,94704,42947,30298,18153,16251,10032,50278,91648,61928,94983,74234,53661,29705,64802,91449,88860,32358,53179,91170,32235,82863,81757,46971,83994,48259,63963,82924,21462,55329,94681,37285,32623,37429,40786,92495,15776,85861,47577,16860,75038,33009,66972,70577,57961,85857,97561,97256,20701,67129,78769,90852,30018,90116,38129,34585,10521,73471,96312,85806,94264,49674,92840,12782,33539,33539,54158,62546,28699,74024,99882,99927,41363,34682,39747,28720,29244,19935,87455,80236,78679,23322,20108,55112,15331,22991,86399,61866,74268,23281,99076,98454,20315,50333,49523,93906,33492,34040,65993,21470,43377,73625,86252,41738,13207,76585,45131,91846,47317,93261,78749,70559,96996,69395,10711,69567,36495,60318,59698,32718,83073,57878,56297,33379,23380,21186,51866,21598,33394,85818,43118,44988,49525,84385,91275,80295,99409,54996,75373,37303,83492,90225,65164,22398,39283,84090,63013,12546,76302,38061,56760,88139,36841,26785,53831,10813,70763,90646,74048,58020,88901,85122,86364,81723,86427,59842,23263,61055,31588,56340,17276,60743,23785,98031,71571,97578,61012,52602,47812,97739,64927,93036,73765,59604,23943,38564,84583,40015,50846,48805,80937,53834,20567,26474,81609,69108,21743,81929,67516,47970,64075,67316,49907,18303,98633,67718,64842,55566,12182,78506,19085,93805,92372,93506,25023,28031,22084,29716,99500,92635,69520,43493,14857,82933,71408,26889,68688,45865,80210,58083,20188,54106,47194,55726,16050,91064,93998,98600,20629,19443,48308,28041,40203,97655,32113,86319,49089,60228,18608,97045,29458,40314,93662,39201,38137,11334,97636,32284,78230,76901,39898,71327,99051,17255,19552,90033,46165,90373,70020,31043,78232,15127,32084,47575,40275,51526,71435,81169,64375,29983,73187,42706,39481,28859,15084,60146,17908,30475,56051,17169,86974,79981,79242,14415,42203,99157,31593,84154,61247,21504,43138,37151,77483,26171,63588,16619,74747,53517,79958,51712,33579,22137,92181,42452,13685,82478,57222,16233,12488,40405,85532,13102,38400,80235,90778,35134,80963,10825,42371,69083,59083,34857,47714,74775,42280,76384,36726,81250,31969,55760,70216,99785,29351,81363,52503,21519,53612,91019,16659,48635,61135,74497,69228,76126,99733,56584,76053,37577,47299,12529,86466,53555,44009,37708,99437,62894,57044,98681,47568,78704,18937,95454,95113,93573,81251,41917,70132,15439,38944,40404,72384,77823,56422,65924,63548,62584,27380,99219,71130,86249,13577,69849,36395,78446,11834,93625,47558,23375,30635,31549,18964,80467,88051,74604,79015,48727,96380,88939,19756,19357,36649,39555,48303,61150,70294,47563,53146,30278,61591,54541,42418,15915,83397,81145,28759,85717,74461,43991,29216,52203,49933,31010,16091,41189,73450,99214,95621,56443,62829,35631,25073,57541,70664,84705,31888,68327,21003,88123,75025,50047,66858,23590,21869,53807,75913,62406,56544,38746,81423,35544,40720,92779,19534,59539,92940,29204,51002,15303,38945,84085,72263,30525,20872,89761,57743,22712,94907,91112,54388,19451,60247,85020,83668,21914,59659,78278,48132,25028,10189,24685,21813,66972,27323,44170,76448,18818,56310,93515,49735,13426,27647,43751,31962,47123,39378,95218,98225,77841,63664,20883,46115,14810,82784,23317,57979,92241,70197,70193,78797,25895,35141,79974,63023,28406,71713,55010,72599,31761,58978,46650,18094,10270,92189,52421,65102,57653,77763,14687,46232,48835,68633,75427,90215,87513,43365,29211,84739,58705,13848,26278,77749,70534,85464,65975,43779,20645,13356,84188,35216,59648,63864,35923,26499,26192,99936,49097,38019,48192,85829,65870,70847,42252,30102,27624,74931,49377,84329,11251,70417,98346,74618,79672,26661,61837,10837,62614,23106,59828,39719,25492,80915,50950,38860,40207,48798,13553,55420,11913,84918,88689,21626,71984,22446,70672,34780,79382,53232,94647,37598,73210,35526,43079,17686,87744,62550,16393,79921,36367,68456,74488,90253,46802,67474,32457,38586,74338,14691,41283,70140,37433,26271,58722,52007,12472,31453,49058,63117,62863,45789,22948,20359,36176,65730,64819,24772,94567,75496,51311,21744,49690,85161,80018,63916,98367,78273,44515,30569,91921,39593,66212,28428,92816,85920,31370,45443,31415,15484,37334,26574,26391,97801,69054,95144,51333,62771,43408,83036,84039,51987,86577,66987,45666,37782,55293,53207,48659,53731,34091,20791,86298,11691,30153,45243,14792,28675,85523,13356,27079,27490,73992,81082,38919,89773,32316,81304,94350,48768,43724,85926,31379,52873,13074,15479,68909,24075,80601,21693,11288,34374,63279,91103,88573,28572,18804,48533,57924,57551,64948,44754,57761,39907,26508,57358,99103,27455,47258,27130,52761,54364,16411,44679,20897,18617,38965,87464,26447,87376,12912,94914,16162,61296,41793,80870,28296,84803,17977,93278,61526,45526,70683,15675,66003,77903,73695,46372,31176,52598,60533,22578,75602,88739,14206,59084,32706,91022,73607,41854,97976,83800,92241,84073,43211,22521,83828,25772,29587,45172,57292,94021,42157,23162,80327,62039,34707,19809,88001,73725,90453,58439,39341,61006,59059,39867,12789,74410,76799,31062,50023,38873,52718,99039,57547,66854,68685,14625,22749,36780,30195,46089,49361,91480,70178,67815,13475,72052,11777,84885,64176,88117,53274,87501,88785,89753,79980,79592,83757,25777,87260,97322,66068,40247,72508,29273,90180,51165,27808,85968,74786,23117,99197,74043,56259,69719,38346,25294,10563,57672,88147,98911,77438,81425,67870,42246,84796,46441,64518,45034,41089,89297,84094,32799,63588,74195,26375,30872,29363,20453,73770,99236,73259,20434,59758,18837,18659,52016,46656,85004,45613,97677,23453,61436,91805,42897,90613,55068,85420,96958,43752,43649,26300,42716,57005,48616,63957,96027,77735,22292,98472,12799,13042,36710,99095,22589,72339,14419,73945,15792,22071,51420,62655,86704,31992,53044,65124,77066,17192,20375,82325,57035,84749,39910,82463,73299,17114,20708,93747,92297,44544,15268,46641,24960,25489,54321,35652,26926,40261,41179,33645,59484,10738,52503,80143,48633,33171,21943,69884,60610,66500,39483,88408,27773,69946,79610,10978,35189,66362,72441,70925,10393,77048,55641,42029,79491,28112,15718,29824,62630,20919,93414,91457,60140,71233,25795,16891,97056,31414,44279,41124,57137,13989,99345,86362,95699,59187,15056,85446,60190,50748,32679,64153,27212,33627,69621,76721,49687,14257,49489,44354,70809,81920,85212,25487,12493,99026,42317,18271,22436,41421,68147,48946,27833,12334,93903,14603,56780,11669,28282,11122,16029,49136,70909,24328,29925,37117,41826,74999,76144,22940,78117,68775,23521,37438,87709,31684,48363,99865,85252,58875,97455,23200,69453,28400,11573,22153,37466,25020,74654,65477,15676,13939,44950,99473,47161,81888,81592,16240,52436,63758,76316,45983,65566,90259,91243,86993,41004,10952,69830,66725,27998,74484,77809,88050,25840,26612,89065,43137,89812,69764,41664,59497,49550,98408,57023,31992,52073,39846,18340,31104,34751,89644,32427,46285,96817,27622,14649,53942,39404,54437,92056,65966,77094,18461,55836,54380,69677,60617,39434,50234,54285,27666,76068,90683,49829,94958,11834,57711,16447,34813,83847,83295,10503,91710,16550,57032,36018,24386,25335,82983,44903,50587,31383,32501,78979,36818,89744,62899,62987,31529,34859,72137,37933,41656,40517,42179,24615,53566,71981,44878,30950,18095,66089,62902,75714,61182,61807,64069,18550,75621,85286,73697,68360,51062,33955,10848,17206,69781,19725,92080,17834,45623,65219,27034,93401,16744,21500,41544,29947,42345,10231,89673,13915,22711,21681,34140,88544,78657,84130,58593,33642,55181,15900,55030,63866,41719,94973,69750,42048,69629,89796,80383,59139,64610,65703,66656,53587,34124,96140,55840,43555,25772,21320,78502,41353,20585,61314,72336,85593,48690,96120,65866,93126,55708,90769,35580,79240,72027,35186,97408,38097,10789,79526,86620,49969,10341,37848,51175,34802,69339,51069,13931,19480,26338,24591,47705,20943,11842,26601,92157,11146,71674,31892,82272,72551,82919,68358,57854,43265,52967,11897,93167,54847,51349,24161,92648,48767,22736,18842,34187,94642,75257,52099,25222,74486,25389,51451,49060,78989,18258,68806,78702,81703,84268,50945,76717,28950,45905,20403,79326,74308,23915,86215,65333,82131,76048,28302,82396,25055,41346,72640,67888,93339,68408,41573,75369,58564,80373,63529,19283,66071,19964,57640,59138,63587,70048,38164,51649,74006,75885,65485,55180,11555,99820,10433,66599,24464,41248,24199,86556,55636,34868,64664,89788,38971,18874,77630,85569,52476,57775,22485,20146,68362,28643,50807,81959,98974,33693,47040,42885,34799,35984,90677,50005,30187,21077,19394,84312,59225,99939,40836,60660,71145,81215,93676,90589,38349,15144,16682,62162,96778,77336,40406,12093,19254,47034,60752,66964,23564,79186,89676,94324,87403,89853,34494,26514,67239,22406,38673,76579,96039,47525,85211,45150,22924,99342,11150,62543,21776,27656,46362,75083,35107,38111,27406,61142,88448,50669,11148,27659,18351,31339,26797,26482,90206,90266,46435,24767,63273,85447,79364,21672,81076,80376,20253,41721,48741,23325,69589,28670,34853,60175,63285,24909,78705,64112,72952,74108,17164,30339,16500,72167,59955,75181,47968,73255,61302,32818,41741,11717,25640,36608,57913,43563,35062,13905,72023,24702,22132,42578,84657,20329,26376,53818,28779,65910,73705,72109,32123,89827,15892,21950,20342,84987,27674,76779,93559,91536,38990,64429,80705,30361,52937,63380,68461,67569,77729,63374,38325,94396,52697,46704,62723,35956,40866,28892,30120,37883,57645,71542,24879,57158,16108,10526,86660,75449,98367,48562,77194,19519,86538,53765,63187,21918,63437,19605,72355,34852,40522,69702,83459,75109,49347,52793,12282,24543,58494,44494,98432,73481,81204,73921,10350,35555,22377,68300,60851,83558,72676,17588,97504,45150,61883,53379,36632,80632,45677,16009,35996,26107,37000,71593,63811,43825,97925,69481,71870,89257,50632,23469,17452,90044,88176,29834,36017,57058,55592,93339,27454,67291,73804,87344,43347,34842,31379,66290,76384,27242,57283,57585,32205,74759,10444,79969,54620,92187,32266,80498,11407,64844,60538,71805,67725,37562,83435,62120,37616,97211,78683,33659,43927,49855,73384,96340,30517,31999,48093,62720,44248,99400,63998,79131,23743,97248,24764,97002,53072,65276,59968,27797,12220,96553,37505,30667,68566,57044,19929,75545,29939,53722,19970,36646,98600,57888,63838,51295,25343,63063,81787,10038,86603,87522,94969,90859,50180,19762,27638,93423,18806,14938,51888,87071,23041,78959,22736,83389,75268,83994,91746,12770,15484,53811,26364,88939,96529,64199,31686,83328,51446,50652,41105,52634,12922,27148,10065,99234,70969,90446,93315,83821,83476,96568,55968,80208,94343,28636,24307,63413,65215,87912,30178,87831,20708,16511,73569,32662,91505,45977,35423,95965,41549,63502,74637,36586,79404,50308,62679,64081,17303,13234,42345,55896,53600,27590,53097,44511,79529,89696,64483,83638,61354,52752,30333,45242,38399,49967,59543,44721,67341,48496,82528,94350,10107,82917,63634,88842,98469,91932,54393,65399,61694,51033,89824,70078,90441,42181,52291,94581,22754,70740,97043,94959,77215,84304,83361,25191,27835,42300,93160,22888,60262,60879,99805,45861,34570,54946,57833,72913,24243,22702,10282,64262,85074,42460,83050,61741,43553,37101,56107,39622,15022,95622,44970,99362,27099,74856,19532,16131,77057,37800,41927,80673,21611,68579,90423,29133,56857,33038,83330,68348,85368,25257,46580,12651,67032,89431,26464,54412,25315,52297,72463,30181,74685,33468,97601,97228,46325,50897,43677,84637,35150,13242,63839,99380,98540,41483,27682,76615,45334,15701,23032,25130,75820,75866,25360,29683,84167,13848,47835,51209,26508,12926,95569,49690,50738,36540,42591,65453,49757,31488,42909,65598,64307,95657,59645,44765,52669,37440,33798,30094,16151,83732,52667,14390,54785,99845,44158,39765,19741,85302,84632,30262,88392,38305,48304,10967,30747,97990,30169,27072,80022,62066,24687,53218,97832,49368,25865,47855,52910,86282,26442,31704,75529,54407,89505,57705,67516,12634,17309,77123,85955,92524,42072,70582,29372,40859,80162,35887,78034,72294,29724,83947,75079,90580,80118,12672,81277,61968,30117,92490,86810,10089,52543,28683,72672,14895,41524,94992,53221,57909,21803,95750,89763,26234,94005,42197,90566,58121,34383,88098,19634,83325,53960,79008,84476,13728,68375,78507,46237,10742,85306,78102,85744,37170,63269,29277,83452,86702,67634,46766,36374,42762,48531,63054,41485,12070,86873,78811,85743,74199,31489,28828,46920,37398,70354,27966,29816,66665,91391,55494,14853,99760,26489,45362,20611,57261,82413,29789,47472,68009,59155,68814,72143,25717,74170,46583,16603,73637,94633,52967,15824,25141,79757,39308,20166,89542,23792,48762,56831,47650,66220,20575,67151,95868,28066,13823,71746,22251,19268,42325,83539,11524,91965,91576,44130,84293,93897,70427,17248,46464,89434,10506,29078,92596,92149,97947,24050,11165,19035,97885,66546,37693,94009,21038,44108,23037,28724,93431,60533,68511,22335,64158,59248,20483,45871,26151,69308,46752,76108,16589,41354,78654,81673,12176,16351,86242,12647,33628,97194,66306,43084,29401,80272,59939,44511,12063,51756,67403,60409,19073,11737,62843,95738,91318,72616,89457,24216,53064,28838,83206,24769,29028,92001,80951,56525,18781,17713,80843,37451,43183,96204,63778,95185,39246,61957,81292,56995,29054,17708,74371,21274,86796,85392,69312,40724,89220,32697,99562,83956,65147,94922,42947,21517,23061,30580,36190,72839,53198,12703,20638,90714,26522,23802,47981,51369,15612,88026,14958,46057,53554,29635,95676,49101,82455,56688,57624,97225,99598,23398,25779,81028,76549,56677,69015,50145,80479,56785,39318,98826,95920,56396,83155,34609,20245,60944,99560,16726,77965,18450,13103,68989,35374,99226,92700,46143,47136,15431,61201,84633,19930,11408,76638,81402,56510,53148,73016,70781,27346,62834,78775,47714,69359,37390,31833,79731,84596,42448,32808,47942,46089,81489,18422,84252,70444,32343,66954,46629,63146,33715,20798,67067,12151,81609,30370,82333,54405,67883,44107,91170,59119,40302,19037,22197,78589,54649,40869,88632,32862,18259,79908,23611,70711,89318,83939,37651,63398,55949,90507,49174,69926,21732,64825,20172,96559,40819,18395,30879,78846,55505,65063,50932,38882,69934,40653,48857,99714,72123,58082,29886,16503,11336,39562,46104,73097,15599,98694,31753,60384,91294,88792,70331,96309,37965,48859,43944,60236,54954,74345,10741,17714,72684,59319,42418,67274,48004,25105,97700,12465,58506,98877,36588,78518,66641,60309,71427,83599,17141,26810,23085,59000,65744,98042,65652,18567,97545,24593,18213,90345,80731,60693,58508,50495,12968,13781,79439,70907,19632,24534,35337,96321,46845,63116,20963,34209,92398,20958,12752,24329,80119,82627,53647,92256,93629,38079,26274,27137,79712,16260,23306,66498,72219,48177,35464,69626,45390,98765,78797,62133,34989,83277,50205,92819,75797,40525,56016,44616,25440,89624,37615,25606,65013,14450,81844,28598,69519,91519,89991,75379,55598,36775,73259,15507,32859,57575,31886,35395,26803,86914,51881,34463,62275,80096,10822,70562,75908,66159,21726,90628,90603,38228,53271,81557,95357,51135,95454,93506,84930,70324,17730,90807,24313,32479,11054,67453,32673,15186,42431,42704,45387,17353,50789,64201,27260,90632,85495,36377,86904,62474,98430,56781,93265,32475,52791,81417,15601,91130,53879,95550,49313,97220,57504,27015,91844,81278,73391,47202,70683,80432,41501,83510,49453,51396,38856,16780,90038,83494,71276,31427,83978,99508,80383,13945,81714,20615,72300,75941,57605,26107,87704,50505,11166,38400,39562,71565,31655,26739,36388,75819,56555,79455,33805,27919,52863,15245,56870,27688,91314,97029,32631,32066,91613,32468,22647,29288,40362,46710,22899,87750,80108,23677,49593,59089,97903,77250,74011,77964,42178,17189,28159,87760,69920,82220,93298,22146,20587,33122,69533,14794,92819,11707,92368,14016,45607,67548,42488,10476,83276,13643,93700,55485,47909,86399,12745,25004,97856,63845,66427,26352,29634,66079,49522,46237,26646,49479,90792,23691,94551,43653,93815,79714,44870,72752,61475,89125,25060,34331,71443,11722,74371,49258,40116,21924,74153,59344,79365,16515,97243,16919,38979,29247,52648,62066,70479,64930,36585,17567,76444,87220,92745,60347,58847,76808,20840,92006,51004,38248,23589,60323,31409,52685,39602,80940,65182,72513,35800,26563,50461,31692,38988,98575,74295,82913,19848,19235,48146,70202,73971,69357,65141,35124,77485,18232,86018,47066,35838,24962,61420,71582,70711,32966,91003,43630,48862,90809,19828,51172,16144,57266,63510,15307,34632,40637,58545,47739,25513,35412,20153,68552,58448,51448,46103,63444,60395,21682,60499,28276,35552,45675,23000,12986,27021,86046,20560,64239,30205,68550,12333,70164,16931,75357,36053,25972,86991,29777,67607,88923,18499,40214,95462,43886,49717,17801,99346,74547,83716,52368,55833,49427,80624,19262,38734,14950,93144,48310,30160,34144,51809,12951,37259,83080,45803,35519,74558,17427,15260,85141,81958,69196,49829,76628,78515,63489,63448,86831,25006,40559,91334,84709,86778,36012,91008,23128,25258,36364,29532,70799,71770,62488,13326,55452,50081,49865,97122,10142,75809,88582,43803,57704,68612,76322,72479,42054,85177,50930,59539,72387,84594,74899,70257,45564,55742,61206,91335,92896,22952,43471,39444,93629,40959,70550,15137,24905,58089,54868,61683,91286,30172,50145,59909,19369,16031,97460,76452,13137,85975,17703,27710,84468,44179,20578,54586,75268,19959,95949,85835,50795,41890,59501,67830,44448,92518,29184,20097,98206,68042,81646,17913,97136,84093,42049,35429,72032,36864,73750,74774,27276,60615,69177,72675,92847,51502,84321,55890,68541,63793,50594,20078,80927,56892,18996,68035,72364,81193,16856,40644,13603,95766,16080,81038,90100,49772,37743,99947,17254,54699,63205,89664,12782,30272,23958,46914,69755,43179,89652,96532,48486,36538,58887,21083,29226,63258,96840,94751,55604,37908,88940,18919,92923,56757,56987,38617,20330,92179,29413,28979,32036,70715,25202,44995,16348,21522,97231,40439,38126,69117,61422,62041,43050,77794,92772,41227,87638,80705,27236,17247,60118,97733,47070,22948,16110,16087,38409,23371,72005,22416,83665,92856,28830,12426,92297,74376,95172,62066,44931,89959,89424,80536,18201,67537,64119,53381,81898,84223,38608,36469,51120,93896,85288,38303,80142,16042,28077,90835,29916,47549,51778,72153,25099,18348,97241,34922,88888,18690,71991,51295,13792,63253,95150,28145,63296,85686,10233,94140,95595,46467,44212,60219,99034,84505,19851,57571,35777,42110,37463,86088,30342,54187,87693,63485,13578,48375,33825,40962,98687,29876,16014,14664,67750,95775,98568,15408,97816,56227,33110,93151,72114,68026,51109,40003,17813,75346,47079,89830,23266,11514,16549,56035,58361,31557,73674,97732,45113,39778,53192,92597,28219,25749,65532,71064,32139,99852,42254,67417,35866,63432,46555,78550,41617,23549,28350,29131,88669,76793,71275,97592,24477,72444,95863,12791,56405,57573,42766,51654,32171,16325,12084,97915,32031,48941,88044,66953,39746,32261,60755,47349,60412,68158,44791,58647,79446,82305,72603,98264,58232,27674,67720,10249,58313,29216,20731,15683,92440,42055,71773,55398,34915,54632,96501,44432,93091,90375,72270,11433,36274,14893,66832,58447,65241,45985,27498,55322,46914,47637,38313,24569,10355,79680,44597,23702,58996,96640,75409,68846,41207,25733,68854,49186,64808,88681,25415,88802,78236,52652,83752,34398,55548,95929,34339,93131,10347,39648,82435,46153,66099,61665,15151,24110,86089,59758,62866,60924,61320,14175,85085,15790,69412,58644,83938,67390,66639,11718,49719,89352,84192,13418,24370,29928,77566,50953,64734,61802,80844,44829,14392,60455,87668,31502,93740,16501,62923,68012,19402,54654,97361,31924,24044,11088,62814,95176,61106,38905,51718,85660,59410,59109,50137,10455,75465,64649,85284,10608,38181,27346,47334,40566,80491,97340,69770,39505,78839,82096,99293,32382,95899,34224,26995,97158,92525,63790,61806,54906,94824,71564,18064,94037,26015,55352,77126,19821,26235,21539,82675,42681,93807,34252,57654,26950,73665,19538,28295,82131,81367,97538,94166,62663,78175,19592,41863,85562,53636,22386,79771,34006,24773,43350,67175,83527,54684,15428,20445,57894,47857,14605,73703,81274,26973,44608,40161,90590,86937,64767,40671,29573,15892,54035,32454,93463,10249,54453,80588,53765,11971,50779,11383,50381,52951,44454,21206,55303,76417,11932,18732,51806,49973,20689,43888,70738,65305,67545,27496,64153,18565,24943,81620,54434,69558,40056,35874,14673,57425,53252,22836,99128,21608,32248,92088,58728,20369,78825,91550,52198,47801,95192,97811,15428,42308,12770,75311,84968,13401,44265,68737,97735,87173,72068,27796,10600,31143,97535,61354,86851,85938,88666,81395,72891,31565,43821,17938,80619,74087,53454,13476,22310,25816,70972,37094,90798,50282,84826,55949,38306,63281,85339,45853,93235,77388,32793,88135,87135,48194,87875,54074,21482,35807,79279,45148,96749,89985,55257,70228,87263,31491,36440,79984,37859,72980,81299,67069,32513,16285,26601,41852,86429,88256,24356,25014,59124,98668,73892,81451,55492,48391,53894,12700,73417,39442,30675,58768,38544,96031,82434,51213,91992,60596,81734,25654,60901,49745,11059,60502,43251,68202,77540,39721,69197,86970,21333,57816,31757,53808,36546,60741,31973,27328,41548,85364,45848,48758,37417,83480,89260,99431,42838,37604,79024,17279,84145,96490,94211,61288,81994,60939,91645,67817,39556,96135,83490,17400,62397,63179,48167,13562,38068,69108,38662,49681,31402,10137,71885,38720,47817,58650,91554,10660,96287,63736,97037,30532,73679,24492,35496,72370,32591,30743,83775,33644,67451,40033,81587,89929,51085,38231,79768,45991,62837,99338,30302,64182,99787,87842,63830,99453,99449,37581,13628,51239,25994,92494,80152,42660,86977,50328,63552,34880,64313,51145,66221,24125,48730,56639,81221,63797,17312,30305,86370,42043,82380,62651,90010,70227,13227,76749,41211,70545,80678,96814,90386,36533,87429,39905,73471,31592,44782,38181,94823,56909,61346,25090,29678,90606,84232,13007,61316,68803,42663,84106,38748,75067,12539,12785,94429,69762,30900,82588,79751,19137,41004,49067,75865,13176,99639,67215,31996,22975,93106,39413,33955,11106,57566,58477,66344,52038,67143,74957,92200,27714,81576,40213,55730,65202,69924,44845,84108,21717,61153,89050,51484,94371,86848,98058,36347,20749,86205,84278,25012,47824,89538,66826,52920,66053,23766,82317,83670,55417,22774,17298,68987,53063,75839,91493,99950,15857,45257,45463,22933,47322,14678,69598,34437,58143,66670,89478,14778,95736,79063,25514,65681,67402,21308,76536,62824,53785,97374,74060,78272,47504,23593,76438,63048,98417,30504,12984,56399,51357,64647,13399,69045,45607,16031,50657,15430,83587,75640,42808,34012,52092,16737,49933,43572,45100,11920,46531,15625,75140,52623,20131,22902,89556,44875,89010,98452,86861,75424,12350,54513,97506,52515,24405,70736,57533,28163,31009,63286,35233,32521,52406,27250,67768,58739,70766,48543,32160,48705,22081,44155,25167,17573,44210,67868,98192,51214,76791,28072,27550,45418,96526,63227,50542,78120,30721,50187,15795,67121,20990,97085,70965,69247,96485,26843,85142,22878,56081,39250,29336,97405,84216,45723,98078,44570,87369,23314,58668,60474,54152,39459,11889,15251,71274,30677,38049,88836,79345,90787,70421,40146,77958,37276,43064,93450,88798,74431,62129,10392,62520,21915,16501,83510,80869,84962,54375,51488,45571,47872,95050,46826,94409,44684,24231,71557,66123,49006,74300,20987,39580,68038,47428,62746,79760,41968,75488,23845,20373,16694,27686,28627,47239,88545,72098,81163,37566,94747,39346,15995,39077,38929,99485,25412,19812,15347,71164,82214,99793,97305,34128,66440,78142,71989,86270,47785,34257,66655,25095,11431,30558,83965,28807,79501,10660,76788,66836,88823,18909,16919,16277,75585,73666,70122,61337,74313,61276,52359,79326,62269,58120,58615,91176,94012,72073,16848,98448,32190,10282,96137,58424,20283,44065,65875,59623,36148,55693,80822,11220,69758,39395,83665,13967,18960,85253,68077,55341,23526,88360,89073,59925,41047,81189,51134,16029,55084,49621,50105,28784,87874,85872,66205,90912,28496,95965,42912,90891,44593,35755,14625,19173,79068,27073,21714,52740,67377,97813,56164,35313,24440,99377,16562,67311,46104,32932,47924,22112,97359,32308,15636,41176,75345,67708,37898,84937,63775,12842,90085,93585,75472,65382,58478,28325,71256,68894,51105,83314,19013,91585,47585,61846,84261,20097,67258,29347,74454,19349,13237,76500,22266,52335,19125,40989,56649,67987,21414,60955,45349,74230,58047,73079,30982,12387,84617,90272,60809,91542,71632,76717,81951,56209,32210,95515,26784,64997,69719,53164,82841,30859,31187,67122,93673,10514,30197,45201,27191,31686,53866,80020,84065,56030,44041,84716,29027,95337,77065,53350,71511,47513,89147,94839,37743,38128,29570,67188,47672,59634,30138,22683,12895,84066,83038,83434,10082,56231,24385,48944,56311,83095,97485,22037,56802,48194,91110,64553,53838,53138,90988,65970,11799,37208,42657,79446,69384,39364,59409,45147,11615,81346,28993,17911,59153,74587,51925,11780,41681,32595,47671,84281,22021,60736,62417,16782,40470,97895,10852,26978,28917,84820,66477,57181,46356,41442,79341,62147,25152,55605,20534,59716,68476,41444,36463,48864,26088,94147,64715,37800,87817,29563,74655,47424,60843,24612,43830,22001,28104,20499,24582,61486,71933,26514,90265,43960,48230,49771,84796,55789,15016,22069,51862,81680,75421,15398,17731,90086,43458,96739,40330,97850,39210,19479,37301,19462,16171,94841,96277,31924,38006,57947,54261,43524,43480,40456,66748,72581,49996,52535,97830,36698,90536,79949,38731,83483,37601,50864,88525,59318,25779,92214,58764,86265,68943,76915,23996,33829,42523,51635,24227,26408,12972,47686,46955,36847,85610,47961,12811,68405,23621,11821,87443,28948,85936,93187,43495,87040,34688,92119,81247,82029,91937,99405,51023,44242,50929,57358,74009,16947,44468,93672,93581,82565,24690,91555,37843,25095,25709,89836,21776,32700,19881,71372,96883,36290,52629,98866,10513,38986,32825,47419,54613,82246,56252,10422,42951,48774,70948,33273,97910,34993,25973,17363,87920,98082,41190,36784,67109,66358,51883,34077,97388,86066,25068,47588,89457,40207,65215,26090,59122,73403,57142,89942,36975,46337,70866,50617,45480,42301,56569,48268,38391,63009,39319,73360,53465,29383,87882,54347,38799,45726,26810,48350,75498,39739,47015,41945,74463,73928,37287,54268,84373,66269,87979,21372,90212,85053,38253,82414,26611,58522,58543,43858,52738,50330,44085,65739,88681,43571,97057,50820,92059,48075,78670,14521,83808,18603,84258,20159,78874,54161,48757,23037,55112,59306,77760,83172,21796,13034,74104,87621,13991,57863,40139,63710,96111,57185,56953,30794,78497,41369,57498,23639,57337,94005,94236,56779,30776,60915,82699,18521,68084,54180,90971,57300,83467,35852,73463,66570,24983,27628,38043,95960,35205,13993,38021,30746,31969,21541,98696,27977,18063,12058,25985,18382,17759,30866,50263,29545,38167,32642,90900,63807,29563,43056,85550,50164,49986,82764,94319,19166,97693,80910,21323,83885,41109,83885,10659,40922,31298,86437,16021,93844,36567,67729,55604,48495,25512,96887,65254,15239,96055,89459,54683,90352,31376,49755,98059,39920,18219,33003,71571,96091,90190,98699,24182,53275,97594,30256,40385,24044,68265,56083,98714,28109,47310,33410,80657,34155,36478,17918,86511,92580,70880,51375,39514,19532,63099,80555,34713,79889,94239,45747,19766,43199,25284,79282,92228,57862,87737,34150,85537,15286,80592,97434,45275,57905,88167,48352,80857,90017,81223,90068,94881,19132,52109,54875,57876,72830,57126,29746,64144,62200,39254,69597,93533,53152,58250,59010,32682,23439,50298,51809,83666,56545,30003,44853,26699,30402,93829,43954,37789,29338,37669,68430,56481,82053,38884,11120,25570,61659,82330,24314,58111,38709,70438,94048,65656,38103,40342,37485,76148,31694,65864,92424,33868,44712,17977,36745,66489,75532,14063,85591,68797,52151,96064,50538,13477,49054,31500,98259,10251,36923,69340,23481,82556,85821,36386,58031,75105,56783,65660,31207,78396,13405,21551,12964,30722,69730,98499,21963,26514,24206,68921,72531,74522,48555,23435,62388,24659,48633,47575,50205,72277,77059,20465,82416,49343,90315,91102,19758,33657,82670,20495,41564,46947,94362,85712,34966,69001,99337,51004,93448,72419,62365,44261,43055,55933,72299,37758,73939,62112,97986,61838,89532,13853,91702,34963,98081,65058,94256,88905,78935,58108,51345,89702,90638,26721,37551,52140,99442,59325,33414,25224,42474,45414,88018,76469,12007,27063,59926,68985,22549,34858,21736,41206,82621,66545,52233,15552,85308,98509,68711,85445,55370,11356,29927,86364,61343,87783,54339,80790,51286,79957,68331,63495,77810,47622,18231,88464,67779,80399,56936,25864,59465,66415,58142,57886,89608,47938,43157,83141,37303,59685,89433,17323,44198,30452,89664,85366,47693,80338,67072,42089,84967,50410,89287,51388,98061,11354,93854,39963,12626,44881,91410,25414,61450,92958,69737,23102,12320,93839,18763,78022,29434,63747,56939,37308,93065,53534,76283,16559,47329,80605,61098,73709,12905,40131,63522,90693,32075,33703,94857,23413,35923,65514,40104,70766,59068,48281,41183,63303,87521,32412,39738,27505,16232,18867,98724,57087,78669,15638,24937,94508,19900,69115,83915,32229,47076,38236,14107,35730,26284,46534,86012,77227,52294,99124,79281,12491,82250,68346,35437,40620,20080,89860,87711,57087,41656,67950,80572,91764,76491,88973,96888,88454,59393,29922,28883,76757,79158,83085,12436,29793,55070,69376,18320,86096,86370,53365,13624,74776,64759,19838,48462,35391,60293,83361,35691,62856,78433,70875,63954,84297,20216,14021,18651,44256,69583,77889,85645,59286,22784,79185,98256,32344,96296,60204,75247,52826,32494,87772,28937,27177,10686,94997,92188,21924,74936,52373,35385,14362,47052,50569,28881,37512,65904,75857,66766,56195,71452,73464,85816,43963,25143,80900,86327,69684,85463,47386,64889,69323,91419,38017,54870,55424,87069,67777,29515,72095,58373,17049,63232,23731,12981,39221,47441,98184,75042,81974,43132,39876,20615,61704,52508,64604,93435,12627,84957,84384,72688,85829,84559,67603,49339,27031,39850,84971,11975,37688,59447,95267,57500,37520,41368,20212,57263,14969,97286,80006,11276,71860,32880,35852,78443,18047,29373,25228,60025,25577,12028,54724,91105,16704,98031,30088,67993,77139,18770,29020,23264,99077,52902,37260,51533,61520,40096,62922,35930,64546,95719,28592,33036,49896,29557,84143,65485,30537,93275,36510,65490,95596,89666,88295,91264,27605,49267,59621,51153,20375,47002,82901,39991,81618,50450,19085,76326,53710,93434,66181,15502,10276,32644,15917,50928,12774,57152,90740,59624,67313,31939,82882,61573,99750,19977,94445,85327,66138,82314,52475,29277,84960,26757,90648,56128,88900,81991,93104,84735,15278,59075,90244,56965,91354,91276,98513,27462,87162,19752,38409,73747,18025,17206,44151,74424,75656,21795,73500,26537,37833,75418,99170,27100,18044,50498,72372,89356,42614,30008,65554,35517,77882,16716,92190,16871,52728,29022,67554,44880,42441,94375,98277,93168,20414,80423,40927,45258,44710,65903,41155,24387,38641,78013,63628,38118,60110,67554,56705,12752,90611,95665,71070,34436,95229,51740,51631,23024,70514,85334,84471,25895,64729,47725,87742,96007,36088,91882,16301,82019,97109,61055,58977,15367,65222,26427,13215,40385,34060,36031,92851,38256,15160,10569,81848,45021,49729,54588,74024,84966,89628,56515,38675,72518,59293,27139,47777,89173,68409,24489,35373,17668,84991,50081,34115,48952,13128,93367,74395,22131,15359,40011,48855,20462,78020,42452,38190,81168,95683,13874,69310,97436,91289,53064,97490,29750,21783,99018,71130,63042,70073,78092,96188,96127,38050,10900,82054,95108,54377,76753,10314,86614,53204,36589,33846,12014,60024,16048,28910,81239,58991,44759,94606,33321,12941,63611,49855,68547,38798,48944,59679,56209,16228,93384,68343,54170,91908,37193,27691,72042,24057,75778,13062,65006,12728,24514,77662,71480,63297,32567,33867,20904,17733,84044,94235,67911,86069,34480,24622,45979,83517,42893,27334,65642,27580,28975,69936,51780,54718,52999,72094,35054,96546,54334,43042,76678,51704,73901,73626,50006,31960,20543,71484,67252,52056,45200,44776,72547,26923,85667,90399,55142,77724,69002,22774,86447,49583,97522,69324,59450,26566,14918,13254,95015,19016,86283,14450,52192,58873,52664,87964,49625,47311,84028,32302,32074,56002,77723,38924,61285,30749,60316,11278,56117,45580,63778,69357,78005,97169,40147,85468,61045,34061,86998,18310,72854,39625,28109,44400,90576,77516,84343,22614,48635,44331,82249,99585,70462,68658,89165,93399,12545,22376,56456,15511,88707,88656,96320,74766,86271,39871,92763,71014,43281,45715,82151,32481,99550,32183,77506,54413,67339,44444,84778,19680,41309,85509,75718,81241,34445,30204,40362,97343,96854,69341,43667,66813,19598,94031,19090,64275,52671,45235,91834,73139,57499,63989,88707,47210,33337,32601,64670,46408,97111,88218,84575,51990,94326,56873,69706,14322,88099,78630,74234,28905,79606,61681,48600,58322,56579,55531,80487,79018,45003,19873,16136,98617,31881,27571,23093,29372,78181,39345,42474,17853,83065,83785,14933,42749,29663,51908,67965,98971,42534,88591,47517,23497,89715,91153,25388,13851,35327,97476,60071,89676,88326,94756,94349,56137,65664,39961,38806,54924,52181,38618,68290,26039,98806,13439,55089,57419,85364,10927,79185,67781,93539,46511,49709,48248,45171,21049,35245,67026,36840,73333,23796,11491,36371,84862,67670,82954,53058,81427,65764,78331,89669,45007,13791,24940,52887,10708,14182,61511,85632,27805,22992,82203,16306,82083,21930,72053,37583,15369,63035,92187,24187,29773,38971,86504,62333,79101,51502,12634,44560,25463,84535,80882,80927,42921,49200,65566,35384,18620,69297,29994,35016,92905,32644,17791,38604,11664,64278,84252,59437,96680,20425,84696,53256,91571,52747,88211,46957,44052,64281,21507,27556,53439,44143,62023,47229,84369,33323,98081,36173,16952,38728,94124,57301,16832,21872,98892,37149,57059,17785,38097,28481,43511,53463,57391,41800,46637,29703,81554,17432,80189,74779,86668,99869,83160,16986,31228,15879,35294,69134,48039,82304,14214,71081,94440,14547,90381,94525,79073,89300,91693,28862,71443,25326,18325,25666,86437,12645,69634,58236,21158,48626,60458,18196,66953,55857,58711,52935,83950,35660,25368,79113,40193,33993,16436,14026,70755,57263,56296,14062,56596,19178,78801,27879,21750,38585,69700,39151,23336,63135,64656,30647,16629,19709,16740,38827,84794,81954,44948,35101,91638,73978,43322,81557,39139,78552,99284,33876,26507,74585,82156,28926,94060,87385,15298,89613,55922,85832,80472,38771,59768,71617,61784,76664,87700,46287,29836,57439,59235,76361,30231,32191,44122,71782,93781,89454,89987,89452,40560,44690,99178,44052,19050,87890,15438,74270,30627,43929,51354,89915,68801,90967,21758,81781,43188,21562,94409,31249,17314,20295,40752,37603,74029,34525,94524,38176,30712,69743,83442,65647,48317,55962,82484,46315,53250,27946,72967,68046,92676,48414,23351,57706,31304,91805,89328,15601,83138,38009,10801,24460,73447,60872,64863,36249,77471,31786,87918,24814,91585,31298,82902,77067,11634,16931,84826,99127,76251,43424,26035,65300,25236,88650,66044,97003,92162,17600,69717,29339,14966,64225,46583,59660,94153,37055,48032,17975,83972,50840,51246,63790,55655,13003,47692,80473,92653,12746,82874,11567,81402,63658,82103,49571,12360,15611,62324,28190,24161,29470,46721,49777,39176,85042,53105,94091,55345,49805,83123,59535,62858,53646,68988,48174,50875,65305,78435,24849,99001,98831,45630,14587,81085,90115,83434,77999,71418,81196,75502,31209,84343,46013,53501,34122,54343,24772,23187,40345,18234,33718,47652,68397,97258,19629,66682,25472,33710,78556,29680,39060,65018,74526,61745,33386,78051,21599,53054,53012,27346,43505,22114,75637,38573,80269,60854,61121,10206,98671,39470,47999,46434,96871,24266,75412,13095,53556,45250,23287,68817,84790,49355,87929,82872,95278,67510,63197,91607,20593,43219,24340,75210,61277,43972,53830,17048,59005,46229,66504,66959,87751,90657,11830,73409,13321,37400,43596,93623,96089,68933,74300,91760,16406,64618,17386,13572,84774,31567,61271,37651,16734,52759,41422,98215,36960,66253,15665,64608,49061,80142,57123,26990,44101,11293,65408,45352,29933,41386,53576,97365,62773,30981,68485,96009,55807,41462,58063,17140,79333,33752,29099,50689,36516,30909,98167,50257,67727,68277,12537,67964,66061,19530,32862,67088,36328,67976,65297,22511,64237,90083,20930,57732,68763,88619,40515,67228,93239,24246,78872,17536,66049,72486,94267,86373,94990,36075,22994,10530,62326,56333,97643,69705,84638,95710,72222,13182,81140,23243,59659,70645,85099,74064,79164,10538,56815,58007,10083,26215,52225,32289,63734,82520,88839,91195,93191,94632,17131,90363,81978,11843,50189,33862,51156,19183,67876,29085,20035,28252,40344,46827,72663,74564,31223,93085,80176,53548,91570,81694,72044,19441,87372,69321,32450,65666,15312,58927,78620,47192,69533,87237,44964,22960,32338,46083,30063,36241,35056,57729,32921,30929,49690,31695,93088,30388,74821,91110,71892,61697,64894,26878,85615,51712,32581,34869,43307,43886,13291,59160,18124,46961,75267,61645,33107,93806,58224,98692,68962,40108,70016,36076,25105,33029,81702,97607,65510,59026,27550,31554,11833,52791,64459,87084,86263,37528,98789,40420,41424,88337,44936,32287,76858,95122,98338,22744,42437,97544,26765,44069,86647,50191,37917,93182,32821,90359,51353,52089,93855,55899,16645,57617,27428,42451,77889,43897,91809,74560,23084,60364,25571,68303,55395,79704,56314,25629,25145,15935,96397,86412,86821,68259,86827,19502,99453,38094,94312,54274,22900,88744,83565,16409,18189,96801,30432,38016,32125,51006,99550,55118,62153,47257,68516,51825,82280,76362,93729,84870,48301,79917,49824,11323,82496,18903,33870,55868,70797,75523,49273,13026,20170,18825,86988,30507,41998,80899,35176,94496,59909,73760,65798,56216,72074,27731,57580,35694,46694,10308,46921,89016,27779,64640,11156,90469,11154,48983,93667,19086,96112,12617,42148,60073,24289,95634,43025,10778,47733,99018,10226,74248,51181,43000,81620,46551,13532,16325,65116,67440,29791,58435,92055,67543,40860,71497,93981,66673,73452,40294,48213,27044,49876,80540,81610,77310,96602,96566,87061,57090,27571,62206,88814,25483,26714,93284,44230,62993,60982,85099,45440,44700,31400,31649,61521,29659,95202,97890,32394,50443,53438,19355,47456,37380,39413,13592,67088,73829,79647,72019,93514,32063,59358,18907,16963,23544,14234,98811,13374,10960,54337,31615,85064,75598,97467,78191,62551,54105,55539,12030,34797,51753,80223,79613,78215,64313,37803,96455,63393,96033,24264,77566,49827,47210,19389,64182,34983,12189,45397,74762,47054,66343,49783,61140,61320,68023,99272,14067,88441,43130,46293,65503,10608,79520,10857,64054,32505,24432,17966,32327,29990,38900,61691,84572,19121,52142,43969,96583,94623,84917,75415,55077,50394,53048,37835,56289,85717,16663,96650,73771,56545,31514,37945,44872,16105,78463,23107,31545,50371,99639,67429,83716,83999,60037,37254,15495,60909,69328,48288,57837,91481,44762,92127,95586,99793,41518,20198,26714,60553,52368,11385,33144,25680,31177,14297,73446,88021,39088,81994,14293,18558,23810,96296,76742,53191,58053,34739,39508,30608,60869,12884,15877,33311,83555,32747,28643,66785,45752,29484,36432,24208,58665,33025,93432,58990,38804,16168,56839,75293,71517,97344,51991,62376,83355,76312,27834,67077,35918,28510,66445,84303,38573,60151,94822,45641,89164,65552,62547,17087,69908,10947,50835,26026,78398,52253,69292,32481,17114,66646,28478,26130,58845,28853,53236,78847,71215,99035,60085,86772,36596,70080,61300,80750,49182,25492,92901,84024,52002,35921,98086,47012,80929,86157,11219,61402,71054,73354,88065,20141,56710,27177,97897,96812,43475,54200,64068,80684,78840,48032,81852,47487,17507,76446,88604,57830,93804,91763,31969,79523,14192,47940,89445,66194,12917,54962,76977,98088,76750,36511,62798,56702,51203,90269,11624,96697,74375,99391,60055,66292,57017,85965,52876,40545,43393,64633,68670,28753,51021,82543,10455,49617,78091,50143,68123,39553,78841,10013,56533,64627,74736,36675,44839,25779,26734,33616,20826,34421,93723,71021,87162,81888,93030,33457,54326,76186,51410,96921,81279,97027,24965,32640,42214,47029,81111,13745,30367,40371,82807,97503,57382,37995,78366,55465,52780,39361,47397,54076,46002,29771,10343,11523,54005,91628,78886,34975,22770,57929,75486,16497,80065,22975,30647,82482,42173,95455,53831,59473,36685,35092,84185,54856,43644,64671,17229,52966,26528,88527,66595,49372,26030,79497,75557,68261,76113,24666,36580,43187,70941,77907,90828,10122,86124,97708,63658,42129,49425,92883,85744,16889,28215,47662,59768,79777,35480,80485,82765,35106,54678,70247,95489,78947,23760,52425,81857,55174,21461,51969,84323,75599,30248,57084,84123,30541,68749,57223,73967,76996,12464,67991,33217,59281,60203,55401,71309,10514,21786,50385,30727,48157,39612,85397,21763,94389,73481,85584,68370,66465,49548,26356,94648,84184,99518,70499,65646,84451,76677,67673,56061,20922,21659,27823,94825,33128,40834,73304,79033,61061,49360,87442,61238,24528,32542,94791,40593,60897,71370,17612,66457,29020,86370,37973,86165,28039,28493,66537,63954,11330,22008,73769,42161,45313,95936,83104,48546,42963,22132,86275,84293,83273,13946,77724,73864,34352,65902,50435,78765,26377,32311,70925,95104,29759,62748,61643,78039,91696,90346,49421,25248,86810,59031,13219,22582,75328,94906,84270,49871,39120,37026,43842,13820,14889,11725,44811,62541,52077,60107,74738,77542,69579,22745,81711,52333,80565,58199,76410,76128,36337,14283,37289,36596,70445,71242,86143,31477,66807,84387,40382,20791,78538,21745,53376,64314,15528,79555,45784,92369,71199,69678,76927,66224,30168,37113,32911,56135,98384,39151,41610,18785,13889,91523,42399,51570,80406,74825,11936,58987,19998,76084,48496,75627,92122,82551,38822,43454,85754,77031,82187,76669,25137,40940,98168,18286,72683,35517,98090,37567,28738,99543,36730,38904,85098,73776,37350,18642,17657,84041,35885,37517,90465,38088,37313,99513,92564,27404,36309,55672,32543,73873,22639,40499,52642,86139,80738,16017,47966,26042,71657,41271,96338,54603,52732,24945,36380,77327,55998,17777,12065,80570,93450,58734,94106,21704,44909,66720,64210,69585,21477,13398,95991,11917,12931,38956,42489,30103,59882,68206,64190,94122,76085,77001,92819,34994,54370,67137,29516,44523,67033,66937,25297,65966,90038,24877,22421,91587,75890,71507,94481,96993,23804,43349,90346,24206,60992,15938,92695,27375,29531,62355,24339,77026,69585,56536,69960,32698,72667,44559,26150,90111,72052,97428,68037,75930,56335,37212,77725,78307,34927,11574,89141,28206,48661,55731,73543,33757,61751,38937,32399,28478,58658,46713,82417,48512,23123,78286,78879,32395,19312,59302,30213,82055,73681,46600,52679,24540,94581,55581,21082,13182,98536,23745,78241,90837,63127,74722,11832,38496,93217,69897,53793,60952,60633,23907,78889,90659,51899,41165,66629,45857,66036,53635,92572,87918,36200,71745,15704,13958,20967,98346,69775,10715,95304,77474,97952,48358,41206,63566,22867,83655,26195,33002,64054,78198,16935,43813,83501,90682,26188,61821,11737,38826,81173,40234,89377,75597,59385,37801,40219,10120,99271,86397,50056,42273,89272,47761,11478,51024,64192,36516,73703,69715,36208,81003,63814,46184,85669,18349,61694,88769,90611,64136,15731,68986,85860,50177,18329,61116,45148,31602,86605,42331,64136,24290,87409,30384,26234,14620,86944,16507,12706,41607,60401,96457,36278,71609,40997,77108,83907,38849,38871,22408,98308,17082,65136,25096,43943,23220,25626,77382,87384,20405,81782,93336,53509,38580,46115,19412,16384,63924,62032,40237,85662,81898,42630,52626,52910,15945,25305,83180,16815,70862,95361,64510,14231,59777,54936,88845,99025,27922,49999,71611,29963,76907,26990,87663,75430,13414,71502,10474,98460,59508,62123,21151,42155,20139,86285,72903,10087,67412,10489,15066,84127,97483,40772,95630,87857,84180,77494,64663,12819,10785,24693,28994,20073,49693,67374,84171,19012,12547,62800,98446,51329,51076,63401,33876,38834,70257,31898,49243,23848,74718,82476,10892,82746,16595,25413,66605,26660,26111,77857,85793,86964,19810,66797,73023,67096,58944,72395,31254,57221,55312,42845,36751,65536,58533,81038,46831,50115,52033,72068,74547,22905,61275,54942,68831,48441,86489,75827,73411,47760,99038,96220,59338,28040,17221,48018,95325,71476,48916,17222,45232,15341,93881,65132,31697,73828,79497,77565,69242,46872,62243,92095,93414,51175,39350,84940,61674,93095,86996,63686,11905,95270,26352,75743,48217,72855,63677,51606,96150,48350,99685,82207,29287,23132,14585,84058,96624,16499,22828,73111,75157,19018,48126,57200,89607,45892,40342,92314,44087,87096,15692,69217,57738,25688,14812,21875,25900,44081,75990,33226,71668,62147,78089,10751,50498,46284,50707,86790,72200,20019,40579,80311,33827,96144,81269,46540,15174,98510,89066,75188,78590,90651,82732,81043,34480,65990,97284,27159,75919,89243,93049,10961,68364,15999,46104,89171,65431,53187,41555,34971,38605,46209,13367,85261,25802,37121,85837,63429,55580,68600,94384,93528,88479,47562,58981,50734,57726,34116,78832,45344,21548,54818,79348,13192,51315,45836,18592,65734,54906,85019,15224,97974,68616,99094,80671,13880,54052,92512,18802,85260,95277,57866,31293,84015,68017,88447,53069,74527,56226,79822,99851,76884,83768,82052,79829,22439,10139,12536,40295,69582,30548,69453,77851,12551,84248,84110,10745,81529,12447,84499,49507,96980,35194,94930,39841,55850,46778,18501,81093,77591,65509,45782,26169,43672,33950,89163,19123,12364,79846,21517,27267,44750,98911,69936,24939,53240,24069,12306,36798,27898,57847,99221,32601,80826,97187,89737,30286,94274,53261,69687,44331,31225,47405,32880,79827,67461,76329,99607,73766,16527,48120,10031,76350,85941,58130,29892,47531,65824,78816,48391,58130,16150,26734,99719,40844,30204,42409,69013,15188,52714,60072,23347,26533,99625,70423,35147,93997,29158,25677,42181,77159,57497,85955,10290,26558,68593,66838,57930,91682,73857,81530,25567,75611,44353,36924,47652,87149,80455,73170,75255,80061,46512,31786,57693,18357,16333,86065,22316,98885,45323,13199,36403,30220,62039,37646,12730,47144,75109,92891,35035,33791,53489,48011,66419,60262,58669,74364,24191,35661,47061,40407,75091,59606,98760,15617,99038,78995,88975,43574,45816,52083,60545,95563,97250,26618,37532,34888,87900,15976,45636,48137,59966,27334,25064,25964,56700,57590,66553,97828,13171,55103,91188,80156,47730,66311,65379,65610,48795,75380,67003,22349,89017,70892,89225,51444,92869,13964,46704,12295,75031,63541,86513,17833,96475,21036,23915,60189,29488,20055,78555,26095,23393,22320,77066,44871,27687,54684,89426,52927,69844,22924,58161,15045,74467,28727,34929,61931,89580,36899,64285,47233,27531,16362,78213,14357,30486,63268,26104,73401,87641,81165,66066,95092,69803,78673,22122,16855,57953,19974,25069,51771,58089,35126,95256,63815,67073,51911,72849,49639,13558,20358,53493,44390,79008,48336,20397,23190,76266,15466,93474,63125,82677,96322,62638,66485,99163,80675,85916,20685,65584,28545,72690,20698,70887,60738,36203,44812,42049,15605,18406,24774,16227,62403,97801,63481,95958,49165,84799,98301,84287,49634,55180,94117,45454,54045,93576,31955,33730,55208,26117,60457,45687,73033,43052,62674,28911,34684,19162,44691,34297,84253,48219,76968,19496,80164,37074,10247,45746,65636,59161,85749,31005,41718,31816,54957,59907,93917,31730,68017,47655,20706,88910,85422,44903,89887,91736,62980,19564,38437,64834,32609,42766,90436,37372,40853,41930,58919,50237,95377,34504,67384,49793,28741,50492,54480,65372,28494,12340,65074,63663,17210,50341,67201,47042,34727,39606,36877,44524,34136,85545,69384,72723,74437,26434,13499,51608,92127,35723,48546,21550,27041,66519,68507,11074,94090,45048,59674,68171,13430,74798,30848,30317,37127,33049,47074,81954,48105,68918,99496,41112,41194,68498,69825,18551,25441,82861,30124,75907,92026,68086,58773,56794,19361,68980,56784,70240,70196,48461,36393,28754,36039,54900,89579,60584,38703,77049,57181,82576,94777,96271,72492,66866,32088,81144,77482,36445,77262,65443,83878,41522,59763,27602,68249,37370,16470,29050,43394,92113,29214,86292,41964,35391,87204,11922,18767,19418,62537,76319,27997,87005,81857,43939,97093,83195,87225,32584,34583,46984,98399,68924,26781,10466,51934,17420,37263,18590,92843,92866,22147,83901,52986,12964,18191,45218,41377,47658,13709,68719,31331,50230,62041,88788,83370,93445,88679,34973,63619,90834,95192,28431,84941,75456,88573,67332,88543,34558,23149,22178,19214,15049,35134,42288,32346,34954,23960,21991,17554,16540,66756,28296,17744,82144,82421,34249,66788,34719,40605,45171,45417,94347,66804,22191,96495,32616,42299,14200,86009,78843,93282,41840,33036,89859,15084,72697,12365,33404,69483,77300,48606,11710,42240,82584,41779,35419,71438,37473,58494,21136,88752,67977,42095,82298,40379,45326,42090,72755,80426,87610,54504,16254,57768,15271,70530,66261,37227,17015,26109,57586,65273,73153,97224,24943,66155,90777,29838,25389,82828,28058,44028,53563,58731,12511,38012,71565,49521,25132,66624,21455,10315,24919,43287,67488,29705,23701,34125,89540,57152,53361,66705,48634,34430,54589,25300,68018,11508,41389,58900,87886,66706,79769,51685,56952,19428,12336,68593,44514,50757,13714,58333,84391,66198,57486,44843,53209,16844,27507,55189,53109,32420,33618,48920,67607,29260,35272,38697,92007,12573,23508,15785,87218,92764,11366,84132,33268,23396,34154,16926,76450,21728,84780,16461,73730,77838,56558,77709,96805,32105,51447,60865,41936,74699,39527,63516,58577,72209,88178,39705,44845,23707,26953,50391,10156,68176,66195,81110,77869,80507,43004,54085,40147,19947,66623,86672,62091,40514,81241,79760,25857,53617,64779,67787,16398,86760,24777,28053,50421,18318,10047,86826,27646,18302,19140,23937,87331,60619,30935,76864,67327,52076,44467,36128,96230,98298,87211,47982,86495,68743,43570,66899,99899,73439,57643,19915,11902,62496,19640,71967,75541,50574,62050,17442,49879,77597,65766,71088,35023,99111,41970,63956,94172,93490,96163,40658,29088,22062,14160,89672,42180,56495,24332,74171,88036,83008,64957,41991,33317,18257,33610,40742,92072,81480,36344,67657,42086,70528,77465,25196,84785,11383,66755,37572,68529,75336,63719,71897,25304,80681,88128,58270,14957,64395,85337,89588,95077,61385,69039,87346,56403,76431,32627,93944,48377,27063,44275,60719,64059,16674,91756,87770,61866,59672,78325,64739,72619,29672,62442,36883,26340,67083,28269,19845,98320,57229,89288,60269,70258,80394,53234,68488,35570,72285,12725,33368,59389,45131,54030,14561,84621,89241,77456,20120,87033,40698,14636,93438,22000,56492,92442,22420,38303,51869,56869,90734,21645,11847,64548,79182,55801,53177,70352,56345,32466,15828,41918,60385,30179,24375,23988,63957,83420,75126,63389,91452,58648,87672,21565,93516,86048,42868,80336,63481,76448,58282,28541,83948,16508,27391,10077,39168,41205,31870,50818,92440,74078,31585,64523,28264,23137,76231,36240,37557,34458,99392,20016,12326,35505,17694,25064,87151,42861,86674,32088,11540,46486,85996,24983,48604,24092,23906,10779,55319,89517,11775,48536,31455,53648,70319,10881,55176,36443,29193,92172,33007,85506,78540,96020,88355,86384,48263,13822,88271,90348,67994,63178,54073,33427,26489,75483,94815,86578,77013,67964,95945,11757,89480,30091,52766,59569,57678,91487,24404,86641,24607,34264,84729,15113,49267,85585,83170,74435,23640,62829,40635,20815,41607,62066,43352,81910,95470,27010,25272,35305,89159,96666,41244,69430,95038,89324,89382,70690,67990,93268,60974,42641,34682,37900,68167,26966,16243,76106,86597,20662,98457,55915,26383,50497,99756,50658,35245,10536,91591,22073,21647,41627,98259,15711,95532,57195,51368,73171,50249,95670,68724,46694,32984,36031,31327,88170,90052,93688,98356,42885,46639,36297,21129,27239,69370,97855,62691,48732,98757,51815,89095,54509,94078,88743,59528,83859,95672,47278,36346,86875,42552,77702,73923,33398,10791,40843,10768,55986,41401,58582,47121,96630,13052,29821,10605,78095,38333,31203,94437,69478,97713,25665,55219,64642,49144,61939,95997,14641,46975,81410,35264,75735,81327,40258,27177,37352,42085,51612,19358,87314,29436,64268,46232,11221,76450,42522,16630,80093,77687,78390,96006,87247,39151,32442,75086,87653,52783,10897,71503,78905,78725,65562,94960,23869,64346,60264,88662,53578,52133,96765,93818,66454,17129,53919,95649,48202,79601,30369,46321,66120,38765,97229,91822,14442,72192,19513,14020,84355,77171,30412,64991,74685,32732,65369,65943,27925,67092,63865,53347,15352,91483,31150,56343,40791,77394,73127,36619,39597,66911,48660,33121,58208,64260,18656,88408,96781,82066,71596,73542,63616,38706,37950,88946,35528,75301,36428,75868,86250,10159,85767,64733,12945,91732,67644,31453,82326,23724,93597,69304,48667,57906,50843,62044,45852,61531,72937,44770,30102,27472,79167,71341,77027,21797,32748,85215,98112,68499,51756,66986,62595,25536,93744,50342,79346,41364,78310,68701,42776,97184,33588,38695,26276,74835,90444,71968,19495,91158,98812,31732,69055,85726,58296,69827,32164,64318,68411,33685,48885,41269,74395,57137,51694,48768,58676,71439,99065,52840,75217,22345,36189,10515,22899,80146,84548,83580,65014,17348,24307,43077,23849,40069,38214,90218,40802,29158,15479,28209,39739,81062,54662,61375,33830,95015,67510,24416,78139,57090,49831,26821,44902,91267,45000,49994,28332,56110,17572,69830,46072,21988,56393,57049,65013,61004,55596,89390,86200,28845,28546,44820,26689,28987,17294,62684,16033,57112,67870,31406,69679,48480,13339,78411,20253,99287,62804,69766,92824,90274,50040,79810,79945,13209,73649,18338,34110,78760,51173,41257,41674,91042,17122,26003,29687,50063,84468,50121,44460,27702,80869,36538,24740,88572,24220,74906,39365,73459,65408,42204,88744,74741,27164,58422,19331,64141,36738,70632,98600,91279,94912,85786,99522,11753,26647,91432,46194,15767,84605,98504,13408,71711,74809,71395,74617,42030,82461,41344,28942,96231,32241,72823,10420,27976,82438,72604,50696,89346,77229,74860,62008,78799,46593,84908,74507,18965,99613,38402,48348,14902,60911,23827,42671,84605,53329,28249,22905,93547,64700,74546,99900,84304,13324,56175,28750,60008,14189,37097,60681,77803,17852,84989,84643,81953,73996,26488,87265,17217,14797,77422,84243,72859,66195,70385,85476,59967,84979,63711,37270,84876,17124,74704,92004,96694,83979,55076,34993,65212,56397,44296,36284,51706,99457,92099,64814,58706,84033,25063,85920,62962,55402,60198,71503,11331,49844,55717,17503,58410,99229,49932,31850,51153,16732,95121,40635,62885,70708,43749,39438,11893,81720,32111,43057,89131,28829,88587,68977,43339,33471,79325,33666,71706,13729,74378,59991,71515,72796,36204,88371,53089,93540,36929,14621,96520,57007,41051,91929,19675,43564,56638,70570,52311,79890,99905,40795,57003,62885,41061,32544,40572,78115,13210,79004,62448,19282,92418,46779,86322,79170,13809,32644,12637,19805,62220,82197,28079,89185,61915,38179,39070,14859,55544,25353,20110,42582,11621,73056,49617,44164,67176,12639,89765,74535,43238,55539,17383,93676,25248,36319,71266,69114,83383,34278,38599,18320,56345,98934,18508,62022,21580,42273,16274,61649,61334,90372,73189,82120,31080,84581,48748,39128,34284,39950,25362,70209,61363,10892,30202,83678,22026,84460,21703,11417,20497,16407,94671,43001,23239,58005,99146,91420,93047,28179,46027,74928,24711,45707,96582,62983,88419,67251,34010,33731,49847,63870,26268,32812,92833,44650,42508,45747,35198,29055,17429,82901,75118,86522,86562,58013,83265,70324,53262,23416,87519,97076,34866,44953,23248,82233,75688,23591,79826,46627,27770,55385,73445,21426,77772,82928,21686,62530,81262,74267,37670,11079,32240,66446,85516,12477,87658,37053,88736,37557,11930,41899,93979,68857,68876,76159,51394,29327,42470,29943,88736,69211,50955,15608,85892,28663,43979,26749,50065,10389,74454,19221,56651,40583,42626,37737,85043,29049,36076,38921,72143,11486,88937,74443,81971,78569,84499,71091,19835,23573,73847,69681,71261,94375,77055,93025,29928,19179,38625,68739,86913,18009,52621,76079,89530,93084,12642,36802,49957,49390,18838,41442,98901,70344,87519,83134,90955,99418,48994,26004,63027,56509,58292,89243,11080,88109,28277,97070,62279,10550,63676,22197,94159,14333,59973,59615,61438,88072,55762,54171,46062,38807,55413,95875,45502,78062,84522,74913,22713,76073,92329,97863,43620,30760,50551,85024,26762,15160,95430,22015,44914,76561,23809,16583,52413,78390,23383,12972,36603,98932,52671,35459,24733,23741,53157,61890,39462,39913,72565,48289,77917,58704,93155,83819,49887,14548,58499,57805,51202,27319,39263,24132,50482,81936,36191,23594,27406,85794,47902,27368,17510,18341,26422,55654,71851,48356,76098,62121,14479,60358,68516,17951,83819,59442,67676,66975,81600,96520,99474,49213,68102,99386,27518,59666,57732,97090,35442,37245,22925,93610,29608,48990,60466,91594,88488,67332,93968,85220,26072,68567,68624,68020,97464,37356,86761,13813,63375,51614,57100,26708,58571,17083,54516,79047,29402,75341,70956,82440,22705,76599,78942,86918,27993,98735,60746,16783,44548,57118,78898,78358,12791,20191,61219,97168,89061,57191,83502,76474,97962,13552,92437,26494,79342,33638,48414,23611,96332,90752,56263,80898,27030,96007,70511,45326,77081,24177,39150,17895,47651,85121,65236,29714,68212,96214,82681,20463,25278,33664,88617,32586,73171,57533,93197,75526,73614,86758,10651,24150,96372,71884,81772,58577,47493,72839,77489,14149,69016,79715,50103,60659,41304,74628,29397,42632,45496,11542,55491,32795,36660,23693,78241,92773,90158,47461,83817,89683,26190,86284,33013,94676,83301,61844,88989,32875,25386,88251,82249,77392,22898,78621,27283,66615,85641,84125,41853,89641,35900,23986,34701,30527,71091,13259,53808,36118,25897,27028,82564,85432,98554,12647,75402,52158,16797,98240,62735,43969,88171,31490,12489,76149,99496,94425,62747,86496,31440,28063,54658,96361,12467,93880,82866,75010,92959,33379,69091,75541,73544,63501,99862,38814,16405,63779,67968,99376,89684,45791,89089,99022,13758,94936,41254,62200,98977,52957,11679,59881,90904,36641,89272,38070,39561,94460,39410,60156,30574,45090,97343,58164,73280,23198,12797,92810,37994,50142,40838,53072,51835,13237,32654,32017,32370,80255,37812,72041,60798,19924,67619,55219,25556,32495,71553,95180,37409,58884,99050,57783,91323,99039,17526,45414,82491,72726,99131,62460,98707,19808,29056,76729,75010,94994,23074,89241,74292,36140,72744,36010,55826,10785,51481,76786,53951,46361,51765,86826,89086,68256,20803,91873,37152,90715,60318,49636,95857,29310,62958,72604,88779,95394,15886,22615,74176,91102,74915,29650,56211,18972,40979,68662,49186,58669,20537,32032,64048,23472,98243,63688,56774,24703,89993,88369,51565,41097,71676,99904,16877,70943,72150,32964,98991,12416,72876,19549,63046,92585,59845,25471,52238,58259,63495,13534,44534,81800,35189,52319,23185,43493,58104,48799,29890,72880,49282,12080,29822,30067,50540,93255,80052,60315,47772,34591,72755,85487,38181,27258,78567,89258,86273,62751,49455,83053,59354,30628,57115,52692,92624,46768,30539,25701,20326,17101,19979,23717,15041,53057,65771,59120,44186,71422,51207,74550,17983,61756,76357,87049,62238,52574,51285,50709,80965,69839,88151,49884,55736,96651,20235,79274,98456,36472,29129,62571,82265,43388,29901,43902,91692,18840,84402,94862,98047,59382,23030,31162,79366,77547,97245,86468,78843,17511,61819,74860,74412,85941,55963,17229,35679,68404,82663,72060,77241,32928,17977,83713,79186,31985,53129,48664,35328,52468,44211,56657,62012,55304,84990,39368,11088,10803,88241,90149,61795,70035,17084,22870,33681,76409,51317,67090,35342,10360,59962,56609,86326,79813,22342,25941,15826,40497,86009,69494,22639,41510,34190,45218,95618,69934,34944,73607,58344,45992,68105,79690,33967,45526,37996,98100,86822,80351,58479,83245,93272,68979,26662,76799,80499,23369,90217,30430,52730,40194,96169,16764,28788,46453,13774,66998,80377,91375,44104,32851,56685,37039,77365,68525,29383,44320,73910,88509,65425,72282,47840,69263,41787,57375,45912,19217,34459,16773,43092,11288,21731,13345,92069,66215,82771,25801,18254,51965,53862,40566,21147,36992,72855,90197,22692,49331,57449,42491,29434,60679,26367,53537,58195,84142,62755,27580,17971,36813,86984,58377,65983,35117,14273,49715,77863,53593,18925,44967,65331,64420,52702,89339,93781,48409,47405,51731,84722,51961,30902,51244,91067,94276,76768,36160,50579,13073,76707,36058,63287,35466,51640,78828,65736,68325,29491,29916,51266,45191,43400,91032,42478,45853,60674,14212,60018,67161,20980,37007,69520,27056,51675,84898,31111,77924,72850,20331,40291,57033,36919,60355,48097,99089,81344,78400,35406,63541,67719,48497,64079,29826,72212,26036,11945,12280,90994,11303,70971,68064,57708,33947,74018,44225,64784,10971,51705,42821,36053,94034,12740,94411,43629,10072,22278,92671,41571,13772,28258,85729,34894,49747,22299,12219,39734,40516,33814,88134,23213,58976,46082,32016,82218,21762,44466,45682,11238,78547,93765,69871,89941,38465,76153,11604,40913,21766,49917,45623,85783,69750,63077,57499,49373,29759,40746,45984,25539,99228,44484,25373,57853,24507,88831,14025,57431,52959,38114,81201,21981,28792,51805,83271,44949,90904,16656,48504,67804,50398,61797,92326,15013,79139,11737,33326,89437,36198,22111,48156,74394,33122,81611,95209,82645,83852,72905,85854,40620,34406,24117,26581,44747,65523,81476,61286,36870,10979,62804,60466,87265,99851,57658,19063,21076,84157,46319,28450,17810,35308,11098,27145,55913,97202,48822,34708,57048,64567,12948,25633,33482,34434,52641,23464,87237,78756,27157,57237,34745,92575,75557,86321,60770,20380,33928,74425,88843,80247,47713,96126,56050,95181,82107,48779,20360,28459,55455,83718,91346,57680,77514,97475,22589,77066,74350,55885,21752,45551,95036,19179,70099,40104,90200,10792,28809,66553,39750,23077,57084,31763,38801,70772,14941,15398,78067,93122,16470,90482,75161,79122,36730,39934,33248,13293,77865,30159,75219,82354,26933,54389,64448,85961,15308,48082,25062,53032,22119,63719,86221,99371,28626,33968,23842,11859,77826,66921,54210,24574,88512,12221,61574,94456,58911,36846,88441,27342,43450,32777,94754,57692,45600,33146,72209,34814,35744,19554,96297,86362,96722,41224,32356,60448,71324,18157,31014,82885,68617,44223,79728,92514,22390,54674,22562,34666,71780,57145,77796,42716,12798,99648,39137,52437,16412,52952,90959,73681,37326,74533,80231,75286,19164,49775,82506,67054,13376,69677,19924,68079,53738,28082,69128,48512,10245,12864,17814,32767,55896,22316,43200,57788,59649,86792,52902,48148,68321,77507,19912,58599,20038,40783,71812,69010,27733,44764,41366,12625,25447,88928,63482,28599,12392,79736,39286,98467,34132,88472,48200,43422,75869,82339,44602,84920,99282,59939,10014,18118,56876,68509,94955,52612,76196,94274,66905,76704,22951,78723,69007,31530,86286,53145,31153,75931,33909,94383,59511,45980,48949,56045,44641,53291,20941,60876,37838,34578,94035,78080,56608,57605,92475,27382,47762,46086,30025,88175,31975,44220,15903,65682,84299,63465,39906,55572,14555,60401,69088,92381,36534,23130,19424,68062,87508,35342,85998,25806,32242,45104,56540,58918,45651,55927,86334,14180,94667,77028,54497,28676,73980,40052,15982,61921,85938,82195,45363,98744,44179,12473,46193,83799,51921,47087,18814,36466,97484,75818,27472,18554,44233,77987,17604,93438,45130,40115,85583,57124,54249,29993,68947,89736,38924,17126,71344,56935,20069,78049,70134,16795,21756,88832,11230,14298,52363,36917,63439,93562,12752,50311,40352,59486,17249,83208,81218,17042,31791,64101,67627,68310,17687,88877,92138,10876,47159,46545,65358,33024,41597,81454,47097,53656,76869,20248,54060,44707,72034,39163,63701,30361,92214,71287,81456,47560,24898,47835,15844,90249,54880,96372,32206,84908,71063,23990,89295,31531,51303,97579,33311,95939,37886,51006,35513,72124,43584,37686,73114,50099,46116,66031,54173,56702,19748,30938,76008,97562,30594,39593,39990,39541,32350,95722,95056,97933,59575,77049,38735,74485,99305,10106,23208,70639,36738,60004,64107,58220,83583,20978,36094,45827,55007,13385,50176,31700,98602,90199,58657,17020,29346,11983,81203,72675,13434,31075,88988,62793,28196,25654,79590,24763,86628,73380,21133,71254,71016,24035,24136,89172,77973,20257,65284,55100,95753,21415,55540,27313,62360,27888,85130,39756,70701,95458,71133,52084,59053,38835,32327,51449,70133,62126,63555,81120,27828,21402,43425,38640,59652,82110,60229,40906,39919,75456,16963,67245,58595,55864,64832,48708,64145,66004,30119,93195,24960,34946,35749,27390,67159,67680,64963,97692,48471,15990,54409,62941,81860,56351,68365,13425,54407,96107,31666,95402,34289,94461,43286,24097,77278,99432,71989,67898,34633,76862,94416,10250,36458,20517,53440,61613,70408,95698,77703,80159,41064,51565,84146,40420,25803,44088,91094,13033,70436,22536,21119,55396,58634,72653,48029,77692,32171,25317,48389,71549,93582,39966,89520,35441,84212,35072,92703,65150,38420,17632,52174,32505,50304,67381,89599,39883,28774,71523,43089,54742,91324,11556,31795,71480,36981,70226,55804,19111,80762,25211,75207,65376,86410,56193,80553,84636,40486,84126,75337,46834,34522,68127,69029,22753,55514,62871,11609,49190,36158,24882,42808,24192,82194,69977,48715,21978,69861,47718,54174,93075,34211,72729,41650,32369,15870,70164,28861,72094,99701,77789,15759,85655,98391,98274,66651,30117,43042,38599,11478,89162,32772,60873,21733,84421,14757,36546,44379,33966,28308,13134,54527,79763,80737,17210,66757,48325,72704,11550,11674,69242,10422,45249,20593,16133,33327,53742,51830,15469,52589,76258,44624,64312,72340,41946,39011,36092,33858,62779,90498,83137,42283,27966,96055,48525,99561,25021,45641,64283,10651,74274,77939,21996,63076,19771,53648,51524,15180,84921,53331,63704,99482,24064,33494,56602,59867,83711,80368,76550,86355,53900,27627,30539,43078,77314,45850,36339,30765,31077,51937,34161,99108,83379,79752,69113,10634,68164,21379,76392,53385,76865,19515,15935,37623,31517,42645,17284,75004,21967,44054,73276,52664,48049,95931,96157,53355,84986,72403,53939,92066,54885,31951,70868,53914,56632,42093,17521,65058,67616,28232,31171,74149,84178,23979,83062,17160,46726,40681,37162,63542,55247,59991,35064,17321,96193,28996,13308,99912,73323,13604,61545,26597,54004,84790,70059,55607,36348,98741,95926,19298,29581,38008,59752,71610,70167,64164,83520,36083,73181,65412,18920,40783,64607,25174,64297,80455,97490,84518,64255,98128,63294,23474,91692,47300,17607,38411,78521,16741,93209,47552,32350,56103,36767,30924,15753,12391,75852,57282,73764,46261,59701,36273,70679,42591,99689,34039,21392,11367,86521,69837,48932,73240,33409,73856,18360,91997,89498,87861,43383,13668,27323,66032,71604,20576,26729,90710,72372,94017,71114,51807,70819,32458,69724,47262,46671,90123,62936,50124,14214,79815,77016,86642,80310,70036,44712,47714,55439,62400,42804,99841,76594,39692,24608,58667,69679,39106,55885,20419,69867,61334,26153,85371,53962,43797,87449,31576,78905,70159,30040,18072,39537,95992,90556,59173,31469,75819,54691,24039,88154,78311,57804,34772,42554,51758,16864,50013,73177,18846,50195,52753,10796,13755,25451,94404,44273,98488,72254,57049,53355,82974,10797,54192,25576,33875,67167,45377,67473,13069,44377,51991,59878,38864,76171,23724,64126,58470,89305,83149,39283,74740,33068,92982,28360,39757,24918,72242,82201,26821,60767,23432,89558,84393,67316,27659,90844,62711,44450,77570,73495,86972,97951,73690,71370,42314,28619,98500,32352,77518,51021,42744,34675,53747,31160,38943,42888,15272,75500,42842,47162,63966,56601,78759,47828,85757,92350,93126,14815,31530,50432,75935,31121,62686,83948,99184,12922,15949,65483,15807,95461,96677,41354,10701,16278,53166,37662,14236,45822,99967,60075,54559,16370,13528,22522,45473,52015,91592,39696,32622,22808,19339,73542,34934,24808,30539,24091,78410,22506,65274,46568,92506,87966,43941,95838,50545,59476,92096,38395,34609,51373,78883,50325,90908,75515,84857,72110,70088,57180,71176,35384,32084,50421,21024,56201,42051,73464,76615,65604,46134,39953,56423,34845,63896,98627,42135,65262,35683,39891,36209,78611,71577,32100,76169,18632,18740,86742,59530,35438,93927,55346,23727,28167,19512,86429,34231,89966,67830,50329,64021,48355,51147,61199,50542,79898,81877,68293,81458,61836,76233,73701,47663,93601,60072,58554,72352,46738,68292,45175,95958,82020,60850,30290,21682,74913,24410,11664,94410,73803,10693,38354,21852,77224,65959,13517,95715,55833,13841,86987,42490,53008,43761,24062,77165,41008,28429,34381,92115,10359,11349,18599,26003,18602,30253,31600,67404,97481,50172,54680,15579,66501,73847,33667,34537,94437,56868,34842,14280,63763,18747,46949,36633,40847,94280,37040,98278,68571,59518,49665,26457,85456,26395,56965,47289,73272,41688,11974,14473,45831,36756,66118,40078,75240,14894,82852,38338,77086,85049,40793,25411,65995,37283,74648,41893,27066,74149,95603,94778,26964,74893,66026,12666,38607,94718,94832,88832,27681,81409,26674,73730,37485,66517,52248,60257,81327,27646,39010,47366,98546,75087,47283,10651,12359,69685,86091,10438,89322,47815,43397,67016,99231,90256,65848,53184,76169,86433,44489,15074,78168,36883,25030,66270,44796,86912,49590,29695,60651,11157,72970,24809,90664,79992,25563,32687,27864,34849,17783,27035,17002,24602,23157,77861,23849,44951,31952,57559,73486,13415,85939,75187,52126,14627,96962,63505,54437,92965,36339,83152,33528,44449,61418,63495,69452,26684,19144,52745,17511,76098,52646,45303,97770,95137,58138,89033,78702,81742,84744,50066,31530,70995,43240,17567,31724,35505,67075,41382,91143,66516,47074,31390,79524,80687,79102,39738,99055,44534,23980,16398,18056,29251,17510,83296,41408,41931,19053,12426,22800,57381,95203,79541,31878,24136,21564,42079,60958,77435,45013,36273,95270,35796,95940,91483,75567,76704,40376,28344,67121,56864,34734,30178,69341,83826,31926,96106,12516,59528,41366,57191,30436,53662,44820,10968,85939,88697,62106,49975,65181,98038,56589,36049,70981,92478,47834,66945,62193,45943,69430,24689,20444,56090,45568,75050,60413,22061,86130,82872,37431,22138,99658,30985,61137,37920,93321,52259,31997,67989,80858,65905,76284,14161,17440,91653,21400,74887,88889,61892,36009,48192,71996,54606,10602,51103,37834,18211,84176,44709,85556,44490,68608,61956,79404,11184,72869,19585,47061,47302,60372,64599,65173,74360,75137,53372,37343,54964,24871,66011,92218,70295,85878,85878,27667,27949,19856,60369,16519,94276,87619,33791,98640,66293,75185,72926,73709,83927,59011,96603,14263,98834,24204,58337,49795,23743,76755,72531,46610,70484,20014,86230,13586,24353,34085,38569,42370,19163,11133,13293,98988,30559,63280,19604,47801,56179,47269,17517,52450,68609,70621,77352,15917,81465,67246,81627,72419,46148,25568,96936,45544,97387,20156,90420,38213,63623,93826,72621,52637,19070,31931,63417,32817,93536,68837,86346,92274,87854,73587,21285,66551,99363,11688,67349,17463,61751,74290,72958,20260,72404,70426,61883,94934,59357,60527,23725,67987,22161,43502,25540,44773,66278,71188,32325,31557,54931,40396,97197,79734,53355,49204,39849,43066,32252,78804,56319,66345,56842,63745,66465,24269,41342,25439,68992,82488,16108,57390,97633,38470,76963,31427,76124,64138,28730,22209,20087,49884,81545,43673,67007,19467,92158,31970,27659,19924,86611,90284,33641,98817,90337,53263,70124,31602,20353,87142,68281,18669,96606,69431,75379,78762,85262,98925,67715,45750,94833,34852,70863,99448,36043,28093,13131,58578,45157,58442,65996,23946,61780,71500,10108,43157,77060,29444,11176,45254,22441,85225,66435,27857,79989,76701,28473,67485,17390,11723,59796,45614,91718,54953,77325,97422,38746,20958,85636,10621,12676,23445,30280,28177,66961,90562,17421,84270,30676,56256,94830,91730,24620,30301,33034,98145,69787,28874,64594,38886,66285,19475,15957,86209,54294,28958,63121,92825,63464,56726,28062,38897,41169,81944,77102,17221,43866,12919,70681,83557,44229,82930,44962,30193,28141,58057,67586,42408,16709,18203,23872,11751,32732,23558,38681,83210,68981,82179,84722,28724,54833,92496,52330,77460,20379,76833,20772,16005,44146,86119,50254,82996,86111,35325,21712,23549,30173,19970,95645,94495,85845,21419,98326,12797,24037,87598,83569,39816,10478,50939,81452,78602,10373,96777,25522,92856,25627,12072,10696,72207,15398,33376,59311,53914,37164,48303,51043,36525,54140,16526,88907,17040,60949,30908,32506,56379,68323,53258,76460,73783,24127,57083,86139,23905,93021,29474,93252,71112,43857,12023,10187,58944,83215,80410,73444,68568,67970,40512,72844,66043,15148,71348,14352,27610,20559,60099,43075,26191,69168,36806,43604,35984,13016,50496,48529,13665,81478,72813,20987,39949,17561,95123,69740,67979,47221,43631,12967,35552,90556,19988,65506,83993,83775,40171,76504,86324,39796,77025,20363,28634,47524,34739,59459,47983,11551,38201,85196,49716,25638,62702,44686,46365,89836,88930,35642,78203,91065,80819,27328,76315,22184,59765,37378,14619,91442,96356,71030,90114,87517,34765,61816,64999,82825,18851,60857,41072,43787,99916,74669,89165,99204,50062,23765,31201,57083,43037,45762,31214,94397,11272,46228,20081,40351,39469,54258,86667,73286,94961,67706,24342,97143,76404,76366,48401,43216,52711,75314,28761,29230,77668,59457,67956,97845,31068,59705,18591,84203,97327,86992,65464,74067,83160,17694,22521,40324,55470,68298,58908,18515,73855,21537,59114,90355,46876,34242,26599,72525,14324,84116,96915,31999,88203,75966,15759,98731,56722,99034,55302,22676,84714,89911,63787,18725,78754,82386,24848,73200,32610,45068,29032,11666,76784,71683,89960,45041,34821,80630,59576,48386,29170,68023,96880,19722,62717,60061,13493,47718,49026,69783,99128,71550,14046,67750,94811,41788,99466,66672,70793,66647,48512,99033,99941,67122,58126,83505,70066,80809,81167,23331,74468,65332,58825,24635,69451,20680,91969,69883,86368,84493,10214,86507,81328,97597,35484,33270,49302,44427,75789,39421,62414,55287,59147,68008,69055,54416,72966,93451,11521,35133,20851,54510,41277,99209,14116,21652,14650,65661,58265,63382,33783,37717,54550,27923,81065,32072,34960,75204,48131,41369,98590,22121,41882,77759,24347,67076,47526,71360,14830,82479,51766,43470,78803,92512,94815,41941,79966,21893,36149,95822,90062,39656,77243,98278,25127,84831,32248,98383,72402,34390,44337,34697,66401,17688,15165,14165,90772,31095,48157,22688,59978,32008,17459,66500,26491,86790,11102,88913,17424,74263,38273,45042,16114,67275,61518,85238,87561,82606,28492,13476,53499,55775,85362,29842,47758,14510,95766,87049,91817,79345,43811,28631,81201,96418,27548,12450,25060,26344,27786,21960,24410,60717,74224,24596,89081,85853,65833,76742,98407,23228,37359,35946,46480,44111,35411,21836,61961,70555,48634,48007,87377,68085,76773,91447,33062,44748,34224,74778,29532,12544,12120,35581,40416,35066,79560,88082,72799,21165,60193,75699,81027,77323,83956,77390,28254,40123,34735,13376,91668,42048,44620,66742,20325,99264,22069,90445,69906,21656,11983,97369,24704,68004,13521,72173,77788,14962,82723,70727,47983,15877,58487,24024,79971,19542,68475,23518,83715,60150,83594,51538,30965,39613,71866,83636,46838,23759,27018,64755,35024,20139,50785,89334,39851,20269,33946,13197,89146,81164,61374,70949,69928,15668,11309,51567,17142,28467,55966,22105,75365,15959,96817,82776,45997,48934,23260,80489,26475,94152,70876,35564,89375,72210,47452,72218,42929,76046,21080,45355,93138,22401,96624,35372,67442,20876,31421,49856,69963,39822,45510,65151,80225,73377,16048,40550,82460,44661,98156,24604,44106,56926,90895,25956,88877,90602,45411,60555,25230,79939,66852,65983,49820,41491,94304,48055,15177,26390,52355,31212,42583,91268,14240,88979,76105,74142,51937,18871,40459,41363,34945,25645,50328,98035,97437,63370,87118,30367,23821,41519,55655,51903,44430,18343,34961,12341,66879,92705,11887,33774,23041,77947,67680,69443,19871,75027,42767,21282,22732,48590,40354,66325,87713,76853,28418,53019,80789,52672,59573,94793,23176,48450,40260,10280,79401,59779,99740,36370,53014,29092,83681,72173,69841,70424,63426,72878,85429,95824,71664,68688,44717,25892,34314,72383,29660,15553,53318,64758,68722,93119,79541,10097,38386,21164,44650,48153,55599,57082,31715,85036,93560,24727,70077,45754,99658,93606,53192,84790,24680,41589,68832,73837,46496,62899,71259,65536,14625,43915,26278,91634,15419,29830,46393,14683,40198,15878,32259,64651,46326,16154,32765,89605,25761,26435,83417,79624,85103,13721,40094,75814,28474,17706,79563,50172,61730,40683,88048,89666,76620,65042,66959,24533,14844,43601,12115,44901,27384,59443,95499,86346,16137,34659,92730,55378,51128,30251,46886,77319,14817,23016,84846,45397,93691,39444,63995,57469,15508,33591,63389,83534,18982,26553,36839,16817,65222,62261,70296,50130,57101,25426,31422,18668,49873,37748,77337,71727,95838,24273,31524,12347,23553,41740,98263,59078,61322,82579,49028,99993,98110,52869,20626,79853,41204,20832,63777,52666,27065,73660,89806,58773,47880,14839,47277,15732,93259,69659,85146,37825,46225,48009,69690,67347,92663,32759,31503,51172,90935,79968,95816,29263,78510,96416,48607,81192,63978,41443,57337,45965,86185,65576,28393,42379,75515,14721,64409,22464,21971,78711,75930,21978,60234,59821,84921,76863,44080,95225,26065,88015,22295,35744,71205,99301,15056,46143,26144,45302,31909,90670,61470,90058,46771,27236,72909,66572,86099,39027,45868,82911,71597,81686,58590,59493,64454,20515,84275,34726,32828,35341,82767,86304,16084,53343,50549,58275,84590,64039,53648,53302,39676,97146,63625,10146,77859,60710,55091,15867,24365,61781,44177,61477,35505,97361,82979,44374,83159,24397,19301,88931,80691,77284,86657,79083,78134,31161,53633,91298,23672,30235,67964,29045,55037,31826,52329,56837,82353,94807,15773,18500,42206,42549,89101,41994,43617,28676,48570,70699,58688,47613,34644,23075,41764,85383,67825,36397,20369,79594,67335,21826,98902,73927,68529,15934,32823,52033,62855,93530,84150,84351,79897,14308,55875,32232,46012,66649,29419,57773,64609,10351,10357,87531,33744,45247,61714,21764,84885,34062,82627,33867,32358,54779,17739,10706,64245,72217,71257,46997,44864,39757,27833,42446,16607,29792,70746,21651,57520,27229,23446,86969,59712,23152,85871,12032,85615,24605,33990,85329,91232,43656,33309,43007,46531,68399,88110,64629,92372,50847,26409,92468,63085,35720,27604,56408,97018,12187,56083,91975,64577,97084,75959,39054,19470,87523,91049,37000,99123,75625,46509,78025,38434,41324,23079,98939,69963,22937,31418,43796,67894,40038,85628,42268,94121,49119,22909,10216,89436,88840,49734,55720,52411,46211,21782,31506,63520,55464,19006,66945,12769,78870,66723,68402,73531,40319,22159,82513,16145,17318,19623,23115,13919,98687,83608,25148,23637,78134,21475,21747,11383,91481,71611,10893,16023,81453,37686,56835,40952,89227,38141,85906,26517,45999,11469,22866,71555,10926,19449,32195,96661,47528,15940,70687,73899,66427,12871,38401,13799,66187,42703,57323,58681,41997,60621,28695,51958,44552,33110,61638,92382,85732,87117,21405,12961,48343,85424,34614,35792,84705,55177,47487,35487,22978,24532,98614,85371,11056,56118,93672,72799,79333,78286,92404,83173,14277,25505,82695,94034,12666,42650,36690,99508,89357,35326,98638,37796,25179,82142,45293,26680,74405,99252,65871,46247,14081,98623,21822,63456,98840,25127,87510,58992,58435,56449,44031,19958,70874,88619,43506,69532,36733,59114,66643,70564,81354,55481,33018,57830,70785,55062,98033,37222,19710,79943,45587,29872,73005,79749,10389,72896,12665,36066,71790,39947,91150,38278,49735,88779,91570,88837,47229,61994,51930,87504,76384,35995,67386,90925,21387,57794,66015,92390,81824,36880,69132,73815,61100,90415,36412,96875,28301,84157,76219,76074,65960,13515,39401,97560,30629,77102,79506,52196,61565,41851,19347,46216,23720,96888,82596,64280,15098,86970,14426,50713,64021,72730,85295,29607,26078,69190,55525,66061,22082,53923,30683,49623,80967,52439,87956,81700,68133,18642,16351,34531,24040,70561,30057,17893,11702,22993,36067,23913,68784,65216,50637,31300,13720,23245,95816,84614,75738,60078,29324,66460,25634,93816,10658,28397,75915,80195,85480,10696,98813,86106,74067,61998,17185,61679,15532,75237,80419,23320,18378,83967,70903,55718,70978,55375,16104,15258,16963,15280,65681,38443,10456,57572,45564,67960,34939,95344,55396,60033,92973,53107,71091,91337,36051,41379,49138,62041,88260,90649,92972,98992,81440,85632,67428,73050,40770,58033,10024,89794,32752,86402,99003,26368,48139,42566,55997,62931,71797,36097,79285,40944,44334,44244,60564,21781,57834,80266,11731,45235,38788,21763,38602,17188,38062,78219,18272,10692,79997,79685,57579,34304,16912,61577,84748,15833,37770,73496,68194,26357,94175,41248,19346,33038,41240,16464,27796,84528,12333,92610,90896,86233,73165,92606,37945,79371,14770,33677,12225,56315,91396,67130,96711,87360,48862,18345,49429,16207,44326,79213,46506,83387,53036,33259,48296,43164,46169,31420,92813,68994,89675,50225,73511,53722,41933,20798,99668,54500,13674,71342,34013,76393,16091,43560,16786,33735,32610,20167,65792,89131,38287,16704,69267,17837,83642,24495,93638,22606,73582,97927,99119,91473,89530,77585,92580,18644,38827,29796,35032,65420,28010,22779,96353,80541,92786,36875,59144,93424,71687,84245,35221,51017,97891,48254,52529,62284,78697,29623,50394,50054,97851,55542,58728,83616,62177,83216,22212,32208,98974,30464,61724,92817,66084,98579,62107,42453,89394,36500,96996,73800,46408,53678,36413,60660,21052,73404,93758,17956,50552,91539,80593,73557,48065,73049,73019,40439,28969,88641,88188,33869,68077,27759,76836,58303,50315,77218,96203,30926,48266,91695,19878,42641,47709,19688,80002,32724,93769,32692,69989,76494,48144,39561,61925,74531,21030,21381,24954,80088,49311,88965,92067,74960,21153,97363,63791,39901,87594,50001,59264,44046,64074,17011,75184,94701,35797,97111,62797,20366,26452,88149,26449,85720,61614,42739,78132,96681,91636,37900,47841,68112,80739,87239,97240,41512,57965,92294,21047,94076,27154,94952,77501,63603,89786,14877,60585,53806,81524,48261,22407,63114,45557,38190,65644,14371,32878,44461,35114,85560,91209,29516,83592,58996,84627,50370,29005,51169,44776,90236,15189,52084,52732,27001,74050,25461,16242,20480,63008,26021,69224,39261,20124,19393,34084,20532,64623,84048,64682,74690,78431,32637,18154,93408,21350,25712,10982,84148,36600,14750,22071,64535,70918,58407,93271,33714,15829,68081,71180,63462,57313,49136,49132,48959,49129,18652,37582,53116,31547,20779,57498,45361,59899,56303,68337,85199,58815,81117,32719,57346,36222,77611,82838,35147,52105,37847,82779,30080,29255,17243,42894,41164,55834,76362,35797,36764,99433,62091,28788,35310,99071,73291,78782,31431,36566,44271,51526,71412,11964,13359,40035,19982,55298,10159,69323,27195,15094,95412,62395,97835,99289,71838,30377,38549,64723,31726,35301,97529,33926,62828,78126,59409,52253,79501,85670,94449,47038,89716,80070,25046,38399,89387,35553,94808,47193,36829,48759,26921,20887,41777,24790,69546,73065,12698,87286,12976,90146,85650,73120,62748,41158,11516,36988,78986,98919,89517,12028,42072,26315,13850,51480,12348,80163,36907,33992,69048,76393,43025,46220,56886,83386,40743,80379,29745,92349,80733,34146,54370,82178,43866,44352,32965,38731,55079,38572,16148,33718,58881,59795,67466,17038,75428,41553,60740,79269,78781,56406,39276,26529,59439,17403,78366,10969,44314,61598,56503,73702,64672,88976,48340,15027,91819,27661,83583,89296,99874,82710,63501,16879,58037,46272,69316,73668,47228,90663,34294,81055,53801,48995,98688,79871,16429,22585,93990,19625,13658,92613,53509,97097,59789,40641,53974,71674,35189,15349,89603,33605,67675,92208,28377,95558,12036,42647,92614,53899,83415,35562,48962,49970,94936,30299,60011,92414,12602,81534,13010,64118,25102,66248,24732,88820,46636,26805,72402,76857,26615,51460,48311,79470,37488,73723,36150,97587,47157,33704,98941,15406,95578,57975,14304,25683,18509,87422,45621,93808,72717,50195,36767,74576,10779,85698,65729,73910,51513,85765,52208,38385,76903,59283,74919,59274,28704,92437,98424,48472,34939,92708,84334,68158,42434,13816,57379,97554,37163,54830,84642,76983,10401,15423,88942,37228,41112,42836,57505,58793,65340,81946,56524,80140,74897,85128,58104,36905,43104,77806,60327,97188,30024,75350,48979,18650,39249,18458,90083,23834,53026,45885,92668,84319,58205,35164,85301,36264,74514,35907,69130,52769,71849,92382,33344,82389,95518,26420,85663,54051,54502,82866,83080,55906,55511,88145,87759,14819,84926,97213,58700,21356,80982,62602,15601,27391,20431,42285,49406,13702,95155,73929,76984,25471,13378,28308,96288,67264,40294,15425,93747,86686,37237,78745,86784,29056,93750,10920,42889,67476,92344,44596,19060,47598,93749,57820,85876,68456,50779,82491,47299,98073,21937,76889,25212,65861,24334,50588,50792,50083,43407,69401,36146,41528,56038,91494,74063,86400,38389,37363,27702,81804,36135,80914,55205,33288,53600,31670,47023,34868,50200,98860,51176,98793,24129,49921,50349,40119,18807,59211,84061,98896,99883,82067,11158,62391,48012,20284,54414,14128,37692,48824,98674,27051,39951,69931,28209,43349,13120,94647,94587,26470,57397,41269,19310,79709,72766,70866,27079,31008,51787,14891,33281,46868,10652,80569,22659,17963,39025,56931,55697,99087,28516,65278,37689,21579,45311,37948,27807,86566,74509,74870,66295,48216,43561,75731,66531,65307,39142,40731,73902,87821,69437,83576,36105,30180,45502,55658,63118,46373,75341,45788,13381,84518,68953,80468,18283,90832,70684,51749,94044,72474,79462,14641,45588,80663,97569,48779,55973,75971,81836,11601,50783,87136,88102,58267,46775,85837,33877,49149,15998,13535,68657,60018,62016,61790,47667,11805,20510,48203,92369,14578,58385,77047,87094,60599,15799,14659,82238,21128,32711,75419,64096,92135,12686,19141,81596,10271,84633,52445,17004,43126,51717,12696,17043,19887,90666,73742,62221,18058,45459,64200,52624,48197,35440,11800,10483,59067,79598,79324,85144,35948,63164,95981,16072,34301,79734,98468,93699,52259,15582,66055,75803,62398,11095,85700,48258,43543,86879,54871,95648,11898,68995,34997,22775,59800,95910,65248,33413,85949,41502,75032,50815,30963,84630,27134,19914,32421,35841,88496,18527,83611,38318,19783,46669,28077,24972,58133,19732,86013,36575,87655,77961,95510,51619,86080,39835,77429,26555,69824,13120,41193,68993,56838,90139,78946,85680,99796,13783,87432,34225,34843,88488,34364,92433,58168,89288,31444,75517,10198,31520,11903,87343,31392,63920,12267,49350,78939,79864,11370,12922,78873,95706,21196,95864,18420,61704,34999,68401,92127,15257,83736,20753,16239,79400,81971,15972,84920,71710,50415,79101,44521,44443,35812,20396,32085,15744,68640,75413,32710,87974,12399,16860,56801,80226,89800,51023,16572,51920,56847,27571,60353,15951,17725,24695,96131,26979,60792,50697,93718,21866,36614,60121,67127,53759,53619,65120,30502,15738,22644,26198,78889,36233,54335,40361,84633,46166,89161,49074,46028,19791,58266,34918,92899,53596,53266,12253,54586,74864,13461,97810,68081,51112,21864,67043,42633,61189,26049,68073,75937,46329,45247,81225,46652,37376,88943,37029,60716,87689,26486,67359,22113,95417,49401,50774,52392,82310,33650,35337,27805,80079,93123,30840,86252,76350,29293,36199,77396,69363,67235,67940,60280,82456,58883,10145,23243,21948,25726,47197,39729,74478,26390,66109,18299,31355,97131,55463,68350,22792,95697,10090,45665,92669,93722,27252,13887,38941,43128,86670,75366,32387,61600,94204,60670,14857,25323,92306,93955,56060,91340,21350,68120,19731,51537,14104,71964,71477,14063,28763,94293,86113,24736,41488,36125,62500,72066,62784,60859,56312,79359,70613,63852,56063,25460,11272,54416,97534,67160,88769,76306,36659,19109,63904,35836,49360,54930,75705,30982,72488,36653,61916,44641,81519,77933,18702,73509,61853,97112,23044,76093,33738,88270,46355,45503,74059,23638,37053,42507,46529,64271,77198,66882,85270,63593,43146,93973,91822,22253,31392,92884,83100,99852,14613,58619,49903,90222,93776,37092,84740,91520,48169,77138,33548,30054,60932,24903,87789,52853,69953,19017,70036,76695,68512,37997,90614,77233,61189,92600,69468,22849,63010,13645,58520,61043,53848,15907,10169,55361,35429,28821,75306,17000,76531,54039,32723,47009,11037,35470,77057,80439,10598,77161,75075,73208,27995,96668,27237,22321,32112,37959,57955,69728,17637,70377,87562,85053,79455,69305,34154,39620,29737,86738,17816,93260,62415,16087,83015,89268,35609,64645,91758,37255,83485,33127,46177,92476,76961,86784,30350,54138,76255,94613,74656,11104,28651,40675,38642,56364,16997,53800,47010,21422,22902,35268,84861,78744,22683,28286,63308,86173,16989,70425,85965,10720,12922,29407,96069,65787,63706,72659,70147,19158,67294,32163,42215,74016,97731,75250,63925,29318,88880,11154,92837,87161,24475,38883,67052,23766,27294,34130,90067,21866,33720,76744,61405,72786,16565,76523,60701,82403,51711,83699,35561,96322,70051,75137,83195,73992,83851,14204,24410,67543,35153,56246,85629,56850,11894,56132,54987,99976,20974,54126,14803,36195,35412,70293,84462,44177,71500,93540,68003,49729,98595,53467,41125,96761,54606,60861,15959,67743,32311,88171,80356,10078,79266,52400,27980,11061,47052,99202,35727,74609,50131,48124,43590,50920,31921,72849,33335,21724,93101,12398,24897,98202,23860,22435,26915,41202,79028,71866,59304,65342,63883,74014,65630,84986,60544,62738,34478,18283,97743,36682,59034,11465,80210,97778,23937,68999,80785,63691,27890,10879,42937,14443,93897,69851,67773,37086,57521,93857,35764,37890,41608,58351,44629,92915,91430,73290,76082,51764,50017,57255,46512,21742,54772,58025,84426,60150,44849,64797,55863,88612,79031,26844,23352,97613,24161,82474,44889,48355,33077,47536,58256,10323,91726,64049,27173,12579,67472,96628,10699,92688,42213,83708,23152,70678,49305,24955,39393,10072,14903,24514,24422,56372,99126,16820,94045,39881,27559,73196,96036,60971,66210,80014,57962,43030,81866,85501,69227,88186,35105,20278,20198,57854,19970,50073,49734,21267,34152,97783,77739,74228,91891,20553,17317,27001,99863,50800,22189,88220,50019,52899,33357,84704,59854,43455,94405,32066,81539,72413,76988,38373,40949,88994,31424,65776,34850,73125,73987,85748,75881,40384,32202,81884,69398,87765,16993,85756,30643,81944,23220,98505,59665,61550,91184,64366,65132,46070,50138,98725,57711,24283,30919,68141,44763,56404,93101,56030,34270,99439,64384,82938,64622,11382,47270,47147,13473,19023,80089,64241,13273,41667,25636,64214,68963,86118,71580,34371,20321,72260,48276,49646,42537,70557,13873,36392,18542,92253,40930,82818,99335,47135,38577,80554,35651,28181,49821,44608,53244,54581,86331,76513,68100,60114,79791,28069,27440,12081,84940,91323,13970,14229,79704,44630,78444,24942,88285,91754,23847,61582,84199,57787,43965,45819,34393,14374,61407,32595,31717,41560,99228,96573,55678,16637,50014,52912,85277,38644,45314,27818,11117,35564,36403,57559,75291,99297,45031,61377,78263,50547,47567,33667,95103,52284,33137,77598,65728,86513,33323,21907,37890,95449,12050,57776,74519,14796,80902,33176,41906,71588,41205,63579,76094,81197,42323,48569,60634,86200,96396,38002,48847,41263,60781,54720,38202,70266,65760,16459,94128,41717,59406,71041,75379,64826,89603,37599,54079,33578,20976,12988,55693,67266,81152,38189,73459,66229,63484,64223,41601,74747,56157,99304,85394,78118,20622,80751,66627,69031,94761,34929,29454,67531,70362,57013,41263,22037,23795,71472,26830,80091,76401,69450,30383,96195,48069,15269,94683,96210,19755,15928,88864,70445,47002,49009,66678,12784,10772,21381,21656,98276,73633,97513,99066,79791,20789,45642,97409,21427,41791,80653,70748,86528,86713,83617,48536,65677,60157,84347,22043,49076,60925,88091,73562,17795,56261,67736,60035,62514,63393,25312,99274,51375,25532,23021,38637,68583,95683,71070,64944,17016,77412,23375,71333,41691,93697,54358,82425,34477,43155,16264,63224,45971,42034,26782,79404,66189,62221,20908,88269,71712,42290,13413,91298,21515,17938,91054,76899,26907,84856,10622,91658,45674,14377,12599,17899,92753,68604,40795,38365,89027,58976,99678,13300,46805,26876,95283,60521,84301,75552,80015,83922,18594,95646,84246,13847,54223,73650,50735,36105,84682,46504,49711,54590,86748,32744,38767,69438,30095,40022,96274,88178,61439,76121,85427,33410,58311,90764,25333,46904,38885,56963,98580,13128,19539,63551,31836,84076,54097,98355,83059,10249,32218,19425,13901,93226,86320,86525,34553,76649,63939,63279,96308,96368,79568,74466,51102,65242,18658,17859,49734,50127,31732,50832,63098,53536,40813,72298,99562,28286,13292,44021,85844,64736,27521,79734,27813,84397,93771,66919,79473,61358,17093,38263,58680,25268,60549,69512,56338,36527,53835,50326,54359,90336,51718,23217,58003,92862,11418,92829,87575,76056,76092,91379,36486,52071,31760,29883,94515,16676,82534,94953,79512,10204,78294,77081,25640,17466,77980,92385,41550,65481,22668,85358,43643,96485,38177,11742,10462,47041,67084,95630,93835,93283,16481,88430,84354,71899,40475,41186,85181,94870,90432,83460,11953,46596,84786,13723,99709,28119,66552,87720,21546,20698,48117,91404,50116,67134,93416,70107,74275,26440,21995,26825,39302,98672,24461,88571,61322,97486,54418,95917,70049,77117,61615,22630,42712,59833,80321,23936,72844,99212,98192,94591,37410,51187,33548,25792,92992,91317,56699,16439,28640,34435,60544,21938,50637,40215,63029,13129,67561,88899,92887,65516,85989,96207,28682,36100,89810,76646,23051,76592,40109,50961,27587,87045,73527,18704,97015,38019,88008,64517,65682,18886,79438,74776,27729,66456,85884,63433,64095,59544,43954,20013,17472,15403,13917,62610,30423,33326,65069,68035,68230,83925,15575,45916,16863,50085,57848,57986,32838,28584,74060,78939,12500,27789,98198,68026,24755,91272,51097,22024,39248,84834,34273,10772,51493,65798,93335,57974,94212,89366,88362,95493,59670,73699,83608,39380,32267,72124,28621,97420,37397,71401,94716,41327,34618,86270,18309,66766,12364,57497,36123,19049,30335,34320,53589,66429,31073,26263,54142,93005,26660,94756,89501,48235,14559,58734,70670,55273,96977,84477,83033,24697,86590,69718,21590,57244,92217,47528,12392,64473,76265,18701,16891,15844,80792,68221,74383,97384,23310,26304,20811,93835,48949,88682,56898,31940,33754,74234,10179,96634,61546,50209,44969,75850,68758,81039,91410,53651,98257,24447,46438,34970,36465,99658,80027,22591,74905,19219,91050,57112,21016,72196,90244,75746,61387,49055,12969,30428,86735,13567,47525,92627,71175,35699,90552,20768,57344,97520,48399,63730,99913,82721,60138,19223,57617,15202,29241,21192,57089,56035,71382,69657,33252,35636,49522,56384,60433,19092,51384,28643,93944,19235,97799,25445,88628,79296,15976,62221,52038,11595,71578,51249,76746,73442,70765,53866,60531,45549,73459,27267,88848,83966,99521,91890,29372,54362,74153,70494,62356,91110,83562,69459,38781,40016,87662,61517,11087,19314,46820,22262,78532,78874,59674,37439,12296,49026,74279,26498,28448,58722,57750,56317,69810,92001,36934,77958,65421,97703,22663,43767,70204,26999,85053,21401,79021,10149,49131,62761,92829,64707,59186,56250,70247,19336,78992,38771,62480,74008,93670,53112,96168,22522,49914,10604,82237,26115,12209,40434,59807,92218,24743,84785,70277,49660,33785,54341,31089,56967,73498,28464,23550,88661,88743,46871,33995,30322,62153,18733,96098,77393,91607,81666,60829,84688,60678,34713,90917,15148,92544,13354,65582,53718,86389,42303,44851,24453,78490,24635,33420,61881,70848,44539,68224,80894,94936,73468,65723,18923,48875,97053,74295,89744,16575,57550,43367,76867,11969,21192,51922,30966,57066,10784,54444,76598,67867,45017,65601,29523,46764,42044,48508,61194,72626,62958,57153,11974,17046,21105,52781,93263,13208,52621,87577,45778,13766,23737,21894,37741,39884,67604,75183,21087,68395,74418,14383,54568,77606,46303,60767,11903,16133,66500,10415,97529,14193,33474,55379,35045,80650,82280,41107,60562,96367,43955,10853,87781,18230,37491,82605,70666,45999,12555,26320,76524,40245,96940,51364,85924,25949,14958,62565,69149,61362,29437,30529,80033,17707,40649,60226,35500,93408,41159,44981,69535,23840,49547,39015,75836,33079,77017,51429,90265,14362,49356,68772,48700,74378,51934,90110,29169,68059,71448,69988,30024,13774,62090,66325,59285,98243,98316,70293,97243,45648,15430,93800,87647,67916,38860,57509,91550,79004,56331,15667,81479,65408,59981,34871,16508,13009,55469,86083,92396,37748,55491,61006,64210,22654,21772,60579,38875,61149,78542,36475,90140,69196,97464,52258,30388,47123,81344,36042,44142,64501,11072,57570,53750,25361,46408,99323,64733,61136,96288,28363,39731,24848,98755,56490,16094,92819,72328,46241,25809,83277,15743,45421,95276,82427,35669,60159,77977,16621,64826,58946,46890,62034,49145,86300,78308,87152,89971,81711,92166,19618,37655,73522,20300,30080,92040,47877,85131,33664,37964,82123,37104,94325,62153,91969,38625,48430,46339,47452,26662,20461,87595,13617,12471,55018,87336,39039,24185,24556,30326,77772,35817,87116,95348,84588,97936,46359,79610,94171,10845,24717,79135,11130,49474,52739,29163,22696,71925,91196,14276,63917,99696,52193,31571,45840,36239,99994,21757,61971,56395,10317,48451,38107,94832,52027,36196,45171,68767,27933,11247,77794,99867,61418,19354,71798,58888,28713,75433,41934,91010,25749,46674,67421,29040,13354,91787,58245,17766,42197,43494,70783,39493,24690,81364,41594,48295,15683,20014,32499,52155,76864,35183,64422,12932,42011,52761,65742,51349,16515,49289,89360,87178,72097,20364,92502,69201,72088,73404,91687,97719,86977,63878,25870,67702,84459,90545,34933,37604,74475,36392,90755,85731,83621,25972,57960,99085,94188,74387,11666,43186,93328,22329,33864,53994,21348,92344,24059,85093,73343,94414,14004,52335,30433,52263,77498,46639,50213,82446,13306,68270,10225,51649,20077,93488,93238,98306,11932,72689,22524,11964,19838,81552,60999,19946,79494,21653,17787,22879,14963,66201,20534,10525,76496,82514,18268,31487,34593,98836,81317,55282,74653,84887,43027,84094,45668,47306,32250,80646,28380,35742,46982,70197,42530,93308,97926,19904,34868,98438,16471,21851,59700,20872,46182,19169,59355,52040,72474,75724,31346,70021,72132,74541,66936,37876,83540,74666,60527,64459,42209,81181,85466,84465,19227,29087,12465,94833,14373,19999,41585,73530,51294,11839,10348,28189,50436,98216,67919,65299,38326,82702,17619,78334,49583,92128,16553,56670,81050,68324,82561,87143,32724,15589,96469,10360,53318,85011,80862,35402,90528,96610,73770,48373,74406,39421,90647,20051,51508,73679,51746,84596,44002,18187,73496,71718,51803,73713,38332,13321,75121,83375,47737,17154,91997,51079,30188,56405,48766,17329,82593,82302,89654,55414,31566,40295,26837,68084,51653,22613,84924,84827,54216,12371,12305,83309,70224,18639,64419,94797,95354,39813,15916,79434,22379,89209,41061,96498,24697,59673,19011,28115,94423,61089,92763,91725,66709,59959,16765,47191,16113,60413,60831,43729,32056,20963,32607,12735,76992,51340,28191,34923,17269,24965,49219,79078,13696,25891,13408,29965,26846,32983,70198,50609,54600,18458,26427,71800,77641,14308,19109,93840,22984,35493,12742,72491,85762,90615,33254,35706,96813,71625,21467,53915,26640,55984,68920,66941,36970,13713,99966,48873,61497,71503,14320,51307,76620,75179,51728,29200,47317,31043,79595,75428,42788,65745,37758,14105,70313,94789,99377,64718,70557,85361,23123,94736,91216,74421,28356,81450,68592,92150,42088,65180,81338,87571,33172,91089,92191,87645,43161,14824,99490,25322,22952,61217,55539,93338,21353,16776,31651,80899,87850,69391,84607,22851,92910,47690,44066,41660,70352,59651,66568,43655,25274,72591,66652,97439,76195,40992,63876,34630,61266,52037,35437,55864,57054,90353,54289,95452,23372,65593,67517,24181,57776,56644,18870,97081,83685,96281,77841,59406,99763,79094,74293,77624,60750,45586,46876,20450,78637,85083,95771,48774,97635,79821,18860,63399,50625,67430,97769,72548,46874,85167,49211,67919,41036,43659,26895,97367,40035,82076,97722,13487,45676,43641,29831,97948,82199,53099,38540,92737,60262,38745,44290,96083,11366,28482,24485,85287,22346,58313,60024,62925,44416,66055,31759,78413,68476,48079,34688,78182,46078,78908,63482,53761,35942,17280,66269,80435,75728,15241,44802,21019,35878,22741,61673,71574,28990,14612,64772,96991,15385,93921,93203,56747,81463,41895,52821,64696,77578,30814,30135,36267,83784,15924,15674,61252,37602,70614,91549,92918,82298,11877,99828,40770,95644,87447,83390,95419,10247,55994,45806,24887,42238,59007,14007,88803,54166,19183,90141,16835,29696,12405,96171,54634,76662,28295,49824,91332,95547,23897,12392,86828,13122,38797,21644,70571,42008,69818,80606,51395,32773,12679,58540,63984,75367,90570,71549,20307,90900,61348,91600,28957,87759,49331,45656,83513,12497,98544,27048,68805,28584,32917,67581,24779,96144,96105,31062,90141,48668,98774,75593,21214,75888,73095,41797,72593,64496,96651,99559,32044,43562,41126,79864,88706,64741,58503,70495,12457,91844,33134,11340,31973,65493,19795,83360,91449,86596,82963,18011,71231,24678,71334,57780,17981,20933,97540,80628,56803,50586,56972,81084,32729,56778,74711,28589,78700,70564,80826,12348,11489,92579,52314,71694,63234,70661,15621,74602,64445,85889,99992,65514,54612,59538,11242,99555,23811,49889,64597,21704,31458,21417,56749,44573,20813,23046,16925,58602,21453,81851,30837,63129,97329,13693,39254,69073,42141,76107,99682,34040,51399,87662,84895,89898,21647,30023,32800,69015,93481,27432,23365,47187,96959,72206,51159,40970,74626,52613,12759,27957,54007,39349,94036,18880,41014,80203,21892,85965,69449,72907,84855,79578,97018,89472,78384,39467,85301,88175,58627,47492,80179,55641,75761,73423,89020,20872,63977,84409,40664,65215,81113,30421,22451,14691,37115,18767,80370,84804,99354,43366,22230,99859,52831,56376,77580,56080,53011,37851,69169,46089,60245,70398,90180,58918,58348,27267,48773,97176,68492,84436,94415,22079,67361,38125,29771,75184,99473,20278,49391,89926,28351,55644,99768,71761,38060,16486,33738,10972,80055,17577,39327,17815,28061,66025,51898,74089,65115,23252,66967,59380,10488,18925,78236,83476,55405,83628,64548,42097,48036,26632,87129,28449,84542,43299,39237,15620,29795,62421,85027,55623,80317,23402,21437,99720,87488,89877,80326,20365,38533,23212,81762,23535,18773,89379,58164,88635,49606,75774,59185,17053,28088,52851,22900,16590,11273,60634,44371,21700,13466,98513,76681,78532,48375,88943,87809,14270,17202,35645,95608,77575,85123,63848,51466,26576,76963,18900,93787,32639,11357,96325,54208,62217,37847,41012,81045,88173,30971,75013,35184,49633,95540,39397,56178,38072,85175,24832,52082,55319,40461,97235,37616,17195,77019,55493,73323,92374,70346,32866,78377,84847,53312,51425,32789,20046,98770,65202,44286,76607,65641,38651,70177,36829,86220,62592,27224,59653,16679,28725,77248,99728,34734,30085,50018,47590,57149,55199,23980,52148,51260,75431,61931,20444,81893,24047,38294,46360,11989,46839,86058,63018,63481,74436,59806,31218,44870,84181,68533,25135,94225,97980,53093,75561,63370,40242,87258,57815,28767,84876,15764,67894,22230,23378,45295,73643,44466,83258,85832,25403,50333,33728,46328,25407,54915,99687,40026,42548,22778,75767,11807,40725,35717,73459,29432,41725,95999,94973,11574,45219,99597,83185,51105,94588,14086,95489,94490,53837,16536,71711,97766,22375,76181,31601,58647,49418,51212,55208,24226,90052,95251,59578,50257,11759,33651,97837,69313,22031,22352,67165,45045,40582,51782,78254,63028,50291,37065,73237,16137,52723,79797,94567,70433,58367,22056,30702,96418,32524,31402,96475,95100,21457,13349,72268,52054,24288,78398,48191,32650,28192,14942,85092,28429,39094,13139,36599,94447,98986,61548,78624,44559,75321,44448,99652,56138,47334,11352,53444,37008,31632,52595,67722,99191,29754,79771,70743,41823,95142,62841,64835,33139,24166,86423,55612,14898,85095,78374,74089,43744,98747,12930,31029,98957,74996,53047,76548,23931,10821,43364,12287,64878,79564,43671,44200,35981,82650,26347,18355,90176,88285,48696,98294,59635,27989,78072,63492,59589,64752,24081,12077,57180,32851,69153,40563,26343,88996,49538,26992,71033,61490,94588,72362,27046,22384,35408,98347,21777,19920,73153,14722,24026,72177,12510,33094,92217,35609,88103,64327,41849,18085,11489,71700,45532,29985,60170,21934,77049,17542,55206,63966,52083,61492,39028,74260,80825,19352,24835,79463,80017,39517,82628,26019,51429,88444,66888,39249,42594,18130,38799,64818,39690,64242,51563,54413,33880,99036,46669,17877,39321,22350,84821,55111,46866,38818,19227,28478,65012,74329,45006,68531,93760,57783,64762,93434,29272,87435,46964,81060,69083,35651,45620,84111,37372,54195,80617,31604,30789,85370,27707,42401,38628,45852,66425,16824,18981,30777,39280,18167,56249,60626,83926,26021,13393,39981,86805,24955,38736,46885,35676,77861,82052,11423,47017,58364,74658,62132,41817,36198,87701,79693,14507,84057,32060,14477,23899,15471,44077,29741,27667,57190,75073,71133,42267,56165,32991,84835,88683,87259,13076,72157,86445,15787,88082,83920,65425,30326,56728,25275,42597,57596,99405,19377,97273,20591,62134,40224,80639,51558,30762,48375,20352,66345,71275,49077,55568,36338,98320,48279,75637,78423,80935,93847,97165,53504,48391,28919,70582,69182,43243,75279,25771,82075,26473,82139,76072,13126,63911,64745,31637,22835,10944,10326,23623,81430,33206,97075,68529,80121,99073,49553,92259,59915,93399,46662,48779,95117,53562,34908,18199,64802,25465,34331,76895,30107,22567,70304,18737,29004,76601,63572,13306,76426,80540,33067,61957,62524,51392,67570,47225,33347,13962,16487,91385,23988,14947,12521,98807,83456,84696,20807,85577,40498,36786,42899,49026,12138,17393,91949,69301,63207,81878,98598,21410,61094,58596,31278,52520,99295,39335,52812,86215,84876,47977,93207,51786,50322,14819,58346,23160,53978,46632,64427,46578,72512,96126,22556,46368,68762,21295,72353,16471,47827,29911,22384,29850,48274,91525,25330,82035,35850,33474,50923,86521,80131,60875,86206,46698,55738,92077,48516,28859,10778,16327,66186,28738,37465,92623,69736,39892,71829,84885,92894,22238,51121,60850,95598,34801,49899,66068,51791,58611,71585,79708,45527,47437,20762,75805,42686,25295,72525,35555,22649,83481,88457,81957,65278,89580,24007,28422,48145,86227,43783,76718,80000,17481,30238,69870,92178,76597,82661,57510,57303,55631,11928,86026,86399,42227,24600,64752,93831,51377,89035,69338,12799,58115,83306,96765,99469,21455,32996,99682,57891,93021,85763,24593,96069,89366,62848,63454,95844,33423,98994,59983,95819,65045,14416,22787,49967,27364,41096,47517,91896,72137,23636,92400,54098,54347,68265,22513,29219,63137,62948,91046,18856,87330,55183,47457,50047,93295,30173,80149,46138,51937,91874,47896,29068,87664,25515,55695,87643,81992,57281,78843,29726,22357,55225,10709,98928,53554,59418,16242,35579,23449,56343,41554,57002,60087,55762,23095,58903,42255,18862,76342,98507,99661,43669,44673,98787,96313,72086,82692,65083,73689,60838,34331,56906,38385,93924,43736,55577,12733,49319,35670,49713,79939,14992,72876,10360,69903,40854,92771,91475,82843,32477,93006,58345,65616,62461,26585,78997,85769,65835,19343,79300,62137,53011,28469,98732,65228,36669,10194,86775,13633,40696,99070,45898,30407,61652,76284,10362,98118,89771,95478,80865,51929,51508,11078,26611,99753,48929,40555,75674,37085,98744,45818,21067,16488,98449,12616,91373,11983,94397,47207,32795,41761,28926,40625,88726,29135,96018,62050,30705,18585,63185,60128,17956,24326,46713,94470,66344,61901,94062,43000,23808,23124,70826,87606,65861,27380,59097,94442,30870,68070,65395,44408,45349,57125,96980,28732,48715,21707,16004,26743,58070,16160,27131,54105,73160,36743,74738,22492,46312,88348,49573,93621,10263,94126,82896,49463,35289,86402,54482,66458,97410,54807,16105,66326,96812,20885,79316,32625,88887,45656,70994,90211,30407,29796,28285,41319,27986,79263,56633,32610,92315,58582,22214,31808,66922,78816,59182,61659,53085,11624,90797,75051,21671,23381,49970,88401,84064,41031,22570,69156,70467,83445,67094,41394,60603,97159,75937,24748,20655,71722,75414,69521,21714,56141,50899,96809,79317,50023,23696,53471,85057,58627,68372,60423,33540,14820,17137,96662,90293,87162,32932,70334,64235,47543,44330,77110,95684,38339,29492,42263,32393,25782,55035,25362,62325,26890,37540,74823,79248,27965,43567,74051,35169,97216,72603,51459,97556,81162,68268,36059,31063,35239,41881,69496,76385,26662,29840,64745,92422,82078,93845,81362,62457,47894,29840,61341,15197,46358,37159,91546,52052,94973,38905,19414,18684,68645,64503,54354,69152,89233,37275,23712,55867,95357,92111,38784,68458,70695,71785,21856,99794,23081,79163,64868,48506,95030,25581,54886,45829,64245,98250,95121,51494,50796,26948,62285,57808,72870,44815,30421,31270,32316,99287,22785,33458,84476,12415,22614,21316,69994,21654,48522,40543,67613,36403,91153,91620,69629,52956,96480,26918,33816,72773,61293,84593,97318,11906,96506,41923,21674,92770,56212,80570,33726,76334,82846,51967,60654,43514,94498,79214,44579,60782,35547,22981,89087,79537,61976,15106,38161,67933,90496,93340,60808,60925,87891,10076,27282,21879,42336,68421,89629,72663,32128,81814,96294,64680,60243,47398,19827,24784,28301,44258,25509,98434,18841,39511,54627,70561,43211,33312,61595,33709,51992,88676,92061,96137,32850,35093,79902,19429,93442,55671,15569,73990,64313,43493,85865,95698,80310,60478,11552,81858,82273,56694,57880,25843,92364,76772,75255,67603,77813,33932,85024,84411,50803,85124,54557,77715,51074,97004,28702,93089,51798,17474,31463,62469,93263,20815,20223,82920,46532,36982,32768,88691,44708,18327,95868,44825,26507,32672,63728,25756,70241,81842,42956,30710,96356,28773,77433,17685,90229,93854,57136,81847,47693,60447,14445,35288,40894,96367,12207,11661,31306,66696,14653,54029,80289,46993,29824,59904,82126,88922,84556,54892,84591,18310,71376,28626,76643,77512,30977,29444,68310,21539,46875,85471,75341,12673,60985,71491,82926,28605,12347,66210,20400,43392,49937,15395,55577,31870,69902,16912,20782,10666,86232,90963,30102,28960,27766,84416,61127,89759,90777,73891,26514,66255,85416,11736,51740,23370,59651,67530,19979,76509,67648,41528,12477,66949,41284,97602,94930,68121,78407,80434,32806,17059,17815,76426,13924,82615,77710,40193,59835,99733,65840,29517,42425,49194,47918,73263,27981,79710,58382,59339,33822,33741,18351,18214,32625,62325,40556,19652,72176,94073,34755,35061,15450,76567,49589,91049,81384,55571,91661,15519,24614,52914,82785,23854,19270,82764,15421,67701,45319,65100,52519,48733,97559,39922,27729,25683,77005,79408,84767,35510,31995,71558,50751,92175,51689,37323,81601,40400,13204,63978,43543,39282,64465,81826,20388,61756,61009,58281,15220,62319,25454,87211,87245,95944,81849,84399,25114,63171,96932,74665,64482,39931,74961,91468,23538,80526,87971,57747,97745,77674,72739,70246,36187,85383,74682,92865,41028,62941,53104,50344,24371,10929,32251,19919,52113,41517,90489,75229,98760,80795,56710,61033,93324,89275,65605,12511,31966,51874,95684,98315,21077,17332,27580,88523,40689,12570,55232,88940,41159,75483,29741,37788,23166,55458,42924,27631,75627,36738,52482,51001,26274,90207,77244,44930,96193,11363,56208,95742,27250,71610,52871,28891,60587,33593,29646,37657,78244,95721,31117,63595,98062,37156,19044,23861,96734,69643,45119,23827,41709,70541,80718,14487,60897,85287,80682,50969,99285,67349,73133,66745,48904,78614,38349,80440,93616,42852,93331,21500,94064,17620,53385,75106,76581,80634,58285,82169,90499,96465,78641,43082,90611,40206,12996,87824,98130,31839,98372,46571,73589,17909,21498,47092,63161,53528,93152,79499,23205,70232,63179,65934,21791,69028,92297,38545,87197,98906,39651,40301,38946,82124,14451,81899,26923,27634,62731,38532,77650,37224,86831,99012,61824,65882,46731,91224,98281,15407,83582,95962,93417,23506,76542,41810,66848,25225,23937,80087,10348,35632,65912,79732,79637,37927,29217,13895,10955,46362,53065,50341,76605,53983,78608,81311,56316,43539,68204,13448,98745,51965,74028,11190,34854,75398,47816,25525,37162,85623,70456,19072,96183,44857,91693,81880,21295,14730,36814,41402,12348,68150,28070,47531,63450,88817,32393,66686,74913,26798,98391,63211,12849,66568,12087,12667,36329,15400,63739,62268,26641,64943,47986,22311,78120,87769,43625,74437,93710,32648,90763,61268,91621,35371,43479,94174,92600,90667,32610,53645,47231,60341,41729,39844,79938,80714,40771,41423,85877,30941,76365,86679,15419,33011,36937,25205,73763,36790,28876,41282,13195,98716,54418,86550,33659,50467,70126,92290,42022,91544,69334,20517,29364,46904,85119,51957,85363,87657,32863,63188,31137,51067,58978,69801,89868,67119,53919,78411,32288,60870,40666,74547,17589,95100,35355,26256,58183,37823,68843,49159,40841,53979,94510,52064,96112,34064,23363,87306,68319,13978,67968,14085,47283,48869,36086,30552,28090,57064,86269,49514,49861,80233,74263,85979,16570,99365,84109,26038,90677,36583,77487,98546,40842,78734,50591,79289,37059,21878,35669,61710,19782,76891,69444,28112,19538,40868,21623,47651,95222,90906,50019,62221,80246,37378,31835,65339,95708,23703,35080,58906,63989,71621,46562,52157,80276,46944,97222,66943,94119,59838,29850,95477,16388,46335,58996,69656,98446,59962,63315,44848,36730,63339,37236,44174,24469,16522,47712,51028,41404,90382,97842,35864,95071,19666,26383,91158,59641,83681,68209,72352,83892,13429,79078,93882,75465,10426,25604,93136,24431,15961,78692,83253,82603,44926,45765,21456,17988,97992,67471,48811,79506,92036,88168,36437,87921,18410,35746,33876,80089,59133,47827,19221,56667,29110,37279,26844,12087,14250,90362,44590,56195,56798,49778,48473,37414,92663,32208,54724,38441,64951,89492,61583,97210,10117,53031,76259,35004,24008,36328,82054,25640,31275,81060,84570,71418,11144,79318,34448,39147,78123,78429,14404,78470,45920,14730,27297,82490,62378,62427,30870,13874,62928,98006,76653,36310,88913,75942,12128,48018,35317,96036,95992,80312,11520,92531,38431,63987,11911,57842,11745,86360,97043,37550,62679,96012,18957,38853,14853,34997,98892,57710,36664,18467,61602,93933,40842,73146,99042,84559,54397,17912,56022,21339,82521,37641,62486,89937,17909,10079,34227,16274,15990,11954,87257,15712,12121,48355,89297,76823,96649,78038,71475,94065,62713,75833,90061,13000,15688,83389,40375,99782,82805,71613,77229,14944,71213,99585,18041,65244,23662,25079,89305,38595,35427,51336,57066,45718,76108,81494,51472,57428,97958,27657,76645,37456,26113,25020,56016,12545,49108,40563,83683,16106,33869,70607,47802,79002,76826,99914,33976,23149,83794,60488,83538,84167,74925,85142,84262,73032,57246,26466,73549,44804,87050,46171,54873,63276,79603,41255,34906,97622,54904,42636,94929,53820,35814,67676,92092,12400,50104,13600,58253,48263,12743,12755,42423,34839,33283,76675,89866,41101,71141,62934,56331,38011,24138,69170,13292,78016,20009,35563,67110,81164,40501,38574,63994,11099,65771,33087,22243,33340,10551,27710,93093,91060,36415,61999,16395,81358,68107,58483,26297,80521,42110,24568,31525,76415,59239,63954,37831,45155,42797,97774,66638,77160,14228,31686,61032,11057,37226,59705,99287,96984,69208,79258,63367,40109,19020,68209,90590,70451,17150,55826,10699,57746,49949,66077,25631,32797,64271,70227,57783,60531,57916,14999,12224,78769,26731,47390,37770,61346,13448,78795,77249,44080,41575,56568,89822,99230,88033,99530,15753,56226,32888,52121,95392,76799,17410,64158,50956,74706,87096,50012,23071,82752,56192,36920,16211,81468,68271,98388,46695,94166,26163,46054,31730,92537,75623,60319,25090,85049,41044,80089,13469,67942,77935,83120,67386,74393,63720,85241,72614,10221,65671,18281,91645,86018,33968,76573,92050,42730,11338,99620,11827,12183,24417,42359,63821,71200,26377,72786,87698,98441,36444,82391,79731,52895,94540,50030,86008,62089,76191,39466,29726,97108,50674,53144,12637,11076,15073,73868,36731,98496,13647,30835,38798,16554,57372,55766,67972,76506,65770,81814,58926,84200,40465,98497,62938,15569,16702,62386,48460,49660,41873,79129,68708,72781,95833,23838,71039,21649,74685,38744,40848,69425,58705,35271,76659,43613,58286,99648,21404,47230,32659,68182,10754,92555,45556,18630,64658,12616,75899,35100,31070,85621,72372,33222,90176,59781,80877,84427,92103,62631,47118,18359,11343,43851,23990,44666,33936,89162,38361,88319,73761,97689,49554,71802,63775,41402,23747,89909,69671,85318,27370,37932,13165,94739,63525,88363,76009,70298,67883,27864,15478,78377,20170,24025,58762,65717,13912,63429,52822,60320,69384,14978,80949,21326,23764,92933,10658,25601,24957,76737,55936,38523,89580,61655,71981,92394,12761,36872,80144,19013,62512,83555,20630,80114,22420,58104,80133,72305,60407,29921,47290,25199,55077,46286,24457,61164,93833,81561,43586,75129,39631,44235,14852,82619,69250,74136,85798,39200,90211,80189,24036,77275,28886,25195,31617,60411,48198,73264,90379,44023,99031,95899,24315,17549,52818,51081,23768,27956,80453,97969,93310,79779,87914,26665,92905,25304,54011,93159,39465,10470,76130,84499,89667,86983,43985,36276,50384,77289,16794,37720,26750,96902,32319,77058,68818,16753,49830,34777,85231,22803,67652,70402,23541,35305,73899,40188,31494,53999,31858,40247,92956,32114,41848,27900,26577,70635,64713,46271,29748,93878,16774,33474,77767,81699,63896,41780,87747,79434,79447,52212,62394,73516,45610,13870,61591,99368,74862,58859,66629,79938,65325,61948,23492,31152,14478,62411,40436,62144,15524,87924,45390,30429,34900,42418,79584,16023,91176,25337,75544,79481,56275,34437,29507,80289,87318,74351,51579,89454,45328,27767,65302,33610,60618,31468,20540,82038,77394,99251,64537,98941,91512,77295,85825,85110,29029,43488,45983,20584,30871,60197,27371,84899,43876,94781,59520,24429,88503,55346,89049,92664,67379,98530,93064,49375,35779,34104,56248,83572,38678,55157,45793,83355,47987,58737,34718,93525,99089,27898,12538,22346,95438,79721,62783,93858,90125,35942,20341,15053,53902,89391,83505,38875,27308,40607,71027,84701,56048,97283,75467,88976,95142,56278,96245,16323,73359,47262,14384,37035,35374,43652,73489,73540,52616,64160,96878,90152,80642,24013,27118,61164,56084,77294,19513,77305,48563,88120,69853,81979,99155,66508,92065,46874,98552,23317,61855,12504,85305,94464,98263,30684,36519,23393,64010,68526,37234,26697,84300,84829,69547,78801,86217,33047,30326,37217,23298,25071,27912,32594,81323,26298,29012,90156,82872,21663,93002,51721,75059,28437,81016,27485,88149,87904,23984,82308,88504,75720,12071,71367,85289,26923,23523,78059,84798,44808,68368,43936,77395,80258,60134,12418,36715,51949,22251,76833,39495,35947,62415,81507,66327,52462,60307,27752,47309,57914,43562,99183,86316,13601,28217,65376,72548,14508,48056,45148,75783,97685,66095,92201,15356,61389,39207,66323,82724,73222,55798,12051,56617,83318,49817,77018,63029,63267,41852,13230,56803,43078,70302,41324,36407,21821,81569,10869,73504,78969,85420,29739,77122,77228,74557,53732,86896,87889,29059,96482,12540,21274,42434,69424,23548,57254,14991,86126,64164,17636,40024,54040,46985,94498,73987,29546,50979,62874,80304,98157,30503,75271,76025,32702,10981,57762,90021,87777,73171,29328,67765,14058,92368,81321,21889,99356,58273,79141,77610,16370,40403,71185,27825,99552,29010,79515,98718,92877,20660,14660,59191,11994,19790,45567,51649,83044,14741,27815,35340,23334,72749,92228,44474,59664,59154,48528,43756,40783,90739,87206,92429,94836,70468,88181,88703,35287,25224,41561,96748,74166,12899,70050,84989,32230,40026,24225,51172,90524,77373,40413,62331,96276,21708,61721,17488,66242,53716,80181,84611,49331,13725,59538,34470,12791,86367,14433,86073,27062,39418,10652,61552,29512,55218,77687,13632,40664,83728,63805,52838,24581,91086,37406,89471,68866,17297,45118,22237,21772,41464,83768,45106,53556,22704,12413,67755,37932,18545,58629,50039,99649,15827,46964,54903,21463,73515,86049,11400,98458,62239,88614,55292,98032,64191,41717,56821,93640,91926,62844,45557,88748,11943,92526,26065,82397,34114,47840,93892,23264,94463,91789,54326,83518,86310,38238,30527,24567,58739,17676,56134,52077,75678,19711,34592,82997,31264,26453,19903,77109,14370,19700,22925,53851,69643,13459,32726,57890,27105,18310,14722,77720,31537,28762,30458,28748,54426,10911,47093,32791,21707,65133,38217,33695,17541,62691,44711,24111,17813,22907,11383,17230,42462,31478,12939,18180,80764,12273,58571,83788,28620,68592,21809,59475,41881,23956,66240,35341,19007,47634,13075,99679,63501,31093,95292,89103,21424,42267,45283,90508,83455,68526,60013,30028,85099,84857,57727,41485,64744,64198,35741,46639,30798,93500,19217,56533,99287,95519,63536,83992,12082,75434,83328,83367,31050,29967,95776,91992,21669,36390,59902,23886,10828,94698,27017,11478,66870,92750,85921,40772,56682,98272,82104,20823,20413,59804,45156,17098,32877,19747,51100,38917,32746,90657,71052,40410,19138,31401,59394,61112,31683,80411,44122,48952,50305,43432,88613,27233,48806,96864,10982,67741,71598,48950,29456,97423,16248,96180,33059,62004,16680,23368,59649,28630,85552,26595,43081,32579,19622,81605,61610,77138,20524,53484,77084,39375,84330,17531,87100,82131,39565,63990,14440,61784,47428,89936,40092,29915,91146,64142,77040,83842,69311,68086,58275,85610,90805,69373,55910,77268,43635,37007,42756,40432,53656,40661,60480,45766,56727,80003,18932,53632,53081,64874,67167,51683,12325,79415,50811,29704,45116,74812,85214,46628,87875,22773,90213,20919,13717,60058,34321,23505,13384,11265,66656,67125,88716,42165,51451,88086,77571,57879,77600,59999,25783,57556,96727,95624,55138,50100,95132,82104,13294,39248,31108,23111,22026,89798,74208,69543,46348,82031,20438,43916,82507,53687,11360,28475,56361,28504,68409,87588,49965,75860,25964,79988,25800,77109,59478,50700,13080,32926,81923,32034,71472,86987,83185,64949,78564,51229,51599,18261,28182,28311,64622,89002,48601,80792,62678,16160,30641,11908,54066,18639,18155,87208,61140,62855,40089,14009,90902,33221,19856,27790,33057,30707,57643,65794,79339,69412,46620,93653,85723,79849,46075,97298,91198,97406,19513,61819,30197,96452,89601,74128,34858,40493,62076,44429,95044,99030,83547,20800,42325,54671,35695,75400,83236,22614,81888,68434,83559,41628,13269,67780,72486,80614,97891,23161,80382,25911,84703,27229,93028,22703,91300,75685,18590,31427,36129,37539,38926,83705,73390,27220,14680,71324,64485,22104,91894,97226,92215,41271,76373,16827,49492,38172,98163,25401,11540,86630,17465,33387,77150,93164,84765,12931,97639,65353,53883,85906,95417,62444,84733,33984,52431,29553,41487,78540,47254,17085,39983,12313,29512,32495,87641,79488,94054,58281,30225,42504,44573,37198,42557,42740,43301,92191,46359,19276,24403,79673,57697,44538,30435,43659,74063,21925,86702,86706,99507,66555,24957,52462,81548,59831,99705,29586,27754,71496,22518,61995,32670,38739,91843,26311,47659,69851,31964,44648,74677,32944,38645,51013,61891,18109,45880,83269,57536,61856,96876,20551,44926,58236,26074,43282,27292,72445,13452,65728,96503,17488,68081,45386,81264,21254,42022,94663,78598,27432,77289,79782,48266,97064,26058,28010,85974,60358,16850,39116,58577,75276,56500,74988,68016,84981,82644,52266,53838,20522,48213,84879,99472,89518,53875,66965,92914,76726,79556,61029,84119,40445,69222,25344,76270,98939,27508,29756,86079,31859,97798,22220,76341,63550,34406,51500,94910,45837,14996,17655,93250,36946,83065,56540,58319,89578,95049,38474,36649,23853,22832,81003,21912,32903,77484,35171,21606,47539,36317,49377,95129,95405,82539,19202,60129,81835,21107,99997,93599,53042,27060,97610,51284,82280,80294,47880,52085,18441,11398,50126,63258,16363,43747,63830,79068,12919,90142,66894,89192,96324,78003,75111,39184,25019,32230,96322,33153,58983,74100,51916,71585,27652,60828,30648,15531,32812,24490,11374,67213,13374,42077,61223,65380,69440,17968,36348,91012,54853,90367,56377,67055,56527,25360,74313,60922,65229,56361,84428,55276,64583,86883,72980,79087,60817,59750,83312,44189,99887,42111,40636,36547,74739,35374,56537,70521,70333,74252,43426,66537,90001,96373,91167,50989,30182,69911,55708,17420,95382,66288,41831,28648,68066,35921,67699,77722,76003,39669,68279,44008,89092,16678,25061,76759,53738,19658,17739,44387,53834,84558,82479,94757,15597,73478,48217,78311,32525,49068,65534,12070,29504,56219,46979,63493,42678,91192,81294,22421,96476,56690,42823,25956,63500,45573,35343,70494,14989,50700,83392,37511,26140,68771,91687,75681,25820,29067,47958,35831,67891,89910,76789,69101,16289,16380,38754,51053,17942,30519,32883,43664,63798,94723,75719,83867,47375,56026,23717,79803,27373,27549,89102,14114,94967,56298,84196,78929,45707,53334,68820,92897,75035,63249,75066,25358,22093,82223,62301,29455,86945,64512,21579,94833,42938,90228,24580,14542,52804,93398,89672,72764,59321,66529,72331,87717,59093,50095,50246,44571,63239,92752,88629,52417,94055,62690,12554,26540,31047,12870,70496,87658,59777,47337,39069,30038,35183,84758,70561,63946,56774,12053,98509,86802,19140,75298,94712,95808,75936,27631,56223,71497,35490,91076,34735,70890,33120,15510,41954,68373,85956,58003,54984,76439,51424,74244,31452,92458,70742,42669,51022,64896,37189,44866,14254,77077,12846,64962,55155,69872,38383,58882,70106,43628,50141,49963,25058,51160,27847,50954,42906,12563,11339,40816,55097,89899,38914,46335,16162,38890,13938,73646,95367,68217,51780,47861,50629,10215,35485,30198,10172,28535,72987,82182,75067,60099,87893,51258,20263,95396,71150,49154,39317,14208,56992,33712,73429,20615,19834,19718,77952,29053,38178,35317,27860,40476,57297,43627,87944,71364,98668,42839,38616,83865,90768,21079,59237,30076,32203,98903,41436,19340,98059,14821,17960,50628,68524,26756,19236,57864,61202,29619,51118,24462,48661,57353,66128,64009,14048,98624,93792,22333,80851,53097,56497,66653,47305,11283,69805,20200,45833,78992,61995,84820,34384,79266,31441,71578,29867,21272,34876,90817,46030,66765,89976,17647,50568,22649,72461,92605,57835,71160,78315,95009,17658,64590,21582,81166,32782,37488,61031,30713,61896,46277,47540,80519,82748,90563,89612,31262,12153,26059,15061,83613,18257,86960,51823,12548,52802,32765,16312,15926,12034,49417,24389,92948,91596,59694,57076,39611,44083,98465,30509,50618,18465,61904,64967,76615,47246,15795,78529,42727,45796,44254,34362,86614,48772,63859,15786,88351,96385,57862,79919,70845,40452,27951,27885,66561,84851,69058,57347,97723,69210,39358,16283,21214,47096,44519,46453,55071,71284,52572,95429,93007,84496,13132,50423,15783,50845,89452,71638,44172,43137,79531,54507,69259,33085,58384,36553,54213,68486,50616,64047,99840,37315,29148,67133,28513,88849,13218,23224,46588,74578,19321,32551,74693,19700,97572,27244,17927,10418,17317,12107,86766,11951,83555,45931,28025,97159,85694,16754,27267,11311,42624,16448,16419,82969,50718,75809,80745,85651,90127,29173,82078,58447,87516,25305,59636,31941,79295,74048,29680,29969,88774,21305,16232,88216,50094,94141,66127,27634,84129,29369,95658,58668,27375,33139,58787,18434,36545,83214,39290,42624,53273,80681,57231,40294,29115,69697,72652,72093,91073,43692,58318,11578,92840,74742,34666,87360,33951,82096,85364,84592,93216,90267,67790,86775,99572,45171,55482,93843,85079,13913,85037,21060,56331,46628,94180,71399,46523,96423,91439,20651,37544,36467,27590,81186,30596,81201,17891,29338,83768,89796,68872,18669,41911,18883,57048,64032,83372,92994,61521,72830,85648,36613,37177,49023,80037,90036,36283,23663,32438,58492,72344,65712,12041,50008,33810,68336,57280,82449,41254,69148,93835,90200,92084,19471,30598,39298,79113,21829,80555,36578,90120,91501,10080,50740,46777,72033,41473,57646,36303,58052,82944,87584,78565,93637,29387,54334,30637,59959,84671,18824,88254,80986,98078,52678,18157,57382,86772,33512,28184,43585,72471,86413,21145,55956,61178,93936,64117,47253,91331,66438,23600,18452,34373,80851,12145,15733,60814,42484,25004,36190,17599,11371,70836,43831,29404,68675,20935,56476,62272,57408,93911,49596,94080,78002,89591,85028,12108,37470,97167,71224,35549,30719,95639,36474,87542,82205,58813,46668,14109,59914,18705,78031,76047,63296,79147,13013,32545,96844,35823,25505,52244,58013,34207,76777,89365,44784,42697,90254,16232,61273,93127,37792,63606,50330,14328,34719,74116,60168,20826,37647,62233,47307,49151,10722,89925,83619,66240,84313,30843,51127,91294,95321,77748,95962,15491,82559,23338,94589,78803,58823,49171,60505,29922,32766,34730,55782,98797,47828,69787,99836,73051,90331,15935,19370,68507,55784,29576,49364,62131,96884,60713,97045,30692,19654,86826,64395,47284,24357,21373,49114,75571,76993,34246,37139,59956,86181,74844,20020,79777,93296,69240,97237,77965,98126,75590,55131,11652,74374,79659,98257,40030,75401,76286,12734,89578,59716,46114,45776,67798,12870,33822,41390,59946,34928,97795,45582,15330,76692,71398,18294,14627,44570,35591,46029,69691,74831,58948,95429,62642,14632,78308,70933,15541,25152,96624,24412,66298,36612,64049,17116,26370,12173,37816,26861,95422,77701,10262,66728,24269,20946,19022,94187,89314,63315,21066,85096,68601,20590,10741,11430,98607,75516,72621,37495,21119,91973,18674,85007,36302,88655,53129,51112,15764,78457,12074,97437,22372,72942,79448,31215,32586,96893,42235,48873,18080,72888,21758,14680,92409,24984,73447,75033,22593,40418,45000,94967,63011,98717,89189,30385,78833,79565,53271,80603,92836,37407,21017,39484,97068,53419,47821,25046,66188,60743,68492,22603,46328,64184,64099,69026,84712,52349,20348,89364,77477,10750,17954,31266,72917,43458,42133,39656,68265,66915,46990,80309,23090,18907,48495,97978,52490,70841,47597,31520,31897,74884,48250,23686,64667,13038,88559,75603,55085,92897,20453,55141,45131,80406,22122,68416,39997,49668,72981,63964,62222,15284,99990,18910,28547,68017,96233,40607,16509,97061,80098,82438,71018,79480,64974,49640,34145,74716,82077,38770,66526,88555,76774,83500,48387,37721,93067,24913,12099,16134,62030,85862,10677,33195,21391,53965,66911,96057,46771,14281,97915,60926,83109,57496,79174,95105,49096,11891,43738,53036,55571,67881,65486,45226,99359,49302,56496,37780,31903,70900,10821,18559,45632,53339,65315,20035,94955,85396,98583,67745,60048,98765,47171,37373,32919,44549,92133,89341,31368,12646,21099,84318,29991,83568,34590,49097,87130,22657,52474,26826,13735,21093,15403,28453,47273,70213,53865,93720,37831,60191,51836,96135,60642,78468,26059,60283,39656,11205,55555,48588,94223,26952,78149,28446,94021,40279,32209,23968,45590,13861,59918,36609,95473,88440,29884,24988,84787,77821,90037,68864,33328,54345,84104,96190,10056,82931,84741,26459,33875,42747,43561,21341,25794,20408,29825,55984,57512,62957,63697,58883,29858,23471,70991,26814,38636,84521,81584,76798,81409,90207,84851,70465,60829,63275,94028,45569,89400,84577,58128,25260,92600,15610,84036,87036,51706,33650,77050,31483,53328,77004,79386,35866,49608,14077,72761,66136,83391,58548,18465,52807,80014,55113,29370,30164,97252,13321,80627,19506,85087,95408,45200,19276,64443,42814,42478,58231,88045,87317,21947,74400,74671,46820,24245,14621,92723,34767,37933,37463,18282,25016,70928,33447,27305,38022,12425,29537,56712,43022,73440,97797,95304,46738,20847,86342,92710,91228,49445,82458,13457,76363,96504,61909,74708,16737,95358,82862,56766,38747,25956,67227,60274,76203,98035,27572,95341,76281,71328,12728,75740,65913,48063,32486,52262,37939,79910,90963,55910,52697,67851,16279,66438,85709,85565,31236,69035,95385,45171,58590,17741,65600,32449,77152,81532,67949,91647,68955,92439,78499,78204,39435,24120,43896,57888,12589,12390,26278,48662,37289,71507,85149,32596,64972,97934,15407,89063,77389,72507,28937,81701,63750,41178,40574,80923,37785,23093,22747,31944,62685,31344,30757,87182,28307,72425,52288,86824,24611,98067,58211,40519,78299,44201,79301,93444,94860,11827,64100,41602,22584,54208,40209,75695,98124,53443,24395,25791,77150,13939,16881,79242,51089,42006,60934,94926,52891,49231,98798,76781,62451,10550,27113,55491,83515,61550,93024,23378,96009,58848,89199,14972,83388,16954,41002,39949,17687,49974,76210,50352,31870,38763,18808,40197,49678,10460,33775,24050,95423,87630,70061,61334,85701,58210,26077,58768,88901,27186,96774,64054,93942,42213,65086,38565,77596,97901,10266,67890,70259,73479,81415,18367,29405,15299,97640,99756,50698,92432,15240,62619,95674,44322,85557,85655,47130,89472,78609,27294,82138,82241,88554,91847,81925,90802,17710,50040,93399,83006,56678,30138,85325,89261,41585,75984,49714,47356,53669,41839,12089,71884,53523,32908,11628,98866,14735,51933,59348,32967,22156,94837,45607,33647,36227,42635,37723,13849,55226,18102,27604,32560,68927,25423,94594,24136,92914,82775,36060,92359,85216,32566,42203,27142,30673,87585,67440,18237,44976,99622,10441,65182,11007,55667,44245,39338,40405,61495,95043,48367,10069,92589,88558,67595,14906,59086,14201,16712,41996,23908,84710,97438,39778,40002,56952,47949,94202,31060,34661,97632,24958,80419,85169,36047,68339,25863,84380,48414,71028,97583,90776,53373,75428,42059,92070,58902,10364,83736,96938,44720,12003,69306,71252,66569,47565,12849,39472,16570,34384,67927,98430,38466,14994,56760,17316,36669,49373,39046,49384,46053,41092,48023,39572,23565,13339,81040,70974,16628,66958,51496,36633,35224,98121,65411,93425,11780,79947,72040,48671,41725,50122,73734,25973,78814,21983,44284,93664,89880,95117,53878,17067,27118,59019,11565,18506,73533,72521,65731,40258,59646,19300,76994,63629,24175,31872,58470,58020,98645,10257,33685,74088,98485,60905,89126,82224,79676,70819,18815,63954,21245,72961,18893,99464,82821,56937,81776,66684,97415,36283,74109,80741,85894,99042,41119,56513,61332,53844,70097,21170,93638,28705,73842,55140,14554,22820,25084,66929,14229,54919,38285,70565,20935,43983,44990,34118,69818,69546,25596,80954,76123,96147,11735,55012,37645,15692,78065,66024,87509,14524,59602,54479,94309,67753,36481,67525,10484,52656,40158,39548,35907,89067,10025,29467,90488,43206,93839,53715,47260,83865,60399,95588,63162,72291,89074,65559,13908,72567,63239,32126,94277,49969,40905,77950,16544,57384,45604,34659,54226,18129,63557,51155,16659,55460,77342,25890,37944,36977,15460,52705,54266,58054,20251,56591,89240,55224,82308,70174,39958,43301,35975,14715,59734,32365,92199,20566,77971,81616,69153,58313,30293,12816,52545,76766,13736,10576,91013,47156,53644,43242,45233,80508,57001,28187,90565,50860,95694,35480,92357,95135,24290,10227,40139,15688,39814,73748,20820,87111,16401,64704,73979,86345,65622,94117,59312,95543,52383,63048,52865,47000,23079,12962,50467,29268,48314,48156,72740,63561,42050,27473,79962,29550,54629,90046,90022,19338,17530,12024,35784,47764,54712,83260,40476,55134,46619,98494,10310,14459,76856,85411,54566,36139,70695,10832,10351,27787,16054,14147,43163,24594,28755,30149,25393,95301,88243,21042,68744,87496,72046,66170,85010,73256,21601,95181,80827,11837,85001,35732,81863,12665,84465,14153,77271,73953,43329,40560,60731,86888,29222,68190,18350,95930,17664,68736,58148,53613,79906,75157,34025,67210,31829,42129,54549,68736,57442,68689,83419,89317,79133,20057,46123,34379,34249,85209,64478,94038,48817,63649,64313,89294,83461,34739,60125,90113,23335,96080,18830,25837,57345,57807,88311,31829,19951,53742,25169,66402,63660,41793,67520,51163,75197,92474,88452,36254,35038,18391,85371,98457,21486,72140,38100,24162,14893,29015,20072,87828,60691,22528,47492,86280,24042,53445,50101,75997,58766,50848,75196,71233,60016,16812,95517,16735,16344,23346,42086,92744,80644,94106,84519,64544,73066,50060,38540,44131,32247,73067,31424,96403,83378,71318,91496,59134,88242,81904,71460,64034,18274,94588,32963,38814,75728,61094,38664,34112,13859,65522,30942,46292,88276,24491,87848,28507,38865,65721,32476,41775,46738,99000,21919,67728,85084,71004,84533,67824,93071,42870,22392,83284,90284,33985,47215,80345,77275,73239,98425,30836,81762,46622,68442,25408,80667,94836,41613,54682,60112,20454,97463,48891,35266,86166,11481,29758,69244,88161,53246,65210,99321,76832,20953,31832,13019,65344,77938,64772,73453,27232,62914,58573,21070,78491,91451,48220,77223,75009,63608,14906,77220,61320,40315,96480,50525,51342,54332,33778,19676,46814,34058,22614,43568,96554,14804,15262,65159,69569,59122,65742,43542,73694,55091,25870,61738,31497,51540,27922,89206,68761,70049,80823,64877,69726,38048,40294,58973,19132,88479,29552,64762,20702,62873,66336,25916,32165,47840,19229,99751,15433,13990,88699,67293,21264,64104,55111,65326,61802,45516,94959,85048,76244,37674,32908,39790,42341,63577,65892,74929,49902,51141,57596,87897,70199,82484,50755,86094,15667,24858,11849,18762,11739,69915,64186,53028,84436,71443,95395,32239,31440,35673,21713,86494,22288,90529,36212,70737,95249,21833,11887,99856,97246,21124,48696,30814,90036,84654,28389,36983,53128,38230,53461,93549,16241,80701,24157,49320,73797,99688,41010,95597,60043,71664,21567,35976,29548,88634,75936,41944,33381,77812,87232,59816,10897,87877,83734,55632,62421,99297,37204,13533,36290,31771,68653,65746,76776,86252,21092,40091,90776,98878,50980,32573,28383,78214,35187,69664,40988,90538,26131,10043,83062,21281,48549,90262,18239,56626,58041,19346,77241,40968,51784,41801,95997,21354,95756,59580,81597,70397,92649,39221,86235,35916,14663,24999,40224,39295,55725,56743,62753,11595,79749,90159,54652,60094,16594,37377,16879,55451,79572,27783,20982,37154,85256,83326,81427,49288,54239,72005,36779,40528,37540,50717,90845,44366,72373,73521,89873,65165,21842,83032,75676,18061,40473,98153,48600,49950,19016,17165,96671,23695,70948,37795,69377,40585,61276,36289,13203,68782,68412,32396,70639,47692,46266,43678,60693,30280,13371,89434,33780,81191,97012,73084,83962,50775,97801,76740,50938,40227,30092,76862,65903,64021,25489,96873,78606,85261,51043,45285,45683,32957,73651,23707,92038,96196,57340,88125,30721,55154,19764,80289,81663,75830,70349,39942,31433,28439,40550,51461,48357,78222,69869,58806,71605,25059,17336,60679,21519,47267,46806,32685,35868,91972,25229,77960,41529,32702,49652,44355,74590,18923,19217,13314,64777,11267,97586,45685,60367,31420,63826,10484,61389,17232,36285,17776,93824,50802,53639,26744,32852,18884,50484,41801,19388,80684,76883,39611,98553,86781,38335,61411,78506,16031,37252,47286,70135,89219,22933,70536,14412,55104,23205,17135,92417,64601,83747,28116,83146,50276,39985,67283,52736,82190,41573,98389,40110,78925,76602,86996,29650,24544,53120,86867,74180,99621,65861,52366,50013,36006,85069,46291,15712,34216,92566,18941,84303,26783,46179,10226,29324,65560,86216,61847,85031,48561,35296,28876,75580,41069,44890,60960,34701,26571,80715,70344,42351,21817,99507,46057,71989,69264,67817,93380,76599,96829,10849,82289,25977,21536,46623,65042,11054,99687,99020,39602,72097,50869,31149,56203,44882,61517,72215,82530,13563,67793,29976,84453,13390,12542,10069,72887,55441,35893,69717,37937,33498,61267,70913,81918,92186,48604,24276,38035,60952,57557,56411,44106,97875,95305,25055,94851,94723,31955,56724,21997,85141,73049,66615,68360,87057,51817,31264,63271,72079,19508,52689,82816,55077,44577,30917,83774,37884,97238,76609,57064,47217,92648,70735,54689,87616,26180,63167,92027,55640,94875,23017,59093,75383,69071,14007,36291,71208,67313,77493,69383,84061,19362,47738,50547,18012,45525,28522,77371,40205,69012,80188,28434,67634,72819,38972,25778,44456,37752,49689,98431,88236,19304,33094,20169,19016,63757,44503,91538,90213,97851,92661,44503,33742,83705,90851,29317,90168,81029,63864,73725,41377,11455,68644,88987,40843,60699,75884,76405,66015,81831,13262,37439,59451,42173,15140,93738,13373,32863,53622,39625,33395,15392,82475,49781,60437,64387,42631,90365,88729,35110,66333,15601,21890,12963,29749,57344,92113,61938,67895,38105,47786,64113,18722,39664,37684,26068,19678,72284,63250,18751,27915,81493,67764,26337,18553,86706,26169,72354,62042,85864,89557,72048,92327,81550,68508,88838,71125,70686,42677,77267,21744,34564,73018,50835,97217,11524,29464,13663,96664,61228,33905,95757,43811,53338,38409,33591,43952,38438,41000,10259,69897,94902,94108,74631,65864,25879,81340,49092,46169,21370,81556,51413,62490,95597,26904,18453,23010,11392,98032,34942,80866,38321,63777,33542,35929,95856,61783,93074,46590,75788,57489,14737,91924,65907,20886,12111,16635,33052,20470,82305,89916,95400,62679,22042,17428,83398,59356,82129,36436,69242,80838,85865,21820,45186,24981,56405,84025,34742,22182,20843,12650,80310,88102,50999,50363,73610,94875,42616,93753,24375,13513,30712,47594,31649,76696,21951,93303,33230,17971,60988,31791,14127,59513,29151,75541,47876,93987,22979,71168,23867,93980,64778,31742,74455,75476,32926,69682,87698,90061,24434,21009,83836,46686,55863,21161,31817,14775,76355,91668,79193,99367,26745,88721,53832,31474,99658,84733,85923,62578,50732,71358,69067,17897,69527,43334,78253,44997,85445,79979,29074,40434,99365,85829,75448,37560,68802,83346,48451,43924,12161,23016,66695,67421,68916,89726,33700,27082,81433,81645,66167,74799,50857,42784,25856,28149,91225,30605,76804,54101,77392,90260,35801,91154,97042,25308,35245,29628,81761,28844,48732,44697,71747,17198,54025,58091,35068,83527,14391,20918,29783,70386,42924,66140,91498,59343,51746,93995,29104,52192,38256,87718,13466,59259,83276,16774,88834,94290,55007,88999,12707,98414,11956,37039,70174,84960,23527,60810,77885,20390,24901,88512,80242,85017,23511,88441,57930,86385,60847,35083,48121,56218,20505,13079,20901,18830,51480,92784,62343,28127,73402,82846,92339,26706,30048,93322,16199,76695,77332,36716,50544,11423,81246,92572,99754,38969,54249,25697,50280,73100,51765,29786,66562,10806,82198,83950,14413,65932,63993,73473,78301,46274,26061,78974,92768,54042,64307,56475,91562,86460,79564,59058,22603,84146,37363,87289,88658,35239,73587,94145,68330,94801,37818,48770,20113,39594,50029,24695,33237,61541,29196,35736,22611,23381,99319,11621,66679,93701,48505,63794,51055,79230,33607,69596,54841,63519,98747,98701,21384,24267,72765,78324,77031,41981,70762,87488,70039,70586,22166,97011,34243,55286,69221,27604,58903,75095,61636,52407,80738,97016,72949,34989,41575,13587,71840,31797,11716,84136,47830,19712,89023,57917,80264,45668,62504,46676,99540,28473,54663,16560,63513,15903,97317,96562,60476,79646,64713,25447,46490,40620,76519,47312,72859,58385,99627,98469,74345,81409,71654,90448,91337,57755,39394,46766,31860,38048,15481,77627,96121,41384,16012,79493,56852,37879,90918,51765,69507,45000,37306,44042,73392,51455,36897,66588,74780,51296,94353,87637,82752,52667,61518,34078,65626,17889,34400,75866,85514,52962,18609,61360,58162,53635,45487,26133,50888,16520,16906,93653,75799,15628,78974,65325,53237,56494,71829,99762,79061,88011,20444,58856,73354,40271,62646,18634,59209,18586,27237,55423,63669,81469,51166,66096,18605,78730,88829,44096,26467,91035,56634,65920,34128,21920,65761,12649,20844,18851,21929,81831,10148,67382,80528,74504,64470,15360,60107,59108,35824,76651,94976,54359,99291,48797,42571,81626,14208,73338,88070,68609,75000,27792,36085,12615,54038,68761,49447,28593,99268,88398,24189,16767,43857,52977,58802,85084,22693,86470,70654,88476,86034,20800,65774,10639,42809,93248,14701,59686,17145,52242,92316,96224,36313,77283,96517,30632,47578,80310,91429,55593,17747,67504,92243,71583,40193,34570,82077,46820,26132,49364,61415,51966,57123,44798,46052,76635,42881,70941,87798,61628,64908,61721,46711,85983,30408,10421,22413,15323,95876,22862,10079,94461,99439,91902,15615,38123,83947,86881,96195,28880,73142,66027,52925,35340,37613,95741,17112,82975,88802,15728,98748,33597,23241,27166,12944,30169,39554,46285,89895,33688,81788,77921,25953,74751,12719,88494,49713,14481,78688,32670,29416,50132,79833,85982,94591,75547,42227,54354,62038,19456,44424,49950,92179,55045,35365,34415,58891,24645,90553,36046,39961,30676,47958,73294,64681,54261,53268,37545,86185,62219,79805,97362,40815,30531,85139,39093,43047,52595,28099,60191,50954,98300,46155,99976,42175,30751,93975,51083,58886,22865,20733,81103,82628,42639,14714,43162,97388,48900,62838,71180,42383,94025,16349,88007,90059,17051,12371,85334,31150,33904,52280,12027,17947,78473,67777,89771,10895,95395,74243,47468,85502,94146,80527,45460,31025,66935,40242,77956,25126,31627,96556,64226,96108,31752,23114,40630,48309,68541,79587,39120,95525,70430,52455,15748,66143,58487,53371,33223,11290,20643,95104,92076,39573,31569,74576,95088,46937,27608,92272,54085,95918,61258,39441,65041,93496,50970,57076,50926,64043,77803,62953,41241,46049,45848,12697,80607,59961,14134,46618,57900,56123,98254,29068,85938,17580,94302,83450,20358,79187,14503,25800,21798,46082,38592,17643,64522,14209,11120,94449,49043,31852,49649,35673,48771,46274,44468,69216,70193,23263,21499,16899,71045,14791,66016,10918,16327,90642,56689,64872,62092,90606,32416,82633,26823,50947,72633,85149,44594,18127,43340,65904,77613,75367,33425,22106,95733,32770,25044,33753,82176,88631,19993,98820,70219,32421,58667,81368,18433,93803,42838,47896,98729,38438,32962,85435,70080,75611,45868,99089,17129,16019,72099,19078,52027,42321,16126,94303,92708,34142,41312,62277,45958,77893,69151,99683,80696,25818,63231,22853,48311,40471,55659,81730,28898,61710,15919,98458,98374,14290,22203,86845,17060,80761,47299,59197,45631,61997,72847,69460,71884,13121,63187,64143,47022,94230,90292,75191,10537,72191,66234,52653,88327,34701,31272,50688,67322,22649,49449,96674,33553,29038,33749,31228,10170,99456,13297,84459,87231,25925,11374,51568,32335,18325,37177,63758,88236,24929,48171,11991,92347,46740,62318,86365,31325,65803,14749,31075,54394,47731,60474,75187,51920,52424,20382,64809,59829,50265,22740,66930,24584,92832,76448,70963,92122,58512,47702,29539,83675,60575,22807,19096,33719,81803,82528,61110,21209,11302,77212,19723,21534,45042,31324,75883,19685,22625,77225,65032,76990,55752,53179,12042,49435,38239,35488,57503,89383,78545,67749,41689,15002,25597,53942,46331,78087,69098,18271,32293,16152,93719,57295,78739,37653,19501,68787,65042,26705,61272,20056,21803,87951,31027,80471,16352,91117,30806,31098,97367,65260,59583,79520,78025,76877,34947,68209,74557,50786,15437,22018,60783,22925,27960,84888,57633,31061,57534,36019,87327,89254,21114,79205,95088,83738,43973,48994,69314,49202,28250,94841,78229,82637,19071,31646,21445,64521,46675,14954,23412,93412,15724,75290,95433,70451,81820,19598,70811,46368,68778,73887,32965,54230,95487,66280,73511,89358,82412,90495,25302,94062,88590,46712,10483,19200,41739,44937,96777,79893,13506,20230,19358,47380,19356,89717,74933,23334,54279,71841,63635,98712,56585,97423,51676,17492,75805,10132,91706,55790,23312,74031,28400,32226,88493,67424,51545,29093,19560,84441,90661,42845,86581,97540,68393,90801,57086,88661,95190,67486,39876,18094,31674,78353,60780,25784,74050,59642,76917,97092,66571,55746,95350,66465,53049,24105,21666,28226,48973,70049,65832,33220,54368,97773,77479,22310,29464,78544,96985,96817,34858,93760,66887,79432,22693,93363,67640,37096,82995,19210,40676,49338,89856,72308,31625,29581,17858,66512,81932,37173,85619,47152,64489,48185,43979,62684,22394,40230,79090,87524,95337,25123,85935,36001,43088,77581,92923,66586,89603,16007,95384,69726,29619,31593,36094,59115,23274,85567,52320,45534,54194,73129,15043,32452,97456,40236,18067,91409,98203,34971,78201,32639,50522,44407,92257,86570,29972,77444,29109,73816,11498,26035,22059,50163,71576,32625,88821,22268,39889,90427,53552,39841,97589,80303,65090,60896,72570,15829,45607,73192,32231,18240,18181,62002,59414,29611,11596,50956,77568,90592,97434,34137,51906,85929,51138,13222,87655,84117,39439,99135,10169,79406,42395,36881,74845,89746,56432,88704,79760,15731,10287,54572,27651,99649,59382,55268,40680,79746,54019,62751,27477,68940,24022,34812,70101,36080,26579,68072,72275,38275,68699,13148,92645,42231,59554,68987,29721,27397,94613,90812,20334,24885,63199,18961,79861,95988,50117,15483,27785,50476,72373,93464,69670,17921,26863,18299,38856,23733,49421,23814,69776,31768,86779,57993,82166,75810,24536,87318,45549,35716,66368,80274,87471,16613,52958,35765,64953,95224,95281,81027,57935,49732,83852,71092,82191,40261,27949,56020,56879,83059,30516,78496,34335,18326,48650,68538,62633,34032,33018,23500,96044,68738,65726,48202,75027,69811,76124,43310,17708,44718,19766,50604,26084,42743,59784,41101,26656,16671,45062,57976,29571,33414,48469,15647,20721,46993,34390,38791,23536,52328,42658,34196,69749,76013,80296,12122,98251,99813,56680,92273,43603,41020,67297,54852,94538,47235,55582,86456,62649,96425,15501,50762,38837,62146,56329,54609,16641,29246,70987,80282,12633,71884,36214,59762,19105,63482,56394,25796,94599,26829,62279,57549,42916,74536,99455,54096,48699,56219,86319,31985,51343,58560,90117,74674,52504,22690,62866,82490,66563,88316,80383,83697,41516,41696,79749,82518,11716,83302,92540,78627,78983,58503,50586,17309,39629,30321,64781,84362,91762,55807,73308,42476,31604,65699,76171,37473,51595,13643,25249,93512,86751,53865,85476,69392,72952,75511,55237,83823,12683,12862,34504,63192,28664,90556,89915,99635,28706,78588,93602,38726,43389,64444,84879,70414,59921,18546,23314,89003,84354,14301,48439,26456,76472,53665,10180,53156,13646,65628,13595,71981,69022,28407,43154,91620,36359,53519,25394,13237,64392,35281,97011,84720,31415,54924,58760,73412,69402,46107,67671,54589,65765,11943,44226,74479,66239,67584,18297,54066,28499,37396,38121,70125,92345,82924,40548,36479,95374,29177,95934,53870,54938,24101,17325,82481,74243,51929,64692,39509,23299,23678,48002,66741,65397,35311,48794,98740,10205,23975,16969,53155,25722,77687,28604,62025,82596,97774,13038,79375,50703,83142,14099,65158,37760,30250,21780,75916,97168,67951,26970,27577,74872,52663,20898,38381,45435,47452,93747,65167,46955,70183,69953,77569,14690,86780,26376,68340,61319,94446,10206,97144,46352,34600,13574,57575,24133,86256,74625,27093,77997,39207,75625,69357,55840,84692,96580,31780,92328,38902,37549,83790,23988,66467,82239,52793,21241,50712,17282,59683,41794,65356,23498,89660,38826,60691,60729,13726,89629,24541,90832,41020,99860,58492,30025,80030,38483,43033,67635,87613,58630,41119,43018,95078,96078,64141,79064,82531,68986,56881,15785,63163,54484,61002,29566,74096,30005,65162,44508,68676,93769,64176,63853,65142,74173,73450,85523,48785,89709,99131,92586,51703,91593,47048,70428,91668,49094,34989,99594,85677,82490,19268,64982,93958,23440,61066,98284,84445,22018,11201,16952,67534,98134,59553,15577,69760,77809,66359,40967,67049,78458,27811,38720,88311,57952,49316,88825,57973,56355,42528,57561,77518,45043,50294,69713,45658,82751,49581,36883,17136,66480,70408,95891,60330,78748,41842,25323,70738,40528,39697,37090,41662,71680,66860,35368,31266,68172,18836,75759,70205,93942,54592,11504,50235,90902,54792,27477,96929,85608,88101,43425,46029,95118,81837,79274,99045,25782,49467,38614,19600,35132,12992,63696,75446,83891,29207,56859,69597,19713,11970,71421,60497,69327,52797,14547,70538,25747,14805,45287,47042,86506,20904,96059,65504,40222,98528,64312,66090,94255,33093,18448,73935,67447,24417,76581,52107,59374,49239,97433,93133,31741,99166,44734,39660,65379,21313,47502,19542,52291,47610,23527,68868,46260,16318,72991,53040,45033,36936,29291,43050,25522,70202,32859,98398,55234,59112,48101,90844,56258,71014,99329,92361,68163,48850,78112,87770,10605,69963,73388,68008,82450,67310,56345,22136,54960,58933,75721,56833,69879,28137,55907,98377,63671,26729,76323,46080,36976,33823,80514,42961,50964,87455,96822,83974,57653,76403,55445,46654,97388,82704,94046,20477,89211,34047,65484,60194,29885,22888,47633,39771,13340,98947,93258,71741,77120,65466,17574,64623,67312,37747,98086,92264,54936,32305,29960,51037,59200,65634,22492,55439,27931,45831,81854,27952,77485,13215,68864,71360,55987,66962,64074,19370,24991,60055,29863,36941,12272,17385,59646,13808,16358,69291,69347,13490,30862,51348,23420,46419,77049,45348,29232,94748,50822,20268,61196,67555,55277,47337,13487,71210,64111,94622,55761,66438,30007,31282,35786,64211,82444,51367,87497,63735,87471,54417,47639,69964,81527,20034,75218,83012,75687,50838,35786,41478,47686,41694,30588,56421,91854,68599,41078,22543,61665,36579,87294,33703,54037,60377,18117,68443,50503,27718,60888,68025,75409,39976,65743,19612,79444,37629,46029,74284,49290,72673,72247,56612,52460,84510,62357,20480,17361,99825,11512,18710,83849,41866,31768,23849,64807,94611,10492,43134,71703,48289,33724,61003,50617,92239,12753,67880,80971,19894,45401,23205,25257,87649,75105,71282,94557,18532,75774,20589,13110,61936,80521,51009,73858,90034,65176,93109,15397,33472,78712,53306,74943,62202,97499,62423,37284,39798,95573,29567,34436,32784,29288,28610,75392,41748,68342,62674,71387,58351,61469,67850,68467,28720,73908,22039,66842,48489,49477,24092,82580,69201,32769,48869,86018,54491,23800,21264,56843,90891,81654,42779,15689,88987,26995,31584,70969,63090,10614,92880,48810,22153,70221,35923,10350,95403,36054,62799,64836,83087,44497,98107,27643,16341,71451,51926,53806,25842,25603,97586,31765,13977,74332,21814,10231,33992,11458,19912,47410,58858,46378,58689,56782,30887,80052,50367,16881,60552,79270,90182,72943,72891,21403,79058,47916,33154,12384,39705,53723,84208,56190,27009,34981,72847,89832,21155,30842,50870,18079,81414,74884,40093,60565,29055,38100,23350,61063,27766,98948,88336,53167,95556,69298,16737,17204,93321,32657,43541,51561,74458,29815,44250,67214,46923,99235,39432,67584,71860,31635,15136,48311,32710,54173,11127,82860,21924,85939,48516,35877,64719,24666,13745,47795,52093,76402,61407,30682,43520,17407,25562,56586,51977,57432,45175,74792,22258,36315,65843,21453,49261,56832,65691,36590,80082,12261,98603,68736,73634,16120,25739,91770,14623,98947,91160,11869,19332,22516,72472,27419,42921,93164,83591,95969,35198,72206,90507,50693,93150,34174,11648,15276,20588,89485,91728,49501,16530,58041,59758,96909,48302,34015,56387,35199,62060,35585,81331,91686,70506,13613,47452,73161,93357,35956,26735,85586,48417,83742,10429,81870,46700,15014,89435,67389,64494,26287,59853,58471,16985,82463,23331,22221,57169,99442,91057,63846,63484,33956,59258,20386,55110,93494,54794,39412,17117,98466,17548,26280,50241,25563,79780,72245,26194,32699,42634,49857,82273,38159,19993,39930,94935,44852,81651,51316,15399,11194,63163,68890,15372,86683,43779,67467,28040,98814,30281,17203,14072,28168,20239,60853,61645,22102,86600,55980,23001,75570,18785,25317,95646,66509,50727,83937,31422,90555,27028,50344,72440,41978,55885,45372,95806,76282,80023,69988,18096,48613,18996,24880,53776,89074,40752,60884,23085,19210,49283,67529,29787,53576,21539,27969,58639,48978,93150,70174,80993,18997,89476,59813,40219,30553,55844,34507,85620,25299,12756,99652,32064,45009,69608,36713,12750,73432,13325,35260,84926,94821,40227,85908,46611,51016,46229,48179,99906,53156,22251,96238,15015,47926,32985,50459,96494,39210,94886,16623,88797,18461,28576,15081,69305,23980,65966,21823,26858,73248,18967,87512,36909,28503,41791,76794,47898,32253,44059,96222,16622,71253,45860,10882,42907,20826,51717,17762,17369,79179,57229,71996,48216,21817,29286,97528,80219,66783,67314,61209,37278,74896,29710,13050,34940,92170,45760,95998,10392,80452,79585,63772,50331,67384,69880,70142,31039,28003,45447,66479,53966,26169,38564,96994,95644,19668,29617,30488,83611,80887,38678,77560,18450,30301,72414,69603,70252,99633,41510,27400,28699,72293,63790,60203,12517,88853,71460,47899,33083,10226,61901,53709,97907,70052,16289,67307,52390,33111,70842,64667,23823,46112,85969,11240,90437,76458,17278,97199,79082,81441,61570,29434,63723,94615,85935,40883,47539,26617,54211,48666,14561,54828,14003,66852,64132,66367,58544,15988,71113,28384,62115,91506,15369,42032,26886,41401,94914,93679,66251,38191,78813,29491,90771,98477,83111,20454,86667,56070,66593,23578,29566,21270,75810,73905,47179,36156,61788,87590,46778,68734,98891,64494,14172,50048,77751,74352,38962,71205,93591,72958,67921,82558,44125,83857,81307,45361,67425,55962,83796,42454,30993,86747,71094,20486,20860,94396,52940,70748,62978,54069,17308,92770,77926,24624,36336,31269,18712,90719,60848,73647,76958,95663,39831,90708,89097,44156,34603,82325,16559,44249,11143,80373,14917,22892,46549,19820,11531,12558,14611,25338,78691,78375,23435,20149,75634,35563,93381,82925,55806,60781,35679,69389,35941,10483,24515,24590,72086,60381,99131,94348,58240,32115,51153,25725,81919,97675,48168,89455,53836,39151,33040,19906,40156,68993,59173,83043,23506,67642,94053,94158,48583,92497,43618,35095,35316,77188,29738,83267,17761,44597,31935,30563,79817,96622,38171,22754,6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30,36012,64836,54192,66983,98715,71733,97005,69419,72219,48363,11406,76475,34950,75096,58651,58690,14331,61838,74521,65167,83371,31394,89483,85976,66383,31083,46834,34034,76196,29673,27762,61961,68437,13086,77512,10156,73101,78473,84232,85195,14108,17814,27279,58335,78082,99298,32730,40577,12335,65118,58908,18117,71937,96512,96091,36569,34347,16906,86553,88849,78927,81041,84490,43136,74297,76213,12705,95548,19698,71168,21057,60035,25114,11152,90296,65194,34511,35026,10532,27908,44018,56764,48505,55599,82122,75361,86754,57202,54620,19412,49637,14761,20511,22850,64227,67602,81816,31324,86198,13652,36021,99215,87743,79531,88314,41511,60337,71880,34331,80140,47583,18397,21680,86702,49177,83137,25228,21572,36703,52297,80937,94565,65000,38733,28604,10093,43349,70671,84763,24515,86794,43693,96607,48429,36194,41231,66580,11732,81167,21872,76740,70096,11912,26147,25371,34154,13792,28283,21352,78038,55472,30034,60357,22453,58264,86906,10308,39855,65198,72012,91879,69146,34565,48097,30827,31639,41003,84459,12153,71222,15937,13768,31296,26184,29064,38220,29587,28333,85563,52056,29658,17013,44605,36892,86393,77361,40797,47913,45986,62920,88641,33726,73438,34370,70270,73281,90712,98991,88785,91904,30171,26357,80825,38718,96769,86058,36241,85220,61137,62104,85907,24584,85311,12411,84697,88029,21551,34637,60654,29419,74116,86651,10431,36534,55503,56531,82326,83662,53410,23558,96828,62864,33607,70712,95282,38754,55780,70522,92945,81985,22162,49348,43617,54517,75891,24168,79430,39615,99496,41138,44185,36793,49262,72954,29560,43146,23366,96219,60346,60951,50497,88594,45081,34833,61593,40516,54955,42109,61348,27817,52959,16013,80972,52506,20379,26251,58358,41814,52392,42791,57795,85269,40943,91034,38132,55786,23224,81979,75194,90126,35545,45760,10050,72828,74775,79159,74524,36848,22200,85944,81322,33649,23932,73100,46633,76423,40755,26868,67484,66556,44989,69361,84028,89360,73618,60627,81330,31820,30093,88664,63015,40386,65177,21423,16493,87416,42531,58515,95609,74861,82559,42716,58563,16037,95689,53975,93934,84268,52897,72932,72096,73464,78751,95926,24577,27226,86686,46492,66129,79557,41887,51336,19341,88303,84799,25779,49555,37762,10158,13702,79325,47470,61087,89856,57681,35364,14534,42379,66427,90671,87049,14399,85352,32860,44792,76693,58895,72854,83503,95970,46937,96317,99684,31501,15097,25432,12621,21133,87209,32885,30951,29796,76247,82504,37944,34435,38795,58948,49255,42738,53131,26171,33935,25079,66010,71996,21449,33861,40554,19543,25850,35060,64910,87561,54593,50895,29606,78658,80835,54603,44870,62925,93254,90386,36527,33334,57844,88684,22612,68976,46472,61312,10744,72650,89576,82772,73546,26298,44417,34722,64084,32533,88101,73181,47541,94267,73577,42903,60084,85428,34377,98751,31245,82209,68221,27620,82088,27222,27032,13993,62743,21871,63871,54193,58849,65583,90907,47702,98442,35440,90817,58005,93762,29457,70008,64777,94639,13732,62990,49808,21611,45232,35025,19403,57265,27415,46580,11199,22577,33702,46245,25348,25079,59371,67390,13386,23714,31400,64786,75793,75895,27916,61440,95009,93731,43085,63319,54982,17063,54387,12793,26619,38539,98353,71882,82230,28623,32269,48535,34981,16814,44654,81977,74994,30564,47432,78802,43099,75024,41227,65850,89842,74118,71471,68710,40906,46797,51710,23118,94461,53673,41223,93106,96728,60631,66669,41586,13377,40216,71103,77237,91825,38026,42106,93729,79476,98896,39695,28377,93009,26461,62844,12552,80264,50591,83470,78483,37727,56028,30267,25972,78406,54220,63865,47382,62581,91829,53335,22233,36438,20093,39262,76909,22581,21440,47927,18327,91271,50867,15779,15862,95481,89885,51970,58192,80146,41681,61177,70798,89762,69769,40040,62654,39028,37473,23236,24687,60937,85834,96590,15859,43970,32985,35155,21032,87926,17829,77723,30166,31240,14726,36851,24618,54189,85242,69887,49210,65622,89846,24615,97266,63372,85605,50894,69970,57299,58338,38071,27497,24093,87992,53031,71487,90868,96909,23829,89951,29839,34547,13735,36705,49250,33111,72293,48186,61934,36278,13081,37487,47376,51646,91412,88052,98187,51099,61363,82437,71471,68246,96424,85400,66049,71033,76184,23625,97644,36023,64884,91221,43418,54573,32193,38185,21951,20783,37074,62659,65342,61401,73783,61228,93788,78900,16303,51574,80120,37454,46015,79954,38639,62240,43170,37641,78858,56500,23493,95589,24140,83362,38653,88347,36713,77554,21474,88381,45684,96907,68441,66236,44095,44737,27923,88189,39329,28348,28029,97944,13143,22691,75538,23482,53867,17434,38737,22308,20745,92677,48012,65523,96382,85042,64086,51219,39784,60960,67456,67092,79721,51167,82331,98685,41771,64995,94968,94617,46660,33894,17433,40226,54970,94467,52488,89129,43658,38299,95421,88001,51689,20978,49676,77597,65205,27925,15399,66946,82383,93398,97848,52129,27026,38877,83038,22182,66640,26421,49104,95549,48064,35005,72367,87257,52809,33075,86758,22488,58079,18900,44555,89480,48403,40306,31997,72844,92208,44310,12862,30193,82057,44413,56812,97768,31195,40317,93321,21256,98061,45974,64848,12800,59685,45315,60783,62758,47541,44895,86681,30685,74708,45006,95445,87626,55901,70594,93187,62072,33627,39675,28766,68939,60244,76125,31716,60638,14590,12981,36885,67681,57643,56181,50225,10405,26790,60650,16032,29474,59658,70529,96771,84703,93668,43769,48819,72686,30496,53772,97872,74554,87315,89014,96476,19783,74390,92661,40919,15197,65527,13641,12409,19190,52304,46684,15979,26908,17510,63886,42501,77440,92279,91201,17447,45614,40245,55845,20800,56023,59199,35923,48411,90911,66792,92371,76200,92240,92881,34828,64356,40965,80932,22153,63022,95415,23845,52528,70152,31433,98250,25077,36757,59829,29214,58328,54045,55028,11372,64405,36613,92879,96988,55905,32326,65322,55551,24011,27232,12582,46123,64989,36952,79174,84400,68743,69213,38795,13088,24303,25109,92121,60214,49632,86828,89691,87509,39354,89078,19392,84904,45892,98061,57896,10394,97288,94986,15016,34970,23348,11566,21054,17084,54790,67520,45687,30804,42722,62648,73553,97084,23319,68179,16282,28327,71183,38328,94978,87757,98347,91570,24760,19527,39136,99485,43853,17879,76203,86449,34424,65312,35508,57267,29349,72353,39442,51858,98493,31683,20667,50256,45506,85205,83141,18277,25996,61772,46267,57508,33786,76944,14817,49894,34033,50351,16041,23176,67291,83004,30317,95854,16317,80297,38463,41294,18783,62140,62983,79909,52531,71203,72370,69713,36053,37948,17062,70995,76489,17957,58652,97799,56883,46199,22110,75272,71223,50907,11782,11225,78827,27522,89607,25712,61089,78105,73687,69139,94498,58950,87333,55371,47395,57046,58591,63837,91696,56418,82198,21774,69288,70546,94826,43969,63310,55303,34823,86785,45551,57350,70377,32880,13915,41137,19854,40787,27756,86710,30899,33248,54438,67546,88124,86512,76918,14566,35811,76151,76550,65986,59039,34871,24102,40720,86567,41325,70924,71639,83747,26308,16567,92963,65305,42178,85333,39077,95424,85196,53953,70307,61342,53279,96558,39800,84034,88014,66871,28724,17640,65047,49789,51258,11594,23892,87675,26008,58436,71712,43354,91459,84046,92864,61928,13741,43747,87495,32564,79542,46141,56331,56386,70056,90254,19240,18659,97488,90532,60264,68603,75300,30654,91517,30879,80544,95965,64826,88531,25387,36154,77846,93758,11270,87890,61754,89425,83318,57714,90354,24392,48525,97705,88292,87704,86988,44392,19996,33353,92753,97345,61754,26553,24963,45417,85006,65342,28348,87840,65601,58958,70027,16879,76880,78532,94227,58673,17992,52878,98487,18434,48884,39963,60336,48754,98190,87982,98666,22535,33433,71789,61249,35498,50352,23299,17900,61296,66730,76771,66474,46203,69513,64072,15528,66662,38650,15818,45001,56557,73704,12563,20091,62675,79145,68338,52781,59384,59914,99339,42600,54026,75149,86469,45364,52868,16589,90359,44495,57661,80033,26224,34705,56526,75965,80162,11543,11957,33246,98954,48164,53406,67591,53940,36606,51813,19797,59271,80219,99578,60514,85208,65793,45888,57865,37279,86744,16525,25873,54650,61363,73321,46310,38999,98526,40673,47958,72825,96325,10785,14554,70756,12545,18515,47862,37367,65108,58831,87051,35212,75107,38524,53347,74106,10263,88826,67651,69174,80607,45768,35888,32937,68901,91117,84888,81880,66410,51767,98458,38805,64478,70830,22101,80050,71787,65506,73227,58080,39340,66826,57836,65520,36823,27593,82010,32114,23333,29331,33081,92134,60661,75305,50173,85314,65199,11574,46700,49315,63959,58572,50491,46817,40562,34610,13746,55034,28057,19823,64250,38045,39243,64219,26978,30971,50396,77481,98831,87312,23936,73377,63570,31804,88711,73335,93302,10231,54123,83191,12623,67386,71306,68940,37265,79411,44056,38026,79964,78766,63770,52827,53767,36307,47063,10946,88966,65863,67628,53968,41567,14717,50833,59446,71913,37565,91875,36377,85346,14794,51582,68369,14104,17421,73482,30158,37901,13860,77316,56694,41097,98621,34482,23632,98268,15839,70409,72023,88152,44710,10403,79608,81029,71353,69195,94566,87863,39789,95069,80139,97624,68952,91909,32615,31100,87533,20682,73193,79693,68536,73668,92571,83363,60209,16316,36919,15398,75150,20132,75094,77708,83579,91783,86431,42081,40443,93386,27593,18603,97161,39124,31448,93325,93493,44136,61157,16208,76883,91137,50124,71937,36044,46855,39004,88458,26532,79407,45302,68445,63371,84500,48372,82192,67177,76455,78346,11775,56697,23037,41542,50897,84786,76575,79118,71447,19157,78646,50418,98433,39207,47405,30936,69796,81270,29372,53551,71501,36166,18214,18901,13144,41172,98388,55231,62539,22487,42865,48577,86798,25312,22768,84870,77529,99324,78861,82578,15725,95358,95588,58970,77185,61173,73483,70776,96285,26708,38739,26585,37099,88682,79780,95616,11988,47941,46446,99289,17322,66594,88860,33929,22589,26908,35086,10240,35787,61248,72349,31104,70574,60417,36796,27177,95020,10297,83306,10539,84724,49879,61961,45114,38266,12783,74823,49729,71067,83791,32550,79920,84311,73312,41168,83371,73888,21333,36387,23391,63648,32694,81947,36882,35739,65810,26388,27704,24250,42140,97308,58086,60326,39086,21397,91757,73987,55096,96443,80164,70862,19628,20938,11005,98332,89098,74699,90453,27326,51763,87222,23832,34811,19598,38630,66928,69335,70376,44702,26634,86842,42733,77329,90424,78586,29998,64206,57773,74223,11113,79330,96311,23926,21636,29672,31943,43535,19782,77784,59695,57120,11237,49641,31389,32324,84990,38164,78547,54675,21054,97749,45832,17815,24253,52230,30869,34468,11124,93103,74171,20610,56914,57082,81585,41641,21722,98141,43471,29465,88560,37305,64962,81868,33255,16202,67838,99226,17491,45306,31876,69779,58486,27507,11051,66051,28217,73767,83960,96394,37314,44219,41326,78552,84041,76530,63972,16958,72892,19826,35474,99890,99819,22917,64791,64029,10784,63046,80776,54334,21559,55190,62968,69150,82780,32468,58474,63717,58321,73344,31950,90641,23022,46700,61227,61530,35978,91060,76178,30948,69088,23061,41758,96810,27194,18999,45866,27774,35538,11368,51028,11961,34970,48328,95314,18362,98070,50784,65538,56426,67959,45385,38476,69378,20837,30027,25369,20464,38971,27096,43767,28166,90910,34956,70215,40717,11541,15498,20256,43590,22050,46541,86631,42503,91514,80147,28566,67120,33138,94454,90558,13905,37832,87677,11570,67162,68976,84259,89458,85560,12750,80725,91269,15513,60989,59020,64138,45789,89169,16567,13494,12106,34443,81246,59075,81458,54061,10697,64796,34197,12291,66960,23735,56797,36271,37898,17743,50157,31244,20360,90152,32393,70505,83192,85223,58836,79965,90191,14704,38844,10260,92735,28206,83085,13563,78788,53496,85768,91218,59503,27289,58960,11870,16990,31093,84157,45347,17170,23379,48854,24108,52494,56776,60664,64272,21774,60491,37293,49960,85550,64419,69704,51074,93023,21655,49570,22939,56858,67972,38249,38006,34031,23644,59933,72651,17887,37585,76336,27933,90762,23352,38322,79537,12670,14987,51827,27954,25815,49241,24175,27677,88548,22852,72609,41684,21618,69630,79945,38627,84759,81297,36781,71106,80658,46589,44282,98230,86624,50543,93690,84477,89051,42398,98793,30457,83989,80379,82121,69784,15374,72388,31148,87358,88838,28782,59471,71832,58264,40846,41156,57144,31402,41376,57234,12498,49057,34862,81609,23672,40486,17980,33202,98831,40644,19116,68659,40941,40425,65220,88100,11443,51882,53222,60288,25694,50957,32745,24428,65755,52147,38850,36287,12551,41092,21014,38102,78504,36386,46969,45082,75278,87160,86043,86849,31195,79067,24194,21288,25557,44398,57315,88823,19179,49722,63353,95624,94880,37450,53227,33973,48869,52968,47772,55579,66648,28392,76274,38360,15193,89356,37914,32716,98786,25535,71123,68138,30281,59440,42780,63067,33098,96951,52783,52520,91631,35348,68893,25732,94014,52716,39116,49522,36567,60495,56073,44625,16893,48132,82518,80175,16016,23928,36360,92155,76999,42714,78240,41950,31784,62192,54254,13347,11789,98026,65328,97082,47928,77975,28127,67958,10049,67164,31344,22925,19063,84288,12641,34403,46150,35671,97327,24547,78562,26771,41361,82837,44260,93772,30885,29597,15365,24256,15070,85726,78716,35582,12010,30342,82045,98991,98358,17745,87192,74338,38867,33285,26061,11191,45146,33509,49686,43528,23141,65023,22809,47365,38629,38007,82913,39690,67252,79221,66180,10003,13382,57418,48872,96514,63219,80024,38402,22025,99903,82749,48668,51517,40941,98500,25156,35291,82318,21860,29185,53958,42604,89767,57608,35945,75751,51890,83632,55219,47920,88060,27020,96186,97082,57205,13054,58531,42597,25165,33419,74991,82969,20701,95793,86904,99765,96069,15708,74241,95331,60986,98768,51844,99414,92006,14636,69295,56668,73105,34947,31928,65174,60924,95272,38208,44950,58421,80021,55163,31671,70689,33290,25529,19562,20301,42369,45310,91643,35218,44938,69740,72517,25652,67013,86500,65516,95652,44255,77158,66826,88229,64509,75569,68153,63995,89455,45284,61895,66018,61660,41196,46428,83331,27389,26147,66713,13104,78643,55646,66379,77877,77712,59600,49940,85552,47937,31667,54256,54949,26468,46798,47538,81280,75230,59055,91675,16697,70168,25047,12737,85259,40179,40992,30444,26320,82165,36867,95471,17468,15237,70079,49442,40775,15129,84714,82988,54478,61798,67613,69497,58483,68407,44681,33443,50094,15447,56087,48607,88521,30145,60056,50472,88078,59653,51046,49919,46497,15015,83602,69182,20691,11633,85251,96655,14923,39762,87695,23362,22869,34860,14234,54552,66276,23484,84605,42480,70512,77576,25805,69455,64275,99122,36287,13781,68562,98477,61294,92397,76278,28646,87117,21715,80164,81663,39064,25534,28622,46244,48823,92611,79500,93846,91427,28447,71689,87537,29517,44000,44925,22387,21880,68814,57507,67978,27577,46229,46748,19207,83319,78369,35170,52003,78335,58786,12437,24536,14818,22919,32604,54539,89146,82484,22549,66149,13111,74550,21040,37200,97541,87883,11440,27421,52647,43198,60682,59730,60158,31347,99203,27939,55225,63639,10021,59462,82440,45419,63226,18761,39215,62214,36383,91996,79524,77733,59096,91806,60093,96668,61107,90066,64055,12344,60039,47633,70067,79434,89577,74715,24090,77752,11623,60812,41018,46393,71750,37783,35877,37665,26054,19522,71955,43872,87600,70533,85562,99419,38900,89090,68023,23607,29221,77775,66576,97144,38727,27117,56938,70316,99117,28404,92072,76702,94520,46668,79249,45648,89209,16473,26996,16414,76023,13367,92778,88202,55576,33064,72865,81699,99598,67359,21916,64117,21879,24594,27777,92686,28861,97066,32790,78199,46966,98895,25776,11234,66538,48805,12810,23841,18564,47496,78391,63528,92984,55034,33530,47059,53093,53297,70904,36376,82220,45539,72502,80213,97806,24302,46672,62807,54664,49233,39504,20683,35030,27669,89799,89800,37111,47282,47026,91858,80064,99515,84611,30585,27635,39565,18325,54369,79246,13827,82850,44005,39538,63529,92217,99907,18818,64088,41964,11941,90477,25001,52624,59988,65171,77618,83588,65070,76280,85222,75057,77376,48003,27511,58372,83888,70518,80186,74089,24677,50298,42221,38015,79273,17611,53290,84137,84380,85606,86870,69273,41090,84781,33236,24498,26586,11022,52304,65657,99415,86585,47684,14611,33378,18601,39874,59226,12867,73730,44584,53213,81314,83386,61420,41481,80454,47084,98221,86645,84696,90781,28143,86139,45662,55823,73072,72221,67891,49235,78070,13402,82595,66053,53597,62535,39198,50083,47393,10611,40363,58565,46792,63926,12693,67897,38678,18718,54945,53512,33852,93620,90116,11103,28493,14731,22753,64874,60454,94575,98709,53717,25929,81425,16941,56209,28496,45334,70788,87731,36601,50091,33446,47553,60912,91295,31346,26088,57307,69059,49365,20816,83386,41964,32217,17826,26592,71602,21536,99747,19727,85518,30340,34599,46407,69025,27921,93715,60276,17139,44719,99173,29032,39139,40311,46150,84310,67330,67253,31727,28694,59719,65365,88503,67876,14868,22817,69330,21239,29220,46291,15069,36146,11975,83635,36480,51738,32790,97337,82825,69650,82865,78836,62507,66488,68742,95342,89552,46551,14425,58588,78289,65509,73842,17031,25207,78706,60549,91532,37912,95415,73818,19201,14003,93812,68516,38008,94302,26684,41243,60070,45973,85276,35014,20280,75428,45973,53107,92697,37628,55648,73337,10808,81779,54774,40604,85613,47200,32416,17769,58891,37080,84659,83778,10974,73452,29383,84579,86736,93090,82275,99549,56853,33828,10798,36464,85193,99259,37394,75768,10743,79180,80350,79335,97685,77257,57233,17012,36495,88586,42515,18948,22329,17108,49501,88005,25494,70289,73563,66576,75827,11004,18801,41223,39052,36103,69370,90809,88280,94136,77975,16280,25476,66539,46780,48159,17135,94262,49661,65344,94022,77082,85441,14432,63579,55927,25814,99049,30901,42882,46712,20413,22388,31714,68404,90021,55598,60154,57995,53845,90546,83793,22637,89571,94060,60436,82010,41883,35904,42323,69088,54327,12888,79425,92455,64452,39868,40851,22420,25917,57024,29023,32397,98783,28428,81695,57186,51903,70275,99809,78697,83801,45872,73822,19543,20846,91305,10364,79974,15042,97404,58947,29532,19753,99176,43877,51202,95771,41806,91651,68875,50468,99940,43655,63070,32999,13966,90242,96660,91911,67705,50346,57105,18093,80984,43598,32423,91133,82984,16957,18595,67539,14223,39940,29537,11595,86555,91767,50435,33542,21012,83304,68593,24182,72512,83389,80392,17915,64071,73551,91572,55534,82821,67867,82556,93839,95831,50840,80118,51052,58108,68584,23158,33143,26503,59592,57255,61777,97795,15613,87353,70381,45432,82515,42401,61661,56399,19853,39852,78072,24091,46301,74398,54898,58399,17977,58792,91913,83354,35758,86661,87666,87760,71856,88228,31721,59520,14990,87539,97326,34231,66062,61163,82301,40385,95493,45680,18995,89830,56242,90096,35125,40266,53654,61881,55727,90716,72805,54810,17983,64786,45995,36478,26853,81458,57525,36424,82650,55101,53981,63071,64753,45792,51096,52413,92430,32798,26426,57425,89685,92398,39910,81343,39323,74770,13307,27146,24140,57268,15951,71935,73656,91119,40862,45711,63195,64008,60988,84155,15665,83118,71191,73859,79889,37471,81334,75277,35026,99913,56316,97516,60690,46556,11154,68100,26677,90089,72288,20886,36443,93011,87671,91823,42597,21104,28761,47309,26429,47112,19572,86071,25174,16179,97986,30405,73240,12623,67692,26984,17993,99284,26832,57690,60461,38865,26281,83272,76692,76415,77646,38888,73683,11583,31434,36435,60472,33983,88407,19946,29881,37484,90071,15174,90471,20788,40795,70613,68145,26500,69737,84575,64577,71175,34235,46559,76250,79478,36283,89525,55172,66120,53405,71957,14412,49334,49984,74368,42246,96154,91638,12044,84264,59368,80604,12937,32677,79446,23299,31014,65185,44026,85912,62239,63641,31836,98956,98429,84561,82124,64699,43081,34347,95125,19871,58933,21431,12785,19584,43062,17137,15363,46654,24094,13190,19864,58141,41352,44429,68580,85375,88149,31954,73569,80954,92408,44614,64067,18818,95985,21397,81748,13211,45605,86673,27367,38744,41900,17397,95927,50589,96457,56122,88090,43183,17074,21265,35758,38244,27108,77644,93710,69267,24860,63937,77811,35395,56867,57926,43072,64516,70708,50306,73403,76573,31890,38335,39798,37695,23312,61047,27456,92472,22998,37302,15966,18626,47060,28441,23373,99779,94769,68156,49898,95416,10643,15990,30861,96101,55356,65051,41605,13943,14073,88718,37409,23445,93181,13433,15568,85481,37063,64159,87773,52317,66772,74170,46595,87607,73705,14117,38741,11697,38479,87053,96204,86028,90493,66658,63153,34948,91694,30032,21890,34299,92537,58083,27638,88655,48176,20969,56083,62211,15671,22412,40385,14153,45217,16376,47280,16322,96470,16582,83742,42795,55144,89009,12065,43478,37973,75381,90789,33403,62710,35472,22495,76065,41908,17608,94698,60272,67664,40631,32777,46921,14377,67466,32395,78854,63722,33448,80942,99542,61042,42415,72043,49132,72170,49803,23378,24106,75511,80428,41694,33135,84639,93410,12107,14723,65128,36523,59535,69146,29512,84005,98477,25481,66476,56697,26916,63158,96601,75119,44495,50750,41597,88019,80867,82856,96315,68261,97139,53730,36129,60632,99468,44665,76439,38305,20996,58759,94634,57957,24062,43179,25491,86207,62615,91331,14215,89982,85088,83914,76698,62746,90489,37264,16869,27735,85557,89362,62836,19759,11261,93545,70694,94465,18997,45770,54718,87130,22602,61058,47867,75927,99991,29461,87251,85357,41197,81847,57558,10006,35398,60350,83924,89123,39221,74966,15331,59560,63016,57070,88097,36971,22909,47305,13024,80525,29843,59289,63007,17084,22301,47539,40034,39512,83164,67893,71959,25352,90140,31350,92238,56649,77856,59274,90318,15217,91728,90000,99776,93919,63452,96616,60690,12018,41724,20183,64892,75528,28274,23871,14271,17727,14110,79147,91152,27071,90484,32782,24949,84059,98341,30587,83528,10092,52591,50452,32965,58778,93921,85764,99478,42596,76866,35950,83768,62983,34377,28555,80954,45871,83021,25517,31082,41418,38433,21939,93262,25453,53921,39785,71086,23131,30863,94805,19268,49095,43242,57133,36121,49653,12825,12021,94261,62140,72047,65993,27864,86148,55855,64588,24100,57007,93464,91052,67235,39621,71051,58209,31055,43730,70385,28350,48679,35823,95829,50998,23946,66100,21098,68523,94941,29120,20857,36686,33477,62396,98445,85230,59605,25618,11909,34575,96949,34190,63725,47877,53258,50492,87399,36314,72894,33758,36792,14911,58898,47818,64035,13367,92524,54865,51157,53148,78746,36055,75007,88776,42376,30220,76040,90935,80461,82478,92315,39658,95826,26088,53902,83439,69469,90162,29752,80656,36009,28489,40313,61014,31751,48857,33138,25687,43698,87728,50675,56935,16109,76056,11852,72871,78955,69807,44447,44579,18803,70142,26508,46908,52365,72979,98442,56152,48011,29896,72183,69833,14734,16189,39601,70677,87525,39550,97475,63997,64282,10833,30367,23650,47278,17619,28544,36572,59292,28899,75359,72470,91775,48675,89410,58982,66713,39212,53315,33724,19504,11798,87209,36731,23415,36241,82528,65544,82259,62772,70572,72902,46655,62185,63013,61295,51291,95638,94075,32093,48920,55074,68600,35667,98163,10757,57044,12096,96874,51159,11023,53532,80314,10519,38360,85972,65896,89187,30354,43949,83286,22752,66631,24984,14010,27341,88613,17071,23585,86681,69453,71098,70198,53358,17250,66183,79157,87256,13819,89958,98358,32533,23929,69800,70026,37326,58570,32361,73014,50758,82406,70070,21077,52860,24244,36276,14290,80846,84446,99161,78485,74715,87581,32143,93895,64325,62233,72286,57518,90681,87807,48123,40641,45847,13498,93428,50276,49482,21087,33344,14860,33668,21993,56472,80662,34607,79828,74811,32553,43589,18766,98456,55986,20942,99055,25766,69031,48014,69253,52799,41706,38868,30496,66243,47471,30683,69444,61759,61859,55131,70790,18723,94862,89300,63904,88079,47123,58879,20579,30169,75398,68339,27144,24553,65872,96913,20366,49251,33895,73838,52178,25308,51909,20157,26942,75141,86556,49778,51889,62538,44974,26103,75858,52636,38199,12710,54318,91509,45145,92257,39717,11403,42794,95371,74467,32641,47389,15467,62785,28567,93571,88324,26828,89217,33643,54494,28056,77097,88987,92226,82172,94603,10322,47172,96925,30393,75927,83946,11832,97866,55363,25153,52172,76324,99015,57045,22686,15779,69767,37071,24634,95423,52264,40840,45718,63661,72069,26178,47409,90434,29191,79712,84992,99898,66388,25515,59626,50886,41778,39545,86395,57216,23486,64738,23507,11289,65625,10112,22847,76792,81834,48683,71855,71823,63343,42517,39883,23699,20738,20662,61500,51343,83411,53523,50675,44955,24861,28526,41324,23979,60014,79401,27508,51592,31335,17801,52330,71908,16531,29207,69039,33196,51286,32108,79145,64745,36477,54439,34456,44929,10446,35718,49527,55699,48081,43637,81605,64737,90591,28307,57944,97103,52489,43603,44660,63594,69768,53417,29404,85818,47022,48778,34315,48838,90608,93745,76383,71553,67040,67208,41124,26966,64416,99379,97679,48682,38695,82221,45338,62730,79885,81370,27681,96875,21057,45578,17569,67859,11512,92336,80818,10273,54529,45969,70837,53526,30926,96682,63175,15379,48690,85565,14460,16851,91384,59925,64547,42912,33305,75346,36585,52632,84898,44186,67466,57247,83246,92239,31104,70887,70160,33393,36775,84255,21751,35996,50195,43211,18835,21466,28408,85059,13380,79334,20536,77887,69258,51919,44439,12317,40006,97948,11388,74795,76502,21110,36267,80672,20695,94194,21087,46922,31098,16619,53583,25138,43738,84249,52503,54051,63616,38959,43285,76469,95505,16642,80280,99384,46869,75140,77951,85404,65951,72300,21842,64201,64630,82764,61445,48596,90186,74990,80651,51335,29417,47325,86787,55412,45724,24764,43697,75693,22678,45800,43413,67400,55618,73821,60288,72344,44827,77688,87468,75375,71275,88337,85130,85914,88300,58991,78295,42793,75493,47643,99233,43413,89775,32077,58077,88499,88107,50003,24419,32284,61716,14817,83913,76993,15523,11431,48568,97965,57953,44755,48758,83337,60696,90627,21227,53815,77405,94403,90551,51625,82301,16897,35069,87722,33951,47422,50705,95425,17228,36392,92350,77508,21103,62888,20639,81272,93452,11754,89876,27215,93772,58594,22715,80663,55072,24263,52916,83387,83783,34103,90743,38288,84914,55282,10842,79098,99398,99519,72491,39243,97323,52986,91611,12155,40197,22446,18511,69243,39721,45913,58420,68465,76312,87272,71636,24310,44087,60310,25711,97904,90227,44712,80481,95078,20272,22592,27140,70635,73612,96306,46371,18852,96392,81069,20657,23808,83965,80198,90323,42666,84193,13773,45360,78661,80392,50870,49693,26849,23747,27806,37532,24185,35391,73503,38963,57892,33555,69222,37482,24124,90084,23814,74363,98273,46964,51933,80169,24690,36194,88472,71047,68620,27264,82951,14483,53806,96726,83592,19289,16496,56613,67447,10399,31442,72879,13057,72600,18759,71009,27209,97397,97030,53301,89418,79475,73506,44932,33796,24370,74307,19239,96695,87000,54117,30876,68206,82977,70610,63058,43487,27060,56885,92897,69570,79735,79526,63563,81904,33119,31962,51584,40546,66893,43523,71868,22539,24461,41981,42155,13663,19632,28227,62004,52391,28036,10735,54760,78738,55333,43617,81825,19967,47421,64288,59722,50479,39720,51088,47949,99318,50827,33588,96654,80597,19111,50411,70639,72052,38715,84221,16545,20306,26389,72405,42866,66598,16035,73993,50320,23337,83356,56203,41059,68753,83652,65067,64631,18736,32214,62099,70671,69432,10765,69634,70748,54680,96300,14103,41933,20491,79637,56278,21415,41023,61695,96309,43833,80155,28680,18961,62768,20234,38103,45188,60703,27346,19829,76973,87956,24973,16997,10657,97609,98473,58852,79068,50392,52509,69665,94665,40717,98645,83980,48184,16811,81588,31341,18291,47794,64834,33394,89080,26102,78435,26147,24061,97617,21561,62580,31860,51856,56614,68955,15061,53643,88346,76472,14365,29162,50774,55302,59410,73309,87800,95021,20733,56024,66102,87176,19839,33736,87527,47670,58426,60674,27857,37201,23132,78227,19324,44469,21929,76504,90180,98417,43215,26649,97875,62244,37265,49360,19987,47060,21024,58963,91903,58243,93981,75703,52815,40845,98860,48153,54027,61690,97154,20409,47925,86066,81336,79702,98134,83158,33732,44084,23498,73131,29388,65006,51024,85537,63960,78910,17735,39305,26380,81262,23000,64937,78041,56934,12150,38556,40500,21015,94887,19241,53657,95949,37742,64491,37319,26403,47975,51745,53014,52849,21906,37187,43959,38588,32940,83783,46300,51482,44725,81386,72860,98052,19721,55603,14244,64732,79083,96827,79735,58322,80814,75906,48048,16109,52803,25939,15697,23372,81304,28016,72528,77425,21409,59447,88852,29597,73949,58469,14867,83459,78219,12256,37399,62172,89151,92616,21419,56821,48495,96329,96891,87750,38393,56974,94116,20870,27655,83741,80735,49657,70436,45305,15886,39579,30871,13894,25323,37688,28181,80862,63716,47378,67236,45963,95714,47714,37586,21915,85252,43254,58336,73906,41307,48539,18419,72599,64404,63243,40158,75400,38099,53735,58639,22735,69889,65217,21135,93485,88720,97242,70579,10481,32070,76754,99860,98992,64160,52602,39936,74183,15716,83836,76921,63020,93960,37502,77020,12753,31715,19987,16715,33380,11716,30771,95104,12263,98110,64084,71934,80117,40386,85819,43390,89404,94452,48934,10940,20817,16324,83268,55881,96867,28701,92731,86473,46604,58210,79613,19908,56099,64746,71517,22461,94975,48985,49195,71623,68622,11168,25004,34559,80167,37877,44314,33007,44534,87100,53940,79247,96284,24016,74468,89795,25014,93427,78678,85940,88917,34032,89792,99928,83749,44561,83091,43298,75144,43011,54073,47261,32663,24124,36550,16931,11216,70756,53613,27265,23998,76217,75426,13444,81116,91148,57922,78903,51874,18457,87755,13487,88897,67004,25396,95725,18366,26013,26344,29761,73936,62210,41800,21056,91347,25083,81928,59251,62595,61052,67783,19220,45200,94123,60614,31962,62412,39467,62583,86506,68846,63774,34268,64104,31860,73117,72912,51635,48269,56557,19937,18316,46808,16596,60296,19073,97304,74443,10452,63870,24162,71100,53738,42745,28600,13766,82891,11969,12365,12212,93528,89390,79279,95928,19144,24364,42712,94829,12692,72364,88659,69904,83744,97801,51819,60847,71334,63678,50220,88487,22188,83322,28351,70510,78417,93578,29972,37554,74224,52316,19301,79695,99764,32072,79527,15223,85727,15647,17338,63246,45543,50888,53448,40196,73640,96932,27723,74526,61894,45862,99532,35559,34796,44352,51832,24622,14675,56560,75972,23956,47335,50266,15878,54971,30570,22187,10137,42600,26042,29826,16580,30149,77614,77473,45428,88838,62385,68692,50442,69225,65613,39249,55996,15696,53765,82523,10529,82629,68682,82109,22959,82792,66926,44581,18910,98698,17430,96175,92664,34892,52687,70130,63412,21727,87928,99883,97374,19944,86858,25533,46023,57542,88211,24303,99370,77936,48034,32422,34235,57044,10943,81732,18568,50317,88985,72117,80817,78968,11916,78640,34645,90725,61820,57549,63165,11708,59574,94304,37287,54160,32200,37475,44819,11189,88958,91166,89407,97259,51457,73893,56108,67038,24887,21515,75776,99294,81590,18348,34699,63265,78904,81301,88914,35242,67260,74639,27768,58057,39404,46796,12890,52784,47766,78481,87765,40614,99693,59009,67042,72589,10189,10833,42282,61158,63287,44960,62609,10225,29995,70494,31589,58936,30353,95985,90280,58736,27508,15510,36173,57413,55751,98430,27344,13646,21854,28976,57969,88243,35649,15801,51054,27029,34114,11471,83340,20425,57205,93582,66907,14748,40309,97615,32245,15621,43080,60540,31010,76291,86939,40494,49834,31522,14352,51377,48889,53918,17500,83003,82937,33605,16596,71261,41134,13413,40096,27347,87490,79237,34325,70352,95513,58762,49653,13321,22018,71483,14182,23110,81885,33232,99652,65698,65273,31111,14794,41490,84741,36616,52201,41531,20129,34071,60721,54229,44594,18927,53503,72127,94829,16637,25871,30291,64438,84259,31609,48759,58378,80154,56584,52390,83258,12772,17249,27556,22966,93704,54557,79336,69179,29650,61926,29747,56847,37232,35831,57735,45406,16755,35706,29361,42370,16586,29710,54014,88677,97801,38196,31199,19676,98265,21309,71343,15110,27909,94179,52917,84919,79861,37721,33428,87214,75403,74502,93671,21434,57199,30771,75838,97859,20004,86816,98399,14580,96380,38795,35602,95174,44038,35507,55315,18555,86381,18472,80261,58571,72508,79541,47669,39712,36837,31044,45843,73379,27728,90909,96706,16490,21351,70557,23107,95356,88059,84312,78295,43422,43609,88325,71842,72361,23510,23391,57177,20358,83220,76666,45416,26912,44683,70832,94495,70470,55563,37237,15525,85775,88174,99396,78556,31831,58007,49984,83472,62999,80577,10680,50728,85706,68290,55161,15130,14541,13122,55541,17345,29653,57564,46706,20004,47525,21496,81042,64805,29568,72069,50960,63149,37207,30137,78340,43853,13047,20968,95470,24077,32197,93606,48975,98381,24301,35285,62701,89069,38910,37982,78265,35609,43062,44804,35235,17309,38333,10004,31898,14564,35787,55994,34924,76701,36122,41500,89949,97895,15514,90743,96700,74246,13726,45524,71562,14841,53908,68270,98850,64542,24982,68263,89972,84834,42779,80256,70001,17391,16385,10566,47234,60309,67694,75530,20683,21765,16682,56493,90345,37619,42996,35941,21999,98769,74352,72907,54918,60416,76312,68860,61846,72184,61123,24832,70258,14493,13241,49212,31562,46366,49561,16891,50566,10717,67798,44245,61440,90504,50791,86684,82773,27826,45011,26869,95746,68752,60467,99146,22445,86803,85891,83772,56819,57838,39723,68365,99424,78160,25014,95756,77512,15742,82642,33300,71025,42057,29398,94635,71587,96536,74816,88190,89500,65432,29515,30443,87840,77205,39984,55224,69427,54022,96035,43390,65868,75132,67795,83162,13437,21217,85434,77525,88131,22915,49466,50212,22248,67782,38128,82088,76846,49411,22468,90953,52667,83109,23409,89462,84984,31609,92904,87581,19958,33727,72709,64536,44702,76594,98753,31974,82119,62408,12566,74064,18925,60374,22299,58661,75936,39766,99517,27283,26045,61962,76269,32809,51360,42823,51988,42644,10378,48845,45215,89963,66391,40338,92478,68942,62257,37338,18718,44929,78672,21746,75578,94710,33337,36107,10544,75725,77556,26055,16163,79049,55049,79818,57892,70792,34521,83547,83090,66546,68618,78273,47351,39559,79682,12369,19310,72400,37414,62384,52063,98550,15062,45218,46928,28905,14313,39807,37505,66430,84734,26201,56562,18455,96222,91059,64798,16482,78665,39128,43668,86729,42376,79388,87286,45739,69843,15560,49928,19123,69229,58805,32680,67627,29445,96638,41583,92890,52803,31310,17557,28864,48568,86110,61808,33971,32819,62971,23690,32634,70095,15039,16411,43770,26598,59139,67506,32536,92420,55149,87165,19373,86504,64165,87728,50023,11122,97805,80958,52583,51221,31277,17893,22986,83352,34320,56833,97055,57286,60845,72528,75511,12114,73035,54919,29055,49075,32197,90354,24316,35887,70164,82940,80642,64544,13054,82019,87785,27511,73100,33179,61313,14458,88998,41910,91104,14340,37424,24053,83055,75949,86259,20975,41904,40370,35353,84115,71515,87082,28971,28882,59461,90297,72952,87822,81425,40141,14452,88783,12120,77982,88043,62813,75431,13312,29862,46131,10849,97895,84273,45780,88322,19887,45880,80294,58449,43884,95351,81624,26619,63074,23523,67756,76146,21866,98087,39437,25456,44234,77791,94403,88798,40544,54806,47725,10243,61045,34871,71608,67828,23929,36472,36732,56608,99181,82401,26774,27350,17639,81878,53712,95448,90733,57188,14237,67783,32262,21683,70361,64791,62465,43144,37958,66830,41335,81811,29493,68170,63114,61701,96074,25627,26158,32444,20370,61954,26919,34767,11324,28188,27309,26145,16196,15373,54819,86603,20945,24804,82783,10983,26062,85131,24472,29525,19730,12223,79659,91491,82124,45145,15795,87684,29180,53351,82037,63379,67061,54894,90680,42566,92267,89042,24534,58776,94895,56666,74116,80162,19418,81757,32560,52941,89700,35668,73339,67181,23704,11469,94883,58509,75766,44863,91555,75041,28447,39871,54220,98245,32396,90353,47749,39652,96612,87366,77881,56132,93077,70561,83146,31582,73708,10563,54500,98332,24696,34260,12638,37463,24744,55876,28656,54304,99919,63006,33531,66894,73655,78512,44850,93516,34610,45166,85238,82111,21505,37186,40650,54079,80785,81786,49385,30311,43354,33290,96760,21891,51059,85766,34179,21211,21222,72944,70811,50214,31511,71961,14691,50407,30801,66636,69198,24415,99317,83960,24349,74131,42726,64115,52643,82979,54125,17206,40485,17754,79986,99069,55003,84852,56192,22011,34155,87064,19592,43307,69383,60354,81101,19825,33344,71543,42107,27348,21852,99512,77381,70038,77219,51711,51119,80822,66746,15447,54947,68437,31912,15511,97344,66163,38368,76102,62998,50589,89236,52041,51349,19925,41671,93910,95520,27093,40403,85771,49596,49998,39663,73049,78624,83553,15859,84816,11444,41212,46214,46141,98353,48681,17206,40211,19082,65566,96428,63712,77666,13821,11944,85562,76692,95826,60428,19107,39347,92067,19575,81738,94371,84980,13253,99592,13708,90798,61645,13212,81240,13304,99755,65586,73701,95088,74288,28372,87702,39516,99886,67442,20778,27691,27837,55488,42564,64925,57737,90178,64726,62468,29995,28433,46182,35013,59250,14798,95031,68698,73292,59830,13516,35190,84423,87537,92174,49455,93986,31995,74825,35630,36953,38188,37387,74383,71926,51230,94036,93142,42569,38112,51698,94046,45152,49314,72429,84945,96164,34675,56618,56000,35368,26195,59608,15396,38006,42104,67378,83290,37392,98819,70836,93538,75623,27021,31782,93600,32557,78312,37093,15367,49391,66316,73693,43138,30942,45269,63186,36735,70064,14125,40075,93222,99777,66413,90774,23058,13323,26439,99067,95129,18964,87179,42219,75451,63601,46821,65151,79367,74891,79295,91026,59835,96174,91263,74277,44868,35217,13004,91567,37445,95452,48350,97276,81699,32445,31259,64332,48306,35229,89951,40196,39609,55966,55704,60115,57476,64924,92860,20251,39656,39977,40494,26936,97783,18272,90339,21203,15411,20160,12268,93731,99797,28929,96602,55108,13570,89469,75890,47244,12462,99873,75872,31142,27803,14126,99246,84242,30193,91592,99632,47935,25037,52721,38575,26822,37276,92240,34948,25075,33625,11872,47946,46979,95819,22715,63182,34325,17209,71216,87423,80441,91343,41283,99118,19131,53400,57980,44189,69263,73375,57413,47871,37042,40242,32604,65961,92997,76705,92825,60075,22396,17535,33667,82690,34808,41157,84289,61363,55230,37283,71326,28533,32740,88993,15947,80316,69221,83572,31934,56446,34210,16958,74121,63848,54177,16151,28546,36539,64500,61728,52704,28229,59762,81870,59658,23370,53248,24269,77647,76614,63003,81583,30762,98779,57939,56939,16632,93103,17021,30635,73689,50086,65546,85997,17052,88055,59525,16798,32490,92168,74579,82359,78151,69706,47066,13906,81552,11114,75002,67992,86524,36167,32488,53656,74793,40183,45940,96747,82125,46443,32444,67866,43187,97991,16557,85493,96862,85634,37187,47777,18864,74765,88099,78299,80474,40123,58812,58159,16556,48718,25429,26002,84972,66751,38871,44452,15390,79027,55578,31116,17899,31393,19854,31618,95267,99745,44593,64286,72738,22718,48736,16463,92274,72571,73054,72308,39112,29693,61032,89218,48104,75034,63258,49327,57971,55549,68037,71381,93922,78078,31095,98930,77837,73913,59076,20540,38872,56529,23905,15513,59830,97506,26424,29832,32361,40061,19044,50929,57152,56127,13272,45091,66027,11115,11060,53311,34185,61217,94401,31069,31990,73510,36234,20809,53070,40050,65780,85993,13683,90949,18835,13488,24696,25142,93976,80307,48619,17413,19840,97827,53393,58935,90435,61292,72002,20110,66299,14765,15361,19704,88416,66205,87622,77540,91631,52558,26909,21154,68210,62517,70888,15187,97285,10634,72051,16591,85133,71160,25238,16639,78154,54702,71668,76723,20308,22468,34224,67104,30646,83286,43087,82496,29776,27889,66305,39385,44722,61235,74454,42701,81925,51520,91690,46791,17075,89812,56539,10977,65340,57014,23132,76607,54969,86682,18471,30775,69466,48482,30605,80109,81423,70679,60974,85687,61855,10280,28458,80305,19882,55048,68889,88790,29650,92725,77057,76038,58336,47142,81158,99638,80598,27142,47856,85360,91921,85775,64667,15161,71083,36702,86774,63254,50306,21355,15648,16243,40539,46032,91662,85113,74942,48349,69847,28993,63038,29750,94894,52329,34627,40246,40383,23076,25648,38707,58398,55752,84110,49173,26064,97344,59683,58845,64085,35024,77530,83223,41087,83637,83174,56290,78731,98511,10064,13131,91708,21266,90288,91064,41684,49216,13960,22722,78652,32583,21649,32444,96287,36841,14768,47691,91577,83185,45659,55692,17113,56346,33805,47228,80296,12234,26675,47020,22544,25992,26971,56730,93938,48670,76939,21493,50442,39335,14883,32852,42296,60893,78024,15212,56932,35927,95157,99781,84262,85992,14180,63836,59702,38943,47491,47806,72141,34697,37904,96484,31954,12688,70849,50151,19840,66532,11604,95017,89836,63910,55163,47660,34556,36029,63226,46748,95750,70541,37791,81721,40712,67463,87095,48791,11005,48315,35063,72189,22796,52446,97829,32642,40686,37685,42743,89753,93786,10453,50541,16434,76104,47950,58101,27274,34033,50083,99794,57575,84029,22858,42597,63007,95265,58279,99424,42512,35825,67819,20814,42958,77565,46942,91006,33405,88107,28647,72829,30696,16590,70797,10454,74613,79961,94161,14149,84659,81501,43124,70981,34924,93860,16229,62453,47883,49387,58889,12216,14468,51114,95872,91741,67685,68389,41456,15780,45405,54639,75425,62355,10692,21160,66638,62395,40261,54329,81125,63258,15694,78134,23360,77911,79580,21375,24157,10874,50233,95883,94682,77105,63676,93772,70769,22952,52990,87455,81044,79271,40556,30992,87807,51243,70584,34675,65781,47283,15340,84978,72094,67078,25860,93083,45368,40498,61355,22350,75717,18985,21162,28367,88214,85135,95221,35180,24227,92994,10586,64935,36782,93176,41305,15793,82260,42783,81446,55923,13778,96253,39652,10018,28357,96063,36834,40509,78553,16932,57871,21103,18971,92777,43386,65337,50428,26956,26795,66634,37508,39595,73037,89825,99512,62696,39197,12957,77940,40260,34900,72052,12236,68323,65870,19850,15003,89104,82522,88912,45624,72934,97558,84182,13260,84211,70269,17017,45059,15051,22564,72362,93801,95916,65778,54981,76096,72556,57971,56019,77068,55028,22081,30902,91427,72571,43556,14952,38648,45885,72970,99684,19590,37332,16815,15992,70461,42467,78958,20716,70712,66804,50477,88312,96699,83713,56587,66702,69371,76751,82788,74568,65842,56727,99032,11538,93688,99078,71938,30523,83659,86213,48560,66123,87727,18656,75906,56662,30451,25604,62766,23236,73033,97905,10825,18526,24361,61069,42683,26183,40477,25278,98427,37656,66359,75130,51383,60653,58109,44018,68074,47107,39386,20653,41179,60550,20716,51177,66923,55662,77124,55507,71103,28824,49422,58900,55045,23514,89498,81087,25595,20543,41075,28999,70565,32610,47805,67695,21147,54502,10450,53602,17048,75950,53466,42638,68495,40844,40100,57595,80398,92288,77260,26091,35932,62123,20957,38893,64770,17015,83132,51379,95305,25600,19924,65597,69120,34866,29667,28672,27458,51260,46459,43592,42162,60124,27083,37819,26419,46776,17122,29956,74157,85260,65688,94824,30324,82184,63484,28834,38959,26829,23583,40818,73123,35550,51463,18677,94816,18335,34278,96544,38013,20109,13749,27339,27276,59694,33861,90121,17571,26001,33724,61675,39465,56773,76143,79292,25137,12807,21140,93525,84652,60628,12229,25444,73594,44625,21276,27234,47944,93035,28206,39571,32504,27232,86811,64318,45855,23972,88833,49039,97671,70802,55490,73437,83252,66815,36809,96808,73752,70400,94859,77026,18742,35202,76773,85054,42224,74713,89724,36437,22559,49977,30619,27612,56227,85453,63627,32367,75080,59128,29725,46351,45255,92895,35864,98716,49714,51652,59106,65481,73273,79053,54376,15286,58007,43090,90637,49679,67634,30004,46344,27976,12194,90556,83819,78497,42022,87971,50516,85074,83005,53737,45705,55329,35854,77090,95820,19064,91903,53241,52666,41372,72101,66865,40165,18267,68049,66276,96122,35926,67474,95714,97258,11139,72315,45580,79515,76840,98508,21584,97611,75498,14543,57207,44742,70019,47930,80768,89041,24296,13669,78292,93209,57625,76766,51753,93592,21257,92836,20154,11509,57980,33357,51779,65555,19222,76921,78814,34565,97403,36391,43528,86920,87065,33075,79528,35029,78694,49520,87050,31423,71460,30260,60000,37236,69716,86597,31138,99724,95210,65058,59153,58275,78646,85081,89033,87509,18081,97524,61903,57326,90203,40454,11440,45951,28861,87255,92415,37035,56525,82327,87131,17839,41343,96170,61750,66026,26947,93488,73383,11708,72137,77524,54664,87345,75892,52580,56997,21970,92612,41472,97596,80154,27341,19988,66605,98590,33226,82777,47016,13106,44704,66770,32064,81828,34763,10015,95636,32560,66073,47382,78556,76227,23372,30292,43467,61606,85152,93263,70566,48762,68078,68801,20309,19178,17500,85649,63715,27432,60377,59066,63152,10121,56451,74948,54019,63642,44614,70599,25051,69417,55718,36173,48647,37699,27482,80570,57445,56970,11318,80218,27233,84354,69509,88853,39747,11599,27533,83760,33106,66571,59615,70810,83485,75817,26730,85060,39071,57624,95650,18247,17505,27268,10148,40300,36315,99155,23499,18003,11606,36163,23654,83650,86523,52530,43241,77235,19824,33257,64296,92278,78859,58699,39680,61556,20097,60276,40729,70768,37686,40672,35566,27381,93088,78933,16644,52656,72336,19887,44938,31327,73111,27277,27087,68706,96240,51712,59405,94647,94208,15799,97723,66833,65924,78292,59313,82942,57909,68982,73767,82015,44607,58451,94346,12261,42047,40817,68214,95009,35405,68375,15867,52829,48214,16135,91129,16788,62110,53678,71788,13070,55668,71248,55138,76869,19162,19309,77845,89342,36174,65244,61964,64163,10348,20110,98719,66764,65356,76688,37564,77348,95797,97671,39435,60017,10202,74231,21741,69544,76091,59348,75534,38493,82539,57023,15223,70842,76785,44047,91649,58029,53752,81918,96367,96900,88806,58567,70979,90583,20142,92449,54534,43508,43945,67880,91275,90611,50414,56768,29027,68720,37413,62428,77284,34351,39802,21967,72332,51429,29242,39705,38654,22243,43325,20796,99574,42244,36689,20526,50639,66889,20329,55551,52631,70894,57190,32384,65451,92864,79511,38255,95335,23088,90610,81001,88936,89520,43129,13212,22892,79045,72955,82274,52950,80356,45256,42227,12030,44730,36541,16453,14109,97169,61945,94669,49803,21203,11028,34073,39078,76306,74404,42098,45222,36905,23210,49033,60087,46361,35128,60271,85191,30170,97898,50138,10896,52045,77111,15843,97970,47149,42819,75668,47881,95996,19261,58445,49561,70221,51602,49075,70581,70129,69757,54585,57111,55073,27213,55405,94596,68620,62321,32967,45886,72339,59309,29514,56789,74646,51371,54538,39090,52493,29358,99042,51523,48776,13104,83431,36559,81061,48337,58427,55674,34566,45668,38923,13548,52403,39594,99920,52426,24429,96433,80610,71027,39483,50510,90796,10708,39551,26934,32633,83826,57744,24837,74339,39221,53086,59106,61645,18575,48268,39690,76198,57158,65297,10261,30434,71525,44303,96083,75322,96382,89254,21111,36311,73182,19031,48608,72337,38363,85755,67857,59805,27031,81095,86457,77643,51169,41781,45882,65247,83954,91084,38566,95749,51479,86288,15119,82098,23526,57171,34738,12922,23853,31957,59934,58737,89357,76396,90611,79165,44464,90773,18793,67925,67390,55171,14055,60552,31551,55953,70229,59736,86161,76022,37610,29625,15652,50156,45586,22295,51210,25406,10400,53804,84939,22774,25321,18547,25515,60504,83770,19018,45942,28136,42333,10277,24154,54201,85313,42403,44003,72107,50193,31337,99754,33684,14842,16117,87131,65992,71251,77674,47490,98675,10652,62265,75122,99742,75297,61244,92730,62930,60170,64216,71824,53779,36425,78256,73604,82440,20930,61706,51935,23260,57918,34761,61319,27100,71827,52509,18464,27822,25321,60054,10131,13689,56890,81682,75247,86719,22228,90826,47853,21391,74391,26150,19548,90163,25607,77941,97348,55837,81830,48574,51282,73139,48155,52923,19653,77918,51019,28189,43713,55604,38134,84787,69793,29396,90195,83040,30667,44174,23514,18635,71112,32047,69183,27327,90771,82557,12640,33241,88568,77749,86281,15513,94930,48515,87480,12895,47712,65094,35851,61849,73528,13913,29317,93184,73617,48468,95814,66807,31333,51315,11842,77350,14978,10925,63878,12530,98217,40934,95979,48652,24845,17501,23066,23347,43866,48035,30857,40074,15831,90452,72523,46442,32449,70668,57224,28785,24066,23925,85492,84076,22489,24901,41738,12744,99099,39308,79218,72894,23819,65381,57227,71215,88650,50596,86851,55944,15399,97631,90962,82493,22076,55707,28732,66683,31690,16220,16745,58244,45056,37016,93961,17900,26634,10627,65044,24843,94529,69295,28902,85151,88324,22588,87399,15946,92414,66341,24064,90377,99457,85179,97090,42273,97950,84272,56829,26007,61936,28874,97414,29926,30997,67048,19719,20876,30322,50603,26234,88177,64847,39483,58592,18649,71495,68348,23078,96110,50556,88412,65278,91768,26621,83728,42096,93578,14915,56174,46191,70479,36310,86915,79871,18559,25832,30290,10198,35240,31133,67904,58261,72409,51999,65711,18126,30011,17360,77233,91941,98567,93636,92767,53813,93393,48134,13200,20415,96064,73730,75664,18873,40702,42420,72276,74633,93795,15814,48399,65254,76512,14616,71135,99298,57742,75521,15499,96931,76735,84259,69373,33465,50963,37837,70988,25484,47912,26536,23183,47172,26218,29808,38863,90508,93928,74741,89280,77599,68070,13915,15961,83147,50775,73371,72434,54882,18371,24754,57409,73973,79848,23753,45498,77392,19990,51034,27537,63637,69461,48209,72906,40474,94299,38406,69827,98982,27607,71098,11490,20678,97413,91544,34237,71240,29388,92173,85714,41809,77524,61663,72801,88097,38199,17876,84386,18414,36187,41638,96795,75162,37819,66626,32953,54296,29907,57720,21320,59148,16335,99095,38174,73647,40493,63964,74204,42729,47028,82813,47882,94556,63703,45759,80739,49664,37264,89427,15752,38890,46411,35868,41486,91496,17819,56006,30690,21669,97676,81802,12320,54372,99698,45801,49237,90930,27786,25180,21662,29946,38929,97505,15489,44133,15754,62157,85074,50370,51731,24831,81256,42413,84903,27123,76704,76513,52225,95465,62366,49510,45314,32415,68763,99913,94176,34841,15433,30487,34691,88698,77076,44484,48358,56525,56174,32017,88084,48426,83602,63916,27122,77006,48374,33394,42031,61359,44502,28200,12176,81967,24361,63103,43011,74848,87823,72345,54498,26284,12689,69461,11317,15339,97496,33589,63698,63032,82080,90293,51878,33046,43177,86289,47652,47022,19916,65837,45176,36710,59014,21212,65618,88881,77790,56713,72532,54175,61569,88091,30941,88984,66223,27949,32100,28183,17044,41382,35756,68485,39043,71965,66803,28792,17084,36008,38241,94574,75580,39886,31358,62095,97631,48367,37315,28186,31872,76347,25936,58922,40880,90556,74426,51482,20074,84110,53608,70053,10198,51689,87012,38663,97627,35631,99067,66838,92930,42714,60343,81633,47153,36818,64221,71153,49067,56115,91527,56134,63549,87431,24897,16380,91206,70591,56195,22820,23563,77460,75065,99572,30524,79959,17222,88406,60585,42423,52388,83482,91229,27494,33569,68596,58840,31316,15542,93465,25453,95750,42496,31415,93885,36296,14372,40706,21999,47364,70095,15124,59712,90891,84155,22453,21868,45532,92607,55749,80638,71682,36231,22278,69663,62120,79594,78287,59997,10671,90009,27237,80738,15676,93217,94951,30780,19803,14509,79967,22285,91147,21032,54325,94229,37565,39496,86607,32971,16229,11326,27570,85434,96079,34743,24022,67252,75833,13564,72988,89287,91382,44271,29744,70290,86971,61205,88279,90365,71371,24585,86213,21690,80845,62126,95328,90981,45252,71232,32224,22201,22689,23527,90089,40392,14789,19458,71518,27599,79071,11745,93756,41435,73625,66742,41076,99286,76953,63511,15268,93850,88756,75041,27260,94809,49093,59772,12235,26722,35101,51083,23453,66799,57128,61313,65048,13626,40223,78462,10113,95850,45088,49182,20576,18927,16511,18086,56536,26531,12241,69765,98673,23108,74030,30966,36846,56741,78128,96940,82557,58872,99323,32635,77423,14994,34353,28160,94621,65304,43314,12612,92049,18729,45530,58817,27358,63802,33927,41312,86795,53118,26077,41569,31605,89829,19199,27914,59291,43760,33926,21708,86966,86475,79817,82005,55249,21849,51276,47188,75465,67889,82264,98889,60267,59337,90849,69821,27760,21462,14528,83145,48439,31358,17665,13529,27378,21697,77908,15384,48139,42923,81982,10865,23622,59685,41525,18159,96264,27179,77724,46468,57038,28291,88034,99636,63713,22119,54754,74634,80918,62690,73774,97643,10042,34937,99438,23326,73593,97398,60565,16462,46916,25241,42601,54440,73664,11573,48967,20433,48665,92463,73616,10783,75148,42015,54237,25700,55701,43262,88277,55764,13078,46887,90861,23240,30127,31039,38937,81678,13384,30268,71377,21060,94740,36939,97528,25792,47043,54597,45748,12267,18183,66282,95163,80963,92884,58834,40832,21207,70251,50052,84206,92815,96071,50461,50691,30523,82381,56357,98289,95702,68426,21919,76186,32262,92704,26517,87436,40145,50340,72845,71143,18907,43202,50557,65980,97774,11784,18447,78002,54227,70590,23716,49247,22615,14938,34801,43691,64878,48039,22739,38982,47976,62511,30177,13075,30965,48022,80304,18405,59715,24231,98055,77381,94883,39298,24905,49638,60368,47305,98043,16999,75763,24794,79610,31399,30514,69365,54998,80634,29433,46119,12376,23699,16696,47424,37907,32718,15547,29028,37827,22213,96995,82681,20115,20326,72107,50319,44332,66465,23890,59224,64080,21906,82830,83834,45350,33400,70766,29897,34503,58966,70256,77629,93292,60421,35768,16542,26562,98345,82195,85674,10782,78987,70758,20482,41668,77819,60162,73422,61373,72288,82051,20866,16227,81400,63463,72205,78853,26591,76770,78423,98931,38588,61958,88525,76010,25168,60270,61827,75831,18574,90458,94735,94853,49686,89739,65560,99313,19873,56178,62172,50914,59885,70013,84838,92052,89340,73906,70282,95806,18372,39280,86150,23156,50264,45016,63744,35895,65388,23369,21265,78781,20964,89017,11892,26627,52003,11243,17658,26771,84510,31468,97915,76581,58545,62288,38744,27670,52873,34505,89318,90408,23105,19936,41462,99056,17259,90881,76266,89301,73935,81908,33751,81577,51378,87730,81644,54207,27120,60055,35009,27467,21983,32944,28102,60843,83737,51574,25675,18621,20444,87777,53649,22323,88112,98365,71521,38451,44941,32069,74813,72260,93728,22431,47359,69355,45939,73013,47158,49218,52857,76312,18815,38958,94858,95111,98179,44052,65758,14853,20077,26076,31956,90203,40659,44069,58504,73360,72372,26768,50780,19269,87414,68810,66440,74026,73757,85903,75412,12293,74550,67102,68575,32872,83751,61419,90786,60299,15827,54589,26792,30730,93669,77471,67886,96804,12061,55331,45376,25644,64434,93010,68439,85885,54689,93743,90746,64629,43403,20203,64424,93322,57648,42610,55425,71651,21481,35169,69110,73712,37495,34000,66081,81879,33116,89137,61137,47013,83988,77516,14888,19950,51642,57218,24017,78853,76381,84879,68617,39342,58441,48283,13454,27560,65468,20174,47467,64282,47592,44955,12387,72258,71268,35539,32461,86565,89400,92684,78649,96738,99071,87616,86775,98955,23341,10785,61570,15294,99611,84545,46516,78469,46280,85859,38524,62408,16251,63153,35856,77447,64013,81712,83576,82857,14631,16172,41196,20109,53698,62685,38528,98534,32767,96078,33088,26962,29715,59057,43427,36306,91034,78438,50865,33658,71675,75060,15183,76363,84699,79820,51449,32841,38787,87284,95985,48561,10158,25215,75652,58633,36319,29744,12890,73377,88948,44597,53256,31118,55020,98302,66028,49219,41600,71567,60564,90808,85528,54737,13091,45982,24158,70564,34180,15819,43854,50121,50611,70100,29187,51813,43041,82162,40912,52162,45403,67517,86849,21668,89514,62020,67380,44066,23267,85877,24601,75814,48294,99153,11082,55383,52545,91030,36724,86448,96195,99909,87101,30928,24270,10665,38873,76529,70672,64074,60429,98735,11337,14232,42586,70507,78896,85953,87722,47592,51867,48375,49019,76980,68914,32569,36131,60385,67523,72416,49179,43109,81443,24190,76654,29622,71692,66151,96734,80073,81577,45084,19365,55245,79368,67756,15339,70288,73928,27050,66121,51636,75455,41766,41470,36441,84626,45415,45358,13238,57979,12829,16836,63987,84531,84210,99903,91280,79847,26231,63911,10685,26443,44700,27134,74012,95571,63337,32973,27970,80991,14910,60226,71363,15102,12689,34639,78802,93622,19755,47164,23972,74429,95239,42162,97407,33438,51647,28873,19766,10227,89741,64997,58562,85508,52606,61909,86213,64506,50661,73231,73909,98537,30886,89703,25366,65378,37853,27511,27938,96824,95527,98976,22230,37553,77155,72146,61862,79900,81918,67928,24984,84735,40693,89231,11512,72451,54345,63437,23699,34202,42459,56174,42435,92059,72781,17444,83633,57183,54904,35914,85438,66603,82306,76824,69678,95175,29221,72301,86839,74986,39979,16955,45405,94133,80147,73520,14645,90038,43901,55395,45098,19242,95421,19295,95230,94049,39851,80676,53364,35520,45958,70588,72543,20014,95459,19375,33730,44422,12928,60900,49702,74851,41302,76186,39635,10019,80266,17155,54098,33497,49577,75538,82838,96792,36732,52703,46883,37518,52184,70066,65124,60986,32575,87356,36840,44266,72583,28398,52410,72077,57783,75700,48269,98314,13642,83737,81397,29692,87420,12630,81017,29469,83080,39899,57562,34637,44448,87143,64423,95078,30430,84619,14927,64165,68577,24305,49596,73247,25361,45011,21439,98385,61208,30261,14632,43417,47929,94666,70578,21465,50263,88246,80345,29533,74357,90646,40700,72063,53212,16322,80551,86133,53139,29088,92763,63584,87951,10059,19749,30250,26806,49309,91628,70618,45431,85805,32719,62305,29998,19054,82761,84696,99231,34762,79201,3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,50719,72566,39087,80760,27226,80322,41735,80087,80958,33899,63067,83306,68170,79628,50301,13344,58604,61781,90221,91153,71529,61730,22588,36340,57148,70402,23415,50981,37265,71251,91427,17774,18878,27857,60952,11729,35083,69053,32595,92110,29218,39028,32083,88357,37008,28601,47277,77705,25813,12722,13377,88560,69991,19179,15533,50217,45325,16063,66138,54648,28917,93893,17030,26166,24364,27436,72547,87102,34263,14613,39245,96838,95145,76046,37408,21075,83829,10213,67423,69341,23633,29537,78574,72062,41931,98066,77011,56125,41365,64219,21843,26072,58966,40481,22926,76636,86812,96943,13227,96306,95741,83147,72641,15503,85068,29065,60328,24218,42962,72645,99366,29770,41220,67801,99377,43730,72787,48134,71090,38773,35294,69449,76940,47864,69739,74572,97825,32397,19653,77653,84386,41131,69126,11923,90566,46917,92772,52920,71915,80052,15716,25436,72182,34540,95697,52321,14325,98331,56221,78957,54582,68185,26873,54076,47600,17357,15297,43761,39184,49933,78120,49223,79656,62419,46177,37966,25482,86094,97859,93837,35561,10702,51513,33212,65628,18366,35391,31044,42473,93524,86074,11172,41221,39017,13644,71136,72334,74863,91148,97255,41528,45115,77673,88560,51789,30222,61423,45347,52694,84960,20233,86236,20909,89893,82721,98267,75788,31361,82658,92872,91705,58027,24242,67300,55748,26159,93220,56689,22662,36747,93570,89854,19411,56096,40431,50408,38897,12931,27443,38477,52678,35968,18116,65787,91991,47617,94144,31495,12491,84108,14298,94549,15808,75210,42274,67386,87697,68250,94298,44146,92884,45828,80493,17300,56844,27996,72889,52955,26043,94301,72720,81975,65551,59839,10383,62202,51134,63556,44720,25217,34778,25684,33278,10736,43822,62313,27371,87495,42504,23063,14897,66819,90920,59224,40994,65358,24847,60006,77885,75873,56578,93594,41245,84179,36088,60160,29962,67110,13200,71674,69056,27812,46177,54018,94753,86637,62443,44021,87479,80041,53110,51377,52524,71958,91188,17109,92251,70208,84505,58677,36011,49271,69797,32370,88632,44815,86263,36429,28805,19992,97531,54249,66642,70083,17377,36594,15268,33268,13262,57824,81314,60692,57962,45088,34802,82298,19551,31449,35944,16560,92513,55106,59926,40967,57843,17334,55190,10534,22612,35591,42229,44515,54876,86179,11945,10163,83349,92728,23296,62475,60636,53757,11652,64888,60124,70722,71943,81609,66843,98463,43944,76046,37268,43043,95085,38234,67729,85695,59156,90308,13544,51958,89076,19731,96921,74246,29132,83226,94040,63138,79236,10122,67853,82578,65305,18749,90263,10486,47540,57405,38858,38090,85566,22887,90593,48939,94510,17939,42665,41049,59017,14522,92466,44418,99356,92726,99049,49583,50329,71767,86136,48319,73361,64406,20076,42165,76573,81327,25153,43631,72443,84793,80131,30950,78542,97247,32472,85553,48156,18060,29130,21791,93034,88257,40250,41096,58003,20229,60259,36075,37309,12507,29891,28390,29249,56185,40994,58523,79767,33130,14832,28493,53368,68233,65465,42303,56567,24971,30960,68129,21842,78714,60676,34550,20730,33159,96951,46139,62799,70335,94227,69649,49651,39633,73837,67949,58525,44809,50160,36473,23679,19425,51921,21498,29742,93449,32441,34104,53213,26680,30087,11467,77569,55169,80645,40524,94197,28339,11930,45123,41166,74396,82029,19104,96077,41610,88669,17819,40299,72571,53607,53814,87210,66667,48475,58805,62375,29362,31371,17976,40604,19184,41085,99625,41040,71927,21981,45577,36142,46857,88757,59640,97606,59460,86078,46935,60233,71261,53080,81059,89810,22510,90550,12420,83286,20621,95373,79130,56510,19962,55354,28661,14064,96650,51447,41973,94964,11349,61461,76832,86414,86628,76276,17919,77775,59474,76492,84579,27209,84436,80432,14034,84417,39889,42168,20387,43254,39245,40641,58846,55436,29179,90678,14839,80526,66017,24538,22465,51642,72437,46014,17493,14133,42424,71851,88240,61153,24442,66341,46625,15529,84875,67073,65432,36296,68879,17088,94433,39396,10641,31558,95836,30147,41895,38805,34751,64641,94318,20384,33903,59913,91350,72058,54969,26991,96370,52915,83732,74362,92755,15273,21811,19734,14649,58743,65857,81555,40077,45912,85317,40822,95586,55918,36772,50378,40929,32628,87740,62695,76995,25144,62611,99567,97496,55148,79269,29209,76562,13268,54568,62930,19652,45273,20320,75792,42148,22715,18273,30095,46627,98248,16066,93030,97285,82803,68361,19278,95785,43145,13471,17653,57976,75896,53844,77079,57932,87239,10096,85024,96468,10390,22159,61863,36434,47179,92961,14079,38410,57028,76914,55648,97820,50405,83031,14372,61391,10824,77633,94479,24782,29769,91697,57240,92062,49045,51954,54884,70508,56855,99098,51749,83634,62901,51505,34632,37180,67414,75066,43270,38967,37194,37691,71572,57702,68488,85008,14239,55767,17474,62289,53139,62423,71470,19627,69232,80480,38955,14499,59169,42612,84594,46509,88132,69893,50429,84385,70221,52453,35151,68456,92761,23708,36766,74109,67749,86420,63488,86653,36156,84442,50666,31664,36115,33928,80279,92679,76563,68987,83717,35115,42644,69489,31448,99774,61441,58767,36802,43613,76506,63408,96505,27665,12400,42520,34606,99536,62370,13738,44745,98043,17246,29855,90761,20228,79234,54757,36635,11875,28621,21777,17038,58461,80306,16147,42832,19251,59512,67031,27361,74659,16023,35961,36428,91285,68749,19180,24006,72633,68200,28839,77256,32186,37872,24285,72681,72752,19020,66634,25970,13065,96655,42281,60761,86032,40567,28320,28738,74530,54175,14773,72728,78518,73754,95937,64473,12621,21860,81369,40587,98119,68480,98231,95475,99098,89152,16074,99879,85852,94037,64345,73361,55274,21354,88923,67006,41678,55396,63632,23803,80343,76496,33266,84922,72987,38197,68506,50734,74576,38835,48962,57736,22919,23823,95447,29320,61087,46886,23046,74561,19438,34526,71597,56090,79232,11217,68773,73188,68529,10014,54953,55038,15705,47513,51658,83950,59049,17866,12332,86771,73787,16273,12056,56854,83212,42777,20697,43662,68169,76688,82846,87163,56958,82226,77947,51209,49044,45965,91444,45759,61486,21644,47245,41348,37519,42588,10889,45461,43973,15276,51120,13355,67517,62301,53230,30546,58798,52074,96233,91023,81386,21808,78863,31730,97810,30494,26005,46872,37890,80496,17435,48451,51826,36265,95423,84192,88261,60870,92389,79135,47748,52925,93599,24221,48785,42071,83113,50429,32812,77324,76558,24476,58853,93443,91516,28653,68227,23631,14980,32372,69935,41781,80805,39264,98662,86047,15435,16934,19472,70770,30950,36798,82068,42293,56854,97109,59149,82916,63942,25938,13023,29452,90090,94331,87434,42053,27188,96478,38757,85654,38145,49812,33533,66126,59804,67759,50269,33125,23447,61295,23021,16898,95138,36581,25959,53959,34838,39478,72452,38649,27886,94039,89687,57894,57639,57903,56932,43099,91564,54559,35493,67871,17569,42305,10351,38647,44605,48456,33308,91526,87938,76974,44303,48997,61525,60598,89719,26139,66738,70948,54621,23984,16674,64354,78565,82440,22408,86528,74069,58558,94980,60117,51450,30041,17031,67952,47480,47736,66796,23734,20717,52056,61271,48092,13482,41791,26628,65823,72818,85657,45439,15813,68242,84089,29557,28825,79794,44821,61260,12751,17075,25870,43061,47877,93151,22531,22004,21478,71523,61564,61144,63009,15101,83984,79189,26827,16200,16678,89593,16235,50922,59961,80017,33238,50211,51178,32529,85775,66763,87415,99650,77257,58850,92909,24351,53603,92100,35387,72453,70191,76260,59012,99777,92628,97820,90187,33470,26807,11920,85683,52781,97673,26075,52615,87099,35223,42303,54024,81582,71799,37656,73416,29440,14511,84976,38168,45560,36035,47270,80067,76555,68609,44510,79646,39078,82268,24127,81622,85104,60753,35645,56433,25321,18816,98432,60929,43580,91741,97739,34198,81024,42658,46607,41028,20643,39007,27029,85514,68731,34301,81872,53505,88058,45319,17875,53609,90174,51225,89976,51933,68519,42137,15910,50083,56278,98950,53732,12156,93397,26331,77492,86821,15851,69461,82429,45806,58624,72121,12022,74842,33260,67126,97361,11711,15425,61668,56388,15353,20124,95372,90402,29372,56486,89509,73474,51517,26823,89863,25113,11983,66477,71711,28265,19456,58680,34095,24804,27526,52426,99054,55201,38102,95855,90040,56042,74538,45414,40400,57772,11549,15185,61235,49430,38101,85414,33074,95718,63666,96210,11496,79781,25074,21728,98444,85390,70718,30930,93449,58128,63386,60486,87511,89302,65247,20244,85815,18525,15368,86230,78897,65387,27139,33356,31465,72800,21467,86152,76530,76731,75484,36216,44519,10796,64253,84840,44358,71319,30481,54133,13566,35355,16062,85763,68571,79770,63693,54260,25384,20648,29688,15065,81537,72730,34453,63138,97501,54386,74960,89256,71666,19279,44112,82497,42425,44341,78267,89028,98713,89049,17931,55481,75108,82795,85266,67269,20096,17355,70814,76687,53368,48598,17235,95676,80645,77205,22823,54941,17536,32177,45475,56050,40952,99843,92864,35961,25666,32442,87192,38385,49591,24463,18062,25651,88722,18959,93495,74204,46771,89111,91392,93531,69180,55125,59907,42502,55402,72423,20140,29971,14527,15420,79982,32932,45701,32912,82336,18647,22235,64934,39819,69876,57527,67941,54858,81726,43698,95028,18573,84653,81462,59130,93576,22035,26340,68061,51309,23285,61195,85487,34868,72554,83718,26112,21035,25384,68679,62000,12553,84620,52895,64961,95806,84942,55868,39557,26379,57968,84624,10419,88919,45683,12115,64785,34810,74264,56119,85181,60321,87826,46822,39370,95641,33501,83608,92852,76302,83801,82193,86196,82128,25575,47821,52974,32684,40871,65896,20524,43197,43687,59271,60337,78701,13975,99541,53107,73749,34038,94226,87580,19095,20695,28120,11870,61638,40799,15112,59499,19463,36307,77739,10636,87355,20469,40321,51262,54813,48930,97050,18752,11936,84954,92999,66973,69932,11901,89097,50612,67248,14026,88637,42665,51304,53052,92488,16413,75826,62023,78665,92779,53121,74579,58932,24222,31645,10747,21490,63173,70149,76127,48030,60410,56930,17302,19815,83667,30432,90152,29976,87652,26982,83525,72377,59474,24922,90315,20312,90196,72502,86118,72375,72664,43443,51319,80713,95880,68787,45611,34176,72303,94305,85828,24322,43474,63055,49806,48167,60125,44988,77352,43696,75219,46827,50359,81824,87356,72614,55775,36883,37958,29198,23955,63434,57698,72395,33970,25024,11574,71471,54758,92112,46757,88439,18117,11791,33659,95854,84120,10542,80277,29420,67947,70467,60086,38590,93134,54514,98800,74342,21423,10517,69407,19182,38677,65575,71580,50303,96758,50935,58259,27802,56743,50788,51527,18192,16718,23912,86614,98621,40025,83244,89164,71198,37595,74758,95112,53372,87786,33078,95153,58834,62051,60998,28735,41119,27932,66823,11142,33910,36957,36937,71228,67631,37876,95577,53124,62171,47673,76701,51348,84388,59383,56444,81896,30985,57233,40341,25547,64485,24133,98418,17647,91545,85056,71242,70643,24743,66610,13286,91241,89995,54338,28522,41493,69740,55842,35904,31296,92045,36150,16879,54792,29859,30572,81762,49017,91397,34490,57236,33873,87034,67968,73352,57227,11754,10891,51098,64529,70148,42257,12829,48687,89971,29629,75924,54423,57475,29621,51198,87857,60629,58363,81098,71895,11589,75884,74374,41578,24994,98068,60606,26874,38199,13531,86294,84965,30382,75532,84506,70460,82365,61801,24394,10988,72148,21840,69983,84406,42108,26775,16239,87410,43356,70913,22356,68625,99478,95877,63041,69396,78613,72624,13495,36450,48355,15798,69877,90449,11230,44685,16868,86208,93147,46424,24826,87232,97012,50262,14584,83728,68521,98688,67341,45808,80161,84210,37803,43103,49248,63460,74271,68684,47373,91440,20985,63138,39613,55979,49690,47753,59739,80819,73864,66225,69824,45045,99818,77880,50016,77026,88726,30403,57632,45034,53873,13260,80014,99604,91915,34861,96893,45089,67816,34962,88894,51628,33128,28638,43063,90461,79768,73391,59453,27428,44960,11451,55041,42248,79400,89576,83244,12415,80176,41877,37275,73808,87948,20663,85406,11339,89212,16863,44744,50406,35907,50542,81748,85164,66991,65171,41393,11889,88472,49513,75419,10112,10706,34207,82013,36958,71445,58538,95337,70706,28750,76906,35827,18164,96830,30394,74216,11731,76363,61524,75579,49366,66097,89221,21259,71627,83963,25898,31833,19831,65845,52819,19205,33297,84632,86942,86802,70826,48703,84692,11601,84016,55499,19430,38493,29482,48878,78760,68545,77120,88174,95361,58837,13453,20973,50909,35080,76380,83193,61485,83073,32219,78477,25320,61814,19659,93480,72066,85949,91718,28917,29216,80543,19533,23841,20901,59174,64121,99149,37299,27222,92322,61017,57741,66605,31183,33372,73576,14768,24497,14469,14736,51301,84934,40704,80399,75167,77651,85374,30389,54520,88865,37106,70012,79488,12649,78309,90591,39115,17287,24854,64223,59442,40434,45441,57743,32909,79612,49256,27579,15217,62167,35461,16806,37977,75305,63346,75081,96340,14808,51241,62560,73932,95493,27568,54243,48976,16917,36366,74535,76460,62955,53290,12794,57452,54255,52163,28009,20489,36830,10558,24283,46989,50272,55136,94300,10760,73837,53879,72707,29159,57642,60440,34332,70315,65366,32548,44216,34351,85239,56796,15135,13502,22130,35574,81757,27557,42185,93325,77738,21524,68745,48274,48301,11273,66402,70275,32484,28911,12399,15491,98544,10110,89884,97593,28372,15027,28612,40468,17126,19411,69525,12355,96198,28596,81865,33202,46493,33911,75538,35484,56187,89453,22073,72741,40370,69131,87811,32893,92245,45237,21666,67179,29959,99617,68686,76044,69796,84379,38758,95935,30852,15829,24104,39654,98400,10557,76510,52304,92555,97848,11545,55826,13990,74423,50557,67456,95899,39054,69761,49855,69972,28572,48752,91544,58748,95335,86394,78763,36904,23725,67082,38282,83162,24689,45990,77822,50633,80836,53004,21785,84038,60236,85359,75657,11264,66899,69265,92897,67796,52328,54281,64355,84464,12382,25331,62110,97047,88633,76859,14519,10984,12786,83306,29401,98492,64363,94713,23014,55972,81612,36011,81234,11576,83195,99779,18685,28249,64585,23994,58869,42585,50977,91744,88131,81994,10376,15565,23088,39812,61598,16593,30045,36923,48454,87665,30862,22132,36697,77823,76680,36635,64732,31926,20080,72894,72752,45580,25892,39444,36048,83324,43730,64189,40597,78085,32904,45722,63536,73600,16204,71650,69984,83051,82590,60427,39965,32442,46603,43125,33061,49187,32906,26776,84081,82264,78397,98443,37354,56184,97390,10638,17408,97577,53452,40357,47627,59348,63835,57576,94733,82563,83844,27358,62335,43451,43835,36402,18732,63316,57684,32796,76918,37924,46271,96307,78306,70479,90369,16115,27320,94996,34644,81853,31953,64268,18770,74310,70830,57462,49166,28909,85557,12822,40440,60446,45915,70825,13607,16571,86996,31461,68904,76604,16966,79361,29369,95028,65733,99460,84645,25308,66492,91771,93427,33898,77556,48649,10072,81601,36000,17955,12552,10219,90381,57180,51686,65846,99295,38272,37839,78794,88962,57845,30756,24792,35662,58126,32013,35214,73091,39414,90247,89653,91955,18877,48262,55884,42204,75014,62773,93427,51095,79462,32303,37413,58752,15845,48309,75924,92864,54483,67148,93812,66568,13455,67347,58825,76115,84247,12340,62895,71178,13681,19140,44890,68837,97397,14167,16458,86559,22668,95251,58292,69106,66750,70241,86776,46575,95446,81528,47204,32213,67096,97604,28502,45033,57511,19504,34267,31319,14288,47565,95261,37422,78507,68601,66997,44140,19716,23299,86546,27576,51425,46999,44321,55614,72343,59128,83513,75159,24077,96798,88672,25820,68963,96967,47856,83312,28868,40037,60227,87938,55577,97437,43896,95450,70496,33604,18345,77858,25683,76387,62226,87208,48856,56848,68226,68072,42732,43986,50043,70425,64234,36511,58574,41204,24564,59827,86283,71073,49538,81174,91228,38005,16557,81341,16922,37829,61261,32116,82959,11322,50248,88337,74026,85741,63093,53543,38725,83061,59609,24289,12583,50235,98422,44879,84241,77584,44785,55398,32098,79701,51606,44607,65671,96140,96649,39954,37243,63126,63096,37452,58135,10207,70030,88472,56421,44296,95872,90927,37776,23527,28620,51779,70821,49098,42602,53999,85012,57453,42901,87035,29968,28285,65724,58198,36038,11027,67794,30399,64138,37498,22687,28422,76889,87725,52459,81021,98507,21805,22407,23872,23946,32312,82874,24258,72857,93497,92178,31577,61674,26895,18167,95812,40060,63564,24023,89359,24640,25526,32061,15864,97830,80964,80136,30899,86480,97436,74837,67537,61064,52447,64021,87580,46048,36508,99024,93692,11108,96814,76283,43113,68804,94023,87594,11317,41472,11235,17664,31914,81523,26574,11125,88091,71401,20120,82979,24773,61084,89234,93412,25682,14647,78314,45744,14916,48772,82844,57818,51990,42740,93084,87928,97678,96902,68844,73629,68934,70255,26820,55302,86646,76750,75858,23256,27806,21819,26663,79485,21818,77051,22371,49145,61916,48230,63195,36315,24682,32233,57720,91636,61803,53722,29095,26010,68483,30069,54997,56005,37541,50090,49941,67895,49143,85954,40801,35537,48428,45243,37266,12048,48674,85275,77392,86014,11666,33007,32777,70768,87918,60777,80324,37321,49721,20101,64548,10139,97871,46767,24381,55101,51821,41887,10153,52719,12145,84706,55135,49212,89132,91309,26879,51604,39976,46969,81254,93913,76919,33400,96372,66260,10555,44970,86966,22706,83712,20198,54636,46323,62427,48017,84105,91913,75866,45287,86017,44144,31075,10700,51262,40047,49082,89748,99366,32940,18438,76650,48681,29587,25765,41921,57013,65562,65986,55189,91759,27268,15566,71577,46770,88309,41409,88780,93171,16275,77752,91780,55507,16631,40161,44107,80338,22300,19197,80579,29739,82359,85694,94154,35091,30252,85452,12756,95832,63064,24289,21358,70347,20458,41384,83144,83837,74222,31517,16630,18529,54235,62983,98087,85117,46864,38554,66594,53858,94414,74995,45139,29309,59952,62723,15772,36649,50655,69212,29085,23695,99923,12490,16988,11719,23405,79577,12185,40629,83778,92655,52464,79618,64691,33142,53208,47989,16713,23787,32474,84829,38109,15604,12021,49198,41110,50031,22466,72505,52561,22836,39775,31014,99004,36608,68882,75941,78149,30262,51011,63603,34650,73678,85784,89075,37762,99536,18466,97415,27937,14854,29893,72176,21419,78852,71193,67670,43659,86664,62183,39816,92543,13287,58654,49800,32613,93350,67673,77541,33884,43905,65125,48314,86512,16224,49842,61534,42367,59600,65582,68947,14572,38267,19572,96497,67143,69777,12479,41123,88495,94348,25225,62889,48846,75224,30196,10631,26850,27753,52979,56275,87250,18493,70925,97178,74808,32223,48828,39610,84756,55439,93705,62183,55786,35292,59224,99184,93521,27968,72714,37599,39132,18857,59842,10235,86726,73190,53030,24954,20817,49621,63002,65407,83266,28958,40983,47061,32900,95300,59808,88659,41695,21809,43732,86539,73203,98321,64182,76328,50010,55833,13416,47325,68450,87129,57443,52490,68440,91991,55922,94037,46026,14515,83638,21373,54892,95653,87033,24990,24823,39721,37386,17840,31769,88922,62353,76571,13083,42094,77437,71960,71222,70415,49109,16791,92949,42604,16915,65941,60195,73248,31657,50220,82540,82649,99567,71319,48908,42241,34083,87883,96647,96206,95733,58141,83128,33268,12491,93853,41413,54216,10598,60282,63653,33227,27285,39640,10077,53266,41691,67519,95579,40945,63147,21055,92900,44679,17387,36948,78750,23037,93655,28740,26173,56635,29065,57862,45757,93811,14191,28392,68842,46183,49853,10839,62888,77667,98884,13574,27961,59275,25902,84130,36926,16207,46262,38504,40425,46881,24521,88150,91354,63744,62589,69036,99447,83665,83699,54733,35330,30321,12039,89963,79165,13168,87474,65886,77221,95018,41799,61309,77841,81961,71122,65608,49966,34131,53258,15355,15404,39241,40788,10430,82989,16912,71173,79780,22049,83857,89630,21385,90366,32650,67466,54282,75355,18517,53362,79558,49633,71017,29922,55858,53355,77092,67329,33028,69561,95394,82780,27164,94515,15173,37299,17742,78895,81109,20891,15775,31025,99139,14806,83650,86064,73155,90791,98338,15203,26301,46751,97273,30379,64473,70402,68326,91480,80139,12673,67810,80098,74400,47856,93404,32074,79995,11358,87693,14876,57244,59957,62242,94750,90289,22425,85171,26479,78001,91327,52972,26413,97714,99611,33072,33898,74020,16245,32475,35282,87115,18652,17263,46675,48291,10850,80397,66684,75874,20272,71695,87200,21834,91069,51316,59613,47428,18510,31879,26000,20592,98167,30176,69008,81375,81746,31734,74127,34653,44549,84464,52748,79123,68553,39054,93346,49145,89660,83374,34457,92598,11439,29252,31811,30516,12151,46752,74107,63740,39899,14552,58586,30185,30851,58567,46873,94741,24693,59203,34665,56874,19208,50537,66788,32111,89748,95449,21215,52395,26965,81527,89481,10218,31184,13324,34288,52777,41579,90475,91254,11006,24992,77558,21646,85717,88872,91837,78075,95619,82642,80594,18689,87716,29749,39944,88114,15911,24880,71950,24076,39563,23492,67644,40830,79181,18450,89593,67488,95356,10558,28197,68094,49677,99528,61014,15006,51046,81925,96050,48323,47703,14618,91801,75429,35917,54339,99638,1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25,64802,67135,62293,96803,38735,50284,56457,26412,45886,75628,25366,58476,20210,34348,81044,13178,86106,37572,60273,83848,91152,25087,96960,19703,69939,29816,19205,32293,70824,68858,67465,84268,54612,30623,30510,75387,93689,58224,72839,86414,75428,48310,40799,24630,26684,82995,16480,66268,99585,74818,37375,99196,54075,23933,17902,45009,99190,35170,86223,45519,17498,30952,75004,79300,81655,95265,98693,69751,53579,86866,41487,63164,89455,95297,52584,84261,85418,65682,27384,48531,71271,87227,53014,16566,11557,38729,55224,58029,49399,84257,19585,73875,87701,41875,90216,31784,80044,93550,91255,64470,51836,73804,75943,38768,55436,49761,53220,71398,87504,65264,51407,51081,91524,72873,36389,40985,96799,78494,92339,63502,90043,50878,67867,11908,44637,97915,72346,91744,73451,22133,95916,65962,76844,82954,35824,59338,43196,66194,16172,76702,95665,74468,21106,94078,89739,13584,46859,93532,61278,59433,11678,23248,27605,47020,89706,80548,70996,39442,60181,82833,96784,85780,26351,59910,31579,79637,84958,59612,85862,85881,73752,69208,22920,36884,82235,24890,95499,28352,79688,51653,90946,48012,22645,24631,71102,24894,94582,71520,12192,22647,33154,67558,54161,31777,63808,41781,93872,11158,80537,95717,12927,17556,57388,14156,65024,60555,38482,74806,77157,42114,94939,98394,17580,76074,49542,99000,61041,66178,18849,12501,15974,16389,63942,49009,33978,79036,31895,36195,22164,91294,52140,64008,64709,17000,91672,67629,22736,26253,23087,72039,45913,22813,83731,82188,66364,52764,74909,60469,45185,73529,18728,83268,74334,55182,92861,72203,47111,74411,28002,98548,36248,84688,11564,91841,31787,66338,83799,84891,58246,52387,77771,12570,66529,79229,69391,12293,97379,64079,41114,85131,66497,68781,42656,34379,52000,27566,89471,34456,59856,64733,35049,89914,19270,62373,83960,56104,43555,31663,22913,47314,34078,32739,47874,13224,21693,31886,88516,45507,52882,21190,64796,93342,68492,12251,79046,91377,64868,38920,84188,39183,70319,84051,48126,52048,44078,84501,47702,37404,76006,36048,55927,47719,27928,51464,34930,44634,85374,95671,41341,61955,33473,25796,40028,55467,92702,93184,21744,78551,65750,11572,59088,67597,66892,73567,35620,95847,11941,76110,41522,72210,47713,68533,15087,49528,52762,40968,17584,26581,19903,96160,93248,34980,31150,39419,44411,79385,92614,92143,53076,69447,51390,70158,32065,54475,30922,46155,49890,39064,27927,75376,12015,55322,53883,71286,71653,42994,65849,53206,29719,83270,50232,58233,63510,70357,15724,95962,60165,48364,24018,55170,73206,71901,76454,49505,59325,83844,21151,17740,21024,11209,33028,18439,54979,97784,70720,51998,53432,11920,24448,80327,58438,31326,25837,15319,24814,28082,96612,59955,66606,25879,53909,12072,56860,75198,81514,56268,52626,65609,85881,56670,82744,78622,43209,88692,86887,90870,66796,39234,89248,10096,47849,91015,53565,18751,44345,53245,96969,40330,38108,79295,35859,77913,31823,32962,95274,29419,57781,56848,66733,59344,12949,99848,28436,75781,18963,69042,38839,23853,58246,37958,79336,81280,66175,22926,48561,94707,43005,16682,35927,57572,86161,14098,55462,94536,53123,29325,58264,32411,82533,26858,13232,13985,41766,21230,26471,75945,41741,18275,68046,84503,30750,67023,75102,46954,95990,50674,74774,54156,66764,33705,69829,65806,70815,74372,86272,41322,54510,42119,59805,17165,88404,58328,57611,86546,26133,42168,50203,61606,13009,38388,41901,23243,76431,50272,24963,70796,28063,78526,90300,90824,87434,10076,47271,28101,71992,38578,34677,19688,16935,92105,70917,86763,38446,76016,15269,42876,85715,90308,50940,57630,53459,26950,65946,12125,34845,24704,97356,69137,43690,39214,61098,75717,69786,69328,59842,36721,58489,99319,13898,80666,34676,84877,46084,31402,24247,30388,59447,20136,78748,31646,88418,43143,48777,39121,28070,85660,76496,72567,72078,51260,71618,66991,76846,63564,82680,16525,35796,83206,97171,60124,43811,92672,93324,51340,48949,23735,68918,43258,82087,25915,31505,44006,34577,66217,17644,45355,85057,35935,73504,79126,36987,15014,27906,59200,58574,97235,35346,93482,89424,13239,29238,97569,95125,87859,66413,83145,94229,46722,30071,81052,63330,15672,83497,31406,52274,80341,38825,32755,28813,69425,82707,53195,45494,93343,62587,91742,58934,99751,95785,79706,75635,50666,93672,15141,40197,82617,81924,80198,71646,81891,78013,92765,21789,49122,83929,76675,55485,86690,45782,19015,45429,31228,49926,67281,58006,39313,24167,27111,49775,35933,37959,20113,95415,96006,89140,55428,70212,75932,56188,36540,15982,41556,68841,98108,84707,48496,69378,75373,28380,52046,85899,61758,40674,21403,36688,63325,72642,24671,57786,84015,15962,11245,33531,44219,33471,39448,92391,13710,90520,10797,45580,82883,35259,39264,39747,66424,49461,26032,64618,70705,55907,56693,37746,26233,80634,19526,48993,45397,23712,28795,44292,85806,54709,27881,35862,97999,68377,76653,19976,71985,51906,73526,84447,15307,49923,56725,11130,69059,67164,77288,18267,66246,89206,26434,33464,88483,17140,86573,44597,71121,54361,17473,16228,42026,81771,22728,22895,92544,52986,85595,76992,74633,81969,70079,74512,68325,57062,40940,36425,68241,58097,52475,61064,56908,11755,98985,10648,55486,93185,10350,72925,82499,74447,28189,70740,15796,45743,95550,54165,87333,29973,84919,27880,22880,90090,46238,61473,62683,55810,10879,68903,41188,75772,36928,36947,22814,95776,55321,27006,50904,52468,57303,34263,45278,81508,69209,88609,28562,49429,69194,74051,57931,45089,71975,76571,73940,22811,18402,74882,36877,56594,50237,16408,87908,27936,98859,88990,49360,24925,15839,71147,53357,71062,61069,84410,69612,23531,28450,49499,59243,49700,18670,33021,82102,67883,37313,83965,80282,33129,41868,71670,77463,33687,89898,62559,14667,97793,71473,45042,60081,69620,88962,41523,27275,18902,88833,50414,22481,30685,87924,44946,63416,21966,94474,42453,23348,91486,67134,54565,12853,50213,45246,51567,67375,77638,75526,12711,75517,40235,36688,84783,21527,54082,79598,48986,51936,40054,70913,63916,49625,71064,10383,58335,49700,41260,79323,44221,26801,37601,29514,36346,35467,58053,10348,30028,78743,37774,98446,90507,60543,74474,58138,87288,83034,58944,70268,96696,59166,43106,53319,67404,84281,11799,54143,81717,79413,45347,88904,35815,52016,23788,90099,70810,33174,77638,68892,83477,88894,10870,88736,78328,69415,80615,44897,48249,63074,30946,19386,15667,48403,95154,24796,11382,71843,40808,79989,81767,77966,63777,90540,20794,30262,27340,36668,23427,22845,77457,86932,69879,41114,43948,59226,52757,57273,46690,65410,65266,46567,55427,66030,62707,93791,49446,74755,21692,49695,87383,85887,59437,49429,32035,18534,27083,28064,41729,28625,36623,36972,16598,65498,44190,95492,20065,64552,14028,83387,10312,78320,66076,31158,97753,87801,35171,12679,22615,19464,33589,69834,81426,16609,13607,21244,96866,61334,66179,31328,20402,15206,25823,24535,16758,37325,26202,53609,26726,18751,52377,35039,56107,62292,90553,33037,89526,64702,51143,60771,14994,59461,49849,95437,70400,32548,33862,69913,78934,27884,65974,85004,72674,28264,22844,80979,61999,43057,27570,12193,78000,76437,43157,82604,80131,80535,39390,71792,42122,15514,87484,52839,77254,53443,56768,86407,62635,60023,16293,82322,85449,66774,29669,91144,11161,74312,61888,47378,58430,27667,70299,41045,55249,92165,38896,47327,69017,72468,77002,51868,81231,67524,47727,54922,57274,61044,35367,49233,41089,56891,37139,43692,72611,76165,42611,67849,10556,27187,26151,72995,24035,21429,41564,14120,22349,54766,74037,28312,40888,27217,56377,30289,86397,38924,35071,83173,71851,59664,52429,68624,27600,52425,73664,29543,45203,63776,43980,76340,29679,21060,38405,42199,51782,69865,56346,32797,39435,21218,15827,54689,17911,14708,96215,28777,81925,36752,40626,73307,66770,48965,92049,92784,90452,81379,72479,14426,68332,58729,51844,13817,55385,41981,68242,39788,86093,22881,49913,61313,93919,65722,48018,28054,57777,68901,64180,50463,96928,30321,50575,20851,95066,53567,18234,75383,17806,91796,85681,96002,75747,31787,41001,32390,39560,72519,78302,82973,75433,46308,18839,56605,86440,32131,70929,80801,99775,16839,36989,14056,13762,18460,59883,12375,57267,34900,24390,16136,10788,12617,65063,91822,53599,22786,40951,12679,99454,92963,99439,90840,98501,20708,39046,10111,12296,57671,77351,56130,68390,50151,40713,30620,33659,76405,90387,84943,40303,15729,88298,14696,23114,28415,92314,51438,59809,30725,73696,28688,20278,32134,16790,69498,44642,63737,86917,76101,59823,33857,82087,52881,49736,47208,75287,93110,87754,37025,87129,68527,11888,48488,77128,86041,51540,83433,15239,90688,74807,18101,25826,34474,52237,38739,62438,22894,29476,73639,99658,47564,93427,93918,66641,16656,70179,62643,66303,38457,81346,31179,86375,23830,65459,66256,73610,16568,89568,95164,52198,29812,19203,45912,30376,87549,78099,87090,33395,10701,40898,66132,17824,45583,86489,78012,15400,45342,24865,93282,19924,28729,85348,20341,45103,26229,20505,74530,39219,75566,48816,21402,89833,90804,59023,46252,79560,37860,10557,14306,76514,66070,91957,95587,88616,55107,82664,32898,61575,71871,95517,38061,98574,12010,28575,44590,27261,56176,87432,43618,66730,15336,96845,71344,46765,13461,87741,45139,31496,72439,40678,63576,80263,57691,34962,92689,99242,58151,85478,31561,88925,21689,47694,30864,21855,38599,51072,72701,38529,93687,25306,44530,62311,85710,73327,61327,37201,44680,50967,63170,98509,49516,29620,70188,14105,47210,18165,49094,76799,73582,60704,48489,47901,73910,43524,91420,97984,96254,43910,22992,97551,35570,75386,94789,41517,84383,28734,28542,18675,83931,57985,41620,16040,89732,94237,24075,44985,70157,30192,67044,81307,85699,50094,21911,23181,31936,45250,39533,78961,98317,44813,13718,27557,14283,11637,54216,25399,29701,73145,44151,40993,30237,26065,42969,94906,63467,81628,44403,54344,28731,31315,79454,91463,26316,19402,81774,62885,28300,59407,11590,39334,31748,72785,17697,35710,61368,82275,79830,10594,61893,77580,11002,87006,74325,82231,79105,27418,96227,72514,55061,98736,28316,52164,48239,58230,23670,13429,92534,84275,28650,79549,81061,90048,83893,62842,63456,93720,59078,19336,39451,17395,16750,10002,39742,49839,40388,77515,31254,75379,91304,40682,75862,60069,87280,14348,85601,59117,58495,26313,32438,77424,98362,64748,75474,37701,76740,16535,42353,41731,90028,63973,16599,44568,92174,83304,60485,66975,72405,88759,18240,77012,38110,43152,56353,80639,39323,55164,76332,16438,20799,56298,51576,54664,23793,26679,11583,41472,53483,73965,59548,18661,47323,43883,84409,72464,42354,26086,70997,38901,73779,49146,78389,68254,47568,61978,27655,90939,48859,55431,13581,12231,71939,31750,12888,28549,87953,26032,65843,53452,65093,98810,31045,29605,35317,57088,28280,71564,68683,26136,76899,57704,65623,51184,67478,86903,50644,63807,66653,93714,42503,54100,97649,48339,12043,95626,59764,15002,20304,43581,54296,14031,85143,90908,58582,14846,88399,71045,12025,90520,48656,57050,62672,92189,72586,75002,73619,38055,75985,19046,28110,32846,86563,23291,19048,56229,85444,43080,80608,20033,30380,86859,94481,14603,95167,30364,55503,77241,91674,25124,16173,45801,84019,82727,13127,80735,23676,72426,63611,68512,72196,56147,48634,25179,28250,19762,97601,11739,83633,98599,37481,78142,28097,46946,69441,91073,21715,57664,60987,26226,21388,19362,91016,50420,58868,78244,28414,26519,46166,56822,68344,92382,37453,14410,63053,34977,17612,82579,75546,60763,21049,25543,91974,79069,82942,86073,81808,11091,59953,77752,80304,38266,76719,32637,66600,24793,28922,15260,82941,96096,94860,24814,16723,65965,55184,61650,95257,78856,16325,15018,78831,76325,87346,46090,58491,13496,75379,64784,89416,14774,70538,99582,80651,10846,99300,80642,16300,86241,40255,53899,82275,83815,24393,35461,89047,84178,22467,88890,96211,33219,52386,21646,94894,21556,80974,45435,88995,75669,58494,87051,33887,92563,56677,91206,70604,42510,50882,67462,98944,77285,61114,15068,56001,97901,66112,63284,13875,87981,21793,13458,66636,77082,99484,41737,96624,84643,69013,36252,16572,48201,75493,44452,66059,53850,53469,97096,62147,87352,62102,73510,17739,29866,92278,74779,47706,44989,62382,58317,87875,97731,10179,95924,88862,87450,59664,35346,87909,21340,80414,56222,30647,68082,43395,74073,15161,48407,19071,29164,88032,39845,88826,98146,51479,43804,79195,78915,76435,14184,42947,62385,47302,51696,67248,15880,26084,81508,40027,59887,65183,27249,85350,47075,28643,55976,62546,35240,89823,99822,91824,92430,96450,46514,10285,90331,54821,99655,12293,70748,10538,20983,32025,68688,92660,92029,38543,40667,90990,26948,97480,52654,69806,12120,62301,86985,78121,55184,82510,29216,51934,82837,46210,71026,79250,65685,72162,77518,62364,35207,15974,48109,39036,57968,33737,63578,24923,52027,63354,99754,38089,43008,65856,46385,34012,85565,49407,87494,74184,75868,20834,70596,87580,32774,37426,61233,68595,59513,83918,66866,64842,37741,71345,54749,55801,90872,52294,37016,48235,63698,63959,70615,81386,84110,21881,83030,26063,59879,19879,78715,12160,45109,38071,30077,14718,57002,97209,22094,96048,46386,17608,88833,87577,20899,71928,59313,12014,19553,40627,20203,60681,95963,11450,17830,66633,60714,21031,26457,45163,17521,25837,69009,61190,38584,53163,71943,75811,87311,72894,95700,13075,45837,72092,38882,39202,53827,55744,21566,90859,66454,64109,49136,76393,58962,27979,99686,84303,80143,71277,24225,92217,84828,53264,83984,94665,74682,46627,65207,29491,29132,25236,44055,46957,73253,75819,90333,50240,29551,94209,59456,86935,63471,22926,77972,59214,30753,37697,34945,20578,99205,35241,67150,22481,63459,61218,68572,79365,54819,50522,97163,26470,42815,23631,61775,80089,36100,10947,55629,37740,68552,46084,99121,25947,37900,24763,60041,45705,63157,44403,84531,99800,75840,34469,12921,15928,80609,13043,33344,76764,82539,65049,96838,68530,69365,82781,94228,53424,22912,56347,11786,66671,65432,11614,61309,27338,82301,51857,34137,69773,61542,19072,73892,14446,40835,87706,73615,35363,57744,43212,95443,79546,96722,58671,43409,46755,39153,11235,62020,16308,78647,51844,14891,76884,19674,37707,25713,41021,31347,72478,85519,17436,42843,53962,58816,73910,97807,32237,96878,63830,30163,83903,85236,25232,60138,32508,81593,49505,72950,34086,27076,93744,68966,34562,58611,25454,21926,34002,26909,77442,21036,77808,55362,43163,96719,92663,20999,17614,94199,13720,99429,84824,34672,45188,71946,32248,16314,20762,82504,70725,61413,10847,53748,76436,87752,50269,22317,67312,10210,81701,44920,85773,93528,30686,97235,33618,25573,79489,47185,38458,49869,33179,19694,97899,79132,71172,17097,66703,26763,62093,22620,67401,58026,36689,86042,14391,44069,98086,65741,20188,82125,24387,39345,59459,15582,35828,29699,28762,68529,14983,22277,50381,80737,45274,20730,95716,52099,30767,61550,84268,55518,81661,10459,89959,35570,75613,25290,75156,84503,44162,28891,10282,28377,16782,96815,21221,78994,11225,96030,62179,36385,61459,47040,47126,80182,17964,25499,68796,93974,25890,47993,56515,59256,41052,89453,60649,23356,37812,26100,22651,46794,10677,87823,21437,30935,37609,78240,93801,69331,11507,11440,13182,10821,57692,28624,27679,49434,96135,59347,94355,85992,86211,46398,69742,48655,88615,42995,59759,13853,22715,18204,46766,93590,36925,77825,26260,44229,41636,29034,31326,18038,53305,39825,85998,39743,59391,13138,72516,56510,13536,54466,90171,26461,79733,68656,73454,44481,53122,99138,97780,54362,69689,68452,21472,34711,35803,31855,34727,28769,74479,96123,73441,91084,10367,60969,48482,41854,22063,86181,71440,39676,77813,11363,69389,50863,54153,28018,58105,59784,34312,57833,58514,16833,87725,63611,43246,41466,20763,21292,24446,73404,68116,48779,62494,84662,32539,17740,69980,71167,63335,83722,35394,88352,80137,32081,12332,90439,38946,22919,85440,23002,83633,15661,11271,28963,80525,21290,32187,18204,48210,67199,92854,56485,24615,95051,93626,53420,55103,36400,45287,26318,28863,56367,12587,39106,73110,86919,57820,90619,23179,90250,53110,62812,27395,92026,80136,42939,55114,29404,85418,16715,85391,19313,27166,40172,99744,22472,76824,74153,62038,21175,54064,12609,62304,14322,36066,70231,83852,84713,48721,65546,63390,19970,44771,53327,24718,10952,54682,71047,22802,16116,29850,44663,74081,77739,84074,15641,94659,58697,27364,75725,33229,39507,87786,69611,30821,50322,50784,57124,40490,97455,54261,61431,69943,45354,23948,83807,12764,85665,10963,56335,90202,75731,16869,83197,44074,56240,20129,61946,73201,79314,90668,27046,12124,31979,49710,17150,45177,68041,95419,77920,11043,39062,42029,56333,98393,76471,60024,64229,69939,79366,86120,85812,84040,94768,19838,33612,61726,25367,52283,10201,43043,59901,52224,85964,60495,74781,16809,43830,66637,22275,40717,58949,41979,76976,90958,25009,78229,85864,19281,11379,60273,72581,80946,97719,85911,23277,77810,28907,56680,98782,57506,13529,66361,74201,61800,99597,84798,71899,24797,95333,38405,26714,18895,51607,27515,35331,96063,70778,73368,38474,98553,91127,68421,50836,62984,12074,24195,63974,71620,71386,54800,92177,99387,10918,17964,23280,67372,50330,78256,10663,31600,14070,34952,84321,69198,73126,99931,23449,10167,16861,52481,57235,88677,82523,61591,51759,43542,79277,48658,12065,96471,97866,21924,72340,75967,86383,86957,43250,95841,92722,27285,26579,27286,11005,88790,44856,89719,75580,70520,36482,81989,35812,60968,70309,80976,39721,74079,38729,29119,96129,28121,41625,52948,33761,15896,12947,95247,62584,17690,44834,42018,43806,81006,40991,81734,26660,52731,95528,45704,17225,52167,40836,87435,39096,42625,69103,53068,44468,84356,31930,52405,76146,40082,64014,87729,15729,35061,55503,67819,80746,20053,55187,64342,75947,54499,95160,46655,51287,65288,87333,96216,96591,32934,26140,47382,39749,52187,68625,54714,68760,16103,41911,95850,79327,80398,71619,34576,40856,22812,23546,48815,87636,54449,30451,26092,10486,40190,26520,17496,59784,95058,94853,23752,11222,61052,37505,98874,52091,10737,54819,88365,11462,85282,71270,51438,31579,73986,47177,23475,28767,54820,62428,93725,46904,82540,87249,73799,42473,89296,36508,61175,67819,96013,47821,73109,88060,38791,74249,88225,86311,32407,50369,37287,58177,21658,73660,13264,38433,85541,69772,69100,13557,34113,86677,11683,43111,82844,60097,64460,44741,22994,74603,76883,85367,54758,95893,13756,57458,84451,19347,66083,23342,69711,70028,67706,99780,15766,30441,55373,10972,89655,40272,84037,32576,91498,59301,34797,27726,66380,97965,36892,16153,56740,41442,80772,39320,95472,52755,76889,56547,38665,73804,85252,36833,26245,12192,44369,39358,44957,77734,15671,26064,54096,12075,34967,47977,20593,77085,87237,24118,62107,42657,40189,96684,78687,69812,36870,31150,14287,78726,38674,85734,22475,28545,91310,17192,22553,35249,70116,54387,67369,34249,71284,52150,98503,43589,59635,12256,89219,29349,74763,98513,18194,34681,27478,99002,46816,64007,67947,38121,15861,18480,51667,86380,50741,64280,17545,84349,63925,22044,41647,38373,25202,13268,18317,56685,34790,68965,74443,60391,40260,85835,27406,90440,56123,66787,71617,74569,11250,19562,53192,29182,57093,30779,87297,93639,39063,27070,40405,75761,95665,71676,84332,87243,49779,16736,90029,70838,31466,37021,72824,27763,78785,78229,72822,79776,55163,36216,42519,67938,25452,91628,41641,41073,21893,11294,57507,30671,52432,12711,37413,60316,79947,46983,36265,50715,53485,64034,77851,95589,44582,59643,75358,81001,25950,70769,65157,60556,21001,37469,30954,92422,41838,66806,41225,80862,82088,34982,39779,85812,56360,71365,98140,64102,44573,61175,82494,40032,99493,79808,25108,73856,47321,61452,91040,12082,46822,75827,42968,28804,92531,55368,17523,86936,42275,16632,45033,17141,33536,74008,12294,42759,80014,29521,52862,32246,13123,83260,24278,77560,38350,53598,17000,79718,77429,30452,90289,59605,76200,75803,78469,83074,51816,35541,51138,14304,35843,37157,99239,29445,92534,22947,38844,72668,57215,88079,37577,69002,67274,49042,60405,13500,58656,66641,14999,16736,82500,54235,55901,52680,25802,73186,61893,97689,35824,26850,40857,57157,89704,53592,41894,33225,72605,88884,12250,55818,59664,70839,70452,59556,34103,46411,86147,67421,28713,48369,86196,87578,37632,52773,54016,78642,37970,71214,97258,19209,58257,65635,65741,96539,47199,94886,33357,45231,32829,43674,48049,49890,17134,65973,69915,59002,99578,73632,58906,46665,55772,82624,54005,96291,46992,41529,83065,31072,28924,89294,50448,40167,44508,10370,28860,46440,12392,70339,20657,34410,80809,65494,99120,96817,65121,77567,17277,30157,51458,42553,53113,29711,94319,44404,26612,82478,67654,34887,43459,18666,15112,65972,55423,35396,44532,76458,93031,39875,17508,61402,83460,65498,89796,86699,89869,50849,28272,70725,61967,20423,23186,30690,55699,95812,38239,52553,38655,66395,72353,66613,93869,64035,82271,56151,54826,31766,18512,22261,36057,57125,22717,66746,11602,88681,17589,91158,77071,51056,35348,46773,64999,68254,77316,15958,32495,14062,93952,98173,91528,30920,11879,57015,46321,75148,41494,15080,22410,86917,67674,41421,42007,58665,33152,74984,44637,66251,28442,31904,96264,61729,55853,26578,81949,19745,21204,36362,25018,74560,24644,45232,97318,58574,64003,64766,51532,88080,53156,25460,26429,13268,64701,13601,46953,56818,50144,43547,79150,60633,20268,48996,82333,93731,98912,48541,53850,94594,67326,61594,44817,39986,71749,83541,23133,36972,97063,84090,73332,32789,60722,85041,17405,16302,73780,64487,60221,88130,37138,14192,63748,81736,17043,31160,60651,95998,71973,80029,60969,16986,74114,72597,18244,51659,91256,32155,43752,79030,88283,78458,43390,69720,33957,26014,16256,27086,60503,65461,98436,44838,33200,84766,18613,11573,42554,73566,22031,86050,93048,49461,21624,86300,91668,50484,88446,43624,78770,45126,34589,56318,15582,90964,69681,23765,34692,27864,59589,58491,48716,71873,31875,44409,73929,98688,84339,21759,20487,93370,90018,18019,22496,32219,18913,94983,93728,90385,37142,81958,88000,85139,82949,38871,90817,56949,15793,23343,33451,71440,45632,95797,86558,22504,24486,76556,17780,11384,78146,85223,42955,89849,11191,15280,20594,74088,47637,12092,27027,52810,40327,40957,83554,84760,44180,13720,56339,89286,91999,63980,70896,76955,70397,84209,97538,77642,40781,25545,37304,91768,19579,47486,84849,17491,79338,57417,31505,19318,77059,26745,82297,92431,32674,12074,42349,17957,99652,51196,96278,44847,62239,15883,38145,50196,84144,58924,58635,79067,83251,52052,57705,23869,26886,21185,69438,69889,56875,39333,68993,96019,70560,61905,17053,48411,66127,63826,83956,52298,83374,20373,13315,69673,92416,78068,76784,53022,10239,82845,16071,24863,86797,52281,85118,43862,64712,95297,12223,22558,80837,30626,11814,62699,98942,33371,55160,27512,73218,54234,85896,95938,22349,58172,79561,91007,59293,37701,62975,63472,74463,74073,88599,24302,42064,11612,52667,99549,41932,77726,91133,78207,65286,74398,28421,58685,67613,16172,74436,98310,53147,59888,62566,19137,37637,37277,34352,95656,64135,17587,92116,64874,56528,97587,45131,97537,98158,32312,21335,73697,39312,64662,48302,79954,37107,84156,68129,67939,91258,74650,85255,21545,99425,52923,19199,44489,44432,90556,77634,58921,79690,45210,59173,45094,20018,65329,39664,47226,36001,79936,84753,88255,37171,34841,45150,81492,45758,88055,81276,62145,85604,30033,65569,28227,83450,68482,82835,96791,29157,29485,43676,42170,70833,97625,69042,29896,71943,17522,44524,63839,11585,51926,64411,25956,44275,30101,72926,58415,52910,20902,90663,11584,30470,23185,23008,61572,51563,42737,65654,75492,35884,12913,99300,91649,75651,13762,35088,87667,12389,23715,18364,50140,38683,33369,47183,96233,42382,62567,71698,80038,40626,25868,13516,38380,77851,16507,93988,28153,68920,89492,10281,55151,23047,86844,93461,26835,98963,47348,12482,37079,49479,84298,75593,45572,26228,66969,92336,27691,66458,11215,98844,83928,89404,68734,99517,67504,19872,46306,67335,66162,32184,71501,81364,17685,17562,13281,24301,19996,36282,11428,66122,47642,39336,37892,81451,52976,28757,29147,17840,26067,34908,70026,50956,64385,99411,47855,19038,35507,38823,32900,93087,19471,61246,63694,88248,35084,54219,89720,88006,54306,94909,69017,55402,86310,40697,65146,77109,28145,92059,69846,55562,83640,88302,23299,60131,64611,83192,22215,27093,95041,42940,91340,53583,69108,87840,50351,41873,96750,94243,81919,34876,55902,90059,85026,27101,46361,77598,21404,58056,57373,78863,19722,73320,71866,23014,84287,50663,60809,47159,76212,76668,38062,52839,51274,76550,65025,37941,76590,93428,35013,63812,85241,43632,89296,74998,59185,36887,22119,74297,54618,87070,89588,51809,26869,47205,94520,25912,66221,97319,85606,56055,26852,13684,63999,67677,84283,76785,67138,73907,55650,34581,83967,64150,16016,84385,67801,21639,20639,42953,98857,99090,70195,44722,89062,95694,11639,99148,92980,79073,47541,75883,52530,79140,64800,57218,18099,23392,76879,38030,35238,75546,43839,10011,52661,88619,48316,85200,76302,35934,51431,29345,73381,13322,63843,37742,55914,84603,39649,86955,76380,73580,30790,94474,70834,97652,28559,44641,36935,25520,56823,44784,76277,53660,67131,78995,56309,72168,87189,52040,67869,99183,68058,70183,16728,27006,12428,37732,83456,49024,84309,49232,19432,83921,26003,13169,13334,84338,42280,70414,86115,93548,98140,98833,70773,97757,85622,76405,11414,46274,31469,79921,76658,42358,51544,82116,85003,58961,16990,98117,89436,70533,22995,54088,99099,66078,97605,75068,26496,27488,15428,89536,81837,45133,55977,38593,61376,44891,24101,96277,98749,19955,92608,56202,95798,79702,39538,42162,93321,89530,38941,96810,14981,50827,77107,64301,24996,36135,96243,32138,97092,52570,38497,18748,96429,59885,53319,42100,31554,40764,35977,31478,88913,12396,49634,43788,19398,66660,30875,56339,92491,63619,96607,14972,44995,70396,84490,88130,93527,16482,60579,39894,64396,74827,13688,90500,68916,27212,95505,58353,71394,78936,72311,95290,50840,89451,95070,46339,20147,79663,83297,85037,84987,15337,26481,45119,54099,42624,17075,37726,46546,83066,60863,53039,56995,50584,72814,88906,19025,35360,82251,61029,63954,21049,57508,15841,57656,63402,20396,37324,12991,51168,50791,50047,58903,85822,40961,30517,32918,25846,96668,76865,20287,58617,18629,79709,87406,75361,69462,75699,15221,72956,42689,16343,23703,79857,80881,31755,27916,84810,99480,76280,45413,95613,73964,18244,95174,42179,30280,69693,84842,46834,17984,16913,66861,36334,52040,66811,67270,78049,69949,11237,52389,45131,59390,49853,85802,85159,21542,57465,29292,35577,31089,48833,13299,55558,46655,40232,30816,61344,13539,41655,72274,95383,60021,28999,45080,11268,42370,92675,69363,13799,94202,17215,99934,40800,76214,86852,24119,48887,89245,20722,92174,68211,11376,82668,45923,87784,10602,18639,29221,33209,87116,84419,46167,80960,10295,95379,68341,19852,23870,94808,69992,10195,23162,40231,58342,52821,41003,77115,25302,48867,22048,16887,17071,58149,96242,96664,48483,25416,99837,33800,39878,95335,10131,13288,25146,83175,73960,89590,59940,46848,33642,38600,87207,25509,75165,15644,69922,92727,79861,76913,72309,81570,79289,57861,32636,53384,14614,43954,47699,73490,45940,49382,59162,17954,11850,36141,52172,41013,54444,58090,10439,92890,93566,44511,53058,49545,71708,14262,95961,81915,53622,28090,43711,41758,95201,76514,61022,46649,89027,40864,86502,73710,55089,87064,92455,58809,12889,29516,83616,71703,16696,26744,35902,21066,98506,95181,12995,51806,39207,30736,11179,60455,38604,63640,89131,69016,55955,41292,73889,76074,97667,94061,90569,15067,61432,71718,68779,50486,23434,80212,14194,41428,22533,63490,23691,72893,13209,98136,72013,90605,16691,92768,29649,30363,14597,33244,20353,97814,25665,22271,81404,76307,63048,75038,74053,10404,63132,67877,93531,45244,13900,50743,34103,71393,39398,28737,22334,92624,22338,38726,50240,56258,81852,30440,62151,14324,94424,83210,41925,55205,44607,95889,84722,24540,92327,66664,98138,99346,74164,66212,20382,80259,20448,87067,91688,91676,47142,16260,57724,62576,83751,82476,62348,93810,99527,53708,74877,60823,83732,53988,99368,90975,83446,18072,47202,97238,65865,36226,96249,69079,35246,78843,55702,22361,55914,33069,36009,30313,18019,19545,50329,77074,81774,55298,69500,51825,11847,35962,87685,88207,93947,70995,96736,59743,33118,12926,51842,84681,27682,69911,55037,94685,98254,54117,79816,91231,99318,12964,76328,49885,74790,23634,15907,68447,11512,59297,69171,72150,30660,99917,83206,20994,29657,86651,21136,95709,85696,94568,65377,64503,15631,77100,79019,64834,48775,50919,76092,49300,82687,79957,35547,36054,65877,80167,19916,69899,12396,48452,84270,37665,68536,92753,51491,66520,12472,79632,23920,34656,50522,96590,80269,29029,57590,41472,30413,70889,16592,55809,58728,69595,93835,83418,90848,11127,97072,57015,51349,70167,18455,20588,64118,61956,26984,99855,50176,65214,62163,78988,37609,16104,32868,82244,20541,38705,14514,76389,99226,52584,73099,14696,91448,91674,21928,54153,17053,62440,49987,76935,95219,68901,64393,83844,23222,30825,42273,84238,34150,10541,80264,55943,69136,96535,62175,16245,88914,56776,85343,74906,81080,99189,34535,19014,26349,24389,98691,72045,58866,39980,62284,47331,54408,67270,85288,37056,23960,45991,94938,99431,98699,29453,56330,50932,44771,20469,86059,74527,75762,55410,30408,52556,78321,38597,50583,72816,21115,74204,88545,76138,34535,92632,17686,47935,26206,69540,92819,24860,60525,45306,44050,53692,65533,87097,61707,90946,64739,25813,18895,43627,47454,63921,49178,49927,57077,81059,22181,32305,53908,60645,73920,66745,70190,91289,52528,77840,68702,51566,24850,10871,90438,72896,27034,93075,21366,20786,49314,84609,84434,61938,37397,56145,80873,73107,78039,34585,41880,29890,66559,72415,73881,58508,93527,28171,36394,94547,21734,33775,74842,87370,45852,77519,41103,79137,91896,12096,70901,29292,35234,37153,57808,18281,33816,19439,30943,36018,21498,50821,46980,28391,85838,60500,76737,87750,68590,49110,86041,10832,78893,47323,58495,29654,49810,58245,54679,40457,68059,85591,31443,82412,28106,37368,87137,41255,90923,68393,66071,55676,59962,29770,17508,95578,86534,15622,87361,56467,29127,82571,33761,95625,65792,79540,64668,99698,10897,98267,18917,33557,48708,66854,89326,23993,42888,28075,86573,88684,30449,15487,96295,29200,92638,18672,33611,62407,13627,52354,68634,48201,11041,45875,11713,85879,60045,67489,59243,56408,70509,88771,89772,24296,26563,70415,46135,14845,66574,44469,60755,44127,98043,91151,32410,91678,92104,32896,91260,18938,62839,58618,81919,35632,56963,73653,39105,52405,82118,54332,75011,49672,30513,31239,47287,11934,89502,10497,23686,13843,65550,18327,16882,31650,34860,11526,17504,71000,28845,99996,33949,42944,37732,57131,11851,21167,29369,91933,88678,92921,47542,51632,93375,50083,81436,77785,52637,16409,70703,95745,68526,46457,60828,32939,31367,77146,12425,97825,25971,79253,27655,29674,97108,39035,85941,40918,47604,54019,11475,62690,66532,47535,88600,50438,10101,27668,40908,88206,12778,26232,44693,23844,70598,16583,24918,33247,88495,76904,57013,90928,37147,43040,47631,27747,92134,20242,87683,55491,15431,34323,83098,18635,21703,22337,65125,16735,67884,23265,93265,45821,55736,49616,60906,78630,63512,64000,51229,36269,31272,12167,12015,23132,19654,16284,40223,52222,79266,86000,61480,68277,32429,61188,25048,79028,26384,20886,75741,22360,51969,34147,19394,68382,24397,79684,49850,12091,68964,88195,87413,93713,17667,27265,48311,23496,67279,53193,98047,74590,55511,56814,64987,24974,43017,51769,88519,58166,84877,35974,80870,21001,80177,69926,46193,59858,81199,36496,60375,79288,97249,10147,76254,77957,68345,56037,22115,28934,81036,39980,71476,55679,46583,86291,81662,18278,39729,12662,63230,43344,47241,31472,15740,73033,39359,14932,78813,26623,56780,21756,16108,27502,56353,49786,75740,80131,36393,68530,81002,58839,21900,92813,56177,20412,94634,84628,52682,77624,18847,40737,99240,20203,51093,35630,47043,20601,84567,46665,26697,67837,91177,67100,44878,14687,23036,68062,61152,25902,17170,52717,39321,41895,21004,98218,48674,73388,37106,22861,39321,40198,16387,58596,31818,51260,28042,35940,53689,79088,74727,92471,69106,64416,49722,69213,27594,94803,36057,36006,49065,70014,63404,24322,15604,30272,55680,41016,94138,24963,91480,47656,66160,97743,78010,73690,48719,24190,23647,57444,45707,27507,77424,54674,33729,15304,93305,96701,35327,21211,96092,85417,54853,45774,30147,60468,20840,18888,31206,49586,12559,95660,30114,16903,11765,23862,51767,19823,35644,40355,51390,29340,84578,36880,47659,36734,92294,15328,73376,43002,12778,49032,38753,87442,24679,31848,53886,75657,87016,76335,14450,54623,39252,69264,25103,66754,49398,74404,96387,36875,56543,51068,79762,18843,71631,10459,91143,59117,23513,63117,58624,12451,94810,64189,11113,36702,44730,24548,20605,50940,20823,18501,99951,67841,59250,39513,95632,30331,15589,97411,84970,10299,89422,70990,18801,97393,41081,57683,40051,98669,16830,30584,34337,42613,30824,89546,99969,79396,99119,17101,88796,93343,49712,86630,51855,21413,36637,92252,80943,48603,81469,76737,91099,44673,24061,76267,48014,88557,63924,38174,93747,70454,11662,61603,88453,53133,70844,70392,53448,33702,13388,75013,86525,60811,82138,14136,46776,56003,43031,79982,39975,19477,96211,13093,94913,72599,19007,55947,76360,94195,66405,56053,96832,43592,96852,97675,32468,87611,26048,22208,44072,56513,87308,66232,86919,77199,53180,10077,52669,77111,20846,88477,91728,21974,28442,56397,38860,98420,92334,64661,28520,15133,69782,43993,30035,77626,41858,94910,93101,55978,42457,84364,44361,83329,87338,20393,11404,25776,24889,39246,34440,88022,13129,53831,25623,39609,96936,76357,27533,13992,15524,18882,22269,65331,12839,23280,18676,72140,80636,37317,58301,67126,29299,14459,46793,33439,94816,62576,32723,69788,21498,63023,61341,36246,69633,72621,57277,41257,54328,81557,61472,57665,77556,48885,20147,43490,46404,14219,11539,79052,34386,23989,50044,99200,64806,34616,71882,77982,43447,43035,79096,19507,36163,91895,29656,33698,29747,73258,73535,10715,89708,86484,55871,76945,12638,52547,80056,18535,42260,58236,74387,56160,50711,76787,45684,47938,88347,43203,71969,27620,33291,52028,76347,13803,94964,91556,89035,78956,31558,18807,47318,69426,35186,25642,96974,20534,12681,93626,69844,79500,50113,74129,13625,26866,51932,94137,67757,74168,72308,15187,49172,99200,26710,76051,10697,43889,40410,67737,50860,60945,35840,44533,26900,75676,76002,21569,47279,50332,41012,75149,51949,91567,53615,96946,72037,34538,67329,73109,36612,65157,46357,27041,91358,63490,99413,55718,12666,56538,34267,76784,25047,23855,65431,38853,90573,49804,63865,78987,25737,13179,84435,85056,91605,19133,22576,92923,81260,20314,42161,25630,85950,71636,47969,64253,65043,99000,70652,28541,99843,96070,68391,68079,79627,51310,78584,24224,74763,37608,46712,73362,33305,78342,20557,24855,93966,92599,54166,45511,63097,73599,28589,64717,59181,63992,65062,62946,61260,83027,10271,35961,10494,34705,72843,83495,90702,46023,42291,82628,72937,37219,37791,71816,18748,10086,57099,64347,95536,24844,58421,59869,40567,22923,79766,43099,94521,55735,68568,21741,31405,59878,95275,30725,46716,15319,34078,28000,65093,55563,30692,84659,97508,74856,41121,34833,97947,81402,80383,86936,72360,44715,18241,51518,47780,71233,49475,33838,93526,50157,76503,59375,45155,86439,49866,33659,31627,96693,35787,81838,98401,11110,93667,38072,57070,65766,27787,90207,64309,64086,23665,62485,86079,92675,46585,92122,69244,72577,79526,57622,96850,56331,51496,60536,14063,30508,62222,89039,75466,51195,36290,28165,99241,55095,42376,74194,57865,34013,18001,93820,41138,55513,59781,66401,64979,83478,45210,51826,30152,48804,23229,71772,58722,32161,71064,40900,16680,70373,16281,89895,78917,18771,11385,78241,88188,12856,25510,63516,56844,15905,47719,59020,77966,68459,13831,47007,67452,15403,34709,21689,79481,88792,39630,21726,90547,41398,92298,75694,23577,50552,83361,13751,12914,64406,17876,11995,17862,96647,46212,53938,50073,57157,15299,62242,41785,57805,85424,24648,60433,74678,68236,14603,15304,39121,97854,49112,69116,82155,90838,31026,50550,26695,22523,42258,94587,33159,31393,65848,58325,40433,42747,50421,60653,33493,68768,18925,70210,24134,29397,34784,20721,37131,61277,57833,68745,10743,66588,13878,77012,57941,42769,39231,81037,84592,43318,68736,67238,51372,96019,67383,41224,62723,74335,53461,17106,82322,62513,35064,55997,75814,20066,89421,47333,21979,19405,90428,57058,52956,13831,49466,56043,44674,13152,63444,94676,71705,98294,68660,62631,97441,32351,19281,95805,54986,95905,79921,83250,73450,41879,84871,49742,77506,83472,65691,51208,12888,36222,89261,10373,61144,61365,20260,25930,58505,17234,81142,14399,16832,24945,54140,17737,72445,40458,92361,80565,66067,88452,83222,29802,64537,68746,31095,94335,32870,33392,39172,30894,59606,65095,94143,34874,46442,76488,63422,34256,16466,25803,80204,51609,93458,63389,47741,75504,12346,83911,81689,31202,45048,88567,54947,21492,20772,98590,88308,53973,73154,17565,52058,85841,66265,68414,98897,90698,54454,46574,30237,66633,96079,20806,71537,67097,14690,10888,73007,51685,57205,91633,24423,78472,85896,87559,17432,45758,28189,61877,74714,64746,11227,39152,18674,64624,99022,74734,90668,16801,59692,13220,34371,51325,84394,91571,38987,88931,81551,41754,13863,62815,45498,37327,15816,82618,10572,18372,97882,34554,53090,77907,81495,72506,49108,78895,25042,34050,41913,39789,36449,39924,51049,89490,70746,12535,67000,95474,63604,23239,40145,52331,99515,96196,47182,42805,60012,12191,54501,14551,30432,99279,26160,30451,54494,51471,63534,12580,80412,59545,20172,56564,56283,45927,72324,95088,39572,44260,41234,59320,74340,82052,99496,12796,74075,49015,13678,10419,35671,51855,78484,46100,74621,17974,47434,68517,60628,15944,57759,30856,94031,65616,37921,52011,22283,22691,20884,35247,62868,97801,41708,87675,22254,59942,51095,91432,30939,42714,76049,69505,51151,32137,72425,53408,29527,80257,27168,36315,97315,44819,92976,78426,21084,78696,26154,98626,92334,59548,44054,87038,67333,79653,35583,49690,44491,68774,77579,16629,18905,39457,39546,45560,64526,15154,78359,50920,36024,83825,73125,92086,76548,33297,85198,15942,59540,71400,43382,72716,11603,26604,74861,47047,18302,62285,53137,52971,72811,53389,11286,79702,26335,86104,60403,86069,61663,85063,74730,61378,13267,49843,17330,99177,55944,67651,85097,38700,81918,43244,82418,71902,38746,35987,21867,51805,27085,70568,95892,43885,95926,81865,24630,28094,84397,18092,50678,23818,53878,33028,17399,43691,58909,64760,64187,96584,63809,37856,38264,33109,45408,81834,53640,48475,98832,51257,63442,30371,75114,87938,74520,69754,70987,30879,72867,11726,84560,51285,88224,96685,14711,79348,39906,63175,97998,40205,66630,32183,85581,93839,78305,61612,63101,89859,36039,48852,84607,65103,37512,94275,32356,50169,20827,18362,65430,86720,61434,32187,59399,74213,61677,71560,87677,90742,40073,26187,79306,58459,54087,93379,93458,57744,54811,84220,61909,11165,58702,12165,92359,68033,62218,94646,98060,18540,44074,39038,92287,40387,37870,43001,62280,36643,63498,86293,74103,35549,73909,68000,60503,51690,86300,28968,27958,57392,32233,81923,92985,40461,28688,85174,48122,38895,61121,49287,54840,25765,58462,68665,18232,39320,84871,47795,18542,85846,59361,53398,94694,82618,85177,61782,92267,37221,68575,80742,40888,46767,54498,13878,61225,54935,94281,39576,12864,54144,28683,71052,32356,60277,74674,40967,69614,20158,95385,81142,13987,69951,18560,51561,14801,78506,29286,99791,55424,70183,37779,34783,10737,46657,48312,90558,67129,87718,31882,50762,12709,32322,67642,36220,69319,19252,70149,13091,76899,76670,47827,11138,12164,72581,60445,31538,96060,85760,83463,70235,36508,81885,83039,18460,95317,59911,34865,83179,83241,20284,89332,46345,52925,49214,46123,32523,79144,96224,75735,12196,29061,11664,63463,80852,64643,15584,34302,63481,68554,80415,16367,20354,55157,66267,95200,74965,92964,87147,81023,68127,80368,66304,67836,82256,58514,13610,71247,83791,27620,40491,60278,85423,52646,55657,77383,31295,41260,83299,16522,42221,44534,44783,57305,78770,29138,91468,71852,88498,28374,37393,93390,99366,14238,24634,54869,79564,41460,39312,28692,19310,86795,47635,93711,75037,15808,27246,29799,14038,54449,87884,56329,97868,80688,85515,28739,65811,66114,87445,63497,50914,72004,69306,86930,65674,51839,31890,43426,32356,17780,14920,47711,99872,40620,61061,78558,30724,33335,15638,42343,36440,94714,21036,39195,82503,92240,83893,78144,83152,50738,81981,61090,27223,40988,27425,24485,41004,62524,33989,54674,25468,68103,79363,77976,95371,19394,99559,75119,36931,26568,15053,44666,93139,92365,39206,12093,53186,57095,70809,26366,81979,73195,44399,90193,11047,15352,20305,10005,94694,46364,69034,49760,56221,31007,84817,89690,92873,33537,80347,21689,36000,52447,20217,25887,78984,46378,93769,30397,35126,42293,83473,11934,46011,35927,98313,78100,33961,25172,23958,31318,66957,44768,10060,26950,57045,50002,55454,93985,93982,68789,66514,57843,44662,15080,13547,46251,95952,15884,53740,96191,20653,59607,62490,45320,98576,49186,42433,36818,65776,61263,16307,82279,46674,54467,12330,15210,65916,71303,66877,25721,57012,73174,48733,27094,73768,54965,48497,70657,89897,73929,81050,55740,79036,45934,37255,77550,54608,51471,89901,62765,46798,74959,35358,78388,97733,92532,57379,70648,90144,62704,76860,43663,84567,34761,67918,52504,41501,70994,55786,21695,96552,49890,85998,63919,87396,61511,43458,18814,29446,42505,12985,14446,76702,24561,21454,61237,51696,10321,75108,84926,61707,22744,27967,17560,92629,29993,69285,13870,59827,47546,21693,26671,65419,57340,76693,89621,50530,57390,10405,62485,88603,56647,48041,78191,44299,69005,40810,79420,32814,40235,97134,41617,76060,11821,51508,20832,65557,75858,61255,78269,75330,71978,22128,22489,13646,68719,31966,83334,71926,54225,76492,22008,29168,53512,81677,98851,71049,49988,90942,14235,36166,86828,19576,99779,33875,61890,81828,79066,50182,84406,13514,73819,51784,18234,76130,53322,66460,14928,40539,40221,25133,10219,65226,98394,59839,76037,59372,83678,57660,75861,63936,54711,28847,20012,42940,83229,78191,90031,28784,51905,48628,70027,49089,64375,12321,32081,66660,34567,27812,59391,84594,54984,12868,33378,37050,32140,58084,10223,79454,23655,22258,91597,40630,79899,48771,31413,65450,51866,48892,65048,86870,33680,28203,78302,30495,67405,89794,52388,89544,98471,97282,36581,35791,87146,34008,29662,76175,92112,37906,56511,88935,15835,83085,93707,30606,46516,33063,88754,98180,20599,97393,40386,53933,13520,46937,80103,59926,69799,53030,36712,36559,79408,19203,86010,47537,24960,49128,37762,11793,12115,45950,59944,91991,85043,87800,75063,37837,61905,47839,68807,60562,44693,19372,49126,38421,82980,80240,53299,13909,44590,61672,77062,63143,61466,46849,37431,29401,50164,73986,56863,15628,60517,76588,82261,11123,83200,61410,78394,31094,96014,91825,87313,19103,68609,61354,69616,92444,81885,89675,45156,64395,18318,82468,77337,90484,50784,15395,34572,28257,47987,32288,91394,24042,62199,36423,52809,64081,74704,82338,45653,49041,47950,63627,28423,36857,13705,69550,59107,51481,89316,75804,13837,72332,88959,64179,86423,69612,37097,77647,78478,80709,75723,17087,88959,74759,28398,86094,29595,40525,89585,77361,41338,93980,37529,43873,63504,44614,51094,93558,78571,33882,15274,75711,18623,11533,42815,13245,50806,12793,50757,97980,45570,28622,25717,45934,48398,20139,77061,21814,51092,16473,54834,70708,14439,59085,58091,76248,46716,51821,27287,78147,80599,41283,58678,19214,32507,70795,66491,65038,71927,11881,20552,85363,29165,12539,87934,32889,61760,36155,22292,93985,58053,93671,26908,24004,42746,13047,52096,18905,50170,87700,41559,83213,86577,95855,29370,34654,67487,48272,32979,92051,87305,93396,70155,56239,84965,58155,57959,29727,83613,42441,48834,22389,17224,74898,88460,21449,89382,77083,45120,17525,69437,39076,54388,55077,73052,36943,35273,23865,67689,11202,61337,24383,36780,53866,81796,17518,17559,35332,68998,92478,64941,61741,86956,14605,19843,87081,22030,74205,18254,67264,48323,70827,64363,72373,53273,85505,53097,82126,44398,58971,54699,96491,60147,41710,28889,49652,91120,81523,12280,28477,40940,12315,43648,77643,18294,67092,88383,90562,80961,59089,76676,52284,81419,95506,79506,53148,20288,94945,90453,58664,15336,95278,34687,90076,55347,83656,17282,31929,10869,94662,72760,40259,24201,46328,36436,84969,15047,77683,79006,83972,57097,44284,33337,27945,84236,27963,96527,95481,66664,18008,73302,21620,93955,27496,24836,54688,90370,54172,88263,89036,81559,16037,97201,87391,75958,67345,50330,46614,38677,10122,65044,64529,95181,96501,71103,59049,34354,73741,48230,84635,25083,15822,23912,77905,32040,88162,14502,75479,13166,72577,38444,20339,37174,52479,57274,36412,38007,30104,89744,27735,70842,55469,57280,36688,42560,53767,57385,44775,54907,96219,40532,99897,79142,56279,76320,61844,17824,61411,66886,22751,35734,28945,71498,96779,42992,71625,52191,28002,14107,38290,86857,77494,79693,74806,95049,42028,98175,84801,37449,81219,57924,69832,53206,20605,77691,24126,22772,54961,71306,29159,27669,23431,40218,51119,65973,77372,92251,99596,25492,38553,26002,99798,48719,35507,41768,82814,45702,86573,69334,93804,51185,58987,99500,37749,25543,51978,77345,52576,20899,51514,72930,52636,50205,27981,81037,68236,53863,90473,14430,29055,83119,94195,51719,78753,83364,24425,65874,17399,33762,13868,21514,75873,14592,41899,13951,14980,25305,63900,11275,93015,54677,19519,16643,30819,95619,19512,63768,29003,72375,18340,29517,16134,24054,10350,57719,62936,54300,70644,24165,48373,26205,30083,84042,31288,33065,46800,63853,54674,72761,59415,81037,48172,92273,83742,42626,94602,82820,19792,26036,71639,44227,34820,73818,82554,29736,58558,17102,20973,88716,25709,59118,90472,42759,97812,43101,50493,46418,82267,50823,14419,93520,41097,37545,51513,75079,74019,14643,50374,40634,65304,70015,33903,53808,40373,61172,32556,94939,91473,89813,86450,64876,40348,90652,46094,14208,74586,28176,37736,42399,80525,47726,88360,38383,13962,89631,27634,53923,82983,76794,25617,76257,19844,88443,74890,68748,36378,41689,58875,63666,15686,49803,54390,70212,39037,56801,68263,93450,57874,70933,89509,89988,52548,47594,14423,83967,14380,31097,21921,90225,77299,73861,41001,40253,20971,43409,94457,79997,65823,37509,64074,27859,61909,11420,81467,86225,90182,67048,56646,79886,92835,47099,91403,46634,14217,88648,38447,34723,55022,49977,23005,59796,43212,58317,27515,88935,90185,51775,20556,41743,95731,63062,44522,35629,50544,66880,65994,10124,92137,63158,57927,36427,63848,97838,93068,91466,99441,13205,93840,53074,36240,14963,90481,94787,76563,41913,38911,55730,72008,74375,30531,83513,79153,33981,59589,49281,20725,64230,40917,81817,54021,99246,36815,36366,52240,62909,33995,69980,19192,99131,91771,15704,35496,69350,26294,61411,28725,62100,89934,44555,45228,41845,98296,70403,78192,40298,27927,29735,30778,75726,40928,99017,33117,81619,36645,15173,95926,68045,60093,64997,59327,96288,44927,47238,60904,23103,35904,11865,89884,29573,71336,50738,51941,38731,89125,70487,73504,12017,96860,87942,65238,90079,41728,77942,62580,30620,90328,60061,34348,48917,70686,17863,67976,27732,61869,33026,97708,64281,49258,95435,56569,62531,65303,85519,71539,37113,22700,78496,34345,73210,90538,18635,88708,85239,29025,96247,40603,61245,56058,97746,20468,48125,37819,69605,39644,71003,78480,78435,61501,18630,10511,99517,66994,39169,59739,58270,55116,70993,83972,49766,76599,43085,88700,93648,80802,21759,58968,48811,54062,26360,68887,10747,37155,25541,97794,60126,55377,37453,76704,41134,27787,18245,60399,87196,27500,60921,71323,14211,77349,26829,68006,63929,62883,23180,68730,91737,54003,22667,18331,85550,57463,91522,80594,51822,20363,12457,93178,70965,94812,45305,84056,16990,87397,15150,37127,49075,35939,92242,53522,16949,16746,10719,84228,55842,97152,29521,20373,29813,18721,66901,83787,51906,44084,40306,45611,72900,95366,29862,82978,95051,48021,23661,92581,79143,84047,35913,11137,16887,29815,57677,48395,48505,10743,54141,31218,36164,69332,49878,20553,57843,89225,55983,74455,65689,97953,11151,47018,61526,19312,50683,25698,47221,17833,13745,16006,90443,98496,29317,31114,68696,38887,43736,52769,86580,81727,20060,67454,25447,38217,94474,16400,56990,41511,30173,92864,89095,68046,67719,67282,99912,94724,16605,61603,87925,99534,26965,73087,79194,24029,82938,14827,20243,24097,20217,54420,98833,77068,57485,56255,10581,84219,84507,71462,27104,94317,61440,41084,90543,12310,90501,70465,28545,87131,98893,74106,44647,72674,85567,73666,26375,31896,36771,97225,82660,97151,77020,93792,27081,86987,99805,12830,91769,70431,93248,97184,92802,42773,24809,40060,97183,32136,93377,32774,28172,64050,39832,94289,24544,48521,68492,97403,99940,49758,96020,89203,32444,84088,78694,44457,45944,60181,57981,15826,57412,30034,16983,47966,78958,35965,69593,29932,81476,18192,95698,68104,32203,69299,78597,61169,78974,50500,58531,13356,36072,64946,55781,32051,32072,79334,78599,35003,87248,90566,59992,40742,74081,38425,62154,85562,90680,73370,76113,40494,73651,86551,49374,69113,88824,68858,19568,93006,22336,97190,81163,16221,56909,70574,87196,10926,63686,53439,76973,38768,46151,10755,37136,39752,85301,18815,89990,65601,86938,51063,97653,71455,30843,94211,35258,51626,86200,11792,28359,16456,12755,14532,97882,18717,91289,91375,60288,37291,79865,43146,60857,99731,47191,61134,70969,47850,52828,45452,90285,37153,52629,66661,48520,79284,99041,42161,57119,44700,28582,50589,37623,61557,92000,36804,27218,86517,67059,18576,12994,55389,63453,91699,35994,65329,28136,66025,28957,46333,69070,49837,68071,65431,67714,72975,67704,59539,60805,15143,68092,71220,23339,29673,30787,17295,85609,92788,87807,19433,80470,67421,92894,67283,37843,21847,76098,77761,62231,84801,12650,13786,65601,52485,16496,62491,59018,37431,50951,70127,98096,55715,12392,16781,31894,61007,29776,28963,79897,26477,85697,30689,20105,28022,92028,64720,41427,42570,91296,57728,20618,96011,59634,82242,61658,53024,19639,91178,75890,13671,76394,78607,30492,42870,43482,74793,14023,44179,85917,63158,69614,39001,14978,13391,58455,46395,58018,91811,52756,54525,59293,64690,56856,53698,28137,98194,16873,14347,77369,88582,34304,51982,22420,61421,59348,50814,37520,75745,75082,12575,56019,79826,79311,18195,99915,83603,64040,21835,59014,82087,47115,80984,18217,92004,74281,33238,72150,78451,98826,28164,95262,58182,90853,10557,66545,40499,73621,48205,96995,12517,90200,99430,26813,53513,77852,62575,24192,97101,19406,82554,44493,94656,69089,59925,75244,10498,16830,87306,87832,91858,57433,33937,14354,15155,11723,93952,39895,49564,13965,74121,33221,79226,73688,95631,99142,94063,30192,78798,89102,24358,63641,14317,98436,19165,25089,63618,44958,44577,10749,28057,45639,22342,20474,35610,21491,68882,28175,53583,60680,42794,19585,13692,31438,67802,74187,65581,91254,61998,78531,87937,98305,93971,67479,77783,11393,81493,13045,94922,52023,55334,65898,60416,45307,29423,90716,56263,17601,76678,45861,17087,86231,35400,18521,30898,20127,18019,70142,15466,95875,68001,17764,39148,98948,48905,33265,38673,76409,58654,93196,71446,67693,57703,88831,87419,10216,53443,61163,26583,10131,51873,80691,69598,69968,92825,39096,11181,80493,99639,30809,43360,80067,12554,55502,14097,60459,94054,31611,62796,36965,38548,64810,64103,12702,95591,98740,65633,50015,34699,81538,78810,40626,75666,44460,71143,87869,69732,36862,94176,50989,77573,96962,77933,58769,51539,44452,54645,45564,25883,65621,74299,77196,68673,98054,15018,16521,35306,23868,52828,49213,45677,43743,74347,13941,73199,23633,22374,96562,47670,19476,84449,29666,67671,96029,45416,73535,80763,35138,12867,11919,67479,66073,57115,80493,99739,52953,23884,24896,14503,76165,73435,80816,50783,62887,86264,27545,11697,58934,73428,41741,91245,81045,94444,71984,41883,13048,37930,88006,29037,39498,18763,11472,56674,19898,93605,39513,83410,23319,80551,34071,54690,53653,24867,97181,87475,46739,67414,52145,91832,25940,92835,99941,64243,67073,36755,29535,33494,77004,49830,49297,18384,53252,18559,93315,55473,39780,51904,90311,47313,34147,68676,88635,91305,86017,40010,30143,26062,43517,91973,99860,35122,32982,78294,62293,74552,96686,11206,51753,17432,73739,84970,49996,46289,95841,26256,60100,94339,59752,84566,11119,32119,78044,59596,59106,74662,34186,91321,44813,87253,19128,20230,80953,42602,35696,26848,34357,34526,26053,80132,27022,24907,90256,45421,55184,16755,24578,93116,26030,86629,53980,90255,79337,27696,10725,20437,56963,10630,75175,42363,80830,43165,40483,74860,93556,67039,12421,98895,88525,81411,61936,99018,11911,57633,83631,86528,11330,91993,67183,23629,34543,43378,57398,53853,19026,79265,32222,84964,35782,71465,33000,70052,19506,45530,86159,48194,83625,49049,32539,93602,67540,34287,67648,62621,58570,89441,17645,55292,99754,25280,79599,16780,95608,63282,60110,99965,55119,95602,52270,68242,16660,46071,40333,43214,13850,36264,90089,65727,31817,59819,63928,76293,10619,22056,10615,18404,99085,12237,75387,99828,45133,48368,11000,17928,37178,30776,89684,25281,90564,48752,44571,53433,97693,79780,11359,63755,56077,29468,51600,25582,20193,30486,93651,38315,90373,60480,30991,82834,89246,86963,86866,75644,84655,98410,64989,37368,21557,75755,37053,18598,75251,53976,67803,87490,60036,64952,42465,77120,91956,66645,80453,48127,51079,15443,15157,54026,44010,92688,65998,95264,69820,28992,37371,53359,47212,82949,50688,19123,32753,54016,98725,44971,77111,94924,18539,19085,43421,69728,92574,24021,36349,85199,24703,10254,69019,56584,81187,91288,37585,36676,95505,47825,67565,46740,57209,31697,51103,32940,32933,81217,76546,74340,64385,22718,60343,53984,54580,41991,94627,20655,95572,71691,99260,81568,66439,45601,78358,69920,23305,28543,99514,53586,64361,61220,36663,59537,96749,74727,55349,81009,67777,87721,40558,15967,91340,45136,27237,27268,96751,92485,49061,49078,63678,89847,39092,45912,80752,56057,58290,45629,50718,62991,13542,47323,71446,31564,44095,16272,36114,63652,81786,65290,25575,50060,50607,22444,61001,20624,27799,62896,54560,69238,42704,87360,78582,75073,29207,71522,87909,88811,52127,82036,79577,45772,32946,46940,67685,80395,15341,93477,78382,13117,83087,51580,79666,45904,56115,48086,39496,34649,37625,73737,94362,86047,66501,60321,79864,88894,12973,99331,75868,56041,71176,57579,55471,45731,89433,20061,55062,22858,52706,30196,98715,89300,16786,61830,95717,89370,52471,49661,12629,17017,82207,88303,71808,61297,63813,74443,42593,32458,35662,15981,13093,90905,92371,86907,13908,10965,62504,38288,55883,78077,99692,97799,98108,30492,94606,59978,95040,47288,24604,16828,96520,99818,52991,23775,79793,20371,67067,42570,51741,30977,40176,46994,26989,73970,77458,87938,35395,69821,61920,50453,89403,84372,60844,87442,82328,77497,25205,23267,39016,76599,78260,19383,35952,42582,40913,55259,72054,41831,53820,82853,48170,40611,12783,15514,90949,65653,55243,57200,99927,22460,55177,18303,86768,93415,81594,83361,58688,57093,45741,10527,67375,27941,88100,74883,71999,16993,35333,28512,76387,68286,18450,64397,69364,70732,33234,21154,41946,64945,33938,52044,29170,67459,72932,86572,11609,16646,55387,28157,49724,75970,60590,26338,93438,31200,17506,30338,67248,26860,27457,46828,31925,74839,19189,42843,31062,75163,18736,87858,97013,25040,56400,32372,19232,14145,94684,53362,75136,60223,20347,27894,24688,78476,66058,98251,49662,59477,19225,21749,17340,19682,93682,77664,14110,57004,67836,79362,14286,22412,23255,75923,47219,47571,72793,32190,46186,80580,54556,33889,83198,72469,29299,10135,75406,98018,27739,54459,59392,68323,16524,48930,38247,18550,93063,26469,81408,67873,15641,93619,63567,12351,55320,41511,21561,10413,80477,41631,90996,63169,65648,90556,81622,94707,69742,67329,73905,98214,16826,84348,14988,20083,74838,41098,27517,21777,29290,72328,11171,39669,84148,46448,40053,78327,64621,21464,53904,94128,35747,63125,28618,54990,82679,64264,58374,51155,79051,17390,37855,59693,20733,22398,33488,66411,81247,84048,98978,49400,13043,99369,22809,63174,10049,15425,12134,22103,32267,53406,81409,44569,65698,61925,81514,90989,17467,16211,98770,88902,73562,47405,34333,76326,68483,56559,43212,70876,82740,32185,28307,25279,93657,31149,16189,73497,34407,73975,15343,56692,99158,99096,81930,89759,78942,30367,84448,83251,21854,45631,41866,92747,77622,85011,31462,19990,19304,95883,21533,61403,15509,28091,94844,45018,20560,95516,44084,68431,86584,98544,35278,75939,63539,42840,44104,26045,20973,14427,67632,12580,73529,69330,17185,55328,29130,88724,48498,93421,30391,52409,85202,32028,81815,38889,59287,12699,18351,90920,82548,28072,26731,36800,63984,73115,16373,35760,54860,38865,59481,70291,52055,64018,90033,89761,10708,59569,72444,36861,86942,72435,59951,92288,91999,38090,93105,35942,31112,92040,78722,27895,82998,80779,89004,99913,58284,85991,61538,28293,66387,37432,23371,12145,76420,95571,47189,93498,86148,46422,92405,19814,76015,30206,84292,76487,31771,96121,77287,36025,85288,52468,79894,53150,82940,26605,69931,85247,72450,16692,27784,96710,95063,52953,10013,18506,70711,39644,23617,78723,69517,71132,79655,53535,59516,77497,71033,52836,76383,12576,16722,19052,83132,59343,25073,99605,64992,95741,96420,85705,62979,87703,85596,58946,72295,30767,98798,68327,52066,79596,58463,80543,40718,24585,33802,61885,13372,57943,45025,94485,24028,45427,61523,23859,40732,53963,15614,72702,91360,74393,83545,73961,46101,67330,56387,34991,75941,57326,91017,25947,68808,88634,77010,15051,44787,15120,82187,22887,23221,90935,71003,31428,59964,75310,47713,89079,13890,86670,59798,84069,44321,73253,43712,51236,77037,70112,28040,76370,54305,90477,55042,61362,33474,97391,43981,13921,94558,54276,63812,14101,16043,77980,11242,89487,19777,19445,34080,34169,81762,77031,11072,95519,80647,66191,39220,35635,19324,79696,80696,86002,12027,43858,32603,73207,80709,75974,24897,88547,53357,57617,34815,76850,16529,21163,93789,64584,75111,67097,20426,11057,21961,48369,65604,67547,16959,99424,86156,24926,66795,79710,99621,70995,43682,46402,23980,22174,63070,62570,66996,52849,77543,54923,27232,60227,68339,55526,58283,62759,61976,75190,68984,56109,49316,54903,37685,37304,68472,23623,47002,88117,90622,96598,38253,74278,58065,66387,36196,53713,13794,44692,69296,27152,53240,54300,94515,63695,63100,39204,91925,21818,66403,77556,70769,95466,69060,21677,47803,55315,15708,86874,36430,78942,29006,95065,51617,41426,50558,87897,58062,13720,36308,49591,26537,72993,63662,62654,58394,26464,39402,46721,13702,49087,51216,74018,43615,74568,20709,96858,42090,92632,96854,64285,52180,64017,10647,56727,15632,20075,98943,68015,37505,50510,34051,21446,10183,25655,41776,98606,70178,33366,40862,61539,63345,54837,29339,28430,61411,53424,38683,21877,59299,79222,99101,97693,54210,25898,57969,52528,28521,98400,58901,56704,27184,35754,68998,41028,14844,55072,11812,66148,62391,23580,43370,83841,66656,73848,51067,90092,45278,53247,33433,37361,12818,52305,66201,28145,51222,92674,26369,83384,22515,58038,78545,79167,94650,30915,82613,24103,95522,43921,39038,41551,38766,44036,18709,83932,74370,37578,61391,42864,13628,35679,75943,48355,57021,60090,72081,34979,67778,51040,20364,23732,84892,18042,74887,99374,27152,39403,14724,11385,58071,80311,90143,57280,16191,47076,82240,81173,55362,70593,75819,18582,30943,90536,83572,15979,96884,93490,82403,22625,46699,61489,25692,51579,55876,49050,93409,25215,76925,14766,76482,22508,78191,42565,18889,75219,89278,41125,88719,54012,91183,61079,87784,73062,93503,23190,37910,81010,40171,20129,15710,66608,58678,32176,14061,52082,37850,96594,15888,71477,40700,96568,77243,62344,95988,58792,57040,64072,18543,74515,23784,45121,84645,73483,50438,74315,11354,85896,40931,51890,57483,30316,68184,52954,27372,45404,78803,46414,67623,23565,29602,61245,55214,99505,46551,81359,38957,12224,81250,99568,15685,31678,85214,48395,87404,49736,14491,88362,74313,92277,90783,24586,73284,69478,73827,70358,63515,32872,23411,39810,51379,20643,16235,21395,28635,93154,68823,38045,75871,78336,91031,20499,73166,72557,90848,77775,97655,73505,88084,56004,54326,58112,16240,66866,44501,87305,55868,18356,64035,86475,67616,84116,39834,77474,70291,46726,51289,49169,69922,70149,55625,84004,92171,35325,62002,73816,70441,20623,18051,88204,49247,50386,38868,82894,11566,23321,68581,91392,78027,62006,89101,74818,72547,46611,15473,29449,13338,54667,98595,81079,24955,29991,66626,38003,72435,76453,78896,64285,45019,74708,14714,42192,66696,69371,69122,47178,11730,45800,96798,74132,61733,19901,81348,11826,74184,61486,26742,92661,39611,17117,54023,82290,86686,40779,28132,38436,15246,46964,59430,50900,52984,71407,26481,30406,40381,12828,64518,80578,77132,40084,31174,74809,97278,97278,69757,94934,83374,73042,85963,96717,94678,63566,59037,70167,95879,26343,60611,27114,74310,72027,41294,27026,10293,57404,76970,19002,64599,50405,50616,23511,77316,37197,39716,95488,77037,27952,77285,56398,70215,33712,93156,25410,79515,21342,62758,93684,56890,63553,69358,27177,89571,97354,27483,58910,48551,97286,97882,97796,63444,18955,87774,14263,18334,96959,43855,71312,21975,66945,50595,75368,30614,77653,94923,94992,98016,59858,81849,63509,55686,29367,19336,11191,77164,70663,81837,19514,73948,28239,94213,73208,32440,70539,51035,90031,23210,22756,37001,38010,15674,27416,45177,97863,35294,25269,57870,58546,75133,42026,50306,79200,46011,20616,11572,85910,21069,93919,85617,14655,30617,79546,88216,66303,29593,54588,16434,64345,59065,67918,41530,49332,29412,54804,53386,77938,88809,11417,26374,17755,88775,73968,43533,44591,27528,55512,26079,48169,45947,84991,11017,45068,87883,54162,29992,88405,21000,59639,50556,69918,87755,84536,41760,95575,50751,88569,99969,93006,43554,17294,80890,42272,64778,63680,43182,17892,66188,33366,37365,28844,36016,86744,35773,70887,38337,62254,79086,34901,19965,24448,26012,41795,66213,25154,17778,10195,45131,63539,39311,35328,74269,77866,95023,91742,77169,65284,92310,89865,85472,16168,15512,40328,60493,26522,99017,14429,70543,20147,36096,11611,77501,98262,32365,71114,76081,55872,79520,18927,34753,33406,79308,99604,24211,74319,90965,73339,85743,10945,30275,87156,97859,83542,70516,30868,87998,53099,26680,14936,82390,54945,80862,12069,10946,33160,94382,86573,87187,12704,91246,45950,50034,71064,98261,30974,65764,84260,26741,84583,37180,93597,57965,23041,62636,23294,20613,45666,82508,42099,34329,79112,29717,49626,50227,48442,82975,91643,39601,60887,86175,51711,43044,12090,31044,86346,45793,92982,13667,22775,83474,18006,64661,12881,54303,46494,89081,83120,50050,61436,42074,45906,88366,74506,94648,28233,91739,27993,83270,13114,37244,39134,15992,19408,46896,65026,58010,64850,28783,85808,52780,79640,41355,12344,77213,68629,72874,82571,50264,56822,23951,60442,28277,88336,53078,29373,22710,53308,18231,99049,64272,95861,63718,19185,76587,24519,51127,43025,33588,26342,77309,30585,80053,70410,86774,68633,77397,10615,72019,17667,68847,27528,96583,74840,74022,51861,69254,74900,84559,26160,69023,19257,68561,38737,99006,95902,68990,62184,30755,74769,78178,12505,40711,74609,75733,75353,32618,12812,24990,47743,47333,42940,76180,86279,16949,24087,34052,63120,10508,31515,23061,11591,70093,91034,74733,86736,94503,59049,84779,32830,94060,68349,14400,50996,77007,58375,32694,44581,41610,43833,63711,10309,19227,60004,26054,52380,93517,91301,90768,63451,50100,77332,76597,12253,47488,41403,70003,51969,84546,54431,15116,31464,97571,67964,55834,64961,65581,47502,84588,31690,94509,53661,41024,31690,13643,67640,29617,88185,96466,69025,84532,27280,97167,62866,94850,28488,50525,34269,35094,45596,37215,67364,21308,18402,84744,56121,36439,28013,94936,52887,48554,29637,16337,89542,55902,72176,91334,54268,84755,25844,95920,70153,18872,15604,95946,92485,85928,58903,71104,45260,58054,78973,80718,84525,77733,15488,37084,15844,10703,11296,85418,28974,80323,17650,36307,14709,93110,52665,94568,16919,12409,45340,25504,59364,46306,62447,93310,89347,95173,11003,64655,79376,18175,85685,97759,35257,74956,76742,57547,14150,53639,12127,65677,12585,47848,92553,40717,42786,55667,33257,54332,44825,46332,57127,68063,45998,29517,79720,49849,59951,21815,28183,25055,27842,59448,24384,37256,20617,38145,27370,51649,85430,11290,65301,21301,73516,36588,42646,79762,25214,16939,44591,22945,94049,24118,39336,50465,13904,62845,39277,98588,80479,80211,79832,92144,70952,76430,91103,52433,14150,68218,32766,34340,26730,55400,39302,48512,20203,40848,54201,86162,97625,76375,96876,71897,29401,91041,24605,72135,94844,75042,17016,95204,42593,70024,35080,49211,32981,57347,51996,97539,32302,21965,32622,63147,20981,82091,10802,68458,38868,50539,22871,86811,65392,29386,15768,11601,80826,28460,22659,86959,18131,56865,74594,92564,67879,73834,31209,72808,89000,15782,33711,88917,77109,75153,94529,21754,27898,38214,42662,18143,45352,99395,83731,16558,10416,84541,98367,13584,11596,31370,86334,43118,21326,41711,54143,59138,27445,99775,61988,96333,87108,48812,94109,20677,47962,63198,19452,21235,74405,26014,39691,55964,10863,53446,68799,89262,80866,52917,13694,80459,99189,55325,94399,22168,80467,54046,14851,93021,76741,80807,87178,29245,44737,98402,99634,36873,47630,83586,48237,24169,55721,83674,42827,40631,21584,69729,42331,65893,81705,87303,99190,78977,16130,36331,26925,63883,53020,88311,79017,88462,68394,64075,10905,50023,14228,46720,16111,38060,60291,30555,98102,71426,53328,22713,95290,37282,44708,45755,23391,87700,24430,91397,76899,74808,51532,32263,29841,29364,80704,98488,78580,73844,40203,23088,98867,23684,35406,34254,59524,58154,72521,79067,75445,89565,29660,37018,86508,44573,77278,15554,33117,30069,61174,91282,61070,40701,81386,17552,88098,42339,10811,25791,65113,92164,43972,95181,95456,77241,45156,79657,91999,71652,34274,88461,11243,57876,23137,58560,20150,63138,53480,73403,96517,69072,62498,81949,95575,73055,18559,67693,78153,19736,45120,35977,75274,62658,68848,33255,27772,40890,81449,83778,70496,45232,12095,22286,68413,38465,42416,53527,94710,94316,52519,23305,42014,35993,54786,52816,41557,61592,71112,90258,46711,40220,59364,56038,81838,57669,32558,37736,58700,53503,80592,16749,42241,72544,46579,75596,55072,74722,36876,62449,99012,73954,71434,65448,68781,61672,51480,19883,23104,45922,48877,91328,13590,66648,64791,41174,52426,10806,94097,18537,68172,55734,75167,35093,97345,96042,97254,76211,16015,75823,91514,43854,63359,91602,80831,21402,64997,71213,85958,23728,22391,88600,71420,88676,95611,31080,68053,21769,62874,46213,76089,35636,35669,75457,98894,64690,13458,42337,34246,87106,12060,41778,32223,50934,63137,43451,62659,81044,43521,56107,77567,74642,94920,16038,36182,85672,51176,48151,47094,85189,96409,81074,75219,94381,79464,51536,63848,35209,98440,38198,39863,86434,92061,38277,70347,67378,59628,32255,86846,11471,43189,61132,89912,63244,11934,32127,19550,30566,38166,67554,34829,68406,53997,27516,61669,36888,83340,71430,29948,92649,58885,17408,21650,88694,48661,20137,32630,22599,99139,28572,34642,89846,20576,11357,30908,33037,59449,34468,65416,52883,77593,86019,10639,22358,92007,49570,15867,56506,87459,64673,62394,30134,95692,66647,36905,22607,84959,43112,52618,80609,19571,36707,41015,95173,48762,78062,95182,66099,90178,53536,72085,78191,58732,48323,44579,12831,72976,20725,13472,88685,65216,24815,51679,88226,90983,20122,97398,20499,61568,62171,92152,55769,80956,44559,70564,38230,66772,97880,37472,11744,94304,64883,26927,55524,39141,29399,31775,26065,55323,61121,17615,56036,22290,71362,67779,94272,12010,54235,61538,46253,69341,24271,79049,65955,97760,93550,44712,50355,52460,76292,73810,70912,10922,59107,67226,83432,64126,11949,34948,88423,31079,34633,90581,24911,28337,85677,77591,44280,59608,12984,86544,71905,92783,84714,12813,76364,88952,68025,76980,60089,59286,89247,66735,88395,82292,10882,62110,83229,90163,54582,34718,25894,68330,91314,67927,74551,63180,57512,99956,28807,92883,83464,11263,95174,46977,83790,33331,53921,16208,11846,73381,92445,14768,10994,94568,32068,46090,96731,70706,79545,49082,35522,34944,51133,92025,65537,12055,50571,54884,72945,11150,19575,20256,73461,45822,85550,20577,26802,16584,75484,43781,83498,87792,21500,89602,57413,86484,27890,51662,15734,66577,28642,63055,23543,70087,92447,58427,14812,75203,16824,92404,85778,94243,98406,59632,97951,94540,81761,60260,64851,56569,45569,94839,93160,67713,40715,78391,39467,29199,64016,22930,20652,22477,28798,28880,80901,81930,31472,63712,11831,35040,57606,75301,95240,15331,82756,23958,51002,59216,66561,77765,85619,60822,54978,16066,66819,21762,29596,60704,13704,39020,39174,64254,99970,63941,81227,96130,59776,63172,93870,74703,58012,89498,62352,58612,26394,19271,76336,31237,44947,98529,50513,35716,75356,89202,62415,73114,65799,46360,41845,16796,86207,45021,81832,94598,60388,18493,10996,99408,95847,35747,55668,98440,14902,12709,90573,26401,84457,12033,38779,10419,76790,34672,65400,95715,52983,94065,46551,84653,16938,62598,97513,30031,22001,21379,68862,11718,81775,34651,66310,25187,27643,68499,79136,18234,28343,83193,75553,63497,94399,27040,62979,39275,38966,99379,69107,53632,60155,10212,72682,13372,58860,62812,80577,44130,51554,56930,92033,74757,66561,24159,19162,96832,49234,61796,37926,11636,97375,95759,65872,91313,34381,95386,42701,86655,56859,24974,16417,91491,79549,34031,71438,21137,52083,55767,55595,40361,57162,97935,73124,64640,42577,16942,18077,50443,44766,80586,74244,38645,63641,83884,62698,34766,66598,73092,73878,31214,27548,71077,44351,10939,69404,12530,35472,75766,14041,48436,47656,16166,59813,67431,54340,11287,71353,44942,46167,25718,71583,69359,92650,25017,28285,39580,73221,62364,75205,53843,18016,59141,10526,75793,23917,89347,19789,68814,22379,22475,65614,36409,92245,52322,17007,79376,95758,67588,12760,99994,31417,93121,14714,97790,82331,80435,87302,27618,67127,58973,66749,76943,73692,32431,26346,71753,31605,66704,66954,93270,18511,85739,89666,89026,30683,24274,53607,10209,68161,62920,60656,82409,47169,74348,72029,49569,47305,28355,47733,31027,74758,96944,84388,17211,31128,63325,62283,10174,68219,35594,28643,39218,81304,24241,14410,40540,92548,17299,40878,27199,20748,23908,47069,43787,30696,57362,83750,80065,46779,73038,92028,42272,37674,37170,74541,55145,21473,55310,81071,20387,46767,21215,78714,16986,79816,98846,27821,22829,22734,93173,58283,76852,32451,62619,18891,45778,27798,76891,12740,22077,15222,89248,33612,55358,83496,77683,51161,43370,68552,10461,88914,65782,40012,74668,85842,79813,48253,24996,28150,95768,51712,56384,56625,81948,81756,37035,30009,99551,17364,23724,87156,61404,22608,41730,60753,18450,70544,39730,57383,92443,75691,56550,32058,48011,72615,39880,84970,12490,14352,89454,99603,87123,46424,69700,94044,99338,39962,21020,53442,62002,41725,65519,80495,76524,37176,62063,76232,25539,13693,48228,93294,96636,65698,48241,67475,73022,36441,69886,53281,67096,68751,54396,94209,67537,97212,17474,76383,60711,30662,62725,97042,16463,32545,11837,52194,50174,98311,49883,10488,42301,84478,18461,96437,47098,44727,19097,47901,36879,46712,33919,95436,69693,83699,14870,46430,36412,72955,96919,91661,47598,46274,69852,40236,33140,81979,54257,68480,16758,74497,12342,21991,87636,58606,73697,86924,35291,39810,44776,71460,96048,25206,92751,70901,93501,17046,64261,20843,13848,53582,13674,80927,91871,72196,71643,64803,97153,47139,39285,61612,47904,24253,54366,96965,74540,48525,34288,15205,90408,20619,73088,11165,46135,49273,85435,17898,32793,93174,59825,51016,53083,97929,44134,98730,41458,97798,47896,89337,36469,59846,33089,49162,67206,62266,90046,77568,61550,41020,12676,93606,25271,75144,90708,99057,30729,40272,69216,68381,71316,67807,82593,61245,38934,18315,59836,18723,94815,43138,58714,99522,10436,27611,44759,63655,14356,82421,31877,47699,11037,12980,99677,76491,72877,74596,52569,84050,79525,76470,67196,22723,48703,66099,59350,27734,21387,31523,26620,92978,87497,85048,57681,98939,54732,84211,33924,22967,56903,49757,44947,37135,39713,96096,14834,31154,28845,41720,76074,76429,58211,94695,50678,69106,10885,90809,49997,22930,46115,48560,37607,27640,47381,96591,71546,62763,24465,51765,59072,51724,52411,58669,85910,41962,40880,79015,99560,29922,96215,78369,30623,37487,17825,81485,87659,37720,64933,63173,81044,45083,87318,71928,27542,71697,47465,22565,19585,97413,35559,17506,28307,21836,37871,19155,94378,33578,10429,18171,94637,53996,41917,53195,96589,11579,78918,14556,28171,74310,44770,13915,40694,60679,72056,76998,71789,44188,66568,77174,77492,18375,21272,78949,93648,63947,44554,70757,79238,14873,19728,15427,35077,49308,96908,92151,89706,83544,28124,88868,82262,91038,36648,72675,28905,44523,75702,57011,40335,20569,12690,19924,87113,91671,33128,30129,15821,70352,57476,70462,39769,99075,81402,58842,11420,67617,28620,90763,87260,43287,32203,71168,40776,81425,37199,84960,38308,55920,35720,29730,52688,11770,34917,94723,31357,70749,71003,59247,38742,99879,86624,44201,11431,51039,14869,43605,73517,15848,43636,56376,34905,48248,23397,47704,69608,77013,57439,48084,25020,56802,24800,52585,54150,94847,97703,64680,31516,34466,71218,85582,93779,28090,67305,69476,71482,13342,48194,43932,86707,46676,29057,55987,53346,96113,76093,69856,90893,82937,55863,80853,85309,14995,55019,86730,33661,28042,94945,11326,44196,20611,84665,16202,18897,34146,61526,90406,10013,35716,44777,83580,38236,38014,77761,10775,71062,67128,29025,23300,60969,87019,28050,59378,76476,31616,52353,89165,50541,93699,75754,23399,22139,35167,69564,18539,90267,71199,76941,13264,36090,55516,22821,74836,95202,47537,16550,58193,90941,53310,91850,90220,57363,51210,77392,67460,10196,93921,84650,37493,64237,73068,21991,52547,85100,71323,45528,13497,30078,88537,57092,58007,43550,59953,90123,22611,73514,82955,48965,43529,72473,20164,49660,96648,71976,21804,80079,81520,38454,40707,81614,66892,85422,30208,96439,91757,91162,33704,77121,87383,35226,68478,84639,13193,17832,81444,43055,56826,33971,55809,72771,72590,12651,64794,57556,69073,24640,63945,60307,68634,17029,90193,26688,94595,81262,39737,49782,89375,96625,15624,20259,17960,38632,24316,62766,81164,58808,20816,25557,14845,16520,78101,83970,88086,81878,77771,81057,66778,47894,49553,32440,74783,14088,29301,94261,93754,60182,53906,10336,76712,28614,25722,38368,88837,29364,77073,68049,16406,33036,43458,79375,12807,23486,67085,68492,26371,28484,67263,74168,32588,91792,46969,36602,77585,59687,83826,87798,45999,83792,95191,19520,88032,55046,67654,75511,87454,57360,13798,46879,14157,62710,39106,69703,12391,92469,76971,66061,68147,73176,41396,36751,92241,71673,42951,37782,77929,56085,37888,77569,92041,91544,86645,42744,84510,73544,74981,63041,76369,17570,68343,55816,23197,76051,52744,78170,38079,49872,85148,54000,37832,33916,24473,62336,22588,56433,93308,66837,21106,25328,63335,89383,44731,76936,95643,54931,23796,20340,89402,54999,55750,66347,81536,95631,27482,70297,65072,56683,30712,55241,24098,59084,27900,74014,35099,44382,18105,27346,40031,72825,85939,23204,54910,56305,33815,52386,45282,72335,26695,33727,41014,92825,61689,95961,45444,29611,48882,90574,92617,32098,63078,90338,70129,38935,72476,73060,70561,29951,29876,30708,28898,84595,85563,70888,83223,35449,15413,20947,15287,85040,11608,89190,37581,31750,95068,28244,42403,37340,34881,13067,62551,70789,29907,49444,11832,41453,39651,57093,72018,38671,31223,39427,51828,28450,69793,92735,60228,62428,20332,17298,72481,21043,77891,54276,94581,23555,61795,60370,46944,25577,84912,13983,33681,20128,54815,46879,68058,56396,93229,44075,28599,78985,37346,77184,99505,43658,37237,96876,15851,95861,55283,13623,46084,36693,64634,12230,61764,70711,93491,17865,25937,67273,94291,18307,33115,44190,86700,61253,20387,13928,70399,10254,11033,88382,80797,18454,19443,12996,85026,68601,56128,41066,69140,60043,91273,65666,96043,70493,58196,28968,77981,64167,94422,30403,75063,93395,89675,55774,82195,18428,82511,64600,13737,13407,85749,65503,13962,81971,52201,31097,63709,48916,28587,71317,86985,25488,27847,15936,27365,38586,90066,55124,13765,83350,58586,25487,61726,41409,55949,26438,69716,20330,62757,80840,51242,27909,87265,41336,61722,83656,66207,74301,16739,22189,62312,81213,54303,58293,79611,22831,14599,80290,43788,39088,97108,11072,91607,19655,86884,53669,29859,40819,44946,65132,40232,32404,93020,72582,72997,43842,23152,93565,79646,28623,48605,28814,45267,90705,38654,75571,43767,66299,58741,47153,82441,38730,18935,58878,25626,62188,27040,54471,54885,71677,20158,26146,76732,24959,66752,69705,62693,65050,32705,90219,95144,46913,68707,16932,66956,66579,32435,74502,67270,63723,67508,63030,21513,28239,23024,15077,36056,65117,42297,68431,80541,62324,49456,33101,80316,36267,62041,88336,26262,54524,18300,44348,72594,28439,56615,74987,74704,67085,38767,53132,73692,15920,20659,95532,68726,68372,78623,27184,41841,66780,66795,66842,16297,76694,93984,53017,55759,95301,82112,68983,14657,85588,32422,96069,37682,38785,69777,51923,30788,93420,81516,89876,53678,94390,24393,47839,32491,70889,31751,41202,36536,80273,13127,33308,18404,43006,78423,79339,78181,98418,96772,20943,81288,88777,89539,53129,89120,15811,65951,58410,79882,43696,35760,19161,30773,52842,64941,12280,20900,35642,55356,50388,65137,55552,13089,91145,83530,99825,79382,69690,94309,48557,56899,17494,43072,83556,51437,74617,89103,94592,37813,72559,44332,56495,69726,15342,53834,23863,39885,44262,60456,32028,67465,20325,58195,75143,29385,35723,51211,74121,58583,37502,94316,76137,71631,58457,30955,38485,60763,92186,68402,89709,78967,82124,53607,96216,45135,23851,53690,89000,89306,50533,64689,45316,75592,67220,43636,49105,72718,22374,35180,37997,56425,15020,10291,59545,17203,58696,38555,77077,57041,86502,26213,19215,71032,40448,52759,84862,83170,79676,60687,88415,33805,84849,27287,82102,88654,68165,33196,68455,49078,84741,51133,39015,77901,95680,85657,69710,83032,27063,83819,51355,35880,18972,94560,80117,48231,20252,27391,30969,93775,70232,84423,57243,78508,81537,68642,17310,27848,48905,19980,58340,72858,58349,41284,84438,70001,30158,27924,28783,54019,17998,95605,49352,60203,38485,76695,83729,23744,52356,71453,27733,18293,73781,72513,22983,83328,80090,11154,15353,29674,46189,29387,26359,15389,15895,13677,18249,88794,93732,83922,64934,80563,25170,13749,25159,18321,81980,70821,82519,15013,32606,11263,28761,42129,39621,95154,84893,90338,55675,18050,70613,21347,95829,37446,50046,94536,11030,94651,42459,35534,35190,91072,25685,63227,77635,28233,65492,30836,34097,40221,43173,69582,46967,94561,96167,74497,39902,33322,29699,20636,63198,22222,42427,41925,72151,66091,46593,88617,38874,43342,64578,39809,99835,74858,99723,45285,62976,87095,82287,50098,41770,80140,78963,97683,57071,71616,75713,41819,40438,96591,78607,96166,93896,57752,51665,21609,77701,30507,41297,96775,12713,58563,18327,53089,73414,56515,99736,64576,70056,38963,48100,28275,20547,41641,63041,19795,75237,20848,27889,78697,45779,51386,17389,57795,24500,34174,83259,85217,81065,69199,91594,74594,61978,43854,24172,84918,74391,31757,95085,64006,23822,60575,51140,12510,60195,79770,77686,36745,73903,36256,41951,12569,29194,35085,80567,41258,76317,86200,48701,88946,80361,81908,47320,16298,63671,55766,51684,79730,51042,59344,62088,38488,18474,30979,37272,34006,38673,45797,55101,29820,54904,29414,16000,71872,58952,73664,50825,27647,32494,95749,17549,90531,85802,20400,64967,32500,51246,68947,26150,56920,57009,93100,79104,30242,46340,32249,53430,32273,29778,25974,44030,77214,42331,65850,13710,60611,63214,48291,79433,11325,51476,88081,51606,31850,43930,78218,75928,49139,18860,85658,18808,56420,43501,33947,87258,74213,76035,75428,73772,56518,79091,54707,47706,69115,11208,98085,86913,58011,52998,14892,81027,17746,54757,71724,92650,67529,59147,84534,71387,51829,60660,20039,33807,64586,15503,13546,60271,27278,30647,50088,78612,14299,17589,47882,72964,10136,12547,17600,11490,55128,28691,56271,19306,12956,70734,50020,31243,89351,28730,16234,39124,12452,15586,85600,59685,65481,23506,31810,30340,98957,96373,46996,68546,65166,96842,60210,63276,65866,52722,16345,37313,98003,43998,63654,74651,73914,55431,87272,66431,62214,77697,93416,46024,49862,98952,75765,74276,65002,82066,35118,20017,97634,61437,44827,23368,78658,85584,35257,29766,80239,76923,20356,36575,75568,42930,14662,12538,24916,22339,67491,70292,10380,37647,56668,21193,99606,25758,95191,45730,97792,44394,72583,56150,46446,62843,49306,16623,30789,97705,95439,86837,70333,66810,36747,83253,55323,95817,69248,84578,63196,31706,74493,43016,81575,52792,35131,74035,80910,81578,88567,45739,96668,47111,91295,15923,97436,24652,91549,29483,20857,87137,22340,10069,73804,27079,25349,38450,32155,19645,98791,74644,43532,42535,19573,45035,39379,39496,16412,68420,85637,26399,18545,48739,90782,52724,57765,99952,69965,44372,27186,63885,36557,14411,28720,32951,90097,36747,28019,99890,85116,60436,67835,22473,67954,47588,11043,23040,63555,35725,33550,69856,34879,22888,21508,80686,45262,44201,33210,61299,61931,83457,76198,73910,15880,17872,40640,59401,80798,36204,59306,15414,90453,35522,35999,32636,99305,28930,58385,29449,56815,44874,70823,67360,83931,16453,82979,67228,15450,95927,85470,27646,40975,45922,98918,92014,94830,81657,69726,17541,12809,65361,91762,40197,94547,76166,96408,29754,38355,30081,41504,33053,71518,56946,83438,17628,52699,48474,93385,19260,95474,14000,54535,46571,44219,80178,94762,51271,15937,19166,99692,77828,61526,48609,22060,75278,51785,54291,99010,74904,18444,88032,36281,25068,68519,96534,28691,61499,46800,83619,75877,77955,32071,11327,63248,72452,91386,55063,86760,26402,26194,98153,99613,11699,28173,27758,97437,17561,19729,13294,13133,42838,80999,50868,45522,63799,45934,16488,40582,84806,26748,23233,40054,54993,27831,98073,75905,85244,10956,22151,84667,50903,93153,35134,77967,48831,48828,29437,37201,60410,27765,80293,13098,19731,92275,10139,99299,70225,92251,41096,89698,27093,63427,76177,17141,47423,91247,57721,10260,28941,98461,13783,53960,96072,51415,55540,94805,76459,44752,57627,20118,34880,64473,60061,18865,57439,41402,45511,71668,65555,28055,54009,46678,14406,86003,96785,82781,79310,13790,47792,81700,25119,54263,54701,49663,55289,59766,26110,46403,25629,51116,82196,35440,26052,60476,50686,11390,88172,42282,47418,39250,36002,19627,72345,10172,35815,60473,76027,82359,38515,68942,10208,82085,85194,97885,70028,78515,70601,44235,87312,10993,34376,69627,12113,96729,93412,67965,25690,38792,57304,71638,60777,85032,88419,74909,37047,88955,61722,69514,95801,90793,76524,81773,13787,99457,54803,79423,49107,97208,50515,33484,16336,60911,70822,77186,61232,69125,91938,79378,79144,77613,24296,19380,26117,48457,53438,28326,27421,58603,74716,75361,93052,52781,78775,11799,59852,15128,29379,63141,98337,97381,91464,78313,50649,76858,74693,17788,35471,74364,81770,29446,45370,67677,87005,22121,45911,36237,13448,31478,36463,11022,28664,79690,75693,77255,86660,61624,82954,19221,79455,23356,47500,75661,50059,88511,97872,24539,52838,76578,26790,81672,87790,22073,97932,65178,14455,98707,22273,61789,52401,14836,69901,53389,30784,90562,78740,33574,40893,46640,28944,11439,95580,86367,95013,65437,54277,71572,82541,61498,77805,13768,69804,26010,41986,58238,10254,58354,73967,99065,47576,62252,12927,79913,24139,11775,69952,96936,45760,24289,30395,59909,93140,11979,40713,73376,99265,19888,12650,95359,18445,30108,41429,91859,48908,76681,24216,90674,22381,54986,17977,99511,15366,44812,65482,64614,51229,31785,43386,19203,26706,90661,11770,44514,80044,35064,99735,25612,31139,86444,65719,79959,84383,63590,78574,86370,49739,36145,37648,72202,19438,90540,58874,92562,51763,89604,64178,94627,30822,34413,74009,27474,48996,67601,47466,67641,88887,97763,61469,96896,30474,95597,49882,78220,98193,82035,56065,57406,75126,49674,96271,20380,21387,68066,23909,91269,88097,60330,60604,56296,15717,74034,40097,47990,27601,75761,71507,47796,51247,48760,97929,19187,55136,82220,21335,79656,55643,73028,15925,61190,19252,44253,66790,84869,72525,34141,93882,31777,51326,98186,47454,48049,13033,40515,28595,34773,67723,88734,47475,86460,31046,13282,29483,78386,87143,31232,56142,58658,50900,29319,77546,28349,25141,38215,64186,16441,75292,90548,89164,94493,17242,78182,11865,20785,37318,66136,63302,56812,81179,61578,44573,29194,51636,43619,50282,21260,52759,18297,76234,93963,25123,31084,89859,55195,13776,76153,38800,93299,50642,51332,69265,20344,37125,99628,55183,44989,31218,38023,40684,93661,49949,19388,99471,65882,34649,89096,24750,39626,39660,70929,57843,55653,26563,44491,84516,17983,82266,76341,27390,55479,13129,40982,76993,74712,51148,95066,56644,53524,18532,80600,34661,11636,56312,41765,69980,84379,42240,86151,50020,94849,65094,66606,33690,32584,65811,40946,96320,66484,74455,58127,73364,49386,59926,24420,42268,66088,24286,95873,60520,21284,93256,61252,53139,58453,30113,55003,34402,33812,84748,72151,16660,72585,57025,27243,10349,85821,44932,71569,91829,11301,68115,14707,10763,63928,82634,67936,62606,26904,81534,89867,78151,72862,69256,74166,49038,58845,88600,26014,65702,20180,37626,12092,47091,15596,91161,68980,21728,52706,35671,83944,92629,12405,17666,19479,78258,28349,81783,99913,14561,74091,74827,42818,92571,49944,82412,49108,43371,33191,25117,23364,36018,11778,96448,94131,43188,15971,72181,79822,50394,41643,49699,79764,39134,31635,44257,24076,74180,69700,90961,52758,12967,45232,64782,17598,26136,32470,13000,44757,79694,16740,56255,15076,43274,52126,30457,43694,53618,26402,95499,24838,57866,66455,38912,22225,82448,47076,71053,70160,74214,15288,49634,90364,97380,26950,11694,67736,34582,73409,70179,94158,44151,89655,43135,67948,23303,84846,60884,32527,39239,42717,50216,85459,27473,93629,69485,65757,14600,31169,18397,11344,61931,43476,75743,65384,20461,24738,45383,47535,14656,38722,29019,34374,76840,15576,29309,38018,15902,36701,56995,38511,23991,98095,41543,38318,54398,71290,78308,65844,91791,86728,12458,82298,67286,13294,42505,15045,54290,89773,84153,42347,28853,90397,89337,53175,56633,62994,73859,54124,21389,37850,21022,86980,48804,36645,14507,46457,99080,33112,85234,70773,76288,13689,55524,85455,43915,74406,80666,69075,42046,71431,43313,26862,78523,83366,33034,79805,11551,91186,52502,22292,75839,13882,84457,70585,63281,14306,95967,94040,50195,83444,51394,47586,29012,60809,19341,52011,62420,29619,41984,42580,45370,85567,75040,65084,10343,41808,91078,80055,88580,83590,94115,16639,37975,26597,27396,21498,12923,30537,72018,66312,47075,15573,75690,94917,47443,67807,81006,81895,87889,34931,17214,21857,91623,20865,86372,84396,63602,94728,90457,53205,78323,33660,38430,99439,54163,96766,84907,48992,27092,40449,82643,42698,99759,42926,60012,71959,73700,11086,95212,62600,48892,90841,41133,39106,68309,23691,11559,91033,15974,69238,31296,64710,13903,95142,11184,28098,21985,60577,26419,44390,66954,79470,82767,94217,87668,81665,48850,47039,77767,15237,26826,64974,78052,57210,34685,19997,26901,15312,61887,82976,57779,74582,24300,76163,35081,43647,41595,77734,73932,76229,23085,88644,68699,90306,49247,61072,66062,55297,60862,74263,19447,93644,66552,44785,26926,31456,29732,92635,95646,28951,58260,53467,52520,15808,10886,58369,71551,89813,34697,13068,82607,96506,94703,98490,14090,23760,44693,32863,64162,38720,38558,40057,54058,56887,18582,17373,16643,25387,45106,52348,23875,48203,56769,14592,65495,79530,45667,55668,47093,60958,81017,77769,63523,18863,76379,71301,54783,77018,23708,38904,59128,67022,40349,94952,72937,73701,39177,15476,12058,14068,17984,63887,93217,17930,30067,33126,27053,68067,78353,94649,51509,13405,18422,21992,56802,76777,52827,37900,73027,27891,32513,73818,59228,26123,22932,17151,81819,93930,32442,19579,58580,45059,40446,16328,17743,70317,68343,96943,52556,65025,90861,40748,75643,37795,74233,41363,79299,11777,72626,85885,95805,54725,54851,83161,23667,73290,64118,16534,80233,70703,56688,28335,52445,44084,79200,63145,26777,71153,45158,61454,42872,64239,39091,11670,82077,31076,47927,37038,75562,25764,37448,76773,47191,35207,61088,57544,13301,36550,35208,18593,68128,92021,99273,82815,53366,48408,17944,28154,15488,39320,50839,17079,35824,83636,40121,29223,29101,31351,11575,45174,65644,94140,77317,42148,76614,65367,85109,85903,26080,37995,61883,19195,49253,34216,28245,83291,63215,84012,53068,46736,62001,76363,42601,23645,32050,51583,95852,50477,64716,17194,29751,56804,72885,50744,97268,73336,73823,96402,75396,22208,54169,48686,62617,28420,38471,44190,45165,69122,88632,49208,41266,41303,35513,17673,60607,49041,76875,69905,27784,91609,84217,25392,51447,95725,49413,55001,55641,96110,54307,15261,32420,76539,83094,94717,16072,40582,78756,38570,80532,82666,72522,93766,23330,37363,67015,30306,99053,13654,52504,19713,36427,29057,59041,83172,89233,58171,57145,52898,86553,54859,54527,24147,51817,48769,98939,13632,20848,22824,70570,75882,77744,27334,13667,86649,60384,74985,48001,85453,49102,62068,75041,45026,19132,29377,18863,79266,50475,46148,43755,46744,48582,81577,48731,29697,97665,58169,69827,88605,19455,22242,91686,37383,75148,64947,88841,48561,94198,51830,90020,41449,82057,31492,62603,61460,85594,74577,83568,90946,25994,79906,19677,43803,66598,70346,99535,39552,35034,72504,27357,86006,74136,50176,57475,51972,80757,57068,36744,81385,54760,13755,64433,80378,60278,37587,18170,95888,53617,57830,74804,45724,44358,38266,87597,14863,29524,32104,43950,82750,11118,38047,69935,33782,75253,79480,74206,65723,82031,15729,27256,87223,14601,12772,71628,20101,18512,33053,57147,82920,84052,52315,38799,32731,78089,78497,17964,37152,12936,63583,33183,72523,80903,57085,56031,40613,98498,33843,20467,79174,20911,23401,82542,95403,45229,44728,32035,49883,50386,68612,21523,72058,26659,77580,84016,17066,50521,33136,44877,14185,11866,31852,21732,58638,75779,83088,22600,80961,34363,35451,98821,83723,48077,78998,79094,19477,41959,90559,39424,38014,13025,47988,31890,84976,24887,39043,41612,31886,51217,90687,98546,12771,49913,63703,32575,10422,34662,43534,44911,54788,74746,56256,62603,45063,79146,81215,47169,47544,23208,11436,61489,29317,25253,81635,83336,10575,75385,22133,30444,89746,77130,57329,78509,79532,94584,82814,73478,41047,39853,78150,43250,84621,41868,18866,96805,13008,57047,69156,73683,24664,67957,38369,83539,48603,33713,84201,32505,78192,43742,51926,11872,18106,75494,91492,32695,82361,60005,47529,77476,29077,86363,50898,81301,42614,35817,65698,67272,19855,58628,58484,84225,89816,81876,96083,40007,38385,83280,59567,45831,71203,58231,75794,62658,74820,74011,52989,45424,65533,44872,99010,34872,67434,29564,70120,92632,46491,94594,36070,24689,80909,90901,65942,28290,23641,67371,70609,19019,80236,58986,27773,20368,80431,88186,86641,49383,94887,70838,87939,91459,38763,37903,74748,34495,95753,83324,71496,62817,31588,64474,82457,99646,61813,47390,55682,27070,51574,29817,25889,42380,84299,52703,77122,40377,36656,74389,68621,14431,51336,17192,94303,63339,82126,27498,16850,55595,44602,49384,68540,21599,90763,19958,41032,94731,28723,63938,23211,45183,56194,14813,33218,98470,65048,56595,56832,21980,77303,82290,73455,68184,88672,71997,78837,45166,31070,55651,27757,63352,88658,66326,64673,48614,14762,61063,68624,97257,71816,65910,55558,84600,59733,82572,59702,72574,68332,17919,27690,49953,36971,23056,44764,45752,57208,21625,74534,88494,79514,15939,39039,38189,74997,54968,41719,28503,79301,91172,86294,35446,18068,49506,28389,87763,86950,99251,39834,53792,98292,30597,84874,85111,54601,86963,84510,95023,89661,14208,29683,98190,75023,99288,10989,69736,39495,25429,88068,24500,48072,42437,33636,49278,81263,44587,55227,83242,41096,88664,93546,55069,16555,59539,38651,56597,60779,66542,78386,79584,94273,35934,18686,61281,55346,32191,15240,43096,75408,98610,46668,82066,57854,53072,66566,82225,39606,72961,75873,61479,45598,96103,65373,88941,87193,54006,19802,25081,55114,94479,91966,65426,95909,65523,33489,59730,46200,88293,84371,30807,89862,86016,93938,37780,42375,27408,83571,25605,93829,54149,26961,55553,20671,63750,73446,76485,12663,66712,40290,39241,44639,87459,62635,69788,38172,74626,91865,44084,15674,21667,69785,36226,96282,27943,91195,75660,48213,15268,13046,96907,40220,91095,40941,37468,76939,72506,57719,94341,82482,21089,10773,81803,28473,75388,12936,58533,97172,14162,94781,37015,14237,24514,93453,88222,23506,18558,58065,27789,63301,71217,71269,54595,95373,69611,69853,34485,18204,16872,66779,24832,37601,29953,11087,52182,77005,57790,78810,59865,13086,35808,19452,69498,12300,60818,29371,48043,44679,88932,54298,19030,72864,64796,25152,11435,42472,33701,16251,14711,64506,41111,48618,87755,13463,49395,81352,71212,89939,46855,56472,83983,31390,99000,98918,94052,16570,97390,44204,75791,62421,82377,53827,85162,89620,95340,60213,67762,16453,59521,69758,78471,52991,93142,13361,10502,78939,40394,82293,29751,67182,41668,69431,24217,27754,13166,89821,48125,24866,92214,67955,80831,71430,11714,98463,77812,68786,30353,15855,40060,85236,79989,11279,16459,48858,99311,13113,90703,30216,94563,82488,86712,14610,29030,86542,66868,79822,17031,99293,16990,74904,99645,68442,22556,61386,53297,59360,21151,36799,25207,75180,37556,13425,57197,55063,59893,26559,61992,45672,39415,69273,81689,65458,83359,17272,99930,96571,85996,91983,74750,54689,13385,36772,82790,47849,66004,36889,26772,16695,69715,41929,49353,74417,44196,75508,60402,66133,40646,43795,11562,18632,52643,94342,62205,11286,70439,49276,43614,70582,80703,79315,96448,21792,16798,99892,87054,52757,77378,24702,94017,33101,46739,67913,44301,83688,66479,22681,80266,30332,97904,41575,26890,22050,68042,42233,98202,47386,93103,97765,95855,33725,80427,50240,64602,13140,48772,87554,71410,99493,33447,30800,89325,98107,33971,24253,72054,85565,74482,31953,72624,21985,64458,63879,97813,36128,59526,90734,87102,78681,68503,44688,34210,23036,22609,56745,89405,89709,49963,41464,29335,62121,84995,49764,48847,57602,95481,39298,28467,55023,59652,91827,89152,87491,94609,84261,94593,92966,94305,57205,72754,52200,84012,79892,65449,87185,85073,72588,99119,43927,36340,24749,64498,28909,61605,35826,30151,59888,28182,37335,56056,40500,26532,13291,24377,89458,80895,29949,89096,93032,37454,48265,90216,51936,67426,59584,29632,17212,81931,84545,29372,31522,27049,41388,62943,71064,38682,76487,48986,42529,23252,67851,69963,12393,83063,71123,48197,18976,18914,91400,19367,79381,88514,59651,63712,18125,77950,29187,99949,40995,16434,62945,81230,92363,76966,46884,49441,80866,92820,44894,97348,29678,21237,47243,39426,79411,65503,65267,43590,26250,78612,64005,45460,30316,21135,71243,50476,55059,39997,29749,32665,13745,25186,73952,10047,95402,43409,49109,55902,23138,51914,78517,84811,89011,49820,34081,50203,22217,30850,35735,97701,62085,99552,51556,53082,93302,92724,30301,55235,50883,60819,19505,24353,72895,42929,25888,13079,30610,14350,52624,94421,28548,36836,58079,16372,60679,22943,54759,40423,76221,59094,86452,60204,27468,92213,71142,50905,66320,81669,18392,84152,92247,64369,68077,49592,21204,85336,70738,80408,57381,22026,14286,50232,84758,90837,72394,80317,80647,86876,15372,34680,63159,92889,46559,17473,44688,21514,98847,20072,78232,73423,32403,96013,51446,69666,54034,43369,99626,41106,20262,71022,16454,51823,63815,24823,17196,80330,10489,95485,91507,46007,96654,77396,18719,17567,49961,59826,42703,92044,48366,78186,81820,42846,58138,63183,32520,88917,80572,89485,14939,99196,45055,23515,26197,18314,32451,25792,59057,65087,78464,54291,90335,15905,42576,43106,91023,22263,84984,51274,64591,73326,80956,11588,30315,40038,57981,21389,77598,76862,48644,65649,76676,57489,48390,52586,10271,72439,44546,86928,58294,30404,87152,71765,14039,56584,99556,77136,74334,71762,92568,12654,11337,39784,95383,29239,31491,78981,25476,11291,13896,69670,19740,29328,19539,75382,74581,99953,79088,27616,34976,64164,37422,38369,70729,58630,65500,47363,56406,17624,30139,44831,37620,93802,60347,49066,72271,32328,97668,39259,99421,28120,22846,26661,73414,88338,22748,41965,93613,54749,79700,91797,88781,27191,52526,24629,90092,62682,81509,20033,70167,14621,35695,29249,90630,78851,55038,22264,17514,32790,95398,92381,44715,30940,70627,66312,24376,72298,52758,70802,60930,93912,16274,97571,51560,36219,84872,92598,63125,29767,46782,20100,29478,71300,51658,39402,70369,56910,11334,34829,83008,63184,97383,63310,82982,13025,41943,72944,27364,42451,27120,74094,99521,55351,82883,75794,53201,61053,43005,83066,35618,56407,28600,14695,69147,73203,39293,25111,55015,81701,71258,67785,73971,75875,67466,44949,47093,98546,93737,18023,39750,21400,56448,49548,17058,90676,81230,61268,36938,47813,94672,19926,90493,52822,60491,93106,11852,27378,18158,66013,34436,45160,12175,39605,32161,92816,10065,93354,95120,67368,16935,53502,39838,11989,79959,35827,86514,96038,71784,14990,96796,80691,97001,48594,99465,17760,83839,90311,30367,45338,53302,42004,22911,92868,81046,95510,77254,36523,46423,17787,43064,97206,65379,39093,31710,35257,20448,98508,47856,15791,95497,36543,81079,61446,59626,75137,57648,80235,69731,46490,71991,57874,75851,11971,80030,81564,79763,44812,27508,37335,60466,52687,74856,35255,38187,46620,59320,78330,67722,16678,99085,73707,87678,14423,68775,14421,29524,34476,15444,68474,92914,65732,60223,20242,87655,73813,49325,27111,96214,39862,38525,16793,56312,17592,43294,38223,62709,50496,36370,50492,71301,23612,62577,14672,36920,39758,39586,85697,33783,90665,43488,13707,37251,13187,16419,39882,83291,51500,81865,11027,45326,88413,92250,23512,12376,42551,45132,20638,11415,60844,30440,50879,37300,26290,97075,61990,36576,40098,15940,22466,53191,65009,92117,11259,81340,47345,62657,60121,46149,34170,67941,82544,16103,11362,86645,88901,95431,27193,64023,54829,17859,42207,90278,11502,90167,64511,62579,10912,12895,67327,44405,75130,52256,35941,43976,11894,10267,94477,52913,34619,66147,27699,52243,60052,34013,93640,74662,14760,22786,68429,64514,36769,21361,46545,89286,37723,84231,32123,97895,43850,79475,86753,37935,79645,74774,29263,15310,81440,33095,69116,22920,36088,66273,11103,82948,82633,18127,71648,36798,57331,99433,90654,25614,12086,89000,80382,53217,76055,70231,95129,29110,56429,35557,32992,94407,13672,32811,34849,53092,34907,18798,36636,23804,53180,56956,82653,14066,79831,79274,17053,60333,85289,88841,42463,63585,11728,81576,74646,75272,93859,83616,21712,78007,51167,59965,43406,83845,45526,28576,97652,55221,69164,16930,88504,59701,24197,10074,14949,31892,75612,26627,23767,21916,51354,72338,80481,83763,58902,20096,90290,48573,44972,27159,12372,41708,25443,24022,45169,94949,19975,69735,61100,86318,39309,76815,51011,68798,63528,84175,24722,68300,29935,63273,72432,14939,15351,57100,98057,16930,43535,35603,43776,39365,17688,51253,54306,80236,13829,84812,82378,46399,62070,64823,33348,36474,33985,77418,93659,65138,94840,95872,20552,33233,70217,40388,22388,40315,59403,69756,27708,25273,26930,50926,63462,69417,93393,17634,38262,35650,11768,15832,68967,38140,17174,92775,85627,58817,83854,93584,31633,37511,82066,54469,45392,75752,18344,81338,57820,15329,68178,24709,65739,97047,79594,45720,83801,40812,13267,12168,51855,95670,89463,45381,99522,34772,43390,85091,55769,69566,51619,14474,42600,79374,63919,55033,79647,19113,35533,70961,33789,97586,46810,83852,46728,65310,38711,78458,53454,41166,79302,13291,58776,96867,83667,69488,46465,36485,26561,18466,91310,49647,51920,25797,55681,42685,32233,36693,98823,43060,65819,54916,96812,19169,13123,34905,71429,67865,92452,20136,50166,23264,90830,42144,47069,23963,66513,67663,85113,25204,37083,16258,14215,30997,84577,45287,36002,44777,27610,76866,35768,77532,16791,30649,64968,53984,10240,68246,60090,64207,72587,27262,19847,60301,96603,12187,90755,21342,56294,57347,56190,60945,17526,24122,48548,76067,31609,27827,30493,99141,60818,71841,74708,34057,43584,87179,46056,55395,76913,47931,52231,47605,89088,31000,65411,68274,97025,22209,29834,85537,71967,37631,43846,85709,95408,14845,75890,20495,89996,62443,31184,23466,50388,75883,99589,51500,18381,54422,35618,29356,35143,89994,88146,79424,69655,27899,58859,31485,33805,22507,24382,25133,20022,35848,90480,41390,83211,38000,13460,64367,54205,49540,55938,16314,93845,67430,20901,74232,36525,65583,16348,99519,30704,65906,92016,37926,45752,52943,94084,97810,62049,99391,71485,77140,64383,58295,88493,24079,66310,36874,88545,81507,95775,26403,41807,36621,36508,61786,81339,68354,31260,93407,33944,69847,95384,47930,17358,61416,48305,46220,46835,62659,42876,17488,51496,94637,60391,96065,34903,86952,82326,38445,63863,97326,93936,20922,17800,87249,25111,47792,77672,40038,17879,27298,10486,13927,46138,10609,62789,43740,64945,90811,77064,90002,98808,43300,44150,89222,43566,23662,57303,87335,83280,82377,79930,95468,46218,15809,63542,36864,93509,33297,79291,28170,39709,46669,63251,19718,95104,68002,75245,91206,52707,58043,18820,24611,44088,35434,10175,81263,72522,70879,50401,45477,46604,38912,99781,96471,11058,59767,18601,62180,54339,81436,45705,14917,62661,24726,76747,35935,18530,29652,47337,72692,61663,62208,56499,52476,55945,42103,80803,44164,97884,16057,88691,24131,12740,67621,69896,60608,32431,90424,50768,24867,81961,20403,69199,84576,85531,56652,99819,66417,96338,63834,80741,75512,27997,75935,70684,73185,79042,74331,53972,51589,31750,78372,24879,11348,59825,66234,91647,10247,20020,73582,21943,42266,43117,85501,98557,87592,15738,62086,82004,32857,36059,16251,19939,19432,53714,68466,68619,95360,84640,30460,21555,78799,19641,70619,61495,22183,28509,55554,53685,65632,41702,59041,40114,62216,82885,22439,12221,57119,79343,34582,29768,61239,49288,69661,14040,17458,85446,45559,28119,30969,80499,77263,45776,15812,63628,85849,28435,28153,89682,30324,54217,78957,91667,82982,39455,69959,27620,29830,23446,38803,88796,29314,19680,65230,91070,24979,38699,51362,67347,48774,21279,45947,10870,28977,64649,79255,30820,13530,51792,22057,46844,82507,12258,21230,42184,75124,22494,69578,32069,64910,39251,19228,20712,87307,14210,42341,28099,59735,36037,22721,81323,53367,42667,22619,21410,34636,84511,50791,71818,13684,57221,90559,24400,30064,25893,89132,88140,46409,68187,56301,45823,35428,23647,51012,12741,99477,35245,37334,64916,26389,74836,86974,55033,79221,26176,62115,74957,60672,15980,31436,52412,82048,24639,16738,92035,38347,75018,50668,21277,23151,14959,33232,59067,77600,18699,16412,25182,98796,39793,15672,70375,68845,57633,22127,97690,18294,57337,16533,46002,33545,29026,69311,38266,91819,22458,55013,70691,25249,10538,32866,59293,12621,76701,45750,62335,65709,87963,79403,94380,90003,54933,80460,75218,57855,22030,53163,81973,38510,59037,92525,69541,34038,83038,66424,79426,34595,95428,77318,18605,87528,20146,19685,90091,54776,44237,83120,50722,91069,76983,51502,54322,75475,29658,32831,13298,30467,43000,93689,88859,76969,75909,51987,91874,17912,41602,97861,55092,28537,57489,64397,10987,95990,36681,74170,29647,48724,19137,89308,37495,56252,15756,20427,49751,62489,40819,30709,14550,18268,31877,89682,84140,73857,76494,32386,74934,28828,25081,14855,27437,67704,70516,20976,65440,98538,86666,38017,49178,19558,44940,74457,85414,35191,10322,57709,20496,30908,36804,97006,21418,83033,69379,22938,76763,94097,75431,47033,15918,68330,36393,44389,92744,99312,84120,58552,33361,51832,12152,51045,45115,78885,11801,14040,75430,36162,48077,27595,77417,70354,78446,47428,75007,23320,53039,44525,92098,31520,85787,81316,65150,78286,73155,89917,27012,33845,79375,45306,63570,76805,19655,13834,25820,68242,11831,88761,79808,12185,43041,22225,70632,93377,12394,34697,61916,86907,29312,22517,40934,30198,85622,48859,92094,86500,29027,67735,41053,25929,21295,56380,60324,19090,64670,85227,52868,53483,61623,76483,91977,77970,16307,35292,30940,78934,33858,47472,24277,89894,74092,37479,72053,26503,50008,37796,74608,96028,63823,38882,68901,26658,55253,77599,62593,67699,70491,18860,50319,84408,41832,42285,67320,12801,73553,23117,73635,24699,72139,52392,66583,92097,45067,18272,76537,36203,42833,70707,77695,28596,69605,88073,93006,27131,67837,88896,56266,91659,59025,36823,29797,67650,73511,83424,84436,34474,77700,25514,38207,56340,44936,75102,78300,39280,14531,21609,71790,41193,32467,51821,22576,12513,55211,15571,29330,95978,77402,59616,59157,55173,76220,34238,34878,72718,42297,80393,51818,16107,88438,44207,77953,86615,21889,82554,69491,76776,24571,44179,77912,28504,93538,83856,53658,62274,35945,17516,18790,24736,46293,14301,38482,11520,59128,17091,26269,22303,31727,73674,51528,70914,30589,13412,89879,30820,22602,67324,17084,25725,77940,26548,56639,36370,32304,16520,30650,82770,72432,34384,38371,85330,30104,73228,65614,34828,47448,33434,85140,95412,19947,65597,65868,50589,74254,35675,23818,70203,84212,11070,79739,81407,71361,82790,60221,57630,64023,54727,54105,20400,68844,35325,98368,20126,39441,87378,72013,46764,11388,26220,78099,20368,70580,41642,43298,10609,25520,90865,82128,75898,25300,88988,63352,54530,29724,44836,30249,69956,69573,96921,58846,59165,20682,95775,98590,61872,47427,75657,56920,58372,70118,80110,68926,58865,36040,28759,88325,47258,17800,99906,52600,81058,58045,78435,73441,96756,47130,19607,30014,61048,50687,29137,87605,62992,69571,15763,51115,95563,92428,99103,55337,28761,80053,95312,27397,48854,47724,42857,17864,91949,91895,54729,91983,33298,95792,16453,41720,30453,33781,32927,70119,50767,80068,29737,16070,57944,10867,48270,73376,59592,86463,40038,59992,95916,59777,86911,76258,82044,61989,38933,40691,69151,90940,82027,26354,78213,52228,61292,39985,52616,16898,31240,17694,37207,83424,65929,11605,31482,60067,28400,74108,91250,63358,42948,24677,55535,73502,96684,12334,79462,52800,32315,68226,89672,74040,24141,88312,65567,91884,39922,53465,54649,31287,39850,77796,85890,15673,84881,63944,95517,63806,98952,15201,70530,94357,88854,10517,17068,99653,61040,39285,49998,81429,78253,87438,38007,98452,37399,42713,65879,37158,14333,68048,57740,81543,75767,74751,79108,86322,32078,64273,36996,51080,75016,85130,90134,68117,74829,81112,98792,37922,59201,60396,88927,76304,40645,60691,44175,46434,23510,54398,21363,40582,86253,29303,77944,18489,95212,93426,72871,55521,49055,33816,50200,94873,92503,86175,60136,52948,36543,79932,63936,94982,25259,56899,48368,93339,95648,46718,89087,49829,72683,22368,12207,34394,77558,98988,55480,51455,72722,84921,70485,41463,65807,98744,71819,12240,33139,33246,30063,33985,54474,52473,19323,51138,88909,13055,53124,32667,66914,32055,12841,27633,81460,79835,55051,86438,69011,33123,13876,79702,21520,43192,80261,54775,74808,44893,77481,61853,34989,71773,76976,30198,45186,91978,71679,59193,53090,88386,77294,97588,34566,16488,70523,56127,60738,92363,69231,88345,17295,63127,70510,42764,88284,76956,74045,67670,55198,21688,28948,26451,23837,31279,72031,78891,53237,49235,62889,31522,93180,56132,18981,44604,76156,21877,27357,13948,48772,33345,75946,84387,11968,78544,89373,31826,53201,59121,39595,40123,75593,52142,32709,41662,79283,81426,76814,96011,36657,56966,95147,24048,84823,20126,45767,41360,84667,21201,84275,85185,21967,85446,21559,74260,71351,97516,51468,33926,94614,40011,50033,83659,25238,12670,57532,44246,56745,19890,49442,23115,77272,54686,82220,83504,72446,64615,81735,74723,42854,39548,21919,29972,78135,42012,81303,40152,79590,82388,15749,42374,92475,87520,18754,96378,68649,67427,53367,65922,95924,54205,39080,57847,75709,62206,99055,98930,41922,92974,41027,39394,37246,48914,30012,69429,53073,12031,86438,10987,51822,35682,37302,93604,46339,70354,73667,97499,49269,26620,14806,76042,56289,29466,41976,66791,13411,71804,80198,27867,79914,10805,61473,70908,44928,88727,99708,23361,74332,73369,57462,28478,94020,63450,80089,53235,92289,41207,91715,32367,41675,93461,65432,99647,47027,90442,47255,58119,83130,65422,60624,22694,17414,96654,12165,26210,90818,36613,38623,91092,58388,50020,61837,32906,27712,61495,10208,58922,20918,62134,38816,26735,86957,29273,37635,13580,24216,13675,28868,90042,22275,28704,61606,74861,34575,68145,89459,91935,73622,62672,95864,52436,26023,39662,80692,82702,73273,47863,33758,65533,43155,42964,10360,75481,24787,75209,75289,39412,90667,43077,19166,57531,86328,12256,29897,58351,78827,51308,15828,61166,34214,99311,15306,46505,44553,21835,93499,72482,70630,14084,59539,97137,12071,15161,61402,94138,27310,86423,52775,50264,70977,13846,78111,25408,49122,79231,49362,80629,16798,97043,77440,10426,74213,74405,81683,41769,83960,10090,72055,53112,55867,39225,76668,40256,98576,58462,11199,98629,38644,68231,19984,37144,75521,95567,88730,38640,65503,68921,64546,31256,95097,35034,85999,90725,45812,24679,78193,41536,99918,17207,76064,37850,44672,27880,20104,51704,29964,14265,25837,51400,90241,62451,66308,21295,28807,54797,47804,67347,86011,84367,80640,23240,37319,38682,17820,71822,75039,63082,39607,20140,87576,20436,63568,31087,12349,23796,61402,98993,76435,47065,99264,75723,63573,42280,89361,79858,32002,64053,34048,68991,15298,35072,77931,54866,16035,70766,66443,33744,15386,31782,63405,19721,82349,74661,37030,61240,70857,89837,50254,88823,45125,85033,77834,66532,21681,10258,17496,99229,38928,82045,99025,11283,19673,59661,19139,34653,29295,43443,92986,83145,27438,67396,65093,15927,88266,43177,92874,38153,18113,17222,61434,52607,73165,78050,96073,11134,82236,40035,45489,77121,37245,23941,93263,46905,70111,55681,48665,57414,53039,76029,97977,84931,83396,94677,74736,10856,20194,54672,74987,29178,90147,65090,48217,35522,84813,11142,35176,84229,98484,85228,68992,56102,56207,43753,66079,87657,47934,26014,62532,33034,29885,15297,17553,77268,61860,28253,24630,46703,41646,81243,87152,77967,49786,39572,47114,88160,96455,50045,62977,88938,60374,79982,90268,80761,54623,83041,85549,27460,85661,50372,20017,67668,42448,44606,78411,21307,32612,52262,61681,35754,33683,78658,42364,23659,13290,45046,89442,94765,45339,18321,84798,46098,82180,76728,64579,90030,22084,19866,69626,37066,45238,16383,23002,86766,14079,26681,37327,72524,16087,92088,71466,81131,97095,33717,55775,39957,81916,29275,14138,35421,57810,28450,43367,78351,91909,47300,68089,13189,86230,72542,36880,72521,86802,44666,36318,88621,52494,67756,57783,13770,11203,64619,68151,72568,18897,62260,68769,30159,24567,70982,74276,12719,81150,86681,89308,17590,73600,77295,85185,18458,15131,79209,39603,91472,82209,13204,64163,84660,59192,15581,36909,61356,48983,83871,59639,53138,46289,87480,69839,47865,95328,59124,95225,37564,57401,10082,80569,95037,99684,34839,89585,50627,40594,18683,70047,11864,29282,78624,67752,58792,35399,15916,65954,59471,30634,47174,34456,27580,94574,75974,94445,36652,39388,59476,19444,68323,73855,10588,47221,63171,93263,47737,79197,55423,23599,68140,54883,93785,46528,44615,47241,99356,45707,59127,89782,52480,33686,93653,71421,26213,95733,66246,99401,82756,89160,60368,87798,92097,86969,76142,61027,99646,82393,80212,14771,39205,13648,53042,80356,71190,54217,41715,40306,47435,59092,33277,91255,84395,14830,65467,79075,18548,71764,48251,19619,76384,49735,95397,58393,12005,12308,32013,58124,26519,65571,27680,42842,27296,95900,69594,60555,88661,96243,96150,50741,11859,82919,48873,74594,48186,30622,94645,94230,17045,52648,53151,90313,87990,99024,83698,90568,37856,24574,82341,49489,25182,73962,53957,88877,78534,84157,62114,36042,80232,15213,80394,57094,84053,12183,85152,62948,39746,74273,56162,45433,68531,93910,60639,35032,46463,72800,43235,61254,36542,22424,81728,69675,37370,71099,61474,36907,69251,25337,97079,80329,64975,18739,60606,47692,83939,27471,96998,69356,78616,94757,40462,52732,80158,54480,54037,61540,68751,98175,42677,92621,28248,14097,22817,41847,16478,72315,49441,89070,38624,99152,82740,60030,75616,44051,35204,58168,37564,98977,37589,71784,18388,50623,14099,87487,10396,93286,28628,62766,26206,49654,51142,37830,72080,64511,15752,36347,74428,64813,78228,53813,92666,99143,56411,65256,14583,38237,81896,60531,88397,68968,67191,22365,52983,73944,24135,98530,13267,22437,29466,49785,67039,85939,73551,37752,16412,94490,77517,51146,49948,88012,45403,49153,99519,12440,10047,59476,46249,43883,19241,42227,82238,47354,40618,28243,68669,16211,10456,78858,17388,97531,95300,20557,69851,19435,73065,34926,23596,25278,38138,95208,81736,25315,55706,27638,61042,78277,16141,19398,96427,75403,69265,86511,37673,33821,18538,45320,85752,87018,70633,88995,44350,12972,13351,92068,77992,41755,70051,71042,68086,16286,68648,13118,39021,75450,44800,25459,62362,77323,66151,42211,22359,23463,29317,88600,81661,87376,72127,52867,70887,26474,88902,62538,19172,71349,66276,83904,32884,47507,36340,45837,34320,77545,58288,38244,10465,55244,33454,24963,55079,43180,56303,83966,75627,33379,73162,40713,71314,63982,47823,92097,72307,62833,41935,69046,43648,96308,85456,34450,90444,94727,87920,23594,49062,74261,71040,37991,29776,17046,91911,33424,29695,76288,46751,89213,31030,24183,71163,40500,73016,60672,71291,56240,98457,99611,97703,54488,93982,46002,54992,68823,97559,92440,70206,82618,25574,81480,59378,96458,16110,96809,95054,73120,32502,76109,23561,38075,98318,41530,83649,95315,82581,38380,91446,22118,46443,83830,57503,62913,56853,47171,34873,28889,56899,56356,43760,63409,49622,98731,41198,46702,34477,46586,26397,34048,55346,32997,63731,85151,49131,82681,65143,61057,39169,22031,60036,58173,25155,32450,51640,11743,84707,41308,13107,11957,70835,58589,44682,79899,90658,55891,54276,99984,93902,13087,55686,57052,51948,75349,83072,37879,75282,20000,96732,52821,43012,69325,11220,62759,22602,72084,82794,75601,43589,67011,69943,48163,50794,88949,28622,52206,16293,46669,19180,53375,15863,99384,97637,69109,45683,97748,60640,15395,52054,86010,73710,94093,39054,78483,66001,95287,40560,91388,28934,16918,74281,66919,60356,82302,50162,79061,28699,92638,24806,77753,69633,37418,48787,27667,11529,51353,37684,49847,62914,30753,23895,44664,94248,24480,46186,11762,88294,21471,44301,97706,54776,47656,38482,84036,37388,63041,88833,65057,84832,86265,17230,39903,61891,46636,70112,81889,86013,62663,52379,48422,99559,23290,45552,66962,61414,47969,82548,47393,12033,35249,13230,82433,92057,53728,96058,88121,28224,18802,21054,26299,34839,95030,27096,58489,11779,36800,13874,11126,99591,14739,23825,55489,22995,24446,30948,88726,36749,36312,22927,95083,48842,84761,83046,26379,66281,25779,49768,73916,36438,39204,63493,70548,85630,41651,95683,53207,50676,18632,43446,46501,17885,69949,41909,78986,54622,71925,75888,45988,27402,38865,67018,66862,51682,94861,17306,79985,16227,74248,32156,34317,86738,40269,58529,72874,19403,52762,15124,25536,62536,21148,77929,33407,88616,28911,16061,35417,34861,14452,78496,84198,72508,64222,47464,47103,34606,66347,24476,14608,30490,22187,85109,23365,13662,97183,62611,12373,62686,13600,40239,33485,70546,15714,77008,91008,21699,48322,51941,36708,93956,63768,22932,49930,67908,15341,64829,61947,35666,46225,90693,96058,91280,80064,24084,43127,48303,87570,76992,94508,98415,87035,45768,16420,67579,97195,41849,92364,35423,33081,83961,64434,38786,70769,34860,76599,25483,45533,26085,99389,56441,71267,43957,79878,87737,85589,46035,46799,22186,82953,25376,42550,18669,26541,59394,21361,90657,69350,83226,30052,98875,85628,68399,35131,83364,67637,49371,77356,41466,40254,20405,98739,25746,79578,44754,75867,50961,43571,95595,44921,27373,58997,65901,13830,67798,46709,65918,72371,55057,12443,59715,35493,42744,81401,23523,81816,12513,72640,44075,76626,76885,29681,58594,51812,30059,41103,96380,96070,25024,91490,88024,61350,47459,97639,78096,79286,98950,76165,63719,93710,49522,89775,94653,10627,51843,82349,82810,65727,29264,23110,79465,35431,86283,67214,92105,73380,60637,86604,87468,74335,35904,81614,16184,68136,22598,22462,50267,95141,40612,44743,59981,48863,73773,88172,41858,94777,16989,89040,48825,10906,92343,24226,86826,49433,71548,50644,96008,60351,54999,72619,20422,60217,84837,23477,70138,98031,68711,23505,90498,57803,87135,20787,23493,59425,71891,14896,90823,78903,83174,45453,59987,26480,85321,91260,90453,36312,89574,11586,27610,88840,87521,60470,45872,18433,19679,95427,88132,92006,57742,62464,52806,26555,79330,23581,15168,75711,24961,28773,20930,39741,74748,25885,28866,86587,57896,95798,65087,97220,88447,34334,56228,87456,10933,92335,42098,40290,31710,95310,10906,22592,74169,70571,36826,60589,10596,23485,98058,44212,64952,90352,86790,31624,96732,92377,93566,95514,43733,15891,55560,41986,55087,55129,83312,57540,60966,12763,23425,69815,53592,14973,56724,22278,84807,18794,79781,49984,57268,39211,58893,41052,16876,56679,55609,99146,89794,82633,53881,77967,64726,30689,89719,91813,88926,20330,80978,10576,33255,96295,34282,79482,72096,62222,76993,54701,71189,26830,31563,38686,56718,80473,12314,66407,63936,73112,54873,45977,71596,92791,14129,15681,16580,20884,60272,26669,69274,61324,65902,71703,63908,98804,10114,93494,88861,48070,62173,35462,23536,31766,88005,58572,64472,54472,89570,10137,71102,12377,64443,39317,68111,47644,46411,78212,57243,95825,24430,97983,71432,13418,41202,24880,65495,39925,12448,29700,24684,28209,31700,12100,24279,15428,45503,19585,21811,14653,59357,35446,93251,20055,80706,33281,95127,41934,33079,87117,55917,57910,90051,89391,73330,37578,56557,77674,98799,67771,27756,11990,15700,43939,11443,42361,49592,66107,30480,73104,80811,45196,10003,35458,68391,82747,69815,78398,25671,38832,17164,58611,71062,71804,33575,49165,67426,15501,22873,73629,14589,43151,78312,29904,93471,22827,96402,80677,13838,75717,89958,61414,80101,79107,10662,96593,76766,39628,53485,96708,14990,95013,65491,59090,86916,60375,66443,12856,96779,69633,53987,23580,91915,50830,76855,70410,83995,87006,33671,36464,56566,41626,10889,46925,15035,40376,23347,11693,47866,75973,72098,24274,64053,38549,67256,81079,41367,81077,48075,39456,89420,77029,62093,43493,97438,42872,90679,17933,88147,25104,62886,63384,21349,12131,31845,36751,39539,49030,94989,20383,35719,26930,92956,94974,15886,12259,26564,90425,36305,95438,75856,19539,13665,95770,46897,44413,13091,56580,18998,28264,33547,59826,98405,50203,24342,71478,88823,73409,90654,97988,32867,85364,14902,74686,41364,61509,17673,82978,29887,51099,46781,18817,37086,19493,80730,96243,46769,78328,48987,84348,26114,13286,65504,28185,35612,94643,67833,75222,99232,16443,62316,92831,32684,89889,21822,85875,66247,82609,27468,15143,72140,90515,78952,21714,14282,30329,84310,90014,60360,23814,40162,31973,19613,62344,39754,92704,22067,32532,30518,65366,51736,24516,83062,15859,45818,71543,61535,95977,88874,82547,49532,53088,60719,20400,81592,69632,61128,79738,26946,63934,61965,76409,66482,89316,83878,56092,43431,59976,31736,42331,53052,28689,30109,14772,72841,79372,96688,47757,87771,98951,83061,52522,79147,92482,12248,89960,78353,57150,40112,34590,43542,26794,62761,97154,59700,48426,21489,74919,43008,82746,85499,97910,25945,59960,38021,25715,51178,19125,10615,62385,62746,69901,12765,31946,83522,83856,51168,91796,50285,39741,59487,44090,60990,90564,24530,11713,61024,78557,65389,57249,10889,61071,76305,16881,59778,93781,27593,41086,37360,47337,99718,21679,63683,70228,91898,74907,76814,68912,35219,58938,16142,53945,63110,93803,22672,70557,43960,32692,64680,68774,48241,41940,78859,48044,20297,55700,43462,71367,53899,22469,41442,59547,67523,47286,77428,76714,16994,71591,34553,46981,37386,63459,36323,73863,26855,55470,40491,41103,48750,23549,25316,92621,77826,33687,69515,18318,24117,45297,18666,96933,17726,98815,28361,13274,65045,48342,67414,21876,51750,91010,66545,97260,96025,14551,39468,70787,13712,62311,14014,36117,24408,50296,37307,56637,97061,35121,73689,44189,55191,85903,22624,88572,27602,22736,37587,21047,50996,82021,24383,56076,95683,55445,61917,15707,11822,21141,89292,66887,19041,18743,95851,87983,14784,60854,40093,10341,54230,57733,73503,40334,68708,12786,43608,19313,59581,30045,39508,17084,78873,83834,43297,87441,45064,60549,43148,48106,91554,81862,78299,17759,95592,83827,12187,83626,38794,78294,43702,88819,75972,36457,43976,86870,12308,92739,64787,97443,14663,63914,88030,84716,43700,52739,49604,37702,53959,99712,98889,39113,50384,30693,43011,99582,69384,52068,79705,98785,68490,73716,11072,93373,78798,51036,92994,32117,85729,89753,98568,92830,17373,50976,73873,98309,87718,35049,27857,16501,34593,40652,11790,63586,13728,43082,72214,43960,81402,87657,73484,53343,75658,18107,21052,17873,20025,23699,43028,19207,50476,72772,72091,76755,91720,30140,50043,29160,62638,79795,16534,79039,96383,25488,61153,25094,68811,43086,42167,35607,91480,36895,31719,65992,51275,39626,32307,97493,51302,45287,41353,55820,68144,86739,58195,16269,99295,23197,88711,63593,66022,22632,95875,19324,22353,16770,93086,14863,47527,23455,26840,45805,11514,54218,98570,59096,87829,58812,77170,86362,57880,30446,79055,65771,55057,50541,42186,78747,18448,49234,76528,59410,65842,12057,83067,92393,58391,75549,95330,48767,48220,97213,10020,24832,87026,82706,51789,82641,78653,43842,10202,46303,58668,51543,78000,28328,76859,21055,19249,74194,41600,82994,16065,43270,52189,75084,22359,49322,38171,56267,23305,76422,19831,19188,90011,40265,14369,77136,47746,60605,50432,61772,16911,47709,98194,47913,35502,56949,26824,32206,66595,77206,12001,53022,96400,69087,50922,34350,36224,39374,92544,16536,87678,19781,14317,70253,56867,57896,12826,99460,62629,26135,93922,14558,14604,51962,28761,54189,82269,15498,24515,87737,29688,91812,87502,30499,50030,11632,24478,19110,93851,85708,73832,45043,59055,86477,11079,51188,16592,91977,68120,28013,42293,69039,38363,80590,30810,90574,54292,39156,93995,85031,29673,90382,71523,86121,46148,35773,90808,98255,25887,49033,49392,61932,36667,47610,27891,67987,82744,61119,36559,61414,12254,11824,20363,61411,67038,23382,26871,58854,32331,52157,95832,11714,69191,37454,11924,52904,69895,56048,27676,47401,63612,99857,41538,22115,89582,80883,24312,37245,13905,68297,34013,39656,89827,13827,34769,67324,56708,30449,67720,38968,45026,17387,24584,63557,93862,71290,59531,75294,13217,50801,94658,90971,51220,26597,26214,96509,42555,61684,62351,28418,34195,19732,12016,53957,82414,19424,51586,28119,91443,42851,30495,73701,11731,49889,47654,45365,60441,96272,48667,10192,76124,88362,57491,73393,98464,81489,99104,89194,70603,14560,57187,11340,43752,64047,97130,10683,42924,82109,21970,63704,45282,47889,31909,21716,27408,77010,16924,67776,91036,98486,63209,75261,33034,54510,42870,67683,58853,21903,95607,23654,44438,43683,94198,57580,52940,34184,61256,71362,28403,94820,14616,26863,19804,84455,11437,83916,14043,94859,35268,22275,13252,14409,78255,59830,91020,28893,57732,23123,80692,83106,78852,17933,96683,86667,86065,78752,50534,21283,95877,88666,12386,78904,18548,36852,60853,23828,28374,45817,66332,10546,88816,91079,80458,76630,32886,19243,10343,60599,98252,46886,30879,73323,51284,78200,88880,47107,30439,82057,70902,23741,43985,63480,98486,33694,75730,76044,26374,90075,85926,27037,88858,97775,83451,51406,89015,20997,22914,55171,79379,73773,14812,77484,51397,98305,57970,20513,60755,21746,44719,97624,24181,56100,54158,31169,34072,56440,43446,34724,95889,74270,77009,95673,63473,96967,99794,84484,73290,27359,88015,24114,23190,98524,51859,34549,69795,27033,65176,72582,21959,73542,74496,14205,71635,35182,73833,46526,24272,89715,16228,95451,87108,51238,71086,93912,59163,94342,78445,48587,55015,81752,76943,45320,39848,81909,50709,60299,81204,37444,75981,22462,32404,99756,24104,13370,56597,99571,13203,81091,90694,11825,68560,51386,86610,15537,17570,67519,72677,18883,53464,92332,17371,97131,56020,47998,29758,44538,88699,42903,76193,54267,33158,93834,89647,10084,94436,56104,98926,35360,75204,51749,58563,34424,35724,12314,13629,50738,11219,25273,28499,32728,88161,11399,19093,36606,35628,11261,54935,80080,65475,77315,30018,68692,21920,54269,29695,23878,52137,12412,78448,41102,28599,64157,68729,55630,16177,98474,30492,71965,88891,70277,93198,70027,84319,74072,89658,74076,18037,85682,57291,71683,60116,79145,59696,44024,81439,88396,62318,98370,17917,95144,83721,96691,65489,61869,88849,69785,66563,57382,45279,30306,80583,39243,61054,93000,50923,73102,62004,69931,27345,87932,98825,30296,48709,64003,40794,57833,37387,79820,65132,29804,33728,81578,86812,87294,31849,83241,75116,99214,13522,83031,40822,23546,72816,14755,80898,62151,44718,86519,57544,74307,11684,21940,11530,42069,18972,27731,98455,36299,91157,95945,29759,71433,18487,43387,78957,10399,99774,14840,39862,47480,24399,48677,81009,18639,12002,36821,76326,23792,31367,82086,76541,13242,67040,10101,29459,98847,54743,92912,22387,72109,99079,96530,87366,76072,93270,68672,70318,22383,79357,78518,52513,62797,28119,59903,72519,22510,73783,95972,94488,28341,44304,83099,15008,16581,95393,40378,80641,60981,55782,80379,17179,63598,79677,39655,61054,57797,11102,54141,62276,81081,49799,89368,50027,10944,29485,81206,29310,24175,25141,39686,44002,29880,56583,12463,33102,81880,80048,35264,24568,59093,23463,43993,64630,61817,27128,59383,47071,40168,68945,20298,25101,94073,75526,19663,24149,90498,85491,45087,34810,52275,33582,25958,18319,24768,81127,74734,12397,45348,60235,81133,74045,11838,13163,65414,67382,45529,93423,49971,98583,44550,49202,31121,50244,49316,68372,74784,92981,82907,86909,65288,98765,77997,39340,55448,34694,91138,73563,24648,54576,52535,94747,54279,66368,98647,64712,20227,72493,34523,53639,98605,49606,67519,92823,20803,66811,23701,94896,78830,81597,99431,36514,21891,84112,61404,42694,60585,49745,81623,18335,87011,17093,52748,16927,27412,95713,79287,21452,41546,38949,32926,40739,32564,85680,66269,50104,74465,79056,64719,70314,59229,25095,70728,22659,65582,17737,62637,44918,75523,45693,44169,78068,81897,87204,79433,30395,18856,86755,90699,89809,76188,28398,83628,61873,20152,84391,22444,86043,33419,79297,15332,93816,98312,96687,33543,14155,36748,90398,76284,59074,86892,94106,58080,17253,89087,54091,54790,15899,77705,71210,21167,65598,75812,35918,77084,74377,66588,23515,62963,25041,72934,78506,20645,77517,44705,40480,81005,77335,91038,45156,69340,57005,77553,61620,92639,67350,85198,15894,75992,94672,65575,46199,33892,21261,44232,72224,77907,38148,65390,15499,65216,11416,49314,97482,89153,33872,42183,23999,95955,33888,78445,11214,57750,63913,41481,46680,27083,15156,79276,29155,54450,87408,75344,58868,51321,15042,22575,37743,48128,65385,67067,86860,67691,89891,85913,55161,11280,23792,70829,83657,95158,98123,82450,76714,76457,71373,88164,97807,32070,72747,43181,32694,86653,87532,65733,86538,67037,32722,47995,59995,64327,21186,70495,13787,21240,70027,63324,24813,54968,32779,32712,22979,98784,63523,61650,54107,61651,99524,74668,39515,95492,37841,17045,62631,29184,64467,51442,65893,33701,97911,47827,99860,51390,73351,45812,14931,18541,22304,64894,86422,50022,43247,15737,74983,98814,40885,16920,33699,93190,48206,26151,84761,42057,64918,39917,54985,24308,34351,99149,75081,65073,43518,64584,30031,39938,42390,34815,58586,67815,92820,47189,13352,71801,93173,62413,99759,12300,18420,49344,32332,72318,86376,18929,37752,60531,12363,68576,80808,21574,86720,32917,78319,64846,97809,35288,17759,13482,66924,63798,67212,14874,30249,41084,21656,75078,62840,63670,23832,29029,69524,57313,17812,20691,53251,90163,64128,30969,47200,47559,17868,63904,32194,44295,85620,98513,28462,99381,26792,90197,15023,45662,13554,29905,27508,62278,63845,76246,40084,93272,93522,72935,45488,50308,17203,47055,61189,67259,27473,98321,48963,37885,22365,37618,13888,99187,35750,59445,51406,54708,56419,38388,73256,79839,58684,40983,99297,65065,74422,94957,78823,49290,23028,85779,69401,74310,65278,14259,89426,14991,97109,23519,71524,87951,47621,56375,73158,39461,54642,32462,54171,47247,41999,48733,27049,71856,90497,79030,25273,77552,58199,37606,38277,37175,87080,78463,17593,10766,71589,14410,50392,29195,53487,14111,92189,29578,62957,13785,74026,72041,52869,11949,33585,98385,71883,57420,83841,64094,34355,58001,77748,64589,46573,80308,50784,42947,99998,52463,21465,67267,64856,21877,39725,64351,49673,45404,75279,23971,64821,67962,68327,69489,22625,43445,77734,30329,21316,55794,54907,56147,53259,81533,37257,29595,20744,61607,30563,86910,92443,12482,14700,95374,63659,15519,40221,43630,72942,53462,59773,29808,92502,13260,29023,38173,14797,41565,84427,75293,44441,88069,29874,45888,63293,72328,98210,24725,89269,33727,83154,80231,32009,35465,67928,46701,32842,28728,84376,91662,92094,85807,31036,28799,34999,42877,28094,76082,47375,23967,24433,50782,39188,32411,24863,22802,36350,93452,70398,63114,53634,74247,95990,55980,53371,34801,78059,67340,98196,17272,25434,62144,75322,38204,93540,14472,26838,25703,41207,94886,70055,19563,86589,17561,93488,26675,68936,91778,54414,50851,95116,58541,79928,91590,95859,74897,75572,85162,64054,63608,37276,18743,52296,61601,44362,31387,78978,27321,11481,94678,66243,96519,36128,61100,76099,60516,41283,50977,39594,33435,72390,22277,23166,98547,60295,16282,34517,87761,71516,31291,55029,17238,66978,82172,68973,94575,68270,16499,94339,14018,79309,38584,33360,54287,70985,99104,18735,83253,51785,66633,63904,21092,56813,33876,87520,38146,35182,72475,44738,91410,20145,73066,76451,40338,62816,71154,10115,73585,16244,93104,18572,30143,25955,59645,12397,41581,10498,68663,87629,21251,93309,20292,65460,29284,56861,49609,51987,92655,56190,22724,47910,43338,96861,73411,30818,29802,28088,92750,25726,88367,67162,38773,96036,77891,26140,87997,36027,66003,16337,47149,83183,14859,61884,83902,69297,68240,54535,18557,12392,99622,17742,97560,84787,73346,25969,14894,36217,69631,86940,91092,29629,51606,60020,20727,38904,13285,30849,56832,26435,91648,50364,77423,61682,75774,30474,74996,30905,10535,69217,19452,61591,36318,20775,16583,93514,38625,55241,20328,58078,60909,28157,65251,81088,28695,33388,48955,55325,46242,70106,71682,66236,38724,82121,27535,50416,51432,34876,62239,38565,67136,65903,21185,81136,86006,55456,28678,31798,43325,93936,99199,24608,61489,85032,65944,52455,42996,59433,20958,79003,43695,88176,50690,22487,89854,72143,21459,86600,98721,21065,73071,42733,73399,82282,79877,88475,53478,59197,67602,15335,46776,57103,29455,72789,10042,21135,35674,21464,63906,22297,46014,68107,44874,76870,72154,76580,88178,40369,81682,90707,96745,35529,70942,25509,82294,29155,37212,40157,53199,37589,61100,49428,49064,65581,80813,74683,58727,10489,70391,92243,11210,91253,29443,25087,11495,76909,76904,90980,48376,31445,90761,15807,19846,23713,44794,84182,34647,16297,45687,36371,34452,79464,85943,59986,46056,21799,47288,76483,75276,98876,27200,36115,23914,47394,31575,13653,92783,98139,95689,56693,70286,67898,10551,74433,30473,55441,68075,21634,25376,55524,46277,90330,61045,12457,61551,72795,85803,31631,33301,41759,53720,94461,15518,92126,66939,67966,23473,73020,78580,54765,78303,80626,70685,47596,93674,14082,92671,42901,27272,16081,80266,52278,19029,12326,12792,98689,42425,68298,24760,49326,37186,74939,50682,94926,53388,42769,35752,20706,12256,31894,90921,55319,94250,30549,57466,70904,73295,54378,96084,97093,87182,65419,85980,91010,80300,96687,94689,29685,78197,95462,54272,96843,13012,14982,44853,73197,94889,21637,37508,84313,31186,34919,37366,64471,50038,18739,54211,47282,26235,96809,57948,37035,31181,77692,55248,50230,31808,18612,91633,61333,74352,89791,90032,44240,83743,87417,33018,96327,25940,31148,13231,68267,67486,91941,58091,61300,89688,57674,93548,17106,98961,32669,15348,43537,15436,26462,71260,27571,53418,10290,35727,44868,62420,81645,62593,85864,16647,35263,77107,92915,61157,92040,96269,78577,66270,37056,10999,77416,52214,75698,19446,11067,84216,46157,83426,39380,81090,68725,17590,26680,92139,56906,62585,33808,37265,99068,14894,51773,89902,69826,98071,93556,44613,17122,19966,67678,63276,93383,10943,99816,23460,30378,67114,88935,82319,97258,22649,56848,73237,23182,12918,64701,64141,67049,96626,32065,54062,18129,67229,24382,48016,86303,20629,99946,46288,60748,92084,13196,69783,80924,30544,84047,44819,66243,97638,48558,86922,36740,44390,22682,17125,83963,68439,29093,11738,29697,28909,59676,70889,92091,29673,58499,84952,92308,94362,46639,66990,67034,11966,68824,84209,93839,24206,58472,73345,53997,69991,51494,85975,82479,42156,21143,57460,52157,73227,45605,61062,60643,48063,25916,64392,62928,47169,52292,68323,91059,64075,49200,52600,78038,88962,23895,72163,80202,75833,28366,59258,20063,42797,96343,50975,57234,48859,69313,11652,95773,55703,63669,44465,28864,33055,41758,10330,26909,85645,20038,58210,37163,62818,60711,35774,55473,47002,19304,25333,62227,11452,82240,68086,78236,82070,64736,49782,12088,31932,27294,64204,84730,14947,31423,49918,79310,46216,14164,47563,16938,54629,31787,25018,22835,79181,17997,41094,85171,35712,38512,69545,71454,67035,77445,64578,99037,98507,16061,85313,69209,80232,75875,99163,20860,20583,74524,61709,79078,46650,29586,12045,22984,18877,94283,38816,90889,16271,11915,97722,95208,29299,59463,66350,37332,63166,16790,82864,45253,88579,48544,31744,35443,49645,68322,67255,29301,56350,44702,83024,48125,71401,52332,40724,49288,85007,45163,42369,59386,74575,71549,33449,34054,88817,13908,56560,97370,29694,20520,84272,88843,33327,35208,14142,90166,27137,34549,81651,64467,57992,67088,72670,56648,24249,57614,92907,95299,77287,15498,51877,99494,49769,88021,15854,82817,92442,74640,32414,82866,39278,66073,80103,91077,59528,93608,94236,96321,25425,90436,44804,51006,45581,14814,50668,62541,11873,41646,22282,38827,24797,58572,52007,46126,44705,35562,13405,96450,76190,13308,59940,97634,95011,52604,14676,83897,73494,58294,50205,46705,36235,82717,66088,79253,62094,43094,26698,20535,42134,53619,40029,47021,27399,13567,39074,49301,64939,36390,22024,44890,56704,41470,49151,99665,12526,14555,95883,85917,56592,34865,73787,72206,35682,33792,12076,11394,50253,19981,10250,34171,31633,92186,39426,32399,44666,38838,49206,50159,95683,17034,11661,79052,22827,10535,53395,49598,91078,78804,43844,64372,23017,58646,68593,75521,28241,94614,41672,63525,68984,72327,41988,43621,87475,77929,12752,98141,24539,70938,89595,89666,63563,27827,25970,84803,69438,27726,41906,23938,49677,41884,43704,97845,84681,78574,86285,84651,62495,62916,72988,39361,16918,23563,77945,81043,58753,83613,60427,88298,61903,40458,13514,84209,39249,50921,46016,38766,43235,10142,69900,72541,24187,93096,92074,61298,46954,71155,58695,53099,46083,55336,89909,77411,16237,14162,15848,85549,94948,15103,27419,27141,88381,63310,53540,17829,76837,48514,55779,60289,54545,77728,76942,30315,20089,45310,27157,23437,68290,21063,86883,58333,92340,13305,85702,93132,61656,52027,58292,76322,94855,73737,79340,60522,21518,81773,71644,75158,30840,39146,66958,90982,21298,29841,43996,15839,31028,32531,55413,41783,41689,16285,74928,74648,73581,90986,32007,63796,85412,94106,73350,77443,99293,40783,16080,70307,24587,80461,48261,97424,74212,65518,72851,68691,71363,73357,65153,88026,16171,79428,97701,29134,29484,56433,82918,24449,49034,57512,34436,60879,29390,48957,59496,36358,40705,79553,55364,49107,24738,96596,27808,98075,35312,97354,96295,42489,51338,61693,69782,73151,71624,64638,53838,98908,49856,64175,53858,99245,71427,82973,43203,53349,78142,98549,91731,59557,54744,82143,77765,39593,98119,77636,46055,37512,29616,60333,64447,50756,66713,73345,60008,65946,48892,77063,68888,62796,39340,41318,13656,32281,21457,96538,83846,19112,48221,80501,69344,58897,52804,59401,18225,72742,99394,92413,35841,44993,98497,10316,92198,42381,10754,18194,67757,28556,31002,98947,13779,96076,13129,64495,16629,88368,47666,90534,34422,70524,85137,39756,63925,68682,43927,39650,24822,82363,47666,10049,90152,85612,44470,11215,69931,59806,16652,94175,58412,27510,26052,36230,60759,31237,65031,23312,87113,75914,52555,49091,12084,66318,65566,91149,76243,70892,39067,82247,59209,13523,72410,47127,93261,65907,42360,19709,13861,35760,16421,77710,68542,26322,75326,20576,35522,35464,95062,12120,69808,40217,25351,16847,86128,84501,27581,27781,79151,37433,86196,57759,45041,61428,98213,47763,45955,41494,57579,74294,21046,17868,78403,36612,18792,91883,24335,54622,74920,49204,62136,69253,64882,41739,50196,41947,85466,81745,36527,83046,85388,59620,67867,35682,45523,35198,31259,49028,84255,71319,10845,91138,69497,66914,59141,20339,42020,11164,84922,89846,69052,76353,29592,78291,74842,27145,95453,37002,86752,73157,65148,18344,97052,70844,24224,44073,69752,32019,55467,82685,63320,60183,98272,69852,95588,74748,80937,17087,80707,57843,85502,66111,41981,79888,53801,28043,42597,83912,80821,66048,26592,37272,16737,12990,66239,57202,26461,56338,18387,76563,78654,89061,18492,21764,40983,65474,53915,12512,85066,16732,53749,78038,29379,78163,50478,17063,40554,86891,63036,21764,30108,94015,20235,34135,96662,77844,47487,11638,29455,24242,78934,47180,10547,93548,70744,34441,17796,38016,59000,92217,39734,64400,12704,42350,24555,84840,79777,78656,20483,11430,89534,44866,70057,55833,83010,36616,31852,42629,43738,69454,18679,18756,38087,34936,45582,23031,29064,98807,56323,35758,95328,25770,96103,66331,21983,67246,22153,49333,24942,14692,41845,26056,43938,40109,63574,96100,44736,70854,54035,18484,58927,85749,38431,35444,58357,96617,84053,87613,66753,66005,94945,52507,16299,33127,39229,61233,51156,50752,11700,39172,45717,56565,99382,84562,49903,57693,99768,93523,78207,80198,26903,52955,20197,13480,50429,71006,43534,50363,64405,58885,41513,88196,88403,57154,87591,23958,88168,12071,77085,27743,95771,76276,56995,14157,44314,73498,85069,19794,35324,52947,74647,69284,49085,31012,79944,66916,13271,91730,34869,53439,52375,18668,52859,59387,18712,34899,82747,30445,43699,49375,54288,41548,52572,58715,51198,18826,84216,57435,64718,90475,94383,14952,52694,75852,31774,42145,31412,47135,48768,65485,78703,22284,89863,88366,96318,63694,89373,93745,46175,64672,64498,73044,57539,50777,59199,91957,27653,82525,77530,57900,86905,66832,14248,37864,65865,72706,32636,77773,90631,52169,71395,72195,30000,96572,58466,65992,21708,86444,877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,76329,86918,15180,88429,52026,27749,15069,22200,82978,38766,32912,69580,22877,60697,17949,80074,44918,50637,12524,65905,99160,89544,10636,21677,47167,63856,47294,35447,46785,26246,92969,36630,69627,21534,91715,68946,24735,77173,51644,79443,32397,10064,53651,47777,78754,94130,15294,73445,87731,61060,94597,76319,21349,89025,34898,56413,37550,34237,68118,73605,17975,22336,74126,64715,53577,87402,21221,90325,36469,90961,55287,52181,82505,28822,19029,97426,34479,74453,20661,91278,26715,10819,12143,72681,66976,43866,78545,79941,75287,66911,63530,68081,93584,68328,88276,28240,81043,53796,91066,84829,63198,72404,53983,92578,57726,20033,18135,87955,76730,65456,83443,10881,92194,98988,67772,84215,82986,14598,27495,37678,12096,38619,87386,69223,77513,85787,32843,66505,19374,16137,99245,99909,32245,20721,47260,20005,82431,21667,28774,98437,95126,40428,41791,65162,47677,83441,71982,47477,33759,80222,94209,70147,53559,39113,65808,60771,88914,12381,20983,97528,67091,88324,70397,74773,96604,30513,30638,78877,47454,24771,37695,45452,72595,36493,26214,30158,40838,95256,64212,44685,11654,64048,72882,13241,61459,59209,59506,94763,20664,11101,62080,96312,82040,39215,23603,35408,59872,82309,64420,45079,56381,64179,45147,55574,91739,58272,77896,14112,78992,62430,37011,95099,21876,22249,87970,41410,97990,26307,46072,27301,89515,83253,74520,19825,51440,14189,58621,75270,43166,81341,27908,40552,30006,70374,98398,31677,57127,26224,87730,52495,11914,78322,21203,61339,30871,16566,72521,98732,15192,46574,28021,89386,40986,98207,74730,92351,90744,91716,87407,67944,91136,56564,85132,69814,31838,31041,94722,20924,36251,15882,93877,39546,37690,35856,64025,41381,84036,90389,11450,41244,32137,14053,46359,26336,49958,41181,16989,89293,50802,75891,65671,16206,91365,33760,16544,68372,92056,51503,62131,94085,28813,98595,91071,17029,81811,69005,36138,74624,58504,91337,55085,17929,64935,88270,68686,60842,38201,22808,85656,33477,69242,12783,36458,22493,55298,27902,65832,30104,51522,51179,90048,41805,43869,70501,57758,90675,10772,78696,17518,73877,48593,12284,43122,89453,95811,95968,30832,86791,20499,63656,52603,78495,17547,92788,17094,57030,89877,57594,39127,10079,65003,11640,23177,33618,60103,51447,58403,76476,35786,78606,53510,36298,87998,54091,42102,61853,28270,25220,40874,41951,23433,92987,26779,91920,10726,67221,47116,69399,69990,35495,48987,79534,11738,73276,31170,84627,60182,38354,84946,69076,94594,13328,31898,43457,33749,90180,99649,21453,22493,52618,43419,41558,26454,81974,14572,14866,21656,73784,41926,73869,31655,20939,62403,79427,58493,63873,83181,63441,96961,68045,62985,50394,77560,70702,33518,59705,87887,25653,10332,40876,81470,60428,86294,50491,60294,67586,13983,49826,74884,10645,46259,66630,84950,90936,49919,23399,27312,18769,59787,31786,98125,84489,48779,68636,58992,29445,79291,33804,22047,16425,50590,36748,93685,70159,43093,74062,84113,82079,13970,98294,77229,90780,93233,73649,71929,77268,83272,48484,78302,29902,65375,84104,33393,48421,50746,82856,45536,20825,42879,44509,19146,83054,37882,10621,15461,86376,49313,81640,32611,42991,57352,65533,27825,85515,71818,71357,16543,34514,10651,92676,54080,64328,38051,30574,34133,73741,53330,81922,73816,40112,57570,48138,79155,95005,52613,23709,68657,27396,27334,92298,14570,27459,37704,49442,68691,72913,52365,78225,13519,94398,27730,48655,20651,54848,73255,73333,16895,58571,82034,26566,18859,34844,64706,72232,59818,39223,59262,71288,70827,62275,73636,18069,39655,90315,82031,96666,99796,44366,78921,36840,33480,11641,11030,89405,84184,71640,40750,24678,90519,34028,48449,59494,63427,76033,82937,97170,36511,90987,61120,10890,50510,56615,82991,22124,51886,21811,37543,76796,32666,28608,61233,47384,89638,39227,53055,74359,14460,58672,19679,64523,83470,77705,58592,25872,91718,66909,48584,51861,60142,26348,85961,40860,27516,36812,44120,60416,13594,71586,90932,72499,85788,58311,28598,82045,45106,96708,58135,35537,89023,65698,84833,98641,38211,94797,55695,14513,71237,40553,78026,16752,84545,59626,50501,53852,10689,27016,14606,91203,39925,59968,67199,81027,92471,31678,76360,71418,28149,65448,90372,10950,48243,69695,48096,90318,97820,73831,77346,72628,89468,54484,26217,54589,53514,81422,10929,40032,10832,95865,45232,86568,48815,69597,80051,52209,79417,41864,78521,10257,39219,75974,97929,64205,70925,38070,21901,79857,18079,92267,98350,23812,44331,59580,40868,18808,97695,48702,26175,20514,76637,64379,49383,35925,88147,64829,64908,80013,57664,62662,36884,82333,92874,64052,67206,45229,20026,68443,26125,10300,57537,44219,80511,23073,83126,65041,25261,23259,68283,86440,28505,25865,96333,62114,88607,14122,56348,31397,48098,66346,79568,86276,25582,38632,94260,58105,57897,81312,26905,33425,28074,49381,70374,62444,76362,42110,49156,46538,42703,89847,19361,24728,75063,61669,96990,42567,75309,57652,61458,24289,77600,30406,96669,93689,98950,12103,85728,89887,61288,35693,91267,16335,43125,65938,83872,73760,65631,58239,66000,68885,44921,55021,97610,73062,97220,60928,88622,91114,16875,54495,31805,48665,55641,16990,53774,13628,45067,68376,73841,44309,41845,81604,83807,25837,75027,47682,47380,13199,56105,50051,85355,19691,49181,88640,74724,44678,51078,70291,46809,90849,46917,53080,80606,65235,10093,18826,37509,64983,27358,84372,33415,81820,15517,80534,48248,38758,89593,42814,87541,76776,93226,82365,57844,43578,93585,34280,67394,25695,27109,69165,10353,67149,22851,17361,70803,35717,73014,30273,71703,35552,24682,68464,71878,41202,45923,42402,87595,83017,62870,26600,33285,96008,15940,83532,34364,78746,25317,16841,54272,52774,28972,98187,76211,52737,16756,42164,38923,28027,86994,30889,33349,68534,33928,19726,10144,21969,91963,42407,11886,52180,69335,12918,25303,58043,31319,80242,84792,10344,90408,82593,54380,17662,83397,51300,76624,19971,49157,21151,96372,43202,21939,33324,66706,69376,66763,26346,16251,74891,64137,67246,85029,56246,52983,47578,81116,51482,35046,91152,33383,66254,44956,70385,29251,73626,82780,56847,77458,63158,42045,81812,45683,41375,14758,29745,80396,62186,20186,99411,70528,11940,34331,45244,42801,91632,38792,21009,50072,80766,85445,45481,84473,19531,31549,26337,83661,58888,60461,99091,24615,73094,46506,49495,31886,51920,89299,54157,40613,32830,68742,96796,14030,34049,73511,99705,47115,99941,55271,77618,27638,64342,43332,30219,48843,31078,27573,45649,24694,10821,49214,68202,80527,53186,82394,81222,18139,54163,33539,80934,39214,24566,90161,76798,33244,54881,48306,45134,38014,47916,74389,99396,21303,28826,49815,18540,39445,27213,18931,10731,27439,99580,72346,57102,11419,15876,35766,43630,49084,98584,77101,88479,79192,31825,30653,40366,61573,14443,83659,16820,56732,81134,95702,79990,93933,49384,98329,55436,23645,80640,27926,49445,14437,26524,91943,48746,17036,87997,53831,70446,45661,61400,83984,61233,67243,73528,26677,30531,13649,63921,29079,90344,30627,89181,55380,38707,69176,56767,66140,29135,71693,96295,51994,86882,97649,35484,47384,28425,41220,93937,24195,83608,11431,12477,10970,78901,59418,57137,58808,56764,76195,23932,98485,73970,57873,33663,73237,16366,24588,64895,84897,94550,40026,91126,72756,26093,28083,88440,16489,69799,49924,14933,29990,35759,92509,84835,41213,65224,28680,82520,28593,32267,96124,56518,58843,94341,58552,24434,13394,49642,80629,69990,64386,58582,30828,13354,71280,47640,98614,66025,41447,84198,78036,93367,21407,71728,45544,82504,40489,87951,65724,41781,46256,77899,30169,43642,96134,68415,86143,64685,10249,30910,34204,10844,66850,14489,12733,77344,77974,82412,35642,68987,87053,24444,43569,56342,22591,40768,86308,61486,60524,94697,62698,87945,68567,11576,48832,65906,92334,53035,64435,36905,67591,32734,36553,55684,42895,73159,27234,65166,67956,11042,58668,95452,95791,17746,99701,13651,63252,11590,50672,38207,35186,59749,63012,78369,81630,92805,73131,69420,36762,24954,41937,54120,19616,76939,43749,27819,42877,48510,77382,85267,75293,91121,22696,98808,30793,96400,95433,83754,87241,62322,18001,97752,18636,40604,16232,21048,83677,45569,60951,25800,21100,20300,67324,52513,29985,21899,71176,26333,31643,83786,31663,13390,18430,20918,86499,10237,97362,83498,67638,85628,56326,11111,45765,79396,57094,30678,59703,42608,85670,14600,25335,66509,57485,10397,53641,68572,43567,14974,97001,22162,37357,45432,27902,92919,56234,21579,72916,50783,19331,81619,29751,20339,69570,83211,67743,30347,46975,92980,38881,22329,47111,37790,31591,71667,10775,80183,29088,91588,36284,37479,78504,82921,88769,91087,98082,78402,23847,41689,81482,89989,48601,64893,93433,74472,89750,43970,32893,46154,60097,15374,17963,73234,18344,81614,25461,98856,71289,51017,37655,90117,91615,49872,10138,96175,61535,22397,26252,47704,21402,34657,66708,76283,23275,87794,13544,98007,23008,22938,24794,62852,25809,89217,81514,82507,96063,78641,72974,12572,20760,85032,19848,67148,37311,16371,17869,16281,19663,44194,34047,52614,62440,39303,78484,20552,89851,49603,53645,30029,82395,23478,90678,18127,25073,94928,60743,94748,79702,30971,91924,14069,99201,18896,41812,41076,24743,18100,60426,73140,77547,77575,30567,53164,77278,49482,91114,21671,83769,81143,73052,64285,81659,75218,30903,15252,73336,57503,69413,22164,39249,27048,32403,60807,32357,36342,86152,89261,98341,53950,89412,77785,31950,14447,41082,84093,18812,78994,33993,68249,71275,43225,94046,29551,71005,31472,31495,32347,41342,66097,48042,20900,20836,20440,34495,69443,14325,35624,62724,64357,25259,99060,27555,32436,21312,49889,71268,60635,75154,74424,85412,38320,43500,33920,43870,31300,42786,67142,80939,54519,42280,78989,19752,39676,43262,92437,94446,14880,43314,27795,43636,65008,74990,43609,93471,65432,40097,37709,59692,30059,25794,77520,30445,88043,84282,97245,72375,41315,49448,16660,30774,57886,51002,82935,37634,41670,46395,50016,18647,74848,13097,11105,59320,37036,13496,89932,10931,83253,40424,38292,23789,32214,13486,43209,48324,94656,85632,36892,65998,21755,20110,82216,99600,10831,67563,43624,79244,10241,83740,21053,46277,29241,49163,33187,96183,17239,33841,36929,16283,70138,99039,26594,95554,88304,28720,64178,99444,90461,72382,14230,90814,75024,12616,85537,40159,75467,77341,77280,59518,38639,89336,49054,75345,24127,48558,94238,44554,80694,57110,54084,23263,11210,72476,92073,95166,91067,20211,30294,53286,99394,19006,15301,52264,71146,96215,62752,68781,10101,83865,78721,64575,86393,17232,27417,63352,28919,82923,96734,53053,12306,82965,50287,48842,35989,30470,92485,44680,14542,76665,48192,81943,27096,37539,90367,77168,48622,27638,82225,57109,68341,68168,44099,61020,61879,72847,82957,99503,44105,11497,23290,67488,53684,41715,74463,28042,40783,25824,41950,10001,17948,69361,41036,41270,16717,15794,78350,46727,71174,44831,82424,52368,93284,39562,43296,32109,34398,52055,46461,44934,90843,62809,29210,88463,20983,10382,71527,24179,44527,38761,58983,51505,90693,35079,90656,98820,18985,34247,71884,40897,50186,16431,91187,25890,15881,72526,53701,15136,77016,26922,51215,22983,94701,14138,19004,22032,61999,91700,56937,83697,39488,61774,17962,41640,75556,20304,99976,44972,33762,82870,81237,80415,75989,71389,87385,44889,43050,39437,89783,11859,74589,65854,97123,67626,47295,21465,72150,40792,84049,32933,69263,35412,91128,81650,61592,55290,43587,73051,39540,48349,44649,82335,26215,79485,66400,79821,92308,13833,41844,66671,11897,60575,88547,69862,26396,53825,28152,94256,14000,55023,14989,24942,47772,92794,82783,27134,13785,83102,66998,68890,70360,83661,14598,48412,68620,72661,48624,32209,58055,60670,98874,84971,50555,76159,10625,71999,81137,77052,83518,72844,47018,94540,32921,98048,37963,93394,30076,50381,16458,88499,59713,62590,40525,65182,54668,89178,77930,12941,77989,56875,98979,60360,40439,30263,23451,73514,73516,58513,90803,75124,96973,22640,83776,17098,24208,43284,67229,86567,94676,15745,36179,73805,71924,44734,90952,98397,49040,29060,10503,86425,46542,96145,68588,26996,33280,99777,34166,28657,95454,65426,58642,74414,62323,64853,33488,42939,64570,80286,90197,97419,53581,37245,96600,42260,71224,39250,26630,13367,83257,63631,97087,50009,62989,59246,26578,51839,61358,79566,71977,60936,40260,95377,81714,34950,91451,14675,41884,13662,70905,83027,78442,10263,45156,13012,38213,41275,83343,47612,68446,92619,78095,26342,18136,55755,98287,27202,52059,99458,59089,33539,11003,28262,44503,48419,98328,74574,98466,75189,97545,96745,56815,96166,99086,28450,61985,91990,17969,14047,91174,39806,84671,80205,21967,17349,10340,36439,78652,60004,44004,66585,51182,26532,16948,36666,52302,63789,65206,68316,23096,44269,17438,68796,45419,30581,95354,79401,81301,65520,34810,13059,13467,13450,29846,14801,66817,85468,74892,26087,32019,67681,77366,18504,58120,91049,84258,19589,55164,69456,13380,83728,87384,50610,59421,40758,67728,38445,99148,99902,81050,25444,28359,92826,97721,72758,64058,47959,27161,10011,17565,62565,17175,76156,69721,50761,25395,78968,17984,66927,85311,59643,20780,60998,92725,53887,82471,36647,99151,49878,76732,89257,18893,61526,52410,70689,72205,51180,58977,29868,56898,59840,10449,75244,57165,63986,45547,25142,74298,25053,69663,84819,12702,84722,38109,26046,57138,94663,46102,45582,80644,74938,87548,17163,21598,87239,43842,17191,59183,95316,34421,73275,58281,44864,31163,24943,90564,47191,55320,30820,17286,71141,62615,55638,74151,62918,16221,63720,33847,93043,65676,97103,49666,26697,92521,32537,50350,71793,66423,39279,56768,44367,94550,52997,56795,46394,36529,44864,14208,53431,92938,44566,28026,19073,73992,36270,70133,22704,66359,67213,83816,86209,46991,91355,34452,14871,23630,21876,63968,59609,44125,72459,60663,48594,38359,29944,50523,26362,62903,76281,98765,83290,43115,89343,71380,98591,57543,60303,17455,80799,55498,83049,10903,37488,67094,34874,14230,48554,20671,44634,14170,14628,16541,49935,54764,54154,43564,54837,70520,93621,13553,54910,82983,81813,51097,58536,95204,63512,17739,73733,38439,54199,21669,84598,63184,36514,29411,74139,33682,89600,82482,31183,90343,80632,14900,65318,99723,53836,40320,41743,26541,33622,51679,16583,14260,12308,25450,88365,34230,31052,90890,12595,23280,45044,13718,66516,21231,46718,35524,18075,80770,38438,85815,25253,42385,92469,74085,18776,10992,49648,22396,89642,57382,67352,14360,49928,27360,60835,49849,84277,14390,32602,53090,78198,38473,86005,57517,94821,45396,74773,90740,46981,77879,29625,34588,45585,28487,53162,81411,24215,83061,54532,96843,93659,61728,10035,59823,83411,62157,67987,52550,34830,74546,90195,42473,12928,17680,12331,76943,43063,46044,18047,75690,76956,69183,46428,35476,54180,46525,10186,27263,86253,67210,10606,77497,48043,95315,60403,94247,38349,34877,78228,93096,55341,88722,95210,82203,75684,63798,45323,58282,37393,27723,34791,65563,43858,76781,76058,80178,31548,91744,44312,89359,85230,19566,95345,74225,13442,14816,35426,35245,12945,28628,61812,75912,62445,36373,80249,53068,33288,58347,22680,24513,76369,30431,42696,40181,75513,55717,59347,66406,23588,37886,28708,17305,12260,94599,70362,49852,61170,59996,79336,41187,45596,95508,31600,15538,29924,45979,41715,79291,80707,47311,42660,55599,47073,20783,12187,39254,41328,81888,28259,21613,56797,66313,66304,80482,90025,32983,18184,11725,27381,70164,25724,74069,25337,24784,15869,82733,80096,61913,15938,86383,23020,96951,62977,26519,40897,45312,99422,36052,89213,60855,35936,61498,16863,92426,81750,12083,54558,23592,45264,93119,45771,27777,44717,23014,82833,94951,20180,14874,83518,33347,77500,35582,95757,92794,54166,62887,11799,54875,69136,35227,42379,43427,30353,96199,94457,22817,39260,55659,63158,77514,42520,35946,67223,44962,17429,98150,20995,79056,32221,98917,46508,68000,33369,20778,34105,73095,92053,88856,95666,36070,17215,70507,21816,57364,33053,85099,10510,92121,11750,24802,49508,66134,52556,67228,60036,69907,64485,90421,82811,37729,10068,58111,40151,71059,15127,45127,87985,34429,44668,52879,56223,96145,40630,45567,16695,80522,14889,84517,10544,98023,85170,14359,97623,11256,91616,32289,88077,19027,56151,25679,60593,97669,63153,65889,54744,24045,62227,16272,14758,40992,90695,33622,94335,27848,32604,97081,72469,58350,94648,47543,78777,31278,58487,66798,49012,92070,49788,36485,63376,16146,31560,31569,75642,87169,74233,93267,55965,84070,99055,33395,69886,42011,65034,13488,56364,79599,90442,63199,34135,61581,25677,96472,57747,49248,69863,11111,37661,25871,67279,10638,41254,72617,82614,59438,47192,10240,56617,18780,59279,22014,54784,39130,90592,53665,52360,92952,75036,44347,54323,44522,55320,93928,36479,56494,95884,99851,77307,61230,67410,87101,44238,90263,84666,22249,39768,16106,76555,67535,22228,29342,40754,10712,98276,59442,19681,23526,86522,33317,74257,27128,58190,35138,12092,36473,88787,91803,43821,58869,30964,22741,83102,75991,62527,45512,13041,57276,44486,25403,65582,73885,12131,95361,67234,44373,64502,17528,24734,51298,70957,13076,34340,24119,63183,44196,59658,98494,72210,55569,13222,96892,28302,20215,78108,58871,55239,19429,37892,64353,35969,42224,90626,44401,35099,23487,76021,54727,83619,36905,88918,32646,31290,57376,49072,64703,50319,82744,90076,86379,42629,44381,93725,42378,95015,12870,50467,28981,12075,29338,74674,67138,78216,97540,45331,99957,13438,71686,37140,20145,28662,50310,72654,72074,41787,76756,12712,57344,43070,59947,62074,61938,32071,30535,24601,13488,74379,57477,17095,11379,60178,92588,31496,30932,55633,12268,72119,48040,21580,91182,69703,37779,94156,64699,78093,12360,93235,76951,33301,82608,53211,52919,21640,96281,41080,95737,79622,52009,62499,52484,89611,70913,75596,10573,61074,13206,34235,21039,24471,29270,66236,46976,14089,98386,47074,68012,81347,76113,73297,34383,51723,20538,89355,56134,20741,11299,24936,63736,52108,84845,56123,82315,87978,57522,70401,14053,93549,21018,36614,40586,16545,75820,62375,26334,95811,62418,35647,38998,92901,69661,38383,66334,70345,75070,21933,33167,69125,66073,81440,64095,70543,94884,30583,19001,73719,34681,15196,58523,72041,21760,31178,25813,62940,63193,90883,28310,45214,39737,80771,91464,12880,71987,64483,21394,87053,19751,32150,85930,57966,92560,81649,64373,23296,34369,48076,88544,99836,43679,82836,37601,89217,73846,62600,63861,94622,90378,90509,74466,51889,85418,96178,43062,90876,75719,66174,58193,57808,28087,57765,10256,81783,18937,84694,63063,75613,16992,49498,61675,61508,80528,90613,64421,84681,91643,66380,13032,93721,44615,11172,59115,65925,66788,45257,26061,54390,12170,19179,63352,54141,58652,16396,44668,79937,93150,57880,81132,62639,43279,10178,69021,25102,47070,74499,78755,56461,79976,81672,54327,16130,62767,97720,23294,77939,77047,52590,23723,91992,30783,96522,50603,98032,87358,60824,49260,57541,83145,51079,95648,42657,81631,73241,74586,86745,97734,31622,68312,51154,32808,25209,53856,55815,24233,45774,79135,56072,92965,82595,20542,15894,82143,43917,98468,21206,74055,49238,21094,80065,72455,14121,93487,85955,13884,69217,20809,74710,87879,22226,34082,31977,14948,45835,33356,24235,20305,60858,33313,86488,73174,79940,61240,52250,34358,75632,90441,10966,80446,96239,24338,58870,20066,48996,60285,99659,31074,27051,16275,87404,38430,34733,78488,52505,56021,73498,70546,29164,97227,16693,27386,19143,11527,27052,62924,91039,27181,68153,96796,29539,93837,99056,19455,47716,13094,32679,74056,93008,53708,63139,75876,51270,94061,39794,24772,17955,82846,49492,39256,37160,58387,20777,14734,16308,79722,63794,72466,99705,54622,20773,77927,47567,69276,66639,93989,11717,52152,12520,27704,92285,98685,40216,32539,40473,41273,98542,21070,81914,50509,75601,19971,60379,18878,28425,62949,26231,68896,53662,53947,55848,15837,57779,13688,62106,10297,21674,37135,74147,53481,12088,37834,50743,68129,93259,13349,57641,30063,54550,20881,80842,59474,35232,49816,69443,60278,39082,16494,31171,59185,51672,61454,72979,84393,42292,72609,35691,30909,35204,56871,87863,45550,86483,31885,31078,14601,53616,53776,50639,26396,76431,83724,46341,82336,47343,34420,72537,44138,11304,44740,29803,61365,77486,12416,32155,68634,12922,78561,32646,36760,71769,54685,72575,46776,32049,19996,81613,75212,83433,71383,94219,85773,23397,53608,81867,27067,48995,62989,28862,31341,38082,46409,34821,57181,71598,68492,77565,39388,72550,84273,22960,79412,54624,26861,57061,23191,64984,80524,51602,36597,28957,46174,72114,11089,73352,93732,19578,64805,62242,14445,12990,91535,63002,19990,80978,11442,14447,33455,52092,64930,14314,75173,79738,23379,62410,94676,11629,27751,11845,45272,15926,84268,36952,41474,49247,46407,47813,67661,29312,75101,67383,94893,11279,17306,97422,44608,87192,81866,45430,42915,45962,43701,79384,98310,37425,91784,58609,71750,42050,96237,86095,34787,24450,68359,20767,92532,60144,42274,18926,99377,85126,53103,52652,53534,81649,76749,41961,70170,49190,48344,27541,97943,62243,22652,67795,90979,49760,48850,26058,56480,40496,20698,69539,33488,57582,13735,30266,34189,38198,36449,67561,71047,37411,63793,74035,55194,60064,18609,37912,87105,89958,13789,14139,68721,29418,98146,78119,18936,38309,81274,56970,72232,56945,53785,15389,14177,35251,38347,95713,82003,51237,76027,98972,58905,27146,26647,58730,97078,44636,93382,16440,91199,51116,69449,57061,49858,94761,97063,61725,23257,95350,37066,36560,44093,49841,84232,36710,81117,60411,13716,56971,57070,94230,55865,85638,44792,10817,37250,81005,20017,72770,64833,67661,10988,73864,52543,60168,80293,44987,27791,25484,29023,59157,73256,54808,40750,11223,84375,46703,92576,24197,67378,34849,84631,14527,63797,54369,85196,19444,39582,88460,24000,86091,24352,70571,42494,12895,73807,76139,15884,97240,17467,31000,72202,11958,96536,42236,21334,60253,20415,48640,91521,67841,68472,35951,15477,87896,60732,49160,77618,85497,49772,99881,44934,88232,33886,95543,20352,32082,78462,27704,56197,27747,21546,85052,64344,33725,91537,28290,72560,53938,80687,12078,93326,58208,85499,95389,21545,93555,51383,34312,59306,38585,22099,29163,17829,50008,37033,88486,47854,44985,67788,59895,74419,83003,83609,56265,42319,21802,74230,58845,98884,37722,39240,30734,66243,66271,84998,40025,24302,69384,43312,21448,39693,80343,68610,40903,60243,61811,67876,36704,90386,15215,21790,28852,75778,65104,16665,46787,91166,88761,30045,82742,97161,68014,73493,51514,63381,90024,17953,55220,65323,87550,97423,24095,32899,44377,23397,25980,64744,28728,85154,43797,78984,67976,19498,31153,65661,68289,89512,35927,21466,64649,60472,44371,50844,91260,25363,75409,25593,99757,23218,49184,40298,60867,48501,99363,24475,38803,47025,81765,95914,98717,88923,30729,97801,16182,77596,28080,78151,90538,46896,22597,29425,37809,66502,89106,38443,21137,65226,22825,63807,26047,48035,62554,36737,39066,73898,43452,11638,57241,68608,66756,29154,82682,21106,31417,24349,12785,58178,73325,57016,26013,89303,63530,27484,49883,36308,17986,18703,11802,26605,35115,89478,52595,51211,65478,87727,18837,95816,51175,97239,79068,73227,76534,83349,74727,95565,49636,76378,40189,96443,43494,65674,12947,83190,68354,73474,41960,64101,48072,75240,58826,31353,98749,83891,96159,94184,28653,15115,75152,46162,75319,98777,75231,47693,78549,56181,87908,26800,28288,48971,43927,76976,66275,70631,50755,35770,74101,64238,41613,42737,51808,31201,81272,21300,83946,59289,28067,43887,18090,23279,61632,78440,71039,69804,10665,84642,63480,27202,55689,21345,36942,61718,45734,99262,61370,30987,57985,68638,20296,45800,14878,53886,53034,52803,81460,64493,88928,60929,32969,83952,38718,77733,25265,34049,11474,95857,38689,20274,37392,94973,52012,52756,87534,39999,29838,86873,79615,31818,57219,67665,14613,56232,76843,45452,41183,40353,39252,72567,83076,13401,47944,95750,45322,59848,82821,94873,38328,34792,29256,89376,64171,45044,86670,53323,24054,51877,10020,92281,98460,15876,41978,46781,13897,93585,99940,40398,92446,71949,92322,89717,71524,47619,87907,85070,59550,29999,52429,75562,52272,40841,77700,37782,69441,73264,85400,28913,69759,80511,11329,58995,90190,16919,96618,61967,47748,25783,53829,54102,25155,30500,86274,79389,10073,34901,56554,21303,50177,85437,77676,14870,26703,52554,95125,84049,33421,50868,94149,78717,58839,17549,66113,90078,93773,32415,36148,75976,89286,35312,84169,13036,43022,81284,61982,83541,20040,17784,19621,15325,61938,10020,98874,96872,97855,84441,43843,94071,26381,45805,36008,14723,91341,64973,67655,33509,24564,60768,33593,10983,14809,92468,26461,17051,35448,30183,16011,48041,94711,56005,83409,90591,44673,10985,38496,22105,32311,40122,31796,67252,35608,85532,30843,75494,63843,23050,30255,76610,31901,71072,35849,30393,38592,74306,34533,34873,90483,13481,33641,54495,11239,53770,41949,12789,27915,17517,60657,31499,18587,16433,52634,43044,57595,19212,68173,73704,43377,60449,14033,47122,28979,99863,17633,67582,94341,88118,31604,73993,68688,87619,96800,41341,72824,87064,77612,26242,56231,76303,51065,51726,78820,24987,27102,46798,15618,51949,73531,96290,89011,43028,30511,17224,59016,11467,68159,36896,67494,55504,96813,83846,77063,54018,29977,94782,52076,80182,54250,14156,64615,72591,22634,65159,10367,33996,75723,22126,90272,20023,89421,60995,44242,16111,43617,65285,50591,52989,43920,28250,49149,80573,57772,74337,37793,76017,56299,11250,84961,97977,80714,98863,55434,50242,84733,68822,65051,43173,51602,78454,39686,35581,97819,47146,73560,49014,86165,53284,35612,53176,41415,23026,56683,85504,12711,63368,36698,86041,14442,32880,90224,61038,59049,32485,39164,12104,12111,24047,76820,99337,25487,89350,89637,47603,49733,73026,22341,64511,83747,90668,77877,42075,88175,80229,18331,13434,99161,51614,94280,48296,97295,85293,97174,97791,92705,86401,60220,76289,81391,48118,64123,13932,38578,81356,50302,85273,62638,93700,77826,18461,88100,90114,34901,68524,71074,26304,81349,89871,75143,63263,52648,91959,44385,76553,78341,83788,41178,25884,87957,50036,50147,22978,94051,18248,34114,61612,38517,28018,58048,94262,40832,21793,21051,49403,59833,64323,49424,62794,27283,22197,18646,47109,41137,21342,92718,53356,70676,96305,73322,13474,80067,52892,80563,99494,18202,93345,19916,21904,67550,40602,90924,26012,90508,28817,53919,97579,67857,21917,30482,21701,13758,28828,30011,75286,59155,74099,58908,55711,78361,84035,49754,66564,20757,87151,19234,33036,63483,50494,20648,55345,97749,37603,36568,10787,28514,32507,73501,40589,36446,56232,74158,63735,36773,61994,29121,49189,14582,45998,77124,13145,66175,32649,22193,61309,26884,17940,90498,77116,77841,29358,24145,65991,46865,46987,74413,48187,32616,10858,78553,95133,87422,84183,65397,84615,54608,89183,57408,69430,52895,92379,79885,70723,24970,91543,54363,50491,21970,17917,94269,12857,81975,77015,38334,63990,61959,83820,34891,65467,52739,57086,15939,77991,34010,91514,95867,84560,40087,50694,36821,44826,68981,39019,99388,69605,47176,81059,17913,51432,14608,74153,37454,83834,94747,64792,21407,99176,90149,32081,19038,68780,48302,30309,47411,56163,85796,34282,41801,70545,43328,81237,62670,79256,24294,27624,94814,98641,79846,69147,91797,22011,51647,60898,42506,91933,94244,86104,46925,61485,87152,42167,84299,18194,27432,33649,36680,97519,94717,94498,22803,99812,98405,87278,49751,33398,97434,77157,30436,52521,46463,82348,93525,79756,46870,96081,80694,19533,98291,48469,92491,30447,26735,43825,53461,51398,57114,35840,58878,30752,22878,64825,85400,45872,82859,66311,22321,31220,56803,14851,89281,79145,12742,97017,61607,77049,33472,81369,97835,22849,27093,18383,35768,31581,28608,44285,83658,13963,90253,30251,75947,23709,92293,45449,22414,88411,28550,63567,54919,34405,48944,20740,21377,89276,24266,67359,47310,51942,95559,59547,74922,60086,17501,27365,29478,19739,43109,57260,54991,22170,65266,36102,99845,96396,23840,77797,20732,98113,81261,94168,44951,37858,20724,15218,87621,90829,62523,31368,84725,32563,15624,42345,13918,79156,79744,56889,55190,64358,14643,88072,89583,51617,90518,88020,25089,60984,28747,70131,38179,54649,20345,85492,59351,14845,17214,68014,73445,73040,86093,66736,61660,93408,88935,31292,10650,10729,98753,43175,86524,44202,11594,25518,22232,69919,43400,35194,98570,64777,78960,63196,75315,11887,42623,12087,65186,73073,31715,86832,80080,71436,26346,93218,24733,48370,50724,42417,64934,39766,33079,44087,92569,76906,86307,11966,99195,22091,10861,56940,73506,44791,48422,61576,22827,40246,21535,88712,46059,84870,88013,98579,21254,33061,38863,15456,84242,35503,36899,68517,79997,11916,20739,34878,96215,94475,43742,82656,25670,37005,89129,94292,96064,39726,63517,76986,20387,27134,59088,41642,70593,94426,77233,95260,54868,70490,45681,35071,66503,41398,49564,17929,28357,67589,64986,58745,51867,37410,29625,10188,19811,38378,39557,70896,76509,60136,56990,84589,10887,85423,78676,34259,74744,30199,29828,86788,56398,19846,14268,50411,46355,54599,86931,38605,29386,88326,59184,88823,90385,24312,68759,61430,35439,56530,91692,44187,44128,70906,96161,82569,31061,19665,52202,90385,76180,67070,93394,36745,50878,78569,32033,58739,69012,29364,47533,28918,94131,24031,22197,85350,89387,51818,41736,97617,59917,73878,86075,25106,11677,56420,36026,12007,13487,31541,96296,67147,48410,45965,16888,23697,99924,46046,56124,33975,42439,14471,49372,38885,71805,66739,50415,42045,61544,79401,75996,80515,79893,82821,44365,25386,60920,27234,86597,15279,86468,87593,90247,52169,38275,82838,44852,26784,51315,82523,93052,37352,25683,78115,44686,36595,87303,22013,53140,88042,70945,53682,44318,55415,19574,16614,39898,52822,28371,15157,39202,73670,38558,19830,20384,63852,15145,16157,12067,70552,48604,22558,41288,29708,18049,70540,57282,31080,99910,24465,55030,58941,85208,55300,59945,87450,35585,41221,80174,95350,29191,96509,90983,90490,81930,92069,73014,79423,76531,52469,69980,81333,74723,20912,85258,98501,34582,51918,97501,39129,43455,84931,76393,65326,33795,20167,43873,85338,92624,17280,66608,33322,11338,97374,69020,72846,27173,95924,94064,58032,28694,67882,11353,13786,27306,69255,65902,29812,86256,38570,27106,61948,37440,97146,81631,47871,89889,85228,59768,41158,97618,76055,30998,37235,77395,54392,75213,26409,12895,93134,47318,53809,56160,57852,59154,63540,94776,83706,23075,50605,19599,90888,28447,24210,20626,98896,12626,84916,46185,28806,34932,26985,72422,42999,28510,61836,16088,23303,57828,28205,62292,88020,79616,38617,39445,92570,75540,30487,33877,95081,66521,81876,11964,42003,69111,27257,71086,95788,11439,58799,90137,51149,71110,47269,83535,11599,55210,96955,35062,14523,51678,30571,85780,58999,57041,65074,85256,89396,60125,77886,82056,72846,40304,66083,49354,94295,68764,46894,86370,59814,43154,77930,68263,25818,41603,92037,56525,42613,18011,52116,68499,87993,11551,25838,81146,10089,11704,14611,30087,97339,34833,50133,22076,82351,38557,86089,74536,81041,49286,38932,51922,91257,21421,19287,27951,13036,24902,53819,40377,19024,90053,53522,80200,63162,41042,66708,49265,72010,44578,16916,76296,98339,94256,97234,60439,16089,13599,27569,24099,26347,52922,60455,30091,36792,83130,52125,37424,91629,14588,61311,31252,14751,77291,86676,53908,58372,11481,50774,33889,62699,14167,30482,84645,36170,42030,68176,58466,54284,14987,62094,81322,52704,53285,59548,68272,57990,97066,84007,69646,75820,77472,75367,63108,96865,48596,29025,58322,89238,19820,78410,12731,37436,88424,91580,50815,18440,70502,22800,39943,64517,92604,53269,93708,56595,62321,68992,59464,96260,23669,49376,69570,67189,46135,39047,96491,25207,24177,66677,45304,73263,98579,27380,47103,55327,72229,31018,54294,38281,93827,57415,24567,86709,21083,74998,77927,78879,63822,38997,89953,47456,82101,17590,58458,64678,68074,76531,70848,86707,14388,62879,27094,22222,83245,46516,38643,90242,45559,99609,74959,79521,88245,99868,12630,96669,96384,45844,20411,38197,82087,17537,93832,57016,66132,81767,13419,95589,95225,44076,97460,79661,59517,38978,84167,71891,54410,41373,25930,74418,61883,65270,92118,37670,48836,95397,88476,27461,79990,65283,41005,67158,44046,48501,15960,67149,49515,57895,14751,57086,86907,44271,50809,55192,24167,51404,65744,63570,37069,36177,68286,41706,55854,29279,80298,41252,53943,51938,64218,78998,67611,45032,39532,88526,12098,56100,88813,53058,36845,86542,94092,51922,49356,24564,52632,71571,97337,27056,50321,77292,48360,92770,46968,97249,69265,67815,24012,86384,38933,11751,89612,90076,79622,11876,74883,54509,85329,33219,39838,31564,43100,15428,94988,72879,37714,91305,70780,64355,41439,13524,46790,70465,74130,95360,44476,44044,58574,26591,96548,29052,31239,22077,38452,79140,43294,25526,52161,14447,86545,42954,77101,21619,78387,94933,97618,45361,38071,62153,93960,63329,78352,40158,97303,23339,23256,11441,76965,67245,29858,69008,83079,75042,48514,28760,24259,50803,64983,24566,89231,93499,71812,54968,56890,84051,81780,14931,70773,21416,71592,78884,70458,70078,44850,99648,29351,43404,95274,14811,44561,30674,53564,69536,46653,52881,94560,99810,64305,29268,22575,65027,49196,22207,35303,91975,56035,53829,55841,79779,61901,30766,57349,77525,19224,14974,54411,45162,82639,12752,20834,43720,87834,44209,65594,22523,95064,89841,66407,67815,13716,62029,60850,19589,78411,18539,43445,99987,85930,57299,64225,46777,92977,96632,67533,87403,53862,35318,66442,66568,24670,47581,49736,53687,92410,59137,33429,86643,60172,52884,56112,35339,94103,16953,64894,53549,71775,93771,91766,89779,24813,66412,43682,33103,23855,26204,93457,80922,52188,54663,25371,62554,29623,58531,72351,95642,77740,21528,20889,58983,58318,77823,48549,36470,35298,69324,66455,13740,63677,78886,59750,52714,79778,59565,29854,79336,33019,35179,24621,30191,21502,97222,67392,35329,48971,31170,88653,83943,18253,31773,90601,53335,29314,36425,74227,95169,61175,16262,47321,12794,93855,66218,92770,88252,12322,29419,60264,10365,61181,45010,63370,16688,92607,59114,79151,75311,76862,39355,83160,74629,98774,62691,21040,86723,24654,82514,59259,25734,69444,19041,35000,79323,96823,88193,62000,17690,14330,58702,96681,69876,71378,73412,84528,55735,37074,34433,42944,19735,65491,95557,50410,52743,44687,11624,22297,76548,30458,25420,59080,49295,67502,16039,99128,66507,90331,52895,96141,10775,40481,81873,65064,11943,94709,10762,30729,62433,29350,53301,90269,25802,84001,89184,34610,32965,68493,47175,32612,81674,26862,58585,20556,48332,15856,51843,29013,46822,11332,21807,56600,98658,43488,55641,94208,87184,81433,82358,79951,55101,96305,54236,15495,79985,22103,31110,92936,86356,95778,86630,83941,67053,63965,10596,70760,53084,21322,37738,41506,15155,76894,42416,33602,39949,56832,96954,29390,79405,38633,59649,46662,31345,58804,81435,76100,88349,39562,59048,67937,50320,77395,21004,79115,64119,48109,61223,75379,62387,91179,70709,26128,54980,48785,65159,54815,78936,63406,78374,61162,21486,98838,30074,26420,64315,15909,82966,65645,96977,99320,57812,87709,15403,19286,17581,26238,17957,59583,23316,29844,34377,50343,31696,76320,85207,25446,46284,18463,33104,15455,58663,93671,57096,20846,45510,27492,87481,55133,64472,68338,74060,20373,68343,31758,54223,83664,12902,85565,76513,48975,97098,26161,95505,10659,63361,32416,66280,58638,41248,98643,46371,92181,81933,84705,48039,68093,76069,36243,94032,22865,95500,22958,96964,14690,24107,70159,49564,63297,54196,92868,18908,38555,23452,53583,81704,35658,29877,72846,11361,55871,88206,46389,17471,19243,60332,19816,43705,54042,34006,62954,29375,48187,21943,99236,87482,13351,26335,28249,94663,92954,29970,16248,48180,35635,73243,79708,66847,59293,46049,67420,79573,69054,34814,66346,34795,15981,43104,23240,92947,35560,36121,96819,66761,19554,76365,59192,48751,64975,83554,67804,43858,31410,29268,26193,24620,92925,76660,18149,23701,21402,68117,13048,74517,37926,35233,76571,45012,13591,81845,68936,99197,82465,67712,83186,92068,11577,50595,79216,46653,48021,94604,77229,86681,77781,30768,40512,76417,91588,52676,31243,86287,78062,48583,58188,43052,68785,93669,82512,54766,96320,27365,33783,94676,27441,61501,36114,28099,15862,78004,22422,21014,39576,55951,15803,22139,64398,14740,76930,25656,50306,97158,73624,37105,62005,94763,60156,81374,70811,51051,35770,79735,98580,51350,28208,32293,74665,11322,26867,82558,99261,23993,91733,28278,48309,61232,59557,75153,65972,67780,79015,56190,91300,73555,96069,90956,75296,31796,29406,77025,27917,44200,57663,71134,43436,49738,24133,34964,79309,94507,34444,60310,12524,59030,90825,81600,83971,59236,78890,63734,50972,62901,39851,55425,91358,62455,41721,60330,98110,32313,91545,83869,46110,94876,12757,65743,98943,30781,71727,99743,22860,69447,92809,96054,62077,47586,36478,43902,89911,49553,54803,38269,57829,39109,16906,86711,75171,74316,26640,43767,73008,26041,11357,82874,13258,75142,40136,37504,21491,77199,73662,20581,41276,36582,61479,57407,84514,85613,34867,72526,51152,56816,85474,52646,52143,40335,53165,42253,39882,23061,64076,59499,37109,53349,29257,86626,99406,98213,92599,75975,19077,53052,52853,46549,39240,50472,35542,11061,14453,23568,17543,24813,19989,34814,54046,64063,98347,47264,70087,50179,34729,51228,61876,93261,10227,23922,26018,77583,59295,69534,42361,69922,69699,86458,14660,92647,47459,29439,46681,93003,41584,84771,54170,95477,31782,36192,19122,50784,27218,53371,13670,84837,82169,65464,34026,41647,73202,30167,21530,52798,58259,86528,43640,77610,95720,56340,43348,69878,98060,62285,42344,69907,52019,13866,75052,10748,89727,42609,16794,95527,94074,26452,77177,27760,36433,93395,85069,71620,40138,58859,47219,16314,97308,73831,70958,53323,59662,42020,18606,39437,60664,42310,27937,39868,81936,38602,86377,40779,33971,71456,82170,62921,17828,50838,80820,41683,82665,88390,85112,33138,76557,60413,87009,80133,95925,94075,69890,72185,24322,22784,23616,52629,96924,34489,19188,28658,91361,26120,40681,21902,22141,21575,99353,48258,78619,59741,23436,64375,97623,97016,45096,25599,81288,68988,71188,91660,97986,73518,16196,92375,50298,53579,51943,20687,11800,45524,66439,49516,74981,41931,91831,40792,29389,16445,94550,94641,21778,91227,42063,86592,54586,42175,36615,80145,37464,63709,87972,38056,91731,79904,69163,82542,61299,36894,99025,65704,98561,88108,17382,35520,41740,58932,15531,12574,51329,26455,56813,86810,60124,42843,46367,12676,38759,55743,78292,48160,50948,83122,72970,56256,30328,23220,24027,64236,13607,48702,76120,54148,51406,67621,79394,87838,57803,30805,49703,18915,31903,81674,59397,50946,43114,20452,82429,14628,49771,38217,58227,49630,42728,29284,43939,59907,39171,25349,94373,64775,17214,47758,45215,79994,39768,80687,21560,43173,52681,33099,70571,96785,71284,86493,88258,65675,10857,74296,19553,10849,18034,50688,53561,37511,56442,26701,68668,43909,21909,61993,75641,26959,45839,35589,98918,69505,16084,76804,37898,21214,46864,75591,99967,23691,24064,46743,87386,46532,55307,29089,69756,76316,49096,17819,29798,91524,51984,68840,82546,72254,28708,42891,43554,32185,30536,84828,87081,32396,59052,12866,98803,96473,32336,74958,59862,76168,39217,60256,36411,99518,61501,13395,54356,31642,46115,86806,10506,68117,97047,90365,86016,39670,83783,70490,15392,94010,55185,37794,74433,88247,17390,48302,28357,49508,23960,74488,68826,94922,96283,52598,59051,84883,78821,20557,17448,66532,96400,28575,46535,11433,29191,35646,33346,15071,62948,79144,97062,31524,94589,25458,14537,49639,68881,91179,74307,58211,60015,47095,31036,24339,43986,60774,89389,24581,85481,88457,65913,35100,57552,66945,22787,33386,73337,96900,10510,45914,84482,94783,17706,94978,25111,92774,53263,55161,89162,41366,70871,73257,86419,60161,21315,17907,52765,80666,89912,58206,47232,71178,29912,61904,66232,23570,48737,54408,31738,69921,11853,92308,21119,78211,72876,90736,11110,32433,86888,32988,16932,81809,80244,83494,93771,53284,86793,58413,95878,13407,18502,29719,90560,15999,22761,64579,27929,17902,20879,57203,70027,94482,48471,10590,55948,13506,47580,33312,29548,10304,46949,97192,66689,40581,39689,40116,66506,84683,85420,50704,54406,87834,95692,72835,86435,16229,30478,24350,72108,75605,24398,42602,18818,27859,98312,30036,36812,70366,20409,12118,40048,92215,11400,22745,66388,88120,82242,66423,58588,59536,96046,35419,52771,38459,22003,34429,33352,94086,68990,37604,98865,89991,93910,16561,96290,38782,24588,69172,27568,14606,46283,11452,52995,93006,55449,36176,33755,23397,74575,19796,17309,64026,80371,33422,38308,62651,53108,94638,52187,82761,49395,71285,46037,93395,87473,95935,16756,82160,33348,74988,64529,65782,59989,75461,91395,60724,61911,32073,78827,41827,93030,92138,33815,43783,28736,12354,75227,44663,13863,13300,62695,13894,19387,77229,42261,75900,91906,48142,85846,89729,97472,94395,32594,97741,10362,87161,70098,45222,96754,94748,39876,94347,40969,61049,67389,18979,25574,78211,95743,34726,79672,10313,57589,49280,92352,95320,16514,22040,88569,40077,64385,69607,35306,34186,35781,75421,98050,59078,79985,74320,20458,93081,18763,45372,99014,98936,10922,55138,95787,13512,85430,69058,99425,99541,74873,90598,56348,69845,79096,71430,36455,36059,27522,95022,83041,70481,80100,38402,96769,60342,94495,34421,19087,60212,37055,17574,16243,33919,71074,83893,74554,89435,38358,56172,75462,34373,59919,38607,16323,55520,43720,53573,80064,54085,64012,15829,82856,85308,94272,53643,77540,50038,59357,45089,35915,22069,45212,76706,92303,61159,25293,29031,72191,32780,70659,87351,45989,32002,43914,94712,24081,53522,69551,67717,66249,90785,32513,72183,81698,10372,76547,86325,35779,31054,23696,87897,21566,37696,16159,67202,11109,93674,45995,55927,53995,21677,68107,52419,40970,90788,43929,21755,64957,40086,88456,56284,57172,94150,29916,97457,37706,80399,11811,14943,69607,67258,55849,85378,98062,36263,93243,72558,24505,55084,17572,55870,18169,98198,56242,50819,25309,17057,94757,28839,52479,24992,32064,68613,57046,31669,76531,24689,71998,79175,91326,71661,73447,47969,21616,47120,36312,41921,84666,17967,78275,45737,54692,31855,72343,57694,88778,93245,48147,65259,59262,32370,85575,94980,77726,83801,51528,85432,36583,52030,44820,63507,19184,74255,63942,22142,68673,53213,82360,79575,44703,99589,97872,77271,81245,11046,46276,59991,66021,65145,19798,55007,92110,26016,77335,72634,38985,63846,78415,89062,46093,59142,65279,86922,74413,49672,74877,77719,67852,26815,57975,32411,22068,45420,81596,10211,99292,55777,68403,66942,30879,83913,99846,60762,69979,97510,79048,80900,76964,37456,12559,82832,40900,84402,20198,95349,80504,69194,87258,49356,88582,39484,32692,45927,77501,96821,97925,76554,40048,80402,89928,40497,14362,26039,84181,96877,56219,93687,81396,65106,11151,65867,32477,76115,43014,70564,52015,71868,42585,96056,19704,23863,97354,15945,50558,79433,92205,94214,78211,26308,29505,40366,95419,48917,55882,78441,21994,23758,11169,63719,52330,65210,90316,31209,84812,70799,98347,31742,13647,75645,47202,80916,42975,68572,85721,25208,80746,20192,65220,86271,42165,94987,52230,46492,75355,74661,69507,70002,99760,61470,17019,74504,85550,20447,70889,30270,11767,69923,71752,19687,32884,96939,51056,53570,19521,95782,25600,86334,30377,22030,21758,61183,36847,13849,65025,59498,83465,48434,69243,86806,65056,53552,43943,42574,91954,66397,42894,11974,95593,25042,81438,89630,76428,60582,41616,30159,27426,56442,15841,13344,95075,32409,23973,91709,92003,70120,92152,70083,62689,96468,45032,49541,62293,11460,39447,19740,12485,14129,85267,19666,77133,99063,38530,65345,44038,17811,99332,68696,77647,55323,92329,90455,58851,65629,90298,81998,24867,45078,23081,38345,41469,60376,22505,23988,87346,93268,12636,99639,73285,47469,33806,84117,21066,97153,86939,63847,18097,85053,17192,90437,34140,61911,67197,77602,44027,55169,40513,98268,17255,60857,43865,48171,46473,82714,91320,81726,74182,13593,83278,55208,24899,43707,15557,84048,87889,55036,10534,24187,14076,21463,13820,44068,89738,10120,79982,95527,53736,11593,43804,57529,63667,20363,54075,16012,12444,19110,55529,67874,25958,45182,83993,79260,32394,42293,60873,90604,13480,99724,74112,12291,68679,90816,59273,65037,93400,13292,92269,19105,51371,23207,48291,42121,56806,80886,68738,88232,40870,24022,97574,56770,73251,83157,78542,72707,17752,69462,25764,83406,53567,66774,17530,81177,65876,78986,79232,10221,13787,83982,93563,63874,47392,23041,54595,39622,62821,46936,97799,16246,27598,42944,16820,61102,45008,19911,64585,66999,98126,60376,47901,34824,56044,41462,52958,67430,39671,35233,26597,16790,71772,91125,41695,31124,43919,39342,92877,44829,84144,11175,95653,11053,20200,48459,23933,18022,83490,95737,56533,35849,71079,24852,26649,42455,38353,41001,54356,68712,67551,94805,58689,37052,45808,58838,26145,18271,37542,94724,79213,31183,52564,40922,99288,99266,66581,59758,48093,83884,66174,16257,23584,39836,54079,67407,66131,68633,17365,46410,98409,26656,68980,82531,41068,39798,38034,26306,43754,59950,12047,18384,74353,93703,93916,57532,84885,19595,97006,99693,16434,10319,22985,66429,78085,29625,72245,78509,86673,50137,61160,24412,45277,15710,27303,89250,62415,40696,96777,25738,14650,10879,33960,95991,38088,45965,90990,78468,58321,58631,39711,34933,28098,56879,78413,45812,61696,47929,49295,64799,41902,32364,89433,64390,65283,96718,18579,69150,36014,32296,82682,81380,92856,37942,14509,62781,88992,76228,52140,58728,42019,26172,44514,17800,13579,44845,94283,68820,62685,49231,26405,73494,32881,29982,56663,91305,95318,37495,61717,36973,96375,71413,30792,57745,85510,87014,97342,40054,30274,25503,64879,34977,92807,91304,38631,70268,92710,24694,56518,90308,12559,27003,37655,53414,78970,55558,61935,18987,50788,49974,87681,49727,85308,70477,16350,46325,34291,78877,90440,50678,88415,75607,41053,47942,52243,89647,24356,48110,80406,24245,64765,18457,80691,12622,59252,71990,48307,84872,59822,78747,43332,31178,38921,70123,87425,36639,19832,63016,69631,35201,54967,27567,27772,27773,21901,77909,48884,32536,59095,69662,41185,49884,58230,61049,43888,50136,57432,62975,75466,42134,24077,75200,25774,42883,57999,94246,16823,86173,28488,70210,91453,46765,28290,61666,95473,10676,62534,95690,21121,31129,79817,50108,88219,69128,23965,65507,78622,65023,27003,83993,14167,11566,40738,76650,89862,31392,50140,30793,49629,83332,14122,34718,29280,59646,22083,72297,35102,74870,71941,22264,16463,72053,89761,38139,11027,54298,53088,38702,47340,30393,77653,23373,49993,26129,88157,73246,76519,55197,96760,57278,58806,96291,88138,76728,70497,75485,86344,68676,88307,82130,54280,58957,86833,11169,21581,98927,80897,43395,53726,22396,15317,60816,79851,61976,17886,68954,37298,63616,98355,44985,85213,56305,34446,84719,22745,58718,50458,57906,63108,89382,23826,48100,54303,57027,98271,35898,42880,11524,47806,85542,41399,90625,27191,80342,39396,11617,64659,82129,91901,43206,32834,47639,15419,99088,32112,25318,80378,19329,74867,74912,47835,95814,47710,81848,49052,19183,63552,13858,79954,92834,66493,46323,29899,30422,29012,97066,30103,51597,40534,24812,72856,56380,77982,34906,82870,31723,34518,53415,17378,28784,28705,45468,52272,61229,67443,16590,56278,37354,63764,44493,15955,88916,10477,93192,83728,95854,79335,56545,43157,57716,15801,11306,31381,61977,75462,27585,34949,97638,65113,64308,20073,50002,89961,76914,81225,58599,17481,34487,12469,70535,92518,17007,30061,59803,25450,79992,99514,22507,73157,91767,88712,20332,20015,74628,47232,58346,23352,68908,78864,74245,34626,90722,17790,43815,78266,33777,33602,49847,19612,81360,92336,43843,25149,92298,94586,65151,81254,15842,20991,57863,27632,46776,97175,90545,80379,43773,10394,51733,95217,59088,29602,50585,80477,25358,59367,96784,61178,38554,39303,37604,70115,13617,43280,99284,77133,45505,21406,82403,28534,12065,45607,32356,80554,25820,87512,94798,46874,99650,81435,54167,45142,54339,45039,19615,96060,12586,71816,86407,91788,67630,28178,98362,27537,30793,95637,45151,54977,90748,97401,36769,79033,85369,43132,51581,53283,62707,22115,91685,42954,27615,74146,83991,19551,60831,98978,93677,64347,80144,70305,49394,62325,49952,52893,62875,59148,98711,56172,23929,36364,29703,15169,20674,43636,40892,15147,54733,46450,55477,54367,37731,58064,96521,19822,71629,91071,88321,28992,81023,65536,84023,47847,36375,93854,87794,94583,56583,93472,79848,32931,88984,29357,30155,98457,82652,35484,52157,55436,61276,80023,63079,43113,77348,67154,85997,43629,94916,92753,60165,75756,20621,19361,87138,18645,36560,30724,61916,28316,61553,38664,49735,18035,44758,58716,35929,61692,12803,62336,63311,55948,64660,10997,26009,50449,87304,67855,46655,24334,85477,24366,76635,51645,50804,32303,61281,89931,24487,49782,66441,26619,45989,52551,44936,75139,81500,29492,41740,40971,21063,87111,55229,85683,11882,19456,61510,88179,78500,41834,45564,64334,31348,32969,10835,30019,90663,28453,11922,77736,96009,66921,49503,19308,99451,84653,70798,34489,11306,31613,18075,17200,64930,53716,76556,64473,39695,45497,25702,76307,34751,24957,73462,70516,38845,23338,74509,84827,21908,83817,32644,21916,35399,15713,28288,52239,52238,26155,45304,48198,43975,63964,79331,58222,64429,75168,78005,80185,23801,97083,60864,94789,74055,10767,12454,75926,28175,85159,96126,30793,67814,73434,83548,32332,52395,12037,63071,48192,41293,58434,83190,99710,30323,93814,37780,56483,83409,51273,52294,89008,63708,58512,96291,89454,79816,20197,32937,14418,11833,53004,53921,34890,93582,60528,42761,80912,33385,91198,84171,75320,69518,12646,37075,90878,77954,90808,16096,14902,22494,95077,82940,31235,29777,12995,22357,46238,20103,75281,23726,87636,92194,66439,76672,93517,65070,76609,54374,72489,77041,32184,68253,38961,94135,49542,30215,62654,55385,23615,50820,14846,34551,49241,53944,89663,40785,57769,23450,86969,83549,72011,93110,63266,67846,43631,93407,18795,89873,76988,43153,50608,20017,34307,66025,38244,12591,25292,46772,35541,35369,72115,53117,71074,13021,70571,77429,11854,19690,35004,58720,25010,79003,88638,20720,27150,55948,66922,10247,23506,30989,26431,47067,41483,42863,83772,48527,77360,41677,80021,85438,91808,17075,75390,59070,15769,62568,31287,82227,89907,13393,35749,38858,36746,42617,90188,44200,23934,26581,89315,98456,73693,91616,65655,87396,44214,49555,89411,80184,32476,53913,44950,67130,66933,88264,78782,16541,77624,91039,86892,23481,86288,37214,77761,86855,16251,24777,23311,78894,10620,51526,86399,55896,67678,19681,46752,68196,21343,19116,17171,42249,78383,73997,60553,21032,86171,96550,98866,39998,66706,43562,55216,34748,27403,23000,60499,84356,33771,87426,90284,58974,33137,43187,40305,32027,40999,54095,96726,91334,92115,93738,80077,95541,44736,46212,71747,66473,48818,30927,44241,83813,64168,90739,58030,55171,39590,57240,33613,53010,90527,19073,99970,61853,75586,82164,69918,18779,29304,97130,53536,66624,87928,96593,63629,42440,36683,69040,87729,98141,65472,79127,38236,63691,38370,25179,21446,12428,13032,17718,47934,46641,39745,27896,88857,24643,61284,18274,37513,22876,46407,17092,90700,47208,97012,96018,27410,53029,39766,25593,30100,30442,12968,44297,32303,15096,85640,52334,53744,56780,77599,95771,69809,30840,50805,62086,91135,27330,27328,67206,21216,84793,72666,60938,35758,87458,88645,27410,62435,75913,78908,30821,42449,81132,10158,57009,36376,37694,30643,38528,79530,92069,57504,93076,46963,40366,65030,85892,55575,76374,41528,66920,13257,33024,23383,66647,52190,83883,58818,20870,16369,88379,43880,10200,56475,99328,87798,50673,45580,70576,26497,53965,48380,65495,19021,54914,39635,15847,82298,18710,38944,98494,95651,79743,78928,97543,26362,73775,23144,39615,73812,72663,72143,66287,45417,24698,73664,50188,51396,34868,38010,55881,10456,55737,40535,30902,21997,59577,47908,86269,62181,56115,59060,87436,21338,60224,15391,33320,56183,39636,89200,42923,57879,88510,61781,15833,41022,88201,59498,10201,43595,46574,35293,82238,36916,89626,93195,65521,71451,39921,38824,29358,48019,24256,61840,13524,65859,17891,44366,93549,29363,37913,22122,63941,30254,26283,36691,13387,66830,96120,34935,33484,25694,77126,38477,88070,82778,35918,75319,66165,64868,63345,21272,62940,77432,65248,49691,10273,46351,12776,91823,12741,56655,76587,55031,35529,93188,68583,29413,22699,66876,99200,73449,84426,90954,27303,51454,68292,64918,82465,26919,51747,15157,59723,28690,10055,64380,33856,23264,24153,45533,37754,71147,82799,94516,45417,94436,73589,19392,16207,87266,27442,33743,62364,61563,19053,49820,34260,98619,12459,99427,13171,16034,53077,78695,73862,21473,86119,68406,67788,65358,88085,49640,79894,83697,65141,95249,76582,78807,78696,67179,98908,44559,46896,76257,86853,88638,89804,90058,87521,73858,46040,61285,95707,33754,10587,73529,51732,99492,24057,57983,35852,87831,14536,58436,67726,99923,51653,84101,52490,74890,86918,21469,48135,73321,34771,45586,12851,45353,33345,27835,48039,34723,80859,95082,12674,22991,10189,63709,91162,34519,28767,25758,69468,47926,48713,65442,28542,59592,65229,94233,15568,56702,71230,25777,48721,69768,81773,15482,43646,40319,64400,79305,39731,43440,42496,37022,46522,94685,98907,19701,44710,66232,86696,69390,80514,30427,11867,77793,53406,99700,89375,15163,22515,25667,16909,95575,61289,57517,93821,55503,72285,14176,54370,97918,42951,56729,53757,77264,45503,37635,67312,51966,18695,23568,54332,28738,52198,67470,26596,70308,41666,79719,84567,26520,45887,75665,63018,94370,47722,13854,44608,18904,76909,71342,42456,72019,93999,39783,34232,31518,69154,35253,18523,55032,94558,31871,59997,44996,48581,36581,96067,63489,61895,37430,84541,75069,19062,69417,94232,98787,53787,61485,59677,36836,14379,45877,13542,58094,10638,10636,42998,18144,87036,53840,13359,25837,55895,98165,94290,33235,56868,26957,35545,83806,86810,85026,35439,94946,21912,66732,83565,98514,15611,21660,33550,91988,74458,70208,31463,37655,37698,65081,10945,75094,43150,77643,64244,94490,18822,89629,50064,73871,30547,75043,54875,93974,93822,86323,13681,46064,49939,26506,61118,34468,81106,92613,21838,48295,19368,79946,38984,14317,16862,65998,10483,83228,61372,73914,22604,79640,36082,80101,29028,35824,37137,82137,44054,32420,52323,44621,66209,84722,42572,54865,16288,27152,22573,73983,98052,13212,71551,48332,59141,88726,35308,34801,75772,45476,40122,40368,46555,25606,98243,56670,45330,97576,63167,76836,55415,87585,83391,90375,63458,61634,67893,53592,51864,99872,57830,79153,28174,28714,59911,46977,58981,78308,96438,60967,71550,17661,84702,49004,11924,48555,81044,55276,51036,61989,75666,49823,54278,57015,30840,24240,80804,42270,32716,78344,74984,94037,10497,64145,70877,15766,81285,88233,96595,83963,94859,33618,18707,42399,95764,87580,88556,65659,32305,39004,45533,28409,28322,10299,56513,80462,85615,77636,61966,13838,61212,18668,79534,25489,69236,29201,20314,41677,99579,36261,54758,58071,83222,99883,25219,39041,21297,65517,61011,46681,33699,29921,52208,31714,14135,14835,22447,67692,42081,26086,46576,72017,80599,15861,81263,64349,21965,36280,69280,36251,70451,26891,82219,50852,12883,11060,19300,43005,88806,25626,33663,91230,45072,20135,16923,34913,13355,75786,85045,80676,98876,43140,43737,16206,55327,13525,15482,73658,88089,77452,21905,66110,34134,66071,56193,10408,64072,30626,47126,82940,89605,28579,49751,66595,67540,98466,55137,89638,91892,10715,11205,97195,55415,31088,75585,74298,91782,21396,25663,22709,34390,97303,92019,43276,25630,79150,15933,34341,91833,98398,95209,21819,22451,72805,64761,19326,84430,57129,96591,12187,47194,12220,47971,67486,27195,47714,41333,65697,61131,39283,46787,65073,21422,26602,81095,22983,67782,43299,88839,49181,53479,27428,43272,87530,18765,69441,78305,24835,34573,39090,14400,47498,43465,49253,27538,84196,46862,55233,47082,99756,16306,83335,95873,89720,36925,85117,68228,29524,34242,11881,28620,20808,65355,78096,32070,47488,94683,55974,92359,95172,42343,89791,78168,69960,58937,89081,38513,74294,76740,79453,82172,37163,44631,99345,75804,81821,52770,76046,67005,34917,47686,73005,31897,43241,11457,38049,36966,42801,86374,43021,88982,13059,60690,96067,13076,90800,18713,66805,72331,67051,21236,62463,52322,17053,46369,84009,47191,85243,97706,35701,45015,25850,50700,22558,57868,95461,74819,31392,26797,74415,46493,25641,89012,13632,52597,57074,95095,13336,90450,96827,63219,15417,26513,43650,37632,60667,64368,13241,36221,28874,67161,40210,54915,42490,38862,69894,64835,53764,88971,14839,72980,92636,73676,94273,88040,71617,45187,34763,48157,90995,49194,72548,75329,72790,53582,76906,94342,24883,22647,22589,15510,62378,63913,82166,88946,87149,21008,11132,84283,45361,97722,41383,24321,45171,56509,95696,44782,85391,96107,34823,60395,80471,78569,25447,86917,59490,30116,96796,31083,85961,74677,79591,25897,86375,55621,51233,56926,21589,45937,95216,10067,17114,21772,74932,97659,22693,37903,16359,96415,69370,48110,57862,31453,69291,41945,25012,37265,44978,33673,32972,56995,89439,13986,87254,97375,72461,57769,69204,85161,83204,97177,85063,50315,63182,96376,19932,72709,48782,97574,64895,58510,80125,72506,29674,39709,49299,98214,48783,77102,96150,73051,14398,61538,20999,55886,87168,17208,62504,47161,60830,72075,96658,52092,67784,48858,36419,15200,20996,80313,48377,23773,74547,23977,29450,15765,76255,75728,19585,66780,51586,16241,23741,17107,71393,36641,69163,70845,45240,93682,61049,69894,25703,86094,10107,84547,38164,55703,51198,74491,41904,37185,73426,96662,61405,78115,69152,48764,14642,61460,18778,25194,65824,15493,86783,82170,35730,73563,25758,71681,24004,23288,62072,30396,99512,26769,87541,69066,23340,72284,73120,81116,17364,46941,35910,94127,73710,74857,36830,77617,40482,35895,35700,41906,50764,48255,11526,11925,81438,73914,39104,90037,16945,71254,71792,43235,19908,22368,71938,64934,12981,42542,71521,94860,82445,22519,41611,25201,91345,86334,14431,91745,72308,84669,51307,75923,30664,97111,59783,90175,13102,40751,14771,17423,70848,37321,17159,91860,46685,67593,28606,66633,21154,85398,26232,32516,54859,37254,59048,79842,93449,37822,28277,21276,48530,74666,86791,30514,59296,18229,83434,77438,10411,34566,41363,89905,27049,25122,87250,54933,55155,80459,64911,49933,38808,36590,64145,32655,59626,63759,94354,40618,41432,86097,17834,83467,17458,20886,25522,38520,82290,89625,68963,55194,28765,85987,98121,62312,93659,11953,22440,16033,88388,12932,51692,52474,40937,85006,43472,77893,12729,66017,33451,34022,66032,80589,82973,36431,18448,65505,63238,66640,12503,51642,44632,53045,35104,97302,47128,34640,90586,85395,29638,59747,28083,37579,62727,31367,59054,41420,99886,26087,78855,89934,90758,31454,70002,25631,62670,20747,17121,92619,80500,33971,60497,51480,60626,47750,33417,60335,64209,71906,11273,15670,84188,37623,22444,18914,18517,32473,88450,31850,11937,33879,88961,44964,67205,69523,28690,17930,19806,80253,90236,67772,45993,38897,40679,37472,38581,45011,63541,90400,77235,47267,98499,95421,72747,88006,22528,89578,36822,57857,40976,15717,92213,50892,55806,66475,47017,79594,44459,71626,15506,88290,21986,17622,72926,71005,41386,51842,94617,25185,30177,54560,33788,16626,42356,97850,55875,28105,62651,96050,13982,31535,16125,78112,43179,28804,80975,98463,72570,40494,18772,12130,39181,58434,34982,94375,88345,33885,36886,98517,88218,66011,92679,99433,14223,11533,30360,28863,97417,25373,67917,63790,58843,79708,68892,33314,66243,64233,11834,65345,49358,10181,78741,36680,95946,58743,58257,15041,59074,51722,91947,33839,48894,64028,91812,12789,11981,17948,20323,14366,34042,96425,11341,90758,76051,33917,17743,70763,36013,18331,76162,87321,61747,51209,61153,44607,67639,26011,10244,66850,31112,68574,42479,50372,99861,63969,64885,92029,13213,34257,75106,73420,56582,95012,79974,75099,45256,19889,18952,93839,81153,97136,76641,15081,54059,63932,81639,76465,50622,70358,56591,36177,83582,42602,11116,75030,59980,72530,65562,22809,13500,83661,90407,79440,79504,80439,49167,20307,76287,35573,54652,24130,25911,46297,88980,87175,97396,20300,43252,39912,81216,52461,30668,21110,98034,29021,70073,83396,19329,95049,29948,53300,37840,19401,30107,57972,12465,24169,62632,20701,41082,30315,97830,21924,56241,25134,12180,61958,67833,18974,30666,78291,92949,10134,99828,66629,83377,79935,30227,71764,69452,95933,93482,55254,33598,70406,87743,52556,21029,25283,14859,42503,10283,47929,77098,37589,62971,70654,56749,60381,83754,93893,65137,98551,13221,82057,11145,69419,50569,75714,64477,33257,11115,62893,93074,10584,85963,21480,72009,32138,32364,44100,51160,54869,82651,48811,38348,22669,58319,35316,80955,44090,82094,66545,67319,47047,96463,79122,26195,73524,25932,11265,83270,32589,42914,11270,50097,56398,83405,54977,54716,82153,16560,27841,22029,11067,29293,22046,44005,38878,23976,27940,93021,66947,85492,51036,48143,32668,10357,22649,44480,12088,26286,27475,75127,77632,32169,95446,33023,70021,60527,83757,42250,86101,24630,45500,36518,91650,35237,40516,34010,99328,75089,18046,91259,12975,69332,15041,42763,48073,89013,30563,26918,23492,71881,16032,90659,38054,45758,66551,60699,74198,46035,60917,26704,54853,57203,26631,51344,33702,93488,82615,42933,28103,33111,57633,70769,71063,44993,64925,25656,31604,43296,75866,80166,31128,86892,64166,85603,59306,49579,65569,73206,60763,52825,57499,43975,50384,37385,96476,29000,59005,35884,28094,21426,16453,37404,75259,87533,27854,31127,69786,80056,50702,29032,12995,97969,75608,60436,44067,41254,38890,74154,60866,30790,48031,89883,38337,99161,27714,23320,95263,85378,43701,39904,39191,92766,93590,45574,20885,33974,27717,10937,87002,40302,16227,61669,14146,73665,46278,59777,51922,56647,92258,20068,23884,68231,61690,59240,81685,25209,59153,95902,24369,49290,46877,27700,50993,39704,69144,64742,19001,65967,54375,46660,76735,57532,12422,83791,55116,10055,67187,79587,24136,45408,16360,81385,17424,65401,77263,78887,40913,44236,47664,78149,40713,42786,91219,35510,27912,56307,53026,11626,25183,75591,32852,85862,49206,98458,14653,56714,50227,13957,15276,40015,94639,63573,63397,89698,44335,78916,62505,86478,34144,22685,82193,89528,20278,57251,68571,64154,98905,36114,67737,42430,41710,15777,72350,43477,99633,56007,80964,48336,97440,11700,29578,72678,53159,84442,25379,76013,29067,85035,53115,38794,14570,12209,50617,73284,83021,11910,65924,26112,71658,32732,39615,48071,55093,90499,33742,99329,15418,51412,70184,71069,34168,19729,59329,91701,42296,12262,24874,16186,44726,68107,98672,58290,16738,22448,42772,76334,13975,74551,85464,31597,56966,95071,33612,22876,93251,82201,51482,85240,24483,84099,56328,47871,39371,78430,79308,61537,83080,62023,69847,94055,20740,89781,72110,46328,44742,48960,42822,96421,22609,46404,57336,43111,24532,93375,52246,74802,75558,51900,32340,58995,93007,11967,74956,60660,76635,24286,77735,15411,11104,89601,60150,92233,39031,64272,36007,31944,82856,28778,97321,52192,12712,58984,47324,70349,96484,38042,22304,88020,36125,81052,72165,40430,27043,28052,40023,62473,72265,51766,42657,33297,58122,94672,17484,15727,60703,22115,75297,57355,49869,99952,78066,96735,93902,63973,82043,30688,20371,61023,47365,10948,87288,45403,89638,88743,65302,31578,91430,62469,46810,68494,48655,23170,11534,81577,89660,43972,57314,14671,61030,44740,38229,62123,54339,36972,42948,91411,44395,11234,33035,46591,94756,98475,27423,59926,67884,83114,36265,78297,54505,68906,20060,93508,27219,59245,63714,68862,39846,71825,34886,34527,58361,60248,59905,83671,18524,96654,17812,77886,82850,19844,31380,70679,22586,24953,19728,83136,93527,26547,32112,65233,56236,87668,34342,15335,30385,90777,58568,69260,95964,85822,20131,71819,67584,75128,90834,96768,20824,82902,49057,18735,88687,44770,52399,11430,51358,91086,13997,94734,80219,39797,98721,89195,37491,68384,31322,21965,60663,17808,61253,26226,97115,21858,53650,63384,45517,75156,19525,80949,56984,51870,52804,39319,98894,25500,81365,15713,60660,15865,90394,47899,23283,92668,51593,75143,21690,89301,23151,11777,59039,89272,67990,43183,29359,76782,83543,36969,57666,51554,84165,54118,42073,81915,36386,27259,78229,82336,42344,18025,31791,90105,11409,60054,60575,33067,73860,14463,61252,85139,79675,67337,26572,31005,21251,97394,54709,75878,96764,32667,33679,42810,55990,13165,10244,46825,32321,84551,33645,62264,19567,74666,23967,61201,56684,51498,87308,82881,82382,91673,17377,43118,21200,25607,11378,68816,14514,54778,90076,85220,33992,51472,47527,87298,75814,78004,16815,37365,82471,65935,77857,98738,43019,26058,24266,65562,39689,30668,18704,76716,43609,39287,96414,52346,99330,35485,43703,61355,81375,43438,21880,27534,83372,16207,78260,53893,54456,47554,26097,35037,58955,11287,97633,77474,56319,85486,73002,56040,83222,56246,26524,93397,88286,42541,59535,37954,38835,28266,57388,52845,47940,90027,12460,55567,40180,34621,70132,26605,92740,49745,74807,79199,46251,22206,69090,24238,20536,56102,54938,63581,60264,18376,57078,21334,56536,33726,93883,59349,80590,79259,17654,79692,46889,11129,40031,70963,17105,96646,53684,79218,57494,93910,40136,20245,72153,74770,96499,47344,53007,40119,42657,30424,43511,49467,41080,41970,99928,72097,63262,49458,73089,86243,71405,33218,52856,40661,63678,20156,38601,67288,53840,42861,23035,98907,56438,35439,71017,53858,77797,18901,66520,42733,28041,26854,67285,18695,67169,96177,23755,80717,49055,63756,17673,62999,68558,28652,33797,77873,50975,66631,23737,63506,44116,84775,33567,51345,45056,28842,75437,49495,47890,42638,68666,22705,15016,32137,86223,27491,20645,88750,53547,40978,62227,76545,85607,73190,93271,62442,12965,56067,96012,13500,92085,91949,54909,18984,38595,46117,63640,32925,34770,98577,25321,89836,74142,26882,55852,12111,19668,20411,59211,42165,70225,91255,30217,99180,72589,24967,72843,84432,37341,51475,43069,34650,11344,94329,14626,60177,47696,76252,79918,38287,50551,48799,47069,72888,62130,15397,31605,16435,21329,30237,87440,96778,58774,95893,32723,90206,59725,79341,54860,46420,72025,56089,66770,91465,12348,77967,37276,17535,98491,69307,13258,20603,87947,65061,39727,25862,15686,55634,68462,10780,38546,43687,85309,70674,68766,39977,77211,89402,96458,97677,22887,26744,37661,10017,57402,63764,96728,27619,50830,51245,82918,42678,36293,40864,27757,60689,75851,74695,63669,40843,71438,24045,23206,49413,50583,63948,30997,85191,97789,87754,21787,89948,96333,82248,38553,43933,16392,33430,88501,69390,91875,30607,26455,97510,13780,87182,81016,27215,29056,65099,60179,20610,95776,55835,95760,64383,37819,43722,59320,62777,89539,32989,55430,88466,29195,49657,53072,77870,85184,62963,24621,95661,97779,12569,98038,39034,31650,58727,14597,22553,43395,91373,90156,20212,12545,92821,45345,42398,33631,19204,74827,64608,86425,22703,93896,12864,41630,48312,62433,34044,20801,61662,93540,82658,45151,67670,77611,40862,24284,17933,45645,97284,99607,84342,58273,95867,71206,62934,71190,72150,94862,65962,82949,50978,71532,64725,83568,57261,97449,29688,10131,40439,64172,20286,54801,83093,23320,28259,54741,85444,66215,73153,25380,75578,37011,13094,54503,44012,62005,92630,70056,86972,49461,69992,28948,59306,22183,72600,53733,80955,11791,55661,57177,71712,63680,96057,89800,92680,39703,82865,51944,68818,36899,82936,33840,63922,17948,19639,95819,22711,46748,88813,26882,65238,37682,93323,83353,24300,75298,38666,52177,13247,26679,26180,51809,93026,62535,78222,26407,51967,59292,18119,63982,97296,46260,90200,75018,17475,92420,83786,45014,88584,87250,87029,86116,68350,63953,35654,64668,30894,37099,83821,29475,18668,39620,91014,69118,54271,54601,19234,64502,44493,43573,75036,41801,57978,96281,50752,20515,33675,34523,15358,61705,26499,22096,94908,95688,60936,86314,66583,78285,80596,31716,32888,27050,59922,85806,97488,92690,48716,89930,59653,13966,87178,91568,28814,26127,91307,86867,85673,11430,18349,18779,71601,36201,28726,91153,71890,24083,32830,21166,68705,92676,11754,39656,24048,89411,88266,16257,98614,46942,95357,93689,66131,47511,83341,57741,62204,39902,39513,82977,29830,15983,52858,63663,10818,64560,18887,34573,88632,34600,46971,72496,22892,45882,54473,41596,81311,76072,48198,92378,52778,65525,83166,55538,64707,79119,18263,10478,46832,56375,78109,61743,52506,29061,80204,51530,72277,53503,91142,64730,67096,32644,71277,28350,59417,12644,95406,88951,89701,98956,97459,47748,57743,95207,59670,89168,32577,10018,51808,21025,24010,39597,28756,12225,77903,91557,64715,34141,40022,41567,37121,93362,59700,23821,27094,12504,67194,58303,58191,55479,20747,18671,77022,46387,68523,16344,55182,36051,48189,36554,99444,61013,71943,34771,73134,12358,43527,22824,74506,45981,29599,97260,88050,29410,87928,92990,12604,73938,12586,15012,65468,27473,25529,68889,51564,89351,77653,10884,48728,58917,83174,25824,79445,61495,60783,93801,56434,91752,56753,29132,57111,78215,87524,14202,13722,14971,70601,13979,31012,10724,43362,11910,22456,41100,98573,50573,95909,82051,44752,71526,91142,71725,26942,56548,28643,52691,96982,42294,97724,96251,71663,39663,64319,72235,91481,32033,63460,29993,64904,19308,28581,61679,63523,84837,21653,68168,83060,25457,59575,54270,83239,77577,85753,69989,14572,30851,88927,55085,98714,32383,70639,32129,25095,45308,83113,62504,84510,98215,17407,88783,23291,20218,32594,91943,89139,84282,38407,97740,74211,60893,41585,27351,46503,37092,14066,33648,84886,64677,13091,33740,12052,18438,83658,82546,60733,58337,87090,48817,58337,43625,20752,80974,54608,12694,46759,32080,73003,80468,88380,37722,99830,92816,29068,80357,63338,34806,49517,68867,79704,37660,38653,52527,90595,10877,49324,16604,74155,82946,70249,97497,39378,56337,30777,92995,63238,26957,19979,52018,27566,55977,44305,10578,75971,79160,67001,23239,62768,71676,35260,65236,17075,48709,20610,19692,40728,49163,21921,59867,59354,89890,33822,64323,75563,32368,33809,24990,13705,56256,31823,30781,99106,83196,57569,99164,31577,31124,45320,59889,37208,55069,66771,11354,70010,33257,31701,19521,17341,79896,94393,24409,61207,19356,14022,40667,55198,47579,44839,62793,94161,36965,74755,96933,27405,48404,60100,50277,39051,80803,10856,92286,33176,69243,80520,20456,47359,11856,63988,35439,46814,40911,88085,78010,87178,26679,73069,59936,60032,73178,27025,97040,88562,81252,79184,21792,75792,85073,54461,60557,17648,95411,29673,25335,38888,55115,87696,96077,43763,17515,45131,57357,71208,36923,96359,86672,99244,19645,69700,58337,72306,51911,80569,96529,20615,87137,37563,61447,64492,14806,21905,78338,26404,61579,89625,27347,50451,89435,59063,55708,89989,92846,70074,82783,67488,39549,58708,60825,29645,82619,16125,76461,22485,87023,12459,83156,10984,92417,78469,51288,94521,46632,30098,97128,71662,50499,52188,71122,56066,64061,25767,86304,58213,11401,68561,29043,68218,50738,35550,19557,82738,29395,85876,29540,61479,82043,61798,19228,19876,12695,20364,24491,61414,25879,60461,22177,16219,35897,48007,54271,34161,62999,99053,81804,29404,67580,72410,29183,93619,74755,16709,34034,47556,56672,10063,66820,74990,31126,76404,98754,10728,79686,71931,84024,86578,96197,92947,58663,82897,45318,32903,41247,96181,77109,50154,84136,25854,31158,84797,32036,22493,22438,65776,61217,76747,82357,59176,69760,21605,84733,99088,41007,39487,71825,80264,85141,46323,71699,29368,54735,52757,53187,57421,39118,19848,44583,54580,30400,68738,73212,22604,95477,63269,13824,55354,83392,94560,10103,77637,48809,78944,22197,32004,42923,97644,10575,44851,42297,49959,91518,66493,78502,85544,64464,34282,96760,90990,65700,76232,10131,12387,33644,88812,91126,73678,36233,83322,20761,25349,15213,42212,96414,20378,62584,23379,83875,38726,89413,68721,14586,79098,53424,81487,64117,84809,41266,64683,44918,18888,17780,22942,13086,19137,27381,18634,86519,84686,94390,23312,42671,43708,73374,67238,19237,14384,15883,89445,33858,94109,56674,88974,15571,63755,83631,21181,66072,87169,25065,41284,35416,61269,72427,38158,91297,51207,18314,37876,91147,23892,86849,97720,82457,93679,32092,37356,22814,87809,99114,43010,34397,91863,33500,42915,30185,97496,39409,15695,68044,29290,49769,49196,69366,21114,70421,81349,24018,51391,27518,38567,63490,64944,32133,82829,15996,21977,12210,97530,90801,73275,16054,21429,38523,81556,71939,47261,93243,56903,73263,42499,40531,76471,20253,99031,45662,62375,30864,48088,98198,55245,16201,39671,99243,91951,36304,31106,84635,11149,92996,13192,22156,47484,51582,61096,60831,35882,68275,28063,70900,46154,97512,67793,58460,41862,90049,12383,93465,26149,28168,26513,46392,69268,97136,54564,95096,91376,14388,16380,99971,69259,19004,30092,73508,87426,70059,45919,24277,32492,44089,67667,40816,25223,26392,20281,31798,75956,63660,91249,88795,91643,15175,49155,65047,10506,11691,48329,90397,97434,19389,60864,13079,79784,76231,48211,92317,75803,65477,88428,30065,45841,56575,11285,68100,58029,15922,68872,23531,26634,49545,27978,55998,48660,26317,30804,90232,52678,33527,15104,25024,60733,44702,15405,52355,46503,57823,12353,86436,22189,58791,36424,86689,46386,75586,14126,70677,26274,57444,90816,25838,33027,33566,76416,54502,31421,96393,23729,78652,19301,18032,77739,89832,52895,29957,11814,60262,66782,49041,91906,43750,85340,92167,97290,45874,65651,28655,38156,70321,83827,85813,23817,61494,65639,62760,56252,52896,37839,95879,73937,31354,40928,74438,20190,40193,93581,91787,13920,31405,80577,40326,77395,63847,47643,71007,65492,66399,91229,90059,57183,15923,92177,71980,60468,72453,50086,39410,56162,20592,71401,24685,95153,54233,18430,46098,41499,21388,93938,12814,45443,26729,30900,86273,64325,40434,48633,69494,37612,55026,77396,38972,47393,45060,83518,95714,12917,72270,84640,95347,42257,90582,41275,62786,86982,41119,54113,36373,60952,37896,82406,68321,46977,11086,28493,48708,79447,26339,94910,28742,34256,53249,54462,14550,31067,74335,22185,57061,64799,69645,22914,63942,75724,71524,11905,67038,39793,88265,66957,18125,52130,62369,23016,27292,71719,82354,58028,91182,83926,55769,57008,73259,25537,64772,44377,47297,13200,32965,42400,97215,83072,52513,87414,21221,95108,90643,87369,61820,46968,58405,80916,14011,46614,80008,59907,31004,34826,52343,69197,68392,72895,27114,17107,56889,68538,24580,84350,14678,51585,82847,31319,86376,89717,63375,89845,14216,34723,75715,23188,62175,12510,34758,66901,22905,59143,85995,96351,37025,95491,68797,74369,78529,78891,51750,32311,19593,18570,95539,42298,95743,15584,63925,84529,39273,58850,51455,15335,23061,65280,34369,25057,45418,96973,27525,49783,33120,39867,10910,64869,76109,70231,80196,36615,24113,76991,27687,18709,13126,22894,81628,25758,79759,47724,44585,38747,93110,58730,57879,79068,25904,89822,86876,76585,71396,14142,71733,78258,32287,72441,18668,29549,67539,11872,81791,59182,35271,36488,22107,55659,31361,43267,22871,18689,40625,76682,49302,95753,19421,79462,66480,60853,34456,64232,12221,33019,64420,65268,44145,74105,13065,94860,99525,95978,90760,77719,31202,81670,48208,76699,88053,30184,20054,17194,32722,35297,59534,57515,74547,11274,85078,76848,47950,36472,59882,49938,68571,63221,14601,96732,99545,46109,83564,69384,66818,64300,48065,57496,41441,99306,19810,90418,10379,30046,50232,22391,24332,75960,81132,76115,33574,79358,16722,20491,43325,74142,23909,92559,91748,90752,74144,53607,11955,53727,16949,33362,40622,12480,87325,10125,74981,70259,95672,95447,55814,99855,97079,75838,36369,17417,83720,93929,79822,33046,92960,43547,53324,74336,87508,84945,55659,78290,41151,27071,46957,41921,84112,25271,73382,95385,33375,92303,47727,37708,88238,33066,63430,73570,33195,70159,91163,12192,16948,25139,10251,83618,74070,61297,19324,92432,29333,33538,38102,93385,81312,37486,25215,52649,25647,31827,84785,68884,89268,42398,42902,56084,56986,40940,83419,86175,71834,70577,32250,41773,73792,98704,60381,43612,77731,28398,23535,73128,62001,55119,34946,11430,57834,37740,59675,68915,76342,78567,84248,19750,68031,57213,98032,96899,70743,47635,69274,42899,25125,75969,78303,64080,63639,39883,54890,72261,57527,32411,33929,56568,60600,28449,32826,81933,65078,99355,99664,90130,89894,78054,76173,37146,90238,64105,33568,95890,89282,59320,69070,61757,15467,53879,46479,33284,74997,97270,27342,29184,44016,18167,26731,28720,79411,52286,20563,65007,83685,57016,92759,72891,76237,92740,54778,27961,61314,67912,76018,96009,14476,44283,92586,87849,23749,90068,29000,33362,22149,61266,74887,58956,26554,25930,46763,63826,93363,50633,69813,38069,77951,89197,31892,47492,61740,38789,70671,80904,88959,76000,17865,47369,35920,15980,90595,21948,97537,95727,31361,45228,60724,89763,92504,22501,90869,48535,79127,74396,61664,25228,84493,69555,88068,18516,92860,85954,93677,78952,98068,25008,20758,37681,55086,60458,65934,46012,31005,44911,76141,96979,35808,81680,74697,57639,74702,87588,36666,11867,30485,64051,72526,86947,89394,99327,43341,47381,38435,70264,49140,83097,34091,35013,50247,18066,51323,41389,63925,42493,32071,68109,81748,34959,60328,84969,93563,31398,61607,10033,87760,38505,89885,16296,27881,25292,22143,13686,95303,60008,22620,88499,21278,41634,72021,47183,31888,23401,57143,55555,41793,63242,35363,68130,68027,30415,28130,57785,73968,40922,69669,22788,66519,58067,92030,82723,75419,63819,78660,86388,85832,46531,48758,81948,87037,44785,85065,42440,81696,81979,78506,32164,24582,87914,19283,78042,91477,88321,35707,84592,52183,24946,73586,14379,17854,83039,44280,59007,51681,26534,72375,33296,51994,76266,48552,51560,66261,36798,74426,54166,76548,27610,37198,45704,90353,21213,82900,40242,45678,95585,91857,15235,33472,16950,14767,27490,86614,80365,79793,19112,52173,49880,43867,68982,40013,23333,51550,27564,30477,61071,56796,20862,39858,72998,94654,51871,71560,91693,67587,46497,92220,92764,42657,55476,43994,53586,29003,31579,19790,15431,17332,58388,36521,83300,56810,93643,52739,63432,97009,80074,36743,66422,84175,22345,26548,59369,66861,27703,96776,44894,13962,43566,44539,65222,86485,41552,21354,41880,46959,59502,43938,27713,47844,69955,60425,22070,62604,50146,98604,57452,34294,59076,92890,11118,30550,96961,61453,88624,38597,70710,97228,78823,36143,87995,54362,27008,24215,63605,17183,79207,29341,26913,63755,89115,70395,25191,27984,97961,65652,39863,28602,54993,38760,77849,82495,83653,28182,54670,33240,82483,22745,87499,79587,18097,73697,28301,92121,81134,80501,30163,88498,27165,42582,75261,50983,82854,63161,28435,28504,97022,56280,73271,82699,65266,65285,66795,91380,86956,55871,73245,41354,83805,42222,76614,42997,82572,96284,94786,49173,12081,14282,35451,49855,63382,99527,48757,67865,84179,88295,71730,19093,65167,94958,25795,94327,22434,41647,56478,78412,63984,12897,64774,18747,66630,46290,97436,27537,25338,77742,56596,16925,49771,59841,91311,28238,70384,34288,68141,78110,53457,38877,31294,88653,12296,85603,42718,77386,21838,85979,16854,26022,34224,69345,20143,33062,69290,35458,13623,76209,71144,63399,94250,21703,15457,62633,97420,95619,18338,97815,46064,24410,51393,58486,86742,16828,84898,94230,49772,90875,24172,39662,19975,18198,14888,65638,60388,74602,71266,25153,73972,88902,38162,68946,40139,50770,88079,87106,59349,33113,69421,50984,47458,20929,36195,41024,57856,35458,80003,97489,23207,89667,65325,24813,94813,23979,80464,44836,17071,80938,92167,63825,76036,47544,22693,72091,91198,30789,34586,35696,25223,79295,63046,73400,73245,58150,21478,81854,18230,75827,78978,68754,76498,52434,21811,12446,60456,30246,14679,60138,15475,47430,29479,41463,62167,84174,76623,51295,32478,43899,31497,58825,72606,43595,25434,66539,22153,77804,99594,71986,11738,45783,63419,31779,63665,92972,17088,86034,46503,62161,20615,45102,86586,14056,38073,51909,32668,57721,58682,44724,54183,20400,69667,74283,96731,60488,71006,75952,11506,75311,18099,62660,30604,41262,95350,90494,41251,84647,70757,42890,44183,56898,81966,30132,83150,63262,12191,46531,65223,92323,40269,81972,37377,32184,63674,32168,90684,26127,71430,41245,90996,67246,60505,26699,90395,70143,43357,93745,80472,45395,67652,33064,90442,18640,97747,29774,28112,91653,18889,79214,81593,98144,47410,53810,75739,19376,70158,80126,36627,59132,92069,64116,91768,87855,11496,22686,36675,96832,26539,60140,80813,43461,75795,40602,73812,70466,70571,29535,76758,34462,67984,51505,76653,72449,45999,61179,37449,17272,66815,46716,45350,95373,20941,60196,31273,46142,97726,86496,90218,76943,50697,77777,32107,71405,41732,81208,47344,68396,96453,13057,53056,25891,17368,54619,22395,34180,37012,44411,38108,53085,64761,64591,47694,97396,77282,11258,14220,16011,45942,52364,83138,33476,63586,61730,11639,35193,63319,37510,61821,63822,40458,42868,47660,18664,48139,12048,58538,12937,31902,26545,51349,41590,49711,52652,52116,55942,89766,92321,39673,12836,53444,75246,27379,92471,32095,47101,22046,51603,63005,70090,60417,48566,92314,71535,23112,83286,46789,18952,43016,73439,91327,89911,32140,70831,41498,83122,60823,39031,98661,91302,63991,20349,42218,88286,44842,40550,22025,50311,31595,35006,10468,13788,71466,77485,76219,78161,16866,53925,68757,23141,57701,11469,42620,78243,92280,95466,15795,33678,99455,76898,61365,27701,74607,32790,44106,44583,53143,56333,29715,54508,68229,59387,78808,21645,68275,76053,18648,18216,12342,36173,60256,12542,59237,21117,36411,83360,22401,49230,38155,99834,75191,81469,90376,34851,81370,31020,31845,24048,81096,10469,66036,24187,53654,15803,96173,54024,67187,14225,28352,84493,84140,71284,70467,97876,21438,78032,32016,24576,67409,87990,72689,53783,89034,14860,86075,98723,75841,85522,41366,70778,35219,23709,80094,17958,54585,95744,58811,66763,60715,90782,67119,62808,81044,55738,62278,81518,49086,23370,12388,16048,96029,76029,56277,72814,12066,23894,66822,77577,18323,51987,69369,78824,93938,57110,92552,93699,14996,14875,88615,76588,53445,51160,34786,28636,82763,40539,88316,75567,68536,94388,72352,89218,64762,55529,24192,38138,60087,67342,52622,57017,58097,53081,90753,25238,62573,52247,63037,12610,14405,16832,16396,89369,45395,80656,37841,42748,83655,94157,69298,46744,14741,15284,93816,55806,46369,79441,16187,69639,97959,74332,43234,91119,11234,31655,39190,22133,54585,41534,87313,44797,70167,45039,55950,42446,56222,73178,40451,86366,26185,80546,20650,60972,89996,12521,75816,60482,80203,11185,79523,52598,38533,10452,78311,72454,46027,28944,26460,93554,99370,18120,64998,17620,55342,77570,32446,75654,21422,93465,77812,26392,22078,98843,13202,99490,46226,45918,76675,44880,37600,68895,39349,71524,78184,64331,73128,99511,86339,29886,18955,44232,53014,10203,59539,60639,83391,34983,18729,67157,22683,51060,85008,87186,59666,47444,41649,37879,20007,68234,79896,27257,29412,77942,93533,63949,80463,41598,85973,88448,42833,93726,89183,21820,77778,29469,44434,47485,36608,80409,68316,14152,59532,64325,51790,35078,70725,45828,92916,93976,31789,43071,50854,19596,21538,16036,45127,72901,23630,47016,96384,89560,57993,31732,14132,47336,74074,69573,76083,27660,40687,26247,86147,26246,82542,15110,25992,91457,62754,60407,38512,46213,32838,63246,17752,27898,47885,74522,89954,83976,97337,87205,63584,54539,44595,90110,31982,40984,46784,86952,33904,57604,50426,41975,76601,21939,54813,88941,28654,13087,89362,79425,14692,67218,30953,53744,81892,84691,12872,22762,74738,46659,48641,27228,71777,81618,43129,30265,67698,36574,92758,37020,40169,26531,83269,68111,77999,35969,85968,28566,94674,83154,38361,45889,16340,86676,15528,61937,75201,33255,90660,52720,35927,53764,24130,73267,21700,83579,40796,13092,26070,26418,44373,70150,83724,71618,38573,23775,82584,30158,50535,38176,39402,49681,25288,35367,96725,28995,20857,21698,65841,70800,77101,81430,27848,11420,96637,57891,60257,11593,31254,26733,22418,82789,63929,73824,44662,45263,89076,43651,22205,99804,45466,65165,74321,13249,90909,21308,87944,76792,79779,88333,21425,47172,66996,84766,97728,33826,30156,37241,59124,24891,32278,63077,70845,20813,42621,30404,45685,52291,58140,75202,33784,94565,74795,74158,16410,60672,90334,30498,29474,14495,43421,88887,68621,80390,47833,32993,88312,53140,48374,13918,10568,97116,61097,64292,46263,92776,42764,60643,42131,43130,68194,92388,78213,91514,30941,59206,19347,18641,68139,85073,87613,25567,58869,99740,65700,10170,44182,61764,83850,23554,18488,18582,66426,30099,39060,85916,14272,17878,60521,92047,89696,59525,88223,18133,76054,83453,32117,42233,34226,65671,13087,64200,98356,67141,75262,62844,80429,59094,49979,20833,62034,20383,75597,45001,10791,73125,47952,72797,22875,29170,60229,41765,77345,92117,64331,39946,69048,43127,52703,46576,91091,57971,91681,87276,92159,58337,64737,64202,89799,20864,24927,28153,79136,99041,22206,62488,64471,26739,87681,14578,40690,43350,15951,45947,21816,99899,27208,60382,85443,25052,28593,11272,52006,45573,12039,22822,72340,23034,56491,49534,80681,21896,41869,94242,30593,60708,67971,51465,58381,16166,96354,19845,10612,19319,90091,61605,81798,47057,65687,30094,20026,97171,72825,93434,17234,96521,58406,39389,68842,18939,33097,48684,35851,23976,89163,36884,19189,36236,15251,81044,82197,69998,27195,88796,85636,48578,56278,18080,68873,94816,23352,97133,12415,52003,11720,92921,60222,77434,75509,91604,11532,13642,78337,79276,61045,99319,46443,69823,41821,73294,27582,94508,39190,65885,99357,17514,95068,49448,29791,56267,86223,30819,58302,72657,18007,76567,58773,48651,57062,58415,74670,57189,74675,76168,59512,50178,14661,39745,19632,56879,60379,93783,17977,16681,12249,17769,88053,69946,53362,88856,65967,10046,41327,95720,16943,28711,13210,77270,99488,75892,75221,98665,75448,92880,14473,84132,32085,49049,75680,23792,99930,30593,89542,38920,61568,96652,53339,15879,51482,34698,53757,80319,26415,30281,27923,39024,92505,98410,45393,91743,15494,17823,36246,74366,24979,11577,81016,69302,12885,36798,83663,29014,22288,22882,96937,74129,79698,59918,41748,21610,63198,18129,68217,90331,67311,82703,51283,85641,90380,22480,68828,70067,40931,84881,18922,20104,81791,68237,34070,95630,16618,79655,88447,87886,60668,87581,13918,14947,35308,85858,23471,14863,60804,79266,81879,45330,17159,37470,12333,47704,87591,28219,59810,11837,79597,19599,83202,96432,20149,76438,20592,24194,70614,77965,12676,13695,17581,92253,94865,80750,68792,16251,48833,15968,93037,81800,59132,28708,34799,60560,93798,14404,93511,25468,14682,61308,70824,35702,61110,96825,80624,65200,18951,57370,59267,84762,31450,48462,92399,44480,93726,54707,68704,12142,55029,73238,85090,98270,21600,63311,70261,84446,33377,73623,19012,45119,66432,27298,30172,48292,92930,57374,60406,62770,42431,28506,80451,20062,29745,31254,39017,25327,83524,89027,56616,94241,12026,14270,73757,49982,31937,69966,35160,96185,46710,56024,96042,25826,34905,21567,42192,83673,48107,95780,87701,50892,99667,11327,40119,85733,48106,33838,86949,17593,74559,54131,38502,82710,95200,93603,95576,85190,82533,93899,70966,42591,54796,15497,74286,27576,52852,47563,18764,27909,33326,40198,50317,88560,86496,86328,46965,19750,53074,30881,65232,80262,58993,99103,36028,37705,22048,41570,31676,85580,79188,69925,18625,13278,36728,26108,90444,86181,93849,30778,66580,14218,48328,60653,94900,55716,28756,72703,17844,78898,35334,26595,44407,55580,81807,43618,87537,53819,28335,18182,31581,98427,61768,78273,41656,91587,20264,73972,83141,23643,35800,14750,13095,94138,82719,65861,67999,88130,91876,20960,83719,69415,91257,53997,70694,85625,68462,29823,16266,59195,74697,98019,56676,63137,36630,58466,46064,66015,54027,19085,26015,62148,75913,20154,35116,88146,21046,59611,68491,44334,50340,37856,16397,69185,77453,17879,18792,57084,54982,12690,81581,13385,74471,25552,31972,22311,16076,96357,28511,98271,48050,71951,36234,93333,28887,86535,79438,57851,62403,30985,85415,92185,24012,15702,63599,21804,88613,77466,54040,26538,44428,76881,92030,30356,36990,84928,26885,43738,36170,67643,44789,87163,53849,20316,36883,60912,44468,89819,44166,17180,81128,69249,55646,86857,80507,98833,67589,88283,57890,24888,53745,58402,74877,29793,58190,90879,55142,48175,68114,72055,49383,48027,42295,51872,91585,71722,14163,60589,42493,15117,70794,88692,66624,84065,97179,39072,77808,87352,76530,76825,80880,62913,52572,23864,19746,39983,74419,10944,44392,78186,85254,58416,81449,32429,52659,33960,76510,29721,13146,62200,90321,50623,65889,56962,47189,23799,65530,75419,67244,49556,36270,27253,39390,22460,11938,70549,98508,55209,15685,58039,91905,94875,49168,40883,36561,99958,98735,55394,32808,32912,34502,44255,60029,88599,70598,41569,29780,58272,38764,71788,92766,52281,93056,23767,78611,42683,24390,32225,64715,23152,97226,28029,19525,49792,59831,47011,91335,95979,84462,32989,58295,94795,80083,82776,58913,23955,79375,83083,50027,87429,40636,78299,23741,91677,76310,27776,40165,78770,41491,79670,27331,21780,81493,69805,65047,45970,58568,49016,50693,97481,27971,49218,42573,93083,24839,88944,73462,49490,59711,54276,36101,23331,88439,51473,39441,91254,54159,72200,91204,12420,47317,35701,88227,47537,65553,87514,18484,55467,13811,14832,75512,21993,50222,37018,80807,19807,77284,38523,31687,17108,55665,49710,29887,92804,82584,38854,57050,52336,74838,11048,73514,46856,95800,25467,49066,43919,20663,80732,51402,15067,52049,48834,40790,50530,30264,41456,58003,12748,70711,69657,47895,99072,71656,70771,91536,74613,40126,98243,41639,25656,64701,85387,30677,20252,79213,38118,28482,67807,52403,56647,73521,67827,53510,51326,64038,65564,60782,15502,29660,42043,11380,13124,30690,74267,10351,11207,82749,82936,45654,88553,44368,62301,96883,15746,45227,49291,64855,70782,63377,26423,31210,80744,20772,77811,33922,13801,72501,68334,84591,91489,83217,68161,57747,68974,81467,76654,28312,48680,24862,19490,80257,78912,92941,56789,42240,69982,98766,21275,56025,37680,28198,56207,20354,57102,64373,42065,34831,50170,39837,90969,19820,79596,36995,85188,71627,96282,90639,88506,32250,45958,44942,99029,81415,77835,16347,65385,66907,43915,85240,66976,97500,12698,78827,73366,91215,99492,65737,20325,93237,13596,68637,48365,99472,21163,68924,23845,33069,19233,38774,45120,80246,25943,82346,98934,97379,33415,40803,99637,48301,59947,14163,34696,85605,51590,78111,30346,57245,74807,33139,50303,47468,17433,41509,37914,64047,85938,78058,75243,41713,35201,74152,73391,94004,93753,28507,42134,92403,44344,12250,98112,82090,44486,49123,91273,24166,33123,30844,77950,77830,38062,50287,81064,56364,55291,60312,69581,85424,45183,55881,30859,25788,69501,19828,25226,81647,83921,26053,20216,23413,70034,37937,31136,72848,51896,11610,10793,40424,12656,12409,59252,51724,92496,61730,17866,73011,44390,36416,65462,63908,68455,26546,27528,15717,81965,64094,67707,11555,79843,74583,12694,57349,36496,31805,66654,78415,77786,92662,27744,66190,72999,44544,55714,95866,66680,19257,46566,83273,62251,98022,22091,48303,13395,54553,85540,28233,36972,67045,49738,35581,50760,55440,27391,86278,64510,85356,27943,46087,83702,85539,88234,57176,56552,48532,68713,16282,32697,54201,43582,78253,78221,75847,72366,20991,66653,34684,69000,18354,15683,36117,55080,73448,93571,75504,64789,73162,93291,64120,47190,37657,66417,65358,48363,77836,48260,13614,93402,19275,54641,14072,70785,10729,64964,71594,77221,57308,46632,79390,99729,92177,75081,85717,71088,22702,24478,80599,32291,38145,69967,70552,76477,42524,66167,40708,50352,66723,65123,30176,43632,96675,12652,43006,24912,34233,37722,83608,34956,11134,73705,21139,26612,49670,21353,50254,29007,45360,27577,13578,58985,16135,34859,89304,42684,64258,52060,57223,30896,71988,26484,99882,95129,72448,12238,26932,46535,68349,14465,81929,62522,89749,68753,42298,88309,84419,21386,85798,91019,19009,36732,56916,14811,52845,98229,94221,65404,83548,38824,64902,81678,41204,78088,64236,85553,27541,90498,60691,94198,63822,57914,54026,70135,11841,16378,25574,59626,34960,21092,57635,77155,92947,59553,14683,72143,54265,61686,52066,84845,47468,15550,34777,45515,48050,30484,56493,21288,21247,17050,51323,42608,11493,78165,23892,25408,70539,65331,20032,34513,29589,51972,98383,62952,39108,79067,73418,95611,16073,55466,76237,76287,94282,41021,92716,11533,60366,34317,35350,65176,14975,36765,78321,60868,76925,23707,33223,94324,24206,57485,85055,28373,55351,47355,50764,36776,26860,65723,91875,20898,57016,90683,40288,17808,64503,59927,72717,72676,19766,46013,63484,35276,34103,74681,63189,66038,14141,65257,30810,10904,88063,66286,38740,61258,10024,98990,99025,74369,84694,71745,10107,50559,18628,71484,37882,75202,95542,19092,10107,17862,89878,60040,38778,39641,32652,34525,76127,62627,85864,16576,10491,31963,78488,12302,55411,83997,51187,72208,21851,35534,88458,76862,99497,13406,16021,15499,20847,51169,53478,33341,20506,92073,83534,49227,43139,92803,32637,84614,91808,16777,11569,77668,32652,17380,91292,27039,73746,48255,97050,32473,38700,93539,19516,70051,66931,68384,70588,39108,79156,56551,92176,61366,71506,59530,53064,13012,36979,21335,70022,79130,28835,43082,71233,46226,52381,25542,28426,30307,92714,59159,21430,86955,24147,58030,71595,60728,52126,44341,65315,68525,89297,20125,75690,20571,78260,43761,19621,63267,79831,63312,89518,65582,77742,41990,27108,75882,60394,20218,88189,66726,71744,50428,65229,95348,98442,17663,91545,99280,72534,54707,49456,22893,59385,55040,76223,82786,96925,81491,74192,42958,36599,74719,71763,12505,34508,33850,24746,93806,53525,98974,86414,87970,96958,75772,95091,53024,95695,37183,33291,33673,50512,95709,14661,58339,50422,11292,89810,69286,11864,41286,62593,91456,76136,79189,16091,13301,25842,66757,13795,16392,48587,91737,92874,89083,85056,24332,10480,89602,78572,63604,28881,70885,52676,55987,83227,90634,81121,51780,35697,92595,40564,90296,72146,46578,13582,29569,74801,13902,56086,21797,85801,32271,25209,84719,16782,12640,79322,10367,90354,66145,28406,83349,89334,41723,28919,81704,24108,82949,57258,63002,74140,63990,95985,28538,59994,55320,68194,97202,44488,86569,25724,33409,84532,49178,36054,89843,96080,40377,30594,10205,24044,30340,68242,70458,37021,28701,78999,66242,13943,48315,12252,63960,44137,65887,57162,69467,49185,95625,32299,42182,30895,57424,81061,22114,56774,73783,30835,98773,73329,77621,53670,59515,54782,50095,62266,33884,89704,57499,83292,66199,26298,36586,27624,61208,67604,17636,55567,99602,62431,46679,92476,12247,92032,80768,84467,79202,56529,32890,51877,72149,37662,83717,36880,26609,56389,47541,76164,46613,82190,20789,70593,93891,76235,77932,59597,26602,67488,93069,47248,28158,65397,78661,33590,84359,40694,57092,14213,48197,63521,14921,16279,93583,73618,70923,16438,44711,40290,26418,18759,72303,30579,99854,41880,24563,80232,24773,87342,49380,49785,96911,13748,79913,26143,55641,60834,48454,75231,33987,82522,12871,78217,81417,60985,76098,56259,60503,94782,33750,28760,25897,20737,80155,71012,57810,37149,42506,69601,37142,71403,74334,11978,54209,75318,42069,84042,72191,84754,59209,59460,68389,40337,17396,76350,89604,86282,90503,85575,60238,58879,73546,51985,51385,72622,16002,73320,74938,28185,11262,29461,10673,11741,89112,65707,54034,19403,17898,87750,91784,83280,96614,67176,93666,97089,42647,56606,83791,24282,18939,32347,54180,36194,34864,95749,32874,79100,95317,59340,77300,44055,14038,80829,87521,89588,72706,53403,43297,13217,31211,46205,93312,64783,18381,29278,17782,81387,90144,18208,12353,28005,85465,92974,50302,36128,15136,80855,48209,96240,77478,28548,12190,38863,89834,12709,84358,53620,82160,51261,60389,17349,64685,55121,18691,52270,39587,98233,16795,67855,47782,20876,59548,20868,92073,59474,43789,88272,28694,58257,76870,59829,11463,98263,60615,84710,90324,92462,72416,16236,48178,49976,44135,77557,59315,62591,47586,36419,23077,28344,30426,52850,22945,20023,82060,20203,85635,44526,42263,57587,22265,93177,72026,14491,27222,38289,34600,68521,46122,93219,50725,27498,92953,53920,52974,58450,32383,66869,83781,78732,33428,89062,17308,58428,67412,35296,84118,68802,24256,16169,82622,34848,31850,77034,63342,72176,66519,13024,72486,33932,67400,15508,25269,43931,11561,59235,75558,33094,83803,74253,49727,35896,43988,73144,53225,90976,58753,69034,37657,21985,69140,62323,98636,61200,77570,78911,48917,94950,27614,72217,10687,92964,41266,85481,49307,49311,31377,96867,40916,41427,37370,48271,89635,69081,88921,39211,17649,19289,96504,77603,37624,26137,44963,39274,36444,97808,59860,76629,75835,37897,13860,77704,83371,27644,37779,90817,80162,51846,62376,54105,12766,25372,97183,15953,96381,80580,42740,62828,28461,83207,25139,39974,13303,45138,24750,74038,61053,85021,64925,87588,75003,52607,26891,49444,69474,12167,85585,26625,69596,95928,84866,56723,77124,76968,37256,35045,76815,53610,71909,17464,24426,56419,91492,24274,39341,38291,10368,73801,66705,78397,79101,39900,91004,47150,33134,39956,96253,73068,31331,62517,58772,91449,78962,92487,58797,84468,49559,53982,66549,48592,77765,86187,32465,39521,55093,34172,54152,25977,82136,13760,21134,11317,52344,28848,49681,40650,41971,34702,58544,20627,44463,61543,58810,39827,63426,33641,77306,63613,52634,39627,42005,90449,77185,67218,39763,81174,13623,84696,25489,23212,10898,54725,94136,51891,12611,17147,78719,78272,42571,29476,44265,31938,32402,95344,83873,99621,21428,36033,65550,52674,77320,82072,56432,68041,19169,26706,45978,34729,63043,22982,77952,92079,28737,45607,97608,23928,43759,93070,40083,72780,76144,28235,87412,96070,76035,92589,28477,68434,31222,12739,11628,67976,36110,92273,19688,54855,73174,90717,47830,21402,35261,46784,22165,72536,71024,85807,82560,10481,14427,98270,74614,35789,51029,99407,77958,39366,21667,69313,83808,44788,62942,50852,72144,22610,55665,38194,31382,40764,33885,21798,47870,85493,84013,76962,19113,55308,91420,30412,89989,28252,74001,99949,41490,24116,58587,85712,35003,61160,60961,13682,45326,42066,72087,98507,45274,88666,50366,22756,90314,22439,90522,35924,55737,27308,29248,89405,93937,95390,95629,97322,20420,15871,90356,48483,72313,76828,36856,66898,86111,97095,33761,60858,62234,70435,39717,84706,80547,81809,22899,20577,83877,44002,65411,86597,82425,16281,69176,46287,89310,37669,34289,19852,87299,86615,95859,36375,51822,99864,51875,47570,46617,71854,85751,91782,47486,52611,85468,50783,25277,37956,18628,76955,43740,75892,13759,65867,25376,17234,91963,18846,32149,54047,75390,34778,75434,90330,33388,42915,11757,97881,62845,55921,42149,47090,25772,79048,78247,72257,65626,30045,85090,12209,96117,21580,62237,36747,98508,30030,43504,43453,80656,50763,20061,38845,13761,21477,92670,43660,52203,51752,84947,87040,45116,29419,61091,51918,22886,27135,47322,86878,11471,98402,45703,90301,39707,67710,37394,93573,40643,72390,55647,15986,33472,26670,55057,85215,93920,40347,84555,18782,18354,51508,12633,18264,85171,50480,87843,60963,30071,24347,98259,17591,24040,91305,23381,49029,82961,69014,59970,39113,30333,30810,60739,20550,16519,51360,85511,43340,44931,86762,40693,80281,49733,34844,59671,90887,77294,89962,10822,87793,74760,10929,75533,64499,88057,65236,16319,14046,39936,12931,12872,59270,11124,57103,60955,28569,99074,66432,42904,68778,52587,16136,22879,19169,12309,63981,99498,19094,54663,73458,90887,11472,21724,23485,54790,80033,95452,67611,13163,36632,76949,28682,29603,27242,30009,45838,55442,63415,75949,61929,65573,70272,95052,37383,26979,19580,35991,78151,97437,92274,71007,35000,86524,99898,66130,62974,32799,67191,32363,98451,45141,55521,58738,80381,51911,11694,36637,58627,47365,92278,59904,74209,27390,69325,57846,86023,10806,97082,14796,84062,48279,32100,24451,71159,43827,46725,33029,25530,63176,27661,23544,75622,41591,85955,86514,79727,42083,81050,64131,77603,17920,36072,79045,54617,23239,27686,23889,40636,12369,53671,91908,21589,35859,11541,15943,55737,49483,81480,38989,36360,31027,83295,18283,82490,73315,55375,37589,17239,16545,54106,91293,65850,10936,85629,75515,97842,81701,40776,30975,65860,86273,41722,53250,58281,94747,92597,97050,86565,24499,24499,42735,70123,21011,28358,81416,48344,42571,77498,67797,92582,58180,37748,59765,49979,57395,62737,53558,66197,94290,97994,77720,56243,88461,96793,85292,96756,49894,99973,46831,42171,32354,47390,52015,54222,51045,73617,59043,67871,50610,37116,88416,66436,52590,50455,48285,83779,92258,66840,93111,40697,48186,59153,19908,74216,12591,12259,50927,22303,79006,62871,54191,46952,81781,19536,75006,20215,78252,91575,25752,14670,28752,96683,45563,23161,54808,26807,59707,55277,64667,16941,43468,16035,44191,43380,87726,61489,81257,55641,56531,21414,90716,90745,60694,85756,81085,78918,58170,83650,65205,21334,31786,94689,64508,80932,66561,34693,25279,67830,37460,83633,73232,44016,42318,49746,20320,22705,85722,89369,20494,26913,21310,30096,73601,11976,47147,32661,46547,85941,72606,70622,72659,20376,39682,14941,55584,96335,66679,20262,31194,57196,91862,45319,46555,12644,11029,80584,23865,17703,12733,69796,54135,81824,29395,16608,30988,33620,78283,28137,11630,36978,72491,82677,24289,99979,54146,97464,42063,20272,38505,71733,67823,67371,88756,62604,40743,31553,41952,57654,73589,88448,94339,70060,97275,14282,88988,47360,33114,96410,55755,52668,80347,15517,49949,82183,68123,35140,57017,55520,43376,42579,38046,91328,47871,86034,62565,58912,28669,71742,18924,78004,55595,11360,78662,34660,73753,21222,64924,19179,60544,62843,88714,76534,95773,74459,77277,71005,31539,87525,13352,29994,38046,50894,39176,36188,47616,67503,48037,36588,89407,66571,76705,75668,19715,29067,33708,14257,17745,30917,23730,30416,22577,28507,21629,78743,37089,27618,65531,43604,55271,29104,84444,72131,42283,72861,90564,54510,99512,54482,56332,42266,89227,29242,13883,53875,29136,21355,64206,27608,92030,76076,64731,46944,16986,65861,85528,21112,74877,95644,72968,33511,22155,13596,99762,89693,41555,53102,35993,48579,86276,64966,27834,80346,82795,47582,55884,60922,97386,68766,31782,58846,83970,67547,76552,65106,87770,56398,60693,41657,31168,87332,94526,53073,56646,87968,92005,56669,15876,81959,20546,82541,79087,28100,36621,69214,66429,34491,95748,58278,78854,90098,28936,49630,65315,33917,81683,93009,89408,22612,24725,68649,86026,68098,44098,49378,49004,16567,26115,74178,27335,72360,13181,59428,16166,48031,10621,78067,87195,67257,96598,19363,92323,65804,83491,32210,57424,69464,49547,80178,17903,27221,34732,26077,59868,12372,87680,22363,54951,70453,21136,39985,57742,13134,38924,49394,98235,91131,89343,42171,35146,45155,14720,15265,13386,93678,88369,42963,59683,46920,11263,93769,27764,71976,58944,39694,42340,26592,10167,87541,23774,85408,45432,63793,79748,14580,43308,57244,58969,19546,60128,78604,29375,22996,66251,47122,71818,16991,96275,51848,30990,48406,86130,67068,92106,34418,35760,67911,61816,90358,87642,86377,69126,94619,40715,44979,28275,38929,60269,50069,35833,34744,22378,89819,57413,83766,28003,89030,86195,89605,61543,85755,60110,33981,69533,97698,81846,51933,19647,75244,30670,51618,89787,57810,84414,35450,54551,49413,43443,99028,97856,26753,66822,78330,61673,14575,23652,78287,92334,10276,53646,33088,60092,27634,21704,90637,28112,68957,80294,65268,51789,51903,37616,33522,17448,55867,73897,29119,78736,23368,64827,75237,31924,28553,30934,24066,51938,72061,65916,57626,12849,85423,14955,51067,65921,10657,38760,11424,10591,33886,89484,62204,39240,29416,48184,70257,47647,74960,92975,64661,49087,70632,12893,30668,52001,76116,18227,49082,78445,41956,75031,99057,93657,49242,16757,25205,63291,65511,98116,39874,94544,65881,69716,19500,49366,80244,96840,29738,35529,64091,17151,44677,98324,70464,93804,26101,61180,13775,95976,38766,80954,86778,50645,70238,70270,27135,16746,52250,66453,48300,82359,32643,50165,28521,30685,15846,61501,88866,11474,34048,64554,56938,30842,39473,26683,77277,63228,33311,87291,23927,46226,17906,65760,15162,11442,79291,60083,53007,10576,57629,27618,64509,39284,96313,32055,65888,49292,86700,35569,84052,87453,95194,58522,43152,87885,21810,51019,96674,22106,64571,61818,20167,51900,22779,87632,37155,94771,26839,84960,10354,25862,77049,67038,80633,73151,83267,80713,78066,24566,62349,75046,88349,51224,42554,77148,93514,27433,39888,20619,79504,47002,85469,63274,52507,83132,16855,46823,92697,79660,52747,88652,82469,51357,84458,68465,70694,81600,58634,41981,96325,71114,26854,48572,70906,10768,33562,17925,17831,38260,47893,93425,18989,10702,28639,26161,98930,82425,77250,37748,38348,93956,61057,67303,41134,45689,44262,31639,75619,91216,27083,81490,22900,46347,50785,43584,34629,92588,55874,51460,89926,60244,92478,10230,78697,63502,87749,33901,92097,53708,22459,81132,90951,50988,64368,20476,56691,49163,93917,20041,18917,36083,61320,89521,49935,26153,13566,37711,23204,13434,52119,76459,56006,17892,10193,76602,87690,99239,51543,65180,70837,20114,93156,99575,29807,88400,56815,40358,70995,98069,52237,14446,59267,94981,53483,74353,55276,53413,89770,73388,27756,89208,67186,80907,38157,74010,13700,79589,32867,11730,79070,91973,54971,51498,94035,22697,29427,45982,72176,32236,16249,45088,15463,44011,28313,52033,37473,64624,24166,60005,90626,39592,10207,45227,29490,48146,55109,41226,97908,90920,56543,62456,25802,53497,33078,86322,19165,15768,96608,86760,27709,52223,27145,43460,46680,55874,16954,67184,32790,71224,62543,24377,15958,40640,27624,82765,66371,74581,60816,15271,50275,85257,47186,79014,41162,46842,52281,54536,67166,80175,60865,19564,15035,62339,16032,10415,35850,41206,67084,45054,56728,38273,77799,33622,80034,52326,26683,61052,91510,26455,56699,49201,18347,15765,74340,36634,26813,72150,49587,41364,12068,36693,53867,58859,58384,28912,70044,33654,96464,47775,27754,74279,35609,35391,31815,30240,60871,50656,38877,73938,43078,87506,16220,51341,42177,49826,53052,18773,50703,25011,43788,39445,82937,18728,17786,52370,92478,49761,50160,47015,34704,21271,14649,29247,36766,77921,34489,27579,94789,50971,62114,55587,74292,47203,25825,72284,13521,91896,98907,65001,61041,96511,83799,73823,97485,55358,78177,86354,67259,94117,60085,52679,34131,62994,35745,43678,77594,98232,98892,73428,22249,31764,22808,23842,77931,77353,36172,80687,14099,13405,54394,41382,67196,66864,27947,75490,27810,38487,22860,94172,35985,84293,12066,73440,32699,65259,42698,61885,76377,74048,19386,93781,92887,83970,87109,88228,24797,31076,12593,22697,41719,57132,25209,70762,38285,60147,45240,62212,23746,66319,62394,49374,93022,41545,26387,36114,87597,25141,86234,98388,95716,76895,11786,59842,82475,81545,96513,10046,80544,60679,36875,40709,76528,96628,77211,33617,94319,15693,56805,69762,56498,38330,90524,82032,34179,13042,53436,54191,75603,51688,73956,78159,25385,15101,32941,89564,71877,96318,95942,93734,14313,50026,27322,62227,30797,29042,57702,36553,24893,48051,96457,78734,54965,50171,32366,77719,28336,36046,31479,14081,28623,79542,12702,39191,56776,85618,66250,37541,90043,20331,68412,82265,81584,95872,54891,49453,19019,37800,80687,57775,40306,25356,59891,71457,17537,77602,26434,65140,22207,68829,43099,63263,48709,79881,34754,21518,29920,11184,58470,83953,69293,61199,38491,11915,82280,65662,71535,84909,79582,42481,12048,23650,25905,97648,20856,92035,23248,41677,23434,33844,64633,75523,19175,75987,96796,21534,59850,84301,97782,55114,89751,90961,69819,19535,75980,68295,67211,25197,24260,61001,32691,44662,17191,39158,72737,92059,65027,44942,75644,70984,27425,58430,42385,29046,94922,37233,87203,80325,60315,82390,14003,23640,41885,55051,25756,74442,29099,46998,21200,68751,98328,90396,60405,78683,94272,87847,71002,28506,14816,41744,11645,94211,31462,55371,13335,24160,83837,59659,32998,89396,44127,40947,38419,43656,99423,71943,34655,22794,25810,50684,80863,90852,35370,73242,76069,38016,61763,48996,71816,54269,15879,25006,26105,23267,71212,73591,89610,30204,41067,87943,96304,88866,20413,79611,21867,70625,22757,20886,60915,46578,70358,87941,42344,13976,38431,43386,20077,81261,33429,54365,98403,70619,12398,70721,84895,90244,18711,50052,46099,47152,14640,76432,63701,38514,93071,62045,29461,13036,60031,54357,81316,54521,58092,18923,59077,33109,57968,25431,70901,53642,70372,16835,83028,41732,81699,15844,46156,50853,68142,59614,19955,13156,22500,27518,16718,11118,45441,14727,23593,26528,61155,67507,51472,28105,62512,95531,57461,11628,76994,60361,91799,18618,87373,35735,17577,59801,60876,80777,46204,26365,58877,55570,68171,11531,61259,32266,69986,23471,53220,63142,22574,42754,53600,64032,46072,40957,11892,83824,87022,94462,39325,47856,55673,39511,39424,68898,80398,73473,57129,15404,10496,99142,72538,44697,85275,50460,25042,16666,47075,71652,50780,55250,31735,58900,77666,10786,82976,57558,20401,53912,33612,85805,72378,92334,33971,30824,35015,50717,81437,79110,77681,31086,33867,87067,83511,31845,22985,38779,11372,83032,21340,70804,30993,76046,31775,47529,37585,96195,21456,70163,70733,76449,34562,15148,56842,57216,35926,56648,69953,59227,32327,80535,61007,29223,35911,45919,66825,32106,23853,40363,81101,97127,56732,47038,64685,74066,66256,94256,15011,69044,85909,80494,80976,21982,76533,20915,67519,27483,15667,95983,20285,19410,27121,77669,23061,32058,84471,61568,10290,29664,13774,15985,12649,77589,58988,69990,41629,15147,79705,42967,53650,17952,47735,47952,79835,93198,98994,71553,19440,99564,21728,26383,38003,19449,14653,86592,69099,74043,83971,89294,81135,46623,70088,61584,95075,20088,43359,19470,52435,71555,95034,80916,17841,71621,83607,94080,29788,82462,97529,10270,70305,39773,18997,74013,42071,29489,34987,34073,98897,56892,50092,41622,22588,33328,15195,66573,22148,72930,70663,10773,31314,11995,60204,36374,64781,49330,67121,15519,26328,75808,29884,42426,44753,93962,20209,67745,48407,56578,59879,52025,48074,54309,94871,38339,59249,67524,37536,67446,23279,64505,68317,88835,34441,16229,57847,73989,13006,57054,11867,51123,40762,42776,23234,99678,42957,30419,64654,76915,71499,95398,74809,83976,35294,85698,81990,80042,76577,12845,60411,24984,26131,43450,19555,41024,92662,73010,20521,96362,54381,72574,64311,86407,98837,54689,62312,21470,73115,65367,17299,99817,67803,65466,49802,90694,40293,60790,19512,94053,33346,54660,27972,94492,12656,13242,46651,38769,64932,86240,20483,25957,56063,88916,40296,79394,60328,44160,75000,81654,47932,58825,90210,47926,91102,66272,24576,22346,48340,89837,42090,35514,94598,18013,68017,20893,23001,47107,88661,33371,36330,44131,54250,75806,61469,45425,73302,88124,94415,93080,17668,20445,99377,43734,83697,15733,95690,81009,77931,14891,68281,74605,51051,94804,60867,15975,32063,11194,49180,51381,85740,36805,48231,74581,55352,18707,22786,67781,89729,58860,42051,29795,56021,25611,45620,26479,25677,89762,98291,93469,96985,69023,65168,27337,27055,33138,32521,88512,32288,32420,89848,17557,36766,46283,82978,12135,91314,33485,43720,34185,68545,52556,73747,84533,64697,38244,39404,17545,63011,26316,54557,76413,73890,33881,76168,52965,74745,89682,83926,90645,89905,90452,76317,24596,48406,25024,89012,15128,54545,44753,63973,60522,47893,30978,34321,77663,99167,31077,10611,75818,77065,32031,24526,47211,83361,67948,89813,33617,38709,49815,56275,21121,58854,97078,37191,23239,24158,77345,71190,36033,68512,10227,25114,36955,24918,98724,18585,53514,79522,27339,67398,82238,90070,98105,86807,21742,94346,38054,73867,35936,29011,30651,79305,47924,80233,36268,83464,59808,34488,99113,50031,71508,58082,66137,19860,89048,10437,76183,62764,72147,44889,40472,52313,94466,90010,23912,22135,32481,91181,61098,81403,41964,78846,46106,50742,64492,60241,21754,97534,40207,71996,87900,62069,39680,90073,86912,51129,87797,34884,85796,13408,58868,44925,21848,43249,26209,23007,34983,44217,39122,72946,49049,56566,35422,65275,27550,62859,45056,15817,59469,57339,83139,39550,43460,85108,41120,79892,67559,98239,32940,23902,31784,28304,14910,10422,78945,41388,79118,95357,76884,99015,11449,93797,46712,63928,44756,25095,62534,47420,85822,19102,93021,23539,40512,59174,13051,56345,40179,33335,27715,14539,73786,27538,59774,57828,43884,94370,31126,65975,84706,96163,47915,56023,29490,53300,86166,29385,88313,30056,21995,52695,77144,58622,13384,94648,60001,63926,63916,39385,85958,16357,36668,18375,80505,42844,84823,85067,60836,35456,12001,89872,96743,41140,59312,90971,78989,57791,44217,82472,14869,59946,72768,48449,43005,75010,51812,30963,42734,39864,48643,15441,37641,95202,95319,45958,54769,15267,32818,94263,88947,87198,78498,43581,27014,78892,69877,25274,32048,94678,50309,85324,35962,48106,91861,98482,17612,44630,99360,42067,56332,18988,94314,86040,25877,60851,67517,30466,31433,13508,93830,42602,13291,92298,72531,18294,29017,21351,72787,53608,15320,72735,10544,60880,12613,80564,57992,13505,53260,23423,29118,81563,72359,56159,77100,36642,40831,34629,36944,71952,99053,80093,58862,81699,34092,23973,25471,54054,33720,15116,23070,83812,38396,82330,59466,71848,39052,40006,49917,19388,16508,25254,26629,86941,54695,33976,41638,24486,79270,98275,44720,41071,20101,94711,79159,48826,70010,21418,29844,98513,57811,64871,27149,57517,97077,45839,32772,50374,43237,96170,57998,28837,74313,43585,60553,47302,38372,61932,13282,75904,48308,49027,94893,39549,58719,71891,56073,19552,21094,82096,26196,23555,58748,90541,16741,21344,30137,33188,50095,57072,81319,60771,18917,97138,89303,18282,70161,44471,17230,72373,29613,35129,99618,47404,89243,13478,17908,57650,98719,11652,18639,53822,30865,53699,98081,19579,72737,88692,41347,70848,64972,51548,67973,24602,18299,61730,71507,21362,80002,34866,50549,72819,24768,77132,90799,20770,94133,67754,49695,28995,85785,16820,92577,40287,71313,56523,49697,61384,55081,53466,22313,61685,20636,30486,32289,68291,60837,38260,32073,68481,82679,30553,81017,82952,84857,75356,60560,76372,58505,44074,79825,15666,37296,90748,34045,67785,70409,40758,80437,34241,20748,12821,88864,82428,91544,63381,57617,28238,18834,66847,54867,65687,96661,57080,37846,38303,33980,28296,39473,72121,34991,70093,14778,16039,72718,38607,44522,93952,46859,88698,65028,77929,30144,23573,36702,64005,34872,76998,14147,46405,69241,17069,36637,41043,41334,11076,89302,79107,22586,45981,17981,58918,26210,40337,43200,23124,41984,20079,80582,11731,31504,59410,10351,54034,87052,12773,96314,45594,91666,38816,72086,41063,55150,42174,31325,14639,55860,22280,87610,12275,87182,25929,60112,83221,76976,21764,91502,39175,21592,28422,26649,40892,87055,17778,53159,96012,82946,81262,41284,79700,19057,81791,20042,54330,84115,27890,55683,11633,16345,24402,34844,23152,11606,65392,12555,67160,63917,69829,19605,54362,46142,31160,86125,33235,25497,82075,30248,77659,45339,94259,81102,68376,64779,82379,77733,92849,20293,25670,32601,58416,91972,53569,10894,71374,42784,79753,12808,17223,74773,13030,88900,96435,85125,28204,35356,31094,85636,79780,92378,53567,11945,86472,25092,29166,93036,97201,57796,61271,63010,99550,42906,38018,52474,42584,39285,50349,17383,70020,26154,62135,24951,10552,70961,81067,46048,94018,19526,13376,80619,55264,32850,61216,73117,17434,58127,29840,81272,19522,37001,21753,85300,43295,63134,98895,27342,39442,35007,29106,63058,45703,88899,88164,67719,60358,77722,95803,20312,73196,66806,10737,33698,19210,51830,89211,64431,38957,70040,13462,58517,84887,71011,49462,32700,12774,24775,11004,19875,16124,77563,43624,24521,12965,97498,45712,14918,45065,28259,28854,84199,21652,70146,88957,83140,85173,99109,28853,62338,22128,81660,10514,32367,71114,97931,57234,33169,74226,86120,50493,75491,10234,36584,72170,52492,66843,31793,31626,18894,66007,20724,38167,63767,73584,72514,56769,86075,24068,95917,28188,32881,86956,96787,79037,56124,49370,16110,44210,52314,60706,53058,45789,84178,90886,32066,87992,13219,85491,26380,29487,75093,76608,49622,27305,24542,95411,56519,34319,61976,93089,11485,74919,99655,35256,50829,91838,32560,45105,98595,59499,47815,84831,84736,69172,80877,51080,90495,46890,37927,42167,72918,76453,99134,34189,58892,58178,66921,82216,21281,52026,20779,72511,12357,57212,98741,84943,53771,25994,30890,38184,82459,95393,41442,61328,90019,55919,41216,36458,99330,14311,25068,30028,54823,98137,19134,54005,72903,22693,82261,71017,46128,70271,11347,12822,51506,80296,17816,65621,54249,26394,24496,14385,53886,98852,51616,10231,28832,89239,83845,86332,83451,29965,86047,85344,14623,84508,37324,86052,84201,75738,11233,22610,58114,80986,91215,76486,40420,45275,60484,48583,98754,96507,65077,60426,93995,12916,18225,87141,93674,51325,90243,18303,40881,75775,37110,64382,46350,35746,72371,87329,89502,37544,68808,94541,98590,18376,13062,90389,49216,15932,62127,45142,85616,70199,16815,91769,72274,12794,35387,47355,47321,44676,40716,73047,85716,96394,48093,10054,29490,96946,28988,30891,95717,79769,48235,90545,37686,30712,83570,61441,77381,54539,83671,43030,70340,20507,39955,83181,11233,30603,31810,82705,10582,37916,27457,64413,39815,30202,85292,73145,58980,23364,50346,56639,54321,40048,90208,35563,18030,14833,30206,45137,44023,93766,87166,23348,24758,14563,95240,85890,98119,30264,12898,58723,88217,92530,85650,89238,31463,23077,23775,38121,76002,13638,66635,10807,38570,72573,83036,39318,58786,50850,53580,87271,26622,71786,99817,50886,10363,61199,22040,21661,19067,96824,33368,66506,81038,69945,13414,21707,46638,93455,79335,25480,36803,65449,82629,77765,99820,29244,60715,95280,60905,83717,59357,37106,23744,85323,78249,50348,73336,86099,90105,56858,15231,84879,20539,66941,20666,38233,38567,42737,25703,98336,14419,75408,14059,55502,48422,44960,83037,15170,78018,35932,50123,12311,62247,31436,70539,36385,96715,51162,64916,29969,70252,58674,24064,64432,45883,94277,96642,35626,29075,31278,18505,61479,55242,42832,16628,18883,86296,71533,88203,71518,24254,31424,53575,22943,66863,32594,15325,17428,63748,60179,96441,83144,91871,74211,22520,97651,77587,96266,75512,20959,27441,51162,70938,46932,19567,41737,72728,93614,44230,22851,77796,71846,53264,16026,36577,16065,59354,35323,53301,75613,68433,27747,42224,28962,75611,49891,96212,59260,96927,34182,23220,44799,58784,77115,10245,48768,97847,47380,87321,85575,61481,28596,85228,83881,24203,91525,35294,13537,78260,93773,30392,42058,47512,22433,67805,54122,26991,20572,14492,46343,63259,64895,64257,97951,57804,48824,54730,73296,30052,96228,93665,18135,86565,74604,36462,10679,21900,39311,50779,76250,31011,70880,53996,76173,73222,73248,81213,13242,77316,70462,16760,88736,23198,43947,22380,33488,12212,29960,20284,99047,15884,11437,45087,74384,48926,12892,89521,53379,65117,32559,43834,48537,48777,76005,44108,42149,23295,60099,38313,54225,70462,25692,22464,71495,76052,77657,82059,72300,38600,34019,18149,53767,97481,75440,20048,16510,35430,53893,94554,89200,64414,45512,22899,13178,28836,94521,44258,76193,89050,58954,65621,48762,77319,10297,52572,80106,68118,20462,29496,46212,83987,75828,79082,29412,71212,77257,87279,23363,45850,19593,46242,79724,30358,60596,18535,63876,79503,26819,72373,89219,32192,82514,76357,74832,93243,42860,86491,39704,71707,28506,44103,44528,63781,90434,73069,88740,76459,48423,37842,75056,27312,48449,45480,71665,13222,50201,53197,35414,75591,23158,80800,95444,72455,64743,14798,28498,99171,89667,87402,46422,18113,72008,56617,37620,55940,97340,81443,80619,32276,16156,58298,70746,64865,54264,68537,27562,88179,29598,48783,15319,69622,62174,44433,13822,62613,83520,74616,96330,93937,82646,13212,21282,40193,12521,47471,13989,50822,95184,46094,57545,69730,33645,51043,56398,61403,61507,87592,45362,96460,58110,17190,24985,19632,44813,43823,60384,24341,76090,43267,12946,26725,71790,39505,13334,82965,18757,52074,32982,50397,26429,92042,92908,56317,14362,85579,75411,54076,50425,49046,92171,65405,57618,31545,11306,56577,74757,23956,62556,47195,16248,91115,96048,96357,78263,31312,65908,67619,78907,42926,73514,12783,26180,17757,63117,81157,73457,90507,45861,21975,90292,51733,89553,78518,92571,25472,43150,94641,47340,98150,66159,66612,63574,97807,15557,18737,13916,28961,70545,29137,42558,49519,74840,29999,41998,55612,14240,99567,51082,84738,98463,91826,82950,53387,60661,99600,37614,49254,74505,22225,28790,47125,66380,39764,56352,55951,56044,64786,50349,84719,32771,51401,37497,96973,34663,89291,21732,87178,50455,48894,46384,91895,91641,14014,45100,29432,73533,93205,59611,22220,21654,12185,56736,39386,99041,25415,99572,78725,33294,36246,27668,53344,51229,13791,67252,29824,44038,86694,33928,33289,60431,60867,18349,37877,93758,85469,28405,88836,62991,12756,91248,58819,95641,20322,91953,27634,19499,57569,15440,97545,12548,60370,10456,45496,28998,61033,44921,97744,93949,13555,24923,61673,64392,15065,20040,96085,46781,18518,43366,32437,83822,41691,50961,24340,65576,81429,13714,45382,25814,49300,46668,96430,33595,75544,93501,56531,41016,87973,69079,10556,54260,47807,65241,75976,10558,18384,62424,46330,15477,44767,70270,48399,22168,77824,40341,21783,30074,62770,89641,19480,21018,68951,55547,71921,94224,34302,74542,10278,88263,48637,74610,80448,33261,34297,26324,75733,72353,58138,98675,94357,92170,53883,39382,92173,46704,28960,48792,64864,42825,31173,44204,38927,61314,91111,41562,99833,15283,73592,27497,66766,21565,79774,17515,52045,70330,37977,32187,58380,84797,36790,68944,71996,18133,57114,70897,48650,87449,61016,86961,65008,97956,58585,19093,92613,56809,23664,34627,50837,11449,70271,21282,42538,76307,29287,42389,15609,32555,61453,94761,58702,80468,88395,10657,99230,39590,59364,78732,73355,85323,93795,26556,86658,76199,91317,64850,35090,78603,96033,18829,96507,90078,59995,24168,53880,80292,99648,12714,55034,85395,39231,77228,23952,84329,87232,83761,85889,49368,60269,45148,56048,34828,11646,13345,74275,79524,76148,80175,45550,13185,83235,35738,61508,19283,90175,66863,32209,62137,64965,11522,80652,84295,59622,60952,44505,31039,73871,96210,49449,18560,32018,93709,61577,39307,26620,56327,30031,42839,45482,86239,58776,90285,40170,78047,35841,43568,32289,97996,68662,45701,86786,26660,74725,55531,19786,20298,10524,33411,45592,55002,21541,54542,74543,29099,80683,73069,11430,74645,65613,57490,96995,21236,17938,65890,50503,30276,99105,70248,59960,99131,81421,79123,22126,15093,26009,88657,37847,87547,61247,96721,66601,46700,97325,49061,25066,64333,60713,23865,30920,94574,47808,30329,10870,53540,21224,81957,61819,62497,35131,21512,36489,30049,60325,24311,68789,36196,41607,13422,41608,51932,36092,98489,53420,27369,47243,22498,73803,34518,62892,33773,91207,66100,74847,15671,70290,24157,16591,83426,82390,99468,36562,76639,33835,34754,68946,34318,50679,90217,48495,55499,23576,52221,20822,89051,27019,66153,38255,79725,34005,31130,92079,76509,38841,66985,94270,43917,52226,33091,68261,19980,32240,78570,20416,95611,12607,16412,81987,60883,99743,32426,34092,51784,65322,39923,67779,24304,87083,97430,53390,50296,57576,43439,96091,16524,95365,35093,18034,49656,40614,86111,36652,19755,35109,54699,29673,85599,57101,77037,36561,96018,40547,73407,73044,99319,85594,32663,48701,19804,77731,45301,62148,38317,64454,74731,78753,15857,48494,52729,30352,17870,12599,12960,68332,47202,22638,33763,97875,22112,80373,46782,85282,85150,95185,19828,13325,79151,40001,87609,65904,34121,21884,49161,33817,36163,77788,40477,88184,60954,58205,24103,39265,40296,32967,51601,27121,25517,54996,96909,73699,45416,48700,75703,78535,35243,24565,74928,88787,34333,57291,74587,23318,92016,15910,50249,17493,44721,98825,41830,60771,96741,98112,25811,15986,84711,17242,97458,40078,54299,27151,79940,42758,64385,42815,39561,37408,16475,71405,12685,19026,92353,12058,91598,92067,18970,74939,80043,89706,86249,76152,19297,52527,32201,37265,17216,52069,91073,70018,79240,77996,22020,80087,37109,74936,79864,62830,47687,62519,41315,37356,66925,33260,28682,77646,30867,65173,73738,11336,64365,45774,51731,88596,95281,53952,89107,50859,53842,37506,25846,95882,16569,13765,16940,51367,71088,55177,61423,74571,72510,97037,78582,30197,83089,99093,90080,54265,87357,32851,59312,62873,74225,29927,56064,26584,65593,55772,85793,18996,23740,18969,87219,38346,48921,56773,73043,99879,58058,81931,98998,21363,75941,80552,75922,91737,77772,83036,28892,12486,67179,23452,84553,40507,90539,46852,84700,62108,57647,68421,93596,36587,76269,18923,99391,68729,14308,87512,89700,54994,54929,17171,74131,73211,85517,33179,87172,72748,80667,68614,12041,93927,20276,85976,16331,19231,78681,85565,39944,19778,39269,49486,44802,93873,29339,47444,79405,86495,22738,46227,90697,38722,52861,77378,65512,73619,63849,44229,95065,74343,64667,89194,44511,87675,39426,59601,36829,62226,29948,60413,78982,94556,17511,13477,27003,11772,23088,10724,26675,51014,41544,41068,74837,18289,90422,73575,75436,14921,26064,89590,11424,45883,79272,62421,80539,31351,26348,46462,41261,70864,37387,35601,57523,85155,14587,39936,77449,84361,16121,42480,37878,42533,44564,93539,24654,80659,50428,10968,10419,92628,19178,26957,47059,93934,19930,58368,70359,31622,22080,11165,29991,94864,95496,54697,13001,55451,30643,59510,27208,56553,66936,99027,26627,88183,26922,36331,96578,94642,73225,30665,49028,76422,20123,66772,77866,75213,22402,76100,23510,88555,98789,69487,64759,89154,32286,80731,64545,57776,74167,83711,44968,14752,43462,40559,76151,15957,14817,31775,32633,35106,15158,74703,39728,22902,71227,16771,78625,96742,87918,14166,87144,26045,20652,62563,93035,91149,86373,18738,16116,82400,86539,59294,30510,92178,19850,59712,28243,60302,73958,73756,35606,25116,92702,16303,61361,68343,30210,96555,53604,66384,82755,77237,34400,87559,93423,70525,86560,93000,20392,64322,33774,68061,52192,27882,62287,70364,94826,57237,73055,91846,64527,88761,65814,67578,57091,57227,42784,54538,81582,77496,45400,27363,25083,50908,69489,58083,83500,73668,52144,20842,27158,96718,90683,98277,76337,38779,70994,70083,38395,35713,90991,63865,68881,53019,78990,96201,72970,50849,99452,78557,30217,32550,16371,28300,66092,31588,78803,22158,28772,69262,53479,57930,71103,45711,25902,59709,85268,40575,34109,78638,68995,44479,10925,12311,11716,77364,77020,61967,72703,67750,60348,13993,57235,22612,77931,51778,12712,48551,95324,23778,69062,40348,21439,14489,55610,30916,18457,28286,29941,56000,11005,73760,59159,69790,91806,52370,79762,29425,22494,44155,45877,56983,42356,78245,14427,40885,13988,18267,53137,67466,88021,88054,29178,51229,29879,21235,14669,42934,59303,66716,82329,70559,48939,44607,45893,28709,74536,91762,17918,86542,90247,94687,30629,82626,41267,88747,42820,63414,48512,24316,45034,98219,63761,72774,42147,71521,35989,28441,63413,25067,70935,46653,32810,33240,38420,16750,16383,47431,26798,98477,23347,31080,91119,65695,80850,26356,73198,29182,91177,97154,81097,14756,16243,81440,29330,50204,39755,84426,25688,11941,51996,19476,55857,88957,33563,90111,24098,91755,67599,48026,15150,31192,36183,83403,61945,78456,33313,30822,35195,78663,70455,59887,84366,60111,17737,68532,91475,88042,68453,83860,28175,37438,57852,80650,11946,35500,94461,20519,89037,59047,50847,20998,27937,18399,48144,64199,32309,33807,11027,37649,62649,15323,46232,81342,51183,60594,84976,91164,44278,61216,91123,18299,61732,44233,66524,96206,27222,95251,97790,71855,28935,88270,37186,24220,99212,24941,71518,36249,44430,78029,53582,12417,39754,19145,30973,78201,85656,12506,37847,79237,13770,24790,60597,95834,43795,19491,49733,14362,39974,23602,79867,16991,21267,69017,32807,77405,57584,37914,89291,36658,42631,98879,24170,76585,97161,60461,21448,47842,68680,30399,87783,83760,51441,69647,98781,52397,21760,36869,38976,21065,38678,48313,40822,48283,98498,79770,92229,94006,49723,65509,50432,31498,77235,24765,49899,27354,23905,72118,12444,81890,49908,18217,55948,78585,27780,63692,64192,17890,83213,58783,64973,41438,68446,65846,46259,28552,16648,15898,73816,71739,46994,89390,12415,22035,23455,72998,69688,87645,42446,12575,16417,66296,91735,99611,14070,83914,54468,87346,56568,86499,31232,58554,43209,70446,83740,18203,39493,87565,81848,85769,71705,18093,84558,19934,79416,53041,71702,89322,15512,55388,74357,98820,26879,71902,13211,57536,63592,76817,60991,64138,61611,84063,31120,29461,90636,97563,50028,29742,71786,26095,54416,39328,55359,87912,45475,97421,81023,73716,98913,37550,99286,19965,99575,49167,47575,76180,93446,79109,36363,93524,48321,24654,52112,77836,31882,85050,81522,33104,17047,15083,54078,19765,22413,50550,41859,33751,27689,25434,65604,12023,46316,73238,94618,87115,31700,55747,48366,32839,60337,36917,63662,25798,23491,47683,90666,44301,27806,92578,93882,59528,55402,27913,11808,77885,15343,52921,16819,45317,98500,24908,34201,50681,77865,82228,39912,80787,44413,93740,35013,80258,41526,73935,58911,16221,28238,89712,99554,50810,32988,55271,53577,93124,88239,37631,93878,52088,63785,85827,85065,48913,29802,32312,89988,60052,54113,80214,94704,48349,60520,91810,22911,33006,74283,68462,86151,75099,43997,41288,74131,53172,76134,42197,52512,14945,15998,56281,94633,53614,69917,69561,42947,47839,81459,64620,26492,64419,58942,28923,13217,12307,63628,74772,52035,68296,57003,54053,73464,90226,47134,38684,85692,44391,39497,43280,69888,47076,72714,54399,12228,18627,77016,44512,47199,59600,53787,33080,22102,55613,27627,46611,84131,66426,62239,11040,40975,86003,57886,61474,61206,16452,52989,22915,18726,90824,51022,67675,71640,96074,36898,46782,87882,86700,57075,23289,49908,65614,44191,17516,11184,33542,84933,84874,19719,66076,61877,13687,52798,35456,56101,34602,24124,47821,47173,92436,70634,79526,81457,72024,25276,15181,98017,35160,66468,63648,97021,15789,28547,80810,98451,40735,52277,21361,39135,93579,93796,32696,72744,87758,44457,73062,70845,32667,78620,17161,99435,25560,72875,70162,61260,13213,88250,70663,22285,83255,62320,76336,81298,37996,83579,62382,59068,97095,31367,13856,23313,81673,22873,72792,30688,63618,25818,71165,60485,57654,49420,38472,64915,21979,45610,28699,38262,54515,64003,47904,49297,90518,94362,98799,90918,82135,81845,37691,83087,75750,67507,14281,70352,46569,79659,36961,25651,76002,29432,56107,90010,42109,30651,80693,23814,80710,65234,19855,87547,40626,63257,13639,78204,52564,17611,18419,67497,84436,88253,87716,81323,63038,81881,91109,49965,71254,23415,74352,27008,39310,12918,81336,91610,13333,25191,46174,21292,97692,58664,30518,57749,52949,36243,68454,39105,12670,26599,56569,86078,67838,52575,57901,62830,76917,16688,66631,51261,25347,66305,63347,29524,50369,98906,84386,32310,59657,93051,18737,24923,13432,34584,11896,31845,54463,70149,13217,97118,81955,94067,79700,60829,33194,81604,35022,51422,97605,75696,40769,51447,34957,83688,76086,36538,73234,50204,19264,21659,49207,56790,68843,42135,80642,95294,43492,69150,29754,32068,13733,37852,52627,27262,57318,86481,60014,39243,38815,46182,18634,79528,42309,80603,54312,91660,86708,44484,36402,63838,27639,58456,91027,96199,56751,66462,90961,64477,12319,21518,35193,20195,32660,12890,75707,63963,94247,14968,11608,11434,78896,65610,73129,29638,79226,31817,62358,18559,83574,78408,96649,76013,68856,90543,24029,39261,94488,33384,34541,31813,71643,31275,38584,69642,36057,30972,31461,35210,18436,57413,43875,80873,26962,45775,11766,55644,44135,77168,45564,71247,89489,13527,90504,33502,47013,52572,50393,99009,28956,97607,88375,98725,76786,77607,47223,65524,63294,62093,74068,79958,57637,94856,61611,83258,25876,51294,65301,66733,41839,33539,87713,65033,72391,55763,90127,45575,44729,96843,43064,28141,63786,53142,58969,62105,56224,66008,53966,48707,24639,35613,70557,13911,87491,15888,12943,35159,16140,27527,58629,45787,95190,63766,54369,79248,90768,62215,29792,29370,55801,91452,78223,19663,67791,76008,73067,10570,53457,10562,44819,50670,57903,43409,66421,22734,86157,20982,77184,67810,49313,73723,62306,81780,56528,94526,76444,18644,76101,51154,61436,74962,13240,82781,68727,78417,96139,47105,80560,64373,93032,48342,17388,86179,22852,47109,10730,48931,10617,36561,65038,89319,36074,89783,84833,71332,64086,42302,14712,95075,79114,92861,65190,32981,42035,70885,57877,79043,83688,11019,91206,96206,55399,77640,86634,71956,62211,94293,10970,53818,12619,68707,59500,78785,31953,51797,44976,94300,13739,75758,78563,57543,42341,63066,45836,45471,82195,42663,63788,53578,55784,52492,31022,94542,57200,87576,18163,70955,93016,22360,44446,54305,68501,14225,21608,23768,78776,63466,33475,91310,98899,16859,73942,65062,76598,29917,27548,61874,14223,59741,70433,64538,50404,16017,74867,57467,64118,64345,95680,91184,89771,47493,46971,46128,36651,50622,21862,74873,47422,48313,20774,56456,42460,15532,87280,55013,70123,88565,13120,12692,57832,86304,26060,53320,41027,22083,16328,82362,72957,49111,89411,24818,88307,33265,96523,87840,80628,45176,73532,52675,90993,70994,59150,32689,66570,45462,72703,82233,49628,88790,70686,60761,77833,43998,48152,94401,45525,35092,84006,25678,24404,20623,16527,71898,99684,70289,54361,96629,16417,43342,83161,73897,22207,99594,31233,42414,94890,56250,80535,16959,39985,76404,18121,78489,71896,19563,18650,68096,78074,86414,61438,29000,55849,91555,36416,82785,81951,81479,75512,81120,85097,82044,50414,28187,56125,76674,69201,64596,87143,17448,16731,86137,41712,50153,56450,27080,85350,57796,85163,49478,77494,65801,94678,70422,34807,19052,59192,86125,87248,13864,26744,49104,15363,46970,62979,30489,38225,79522,73415,69635,56877,13334,88046,51724,53977,49078,57246,25747,15097,48577,68990,71225,13774,59087,23662,70679,76038,65579,43338,30998,52141,64174,40324,22240,14206,74761,12543,54613,40158,77353,96471,12313,66194,29150,41864,94783,74931,52313,44744,87353,81505,65144,67273,28814,46617,89072,67777,16454,56303,19994,35104,43455,24535,65288,18788,80785,24529,43195,10191,64607,75226,56360,15917,41881,61064,20696,81402,80752,32200,17202,92285,33087,20457,32230,16389,39519,43804,84939,64882,86402,55496,76524,87382,57978,24558,35393,33537,90906,18919,27881,86640,26704,56035,83949,24258,21526,10587,74405,31254,45463,87429,15415,16291,78326,82559,63799,49098,18764,93063,17380,89288,35780,84990,75185,96695,94386,88397,12730,80035,41286,85052,91745,99069,88165,76903,21885,75141,52645,34345,22920,34970,15290,41089,40396,44211,12226,12545,69299,32343,12908,14527,58855,42660,75938,59340,59534,39385,78000,38281,86502,25098,95826,10726,99095,81426,72452,20024,49411,64880,77760,94530,16599,94713,60599,93295,61668,40752,61725,26411,10288,79468,12010,19813,24200,45283,59772,87741,54212,34969,72999,57539,76568,43171,55785,96601,91562,77762,63634,77069,12615,51055,51382,95392,41885,68497,98608,58313,16230,73572,53224,75586,44717,80755,67635,20097,92782,73022,58505,71684,68633,30527,82969,78797,56350,59702,12541,86548,74480,79368,63936,19998,75120,92282,58192,99798,24453,64979,24255,81846,93223,17916,37997,87617,27543,10829,69065,34619,87087,79057,16822,18100,32417,50395,88426,77349,59880,97452,60389,24637,98081,42086,94398,65219,95406,77085,49000,85885,41952,30434,93840,72633,10637,52670,26970,88073,74602,33939,34057,70440,26457,45250,23598,95950,34963,37357,73198,51815,74626,73093,16658,12342,89784,57958,19675,71678,18594,95554,85597,92282,13726,87705,18832,69003,43711,82922,60875,88566,76948,55407,27837,69252,90166,44203,60621,31612,54635,73107,16569,79656,17373,53077,62212,62319,79513,89827,54761,18504,14980,35533,22607,13259,75817,13531,20863,60028,51690,85202,65977,10417,43157,82335,43627,83120,38875,74899,60524,69742,72880,31688,13833,30482,76124,26542,67974,59660,32970,63556,77434,24040,91605,51417,30905,78302,83058,86108,94382,17695,44356,16950,23296,96599,94185,11506,65351,97345,71231,38469,75446,38101,74614,26764,96603,91859,77242,91756,29673,65705,87129,58633,77185,55063,26488,71122,12556,64437,13634,60415,64359,69853,59189,91596,69521,69771,55292,31324,23573,27760,46016,46762,43827,59576,39175,53741,12272,14123,33611,77324,12590,63854,68724,49255,34558,78109,73601,55463,75528,83376,95169,20746,12508,87173,85017,78251,10212,90511,47054,33866,60394,85306,16725,52830,86313,85400,35614,20887,42159,74818,93651,31649,84701,41346,24295,50748,52834,90284,78658,20142,58540,75595,75834,31402,64533,35299,63042,30902,55655,67005,78760,78037,32743,44512,18748,45687,18129,61099,50648,57787,96123,50300,50193,82313,58054,42348,98896,70281,79706,33198,29817,43231,63097,94849,90506,81352,61901,29265,72746,68205,29644,15960,47847,40994,50197,19286,51035,64397,59663,44989,76048,95653,87998,69435,75851,88746,17949,59751,83803,14288,33394,28861,61144,35896,50601,74115,33479,78363,17337,64385,58413,40418,98780,60343,95352,76777,17368,74724,24703,50859,43769,29534,79167,24752,61228,41826,39293,97495,37591,29885,67569,87008,47077,32966,78328,53430,30309,70087,97769,13597,80605,84562,28563,28652,27205,39378,95084,20725,33737,48942,32989,30567,60454,18947,53844,94743,34457,84931,96633,33535,21515,57599,40611,83648,57587,17423,73912,80087,17036,10716,33310,61642,53056,56984,20503,13365,75118,73531,84476,99023,12863,72217,90270,48931,50138,39699,64673,91066,90674,90942,41508,35647,25028,92396,24812,99646,63072,79908,33534,80365,13332,11345,40500,25066,45076,97144,50361,84964,10246,33083,70993,21446,11972,57143,62748,82276,58767,19325,56903,82315,74943,67313,85828,55415,38796,63428,65316,23713,13087,68319,85072,36132,90069,27057,50470,55534,35477,33906,38798,85711,71794,17463,74610,54337,41192,78867,18891,11983,53818,32371,54898,55832,62166,23884,62331,67229,31523,84594,54788,18510,58406,73740,76018,74904,44796,60533,42454,10108,75407,29548,97935,12157,11766,85239,14770,93936,11744,11571,86802,10729,63355,11738,25057,84644,53538,92537,57370,82075,12771,22485,37904,38798,23011,82709,56638,12126,80807,81411,38899,41901,87551,76727,56377,12822,49365,77262,86266,80680,79211,19982,30731,11777,56922,45652,91068,49823,37415,56196,83666,35773,22801,49439,76984,17892,99510,13592,62540,58413,82319,75071,98972,33653,66093,93137,90665,81253,69876,49619,74015,65125,69559,56834,26399,87209,36313,87226,94087,32410,26138,23614,12533,47136,15242,19001,36143,78695,92608,98721,58562,97005,42967,69904,84606,71990,41262,57408,26093,53552,49248,55110,17658,94137,80665,27439,23533,81980,90555,93968,53461,85791,28570,30202,24572,86036,95463,70976,42343,62533,98324,77734,41199,89431,56169,55299,67916,29461,25583,10433,94146,24021,50414,29857,47517,47426,89545,54126,97594,23712,50929,38294,79854,70180,12576,44314,39885,18107,22364,11947,53193,31763,38100,59778,55681,60414,55629,71937,31423,75826,18852,60821,84900,44854,85421,29370,34641,85450,60896,81116,74025,81953,21873,71131,34849,21949,56053,66638,71871,88703,61637,59284,25104,82089,25884,72236,64645,60156,39544,11307,78761,30282,82869,84570,69649,26920,55692,29240,47178,71246,49935,92847,48541,87310,18014,85220,49885,38532,10971,31208,35005,67549,78102,49317,48873,84401,74676,98457,57054,28395,45007,27868,63819,55617,88836,72909,33587,91164,31797,79614,71829,83666,29017,79231,94056,40888,57291,84988,80986,62480,55888,49065,29106,21143,96335,33481,87056,27734,55823,70971,69167,10724,27384,43577,97289,21463,89091,59678,74549,51942,41337,25374,61691,94081,61377,72950,63026,72282,95237,99129,44728,54605,57165,97301,62387,21621,76132,73430,31693,14039,47964,81431,97117,61686,72694,54064,44007,51496,29021,74463,59941,98970,87410,59269,31289,89343,16864,12646,80514,72642,89227,34195,93047,50242,79077,35881,94275,68281,14554,88728,28893,70087,91559,85222,33130,81593,31833,64255,43893,42870,45571,70680,21707,21435,75082,91409,78156,91733,63974,73451,85936,17338,91465,27171,28302,52144,60023,19608,94821,41722,85308,83791,75017,15006,97542,59304,42885,16354,39149,60383,49022,85928,37129,93688,58547,43257,18896,37482,50692,97337,47306,26960,56157,38292,48768,55800,29725,95825,95110,21774,59014,80171,67353,56212,14700,65354,64696,53977,56626,40918,37315,26843,14532,74299,84957,75787,98079,47135,58060,26439,63026,54260,22667,29229,15557,58861,63218,44502,39587,43891,77111,88770,92466,46068,76393,79004,71644,41233,61455,64219,83062,45014,67612,12005,39075,15586,25239,66065,84283,16370,13663,29212,74693,35676,93067,73062,35427,30894,55712,92657,64544,77684,70102,48847,69697,26662,99936,47020,31465,41099,55134,15412,15088,21817,61142,97743,76662,16704,79575,26182,79538,62293,54624,81868,50120,63035,35264,84324,65100,39497,94486,14657,74691,71069,19181,34688,56680,97559,14112,13939,13052,37908,36194,47000,82843,60900,80395,26583,91651,32286,85057,10682,31702,40709,31297,37584,95968,48037,32126,18726,70414,95471,28986,40723,53272,50070,42788,15370,39800,48559,80182,80371,20975,44292,47807,31789,10867,80137,23300,62071,24424,84425,80427,89824,60399,62390,40744,59106,51883,12467,32238,63611,21721,44078,94908,34437,68809,64533,30840,52361,98877,75123,40539,26157,41905,99410,71523,57774,15208,93622,48064,96458,87069,67431,61003,98749,76643,69653,57907,82872,97467,15872,87837,90811,22671,75088,89393,31627,77230,27947,82062,78099,62607,16452,82766,70181,79694,15699,19663,35693,92304,79548,66110,75014,48328,67194,92970,75771,23040,16179,78447,33480,41599,89713,98175,40537,87448,12224,32138,90750,42708,83764,97163,46809,62654,43684,92890,69024,82639,76916,67558,57727,86856,82441,42447,69337,15157,31469,41987,93331,16840,17914,98467,41842,92227,38670,56598,55716,75112,14835,70396,59632,53844,29883,57195,46207,71893,72439,70499,11848,47745,58901,40208,87905,92256,69742,15140,22433,66851,15736,54685,14798,17897,16857,16361,11381,95989,85736,35833,26798,92149,22906,35785,98583,99182,30072,21860,13845,25099,77164,80173,86421,15585,93406,86265,82113,14612,26856,66060,24698,30205,20567,57690,31876,95208,20961,20702,96247,87621,99370,90793,36782,35993,11614,45277,50942,48660,27396,89829,82536,49328,23652,92481,11881,50367,93241,51627,79403,37132,89703,13994,24372,44389,59459,98138,93370,81706,66584,95603,96457,48200,76897,56619,74601,29792,34399,97647,41244,59025,30154,80474,95892,50969,85501,74579,77778,58866,87910,51670,91238,54862,44723,52731,17164,87814,53092,43610,27447,45178,12322,43710,29003,41939,28255,65110,67920,93819,97675,99505,22271,61578,97194,79789,97849,59135,52060,36195,27590,54749,63002,10111,71335,74794,21973,77871,71509,60190,94980,89226,89600,16934,99717,40025,18545,65763,58131,16196,69389,39042,14747,80467,44705,65439,36464,41562,39490,12856,53581,29807,29519,81192,82051,19053,75472,57675,28623,89439,34790,39758,50580,78873,75555,63118,26899,29300,85367,70749,13373,19323,41866,28534,91227,24607,49796,62256,71828,47493,26825,44589,61557,21223,23735,82573,91308,96154,51388,46908,37333,33001,42314,68837,29747,12168,11480,93294,13495,89686,69543,27071,98667,88820,90590,79256,24080,34247,18370,28708,28469,71299,65974,93535,83112,64853,37817,88097,77697,97059,56560,26863,79301,34136,84152,35942,96631,83440,50618,45140,68223,53904,77021,38603,39696,32660,69529,79171,54347,11661,77677,57026,30129,22223,75286,12264,22860,64121,33828,63234,30701,21922,81106,81465,96495,55866,60740,53570,83035,17791,69567,20451,42047,92711,23668,79852,57060,37291,86231,50834,50669,64957,25503,36760,29577,38221,89648,20309,46668,33914,59701,78131,54159,31405,56667,13722,33861,22189,85157,35783,93210,39480,77909,70771,57210,82216,22071,56495,18232,78559,56050,58927,68714,49323,64666,71162,35021,61351,97125,16352,22436,37108,31953,96516,35536,96201,46137,13243,11797,57064,12232,24333,12314,63144,50030,70365,49956,39901,90780,65214,19305,36177,63045,44808,86343,67806,12563,26088,67542,44758,27389,33633,37280,91976,30075,75839,98139,61146,20866,96589,59424,75604,73237,33054,14457,79764,53158,37422,52783,37858,77375,24133,62603,79878,23320,39951,67609,69705,85567,82314,97613,93168,66460,44501,37296,86249,70961,15186,92094,33770,15546,69494,41045,13525,94852,98321,64131,82135,67866,71009,72347,11378,83661,49842,78652,62489,84907,96560,83841,82661,39158,50838,56143,26055,66735,48400,30624,51345,76419,21912,49189,37238,49202,27300,63978,97738,37547,94203,70385,21144,12433,26782,38943,16196,99409,36315,11686,16511,41196,33708,46578,64743,45600,47329,92401,33941,87393,37936,56399,80510,63706,97958,20743,10602,61578,78711,80807,60026,51948,66539,14905,90960,75673,74021,62306,85726,23427,14322,70165,50782,46114,59185,95406,71949,57234,67888,43546,90422,26706,92635,48955,46693,83790,19077,43791,44938,38164,74573,65734,89099,18132,52453,94988,53871,96289,97001,37234,19617,12334,43762,31657,67031,80447,71841,93446,57644,25264,65809,10021,24169,62091,56098,57117,57885,13521,57496,83818,98564,77197,61061,64575,56608,40168,43316,21852,15975,62144,22433,72652,26834,93961,14408,88655,57265,50519,14718,48647,36920,40039,89441,75725,91410,13252,28349,22956,80293,90562,18675,98107,44255,14816,29126,49310,63616,90092,19778,95125,73446,60318,16664,70140,16563,92383,32101,72593,24888,30154,16065,98583,30802,97679,23631,45577,15794,96792,37447,71947,48733,47670,89792,60951,86148,33633,63870,25579,11557,91999,26602,81509,34282,43326,96293,31038,54729,73262,79722,91879,52991,81834,75257,18988,89930,55954,55399,70095,92990,12844,50491,93381,47577,34283,25694,74687,14878,74714,92681,28722,28273,76766,17745,21224,24525,77567,32414,50874,15231,16598,34998,64612,77862,15610,37873,68054,73340,24407,75679,12649,50154,28779,77222,74793,30916,15102,73629,79806,99207,42886,63371,26024,89904,67279,47612,59623,53195,89691,13413,45162,41574,28473,89642,57524,12778,78080,83052,31177,58611,82195,93196,29443,96989,38070,60537,96084,78645,77946,86276,87443,63579,18094,82786,90514,85066,32489,68773,26107,98200,20980,90271,50634,87343,42995,40566,11655,54044,71908,51277,11727,33031,89381,81203,90331,44114,51451,58804,92505,30737,87205,80862,48484,69506,62380,67681,99668,83206,26781,96501,78007,78329,14288,46582,65760,55694,23381,42418,94850,67028,71913,60600,85150,67018,45275,44129,74295,56055,40496,90905,25608,97813,18055,61267,26198,76091,95654,21882,94320,64874,20651,10948,76098,64883,30847,55351,85524,41679,67749,93502,35420,88679,72592,65381,12830,47666,83775,34488,20327,53527,78583,76891,19992,52034,78404,29667,20832,46339,86131,51681,10286,54003,34446,83654,63424,76068,81927,59895,77433,46185,48198,60567,87500,18173,34090,65070,52207,66516,68555,15019,69067,34846,64529,90737,31180,11766,94970,42881,32209,18064,49692,39881,35622,31219,78970,94841,44485,83039,97194,15883,71440,10835,20990,11966,31026,12848,62488,72427,78948,39584,26749,24423,51918,52411,26310,85733,40092,88668,22025,49109,44643,63350,37645,21558,13740,30371,27198,29752,82678,64233,40981,45679,80281,73482,14271,34844,29078,39971,23540,39981,82541,39138,72355,12766,86575,66931,15023,17816,71286,83594,22793,70743,25315,37329,39204,65366,78355,22285,80418,79588,76770,75718,34321,50487,94274,56862,69366,56442,52603,27590,31432,99614,39184,26600,42596,89692,84160,20906,15883,51013,59299,81430,43155,73490,46948,55896,85129,62652,96079,97415,77331,45137,29263,23302,22888,75217,93936,17570,65284,44027,73296,89284,79764,79514,99993,90006,35924,49974,23205,25904,99450,33076,69751,49204,99161,35638,21704,48963,47340,55217,32190,12964,86228,82249,76226,81471,91951,39363,81683,71356,18548,71741,37145,52074,27416,65460,45403,64236,64575,68512,93980,54029,58894,47266,41710,67325,40866,90626,33108,39665,88112,62076,32065,58889,21554,85887,70484,38074,36196,10774,98959,79170,59182,27893,11984,79136,85108,37735,43648,68258,67810,48864,43621,53933,56236,44102,43857,29766,40859,99139,91058,80822,23262,35055,20136,83098,51724,56546,61201,98643,71144,65692,99093,89537,80217,72834,17436,31803,10173,37935,54097,29402,28385,56388,71251,14582,91894,98807,15575,19561,40834,87987,85898,87743,72246,35376,59545,43648,55535,31367,39289,54260,22140,45701,93932,50138,66617,36364,36082,82447,54985,17537,52184,22150,98706,96708,15091,37377,70643,12187,77873,84588,50535,92231,37784,64272,25538,97726,63813,86065,55952,40643,95129,44600,46420,15531,49593,43827,84626,23540,59931,52770,21397,29435,14785,72262,43725,17474,65114,70754,13013,88288,68701,25726,80247,58736,47387,34696,77705,84434,97083,69819,95077,51138,59768,93266,24263,35227,48749,92389,38120,19986,54750,21961,32501,77369,42440,74520,70855,20214,81640,82306,67556,22993,76894,11264,54348,61275,88302,63418,61466,36080,41185,34928,28193,36108,69189,19230,36896,82316,62817,91529,91513,30622,98517,33532,23289,34796,63002,17242,70961,77376,39923,90956,35057,83943,63618,88914,20710,29850,26309,80596,17382,50902,85726,94554,48477,66686,18399,95431,93311,44636,18503,34634,11937,45875,67662,75911,44531,39028,29356,31535,50674,54495,72195,10710,74511,33355,61472,18291,55045,46975,73011,98601,50472,34885,13048,71954,50818,96753,96899,84757,77964,84447,63380,31777,76818,69725,56764,12452,23425,77335,11187,80942,40550,64665,53294,59178,98054,97535,21804,28045,27509,93596,29239,81450,17618,62113,72426,67648,11468,87044,55280,34841,72701,22505,48173,12679,65279,29251,14545,13327,41757,68910,81357,75022,89937,29840,65365,83833,52402,78685,45013,36037,23190,90343,30723,87219,29855,79867,32597,22730,50757,97901,31245,33065,96177,25335,48302,11332,82342,76335,81250,80693,96441,57046,92887,67032,32484,56297,89431,99385,51889,66759,75923,16717,18219,97094,60777,34610,85440,63509,14149,69347,35697,77195,91027,99306,11420,29283,20896,99341,71150,65033,37089,28826,32777,43350,47276,94203,94444,40713,48143,30838,60505,74664,10107,21383,20760,62934,70656,95712,19957,88041,63791,31164,92176,20933,54823,89152,19489,47184,18418,83843,76749,10155,72831,66883,94921,94643,45334,83603,74168,18887,80566,22880,35242,71631,93070,77607,14894,99163,92685,10883,67084,72849,62971,30438,57339,61148,41234,96271,26742,40710,81664,77239,73115,34348,24210,71462,84234,14653,24712,95524,39531,46248,67503,99191,55961,39509,27146,35984,12924,96164,84342,52283,87367,45579,77406,92373,12239,97157,90763,10221,15041,50433,27655,78783,70881,55701,31119,98459,76758,51181,76672,72218,88485,92832,10837,46878,36097,34204,29316,37829,85328,39770,47591,95299,60513,96063,67455,87151,72289,32909,18587,19098,13622,84174,32268,45728,41135,49420,18231,34860,42188,15482,56337,69572,99601,92399,81149,68822,75334,16249,48067,91386,47560,29424,56878,28520,21310,10153,10006,77790,30025,91266,39680,45188,11577,21469,98054,10748,84887,23171,93290,75770,77877,97180,53643,88405,62478,76046,94785,96622,58423,88643,89881,40973,35588,39493,28721,50377,67353,45909,46562,47155,51031,45791,36586,71423,29230,61694,12055,21852,84598,20593,75863,12818,70639,50735,88947,83409,29790,94610,96936,85978,59216,40384,18585,88407,91875,21187,36575,63977,68680,41638,76054,47758,79722,80988,10591,55224,33304,24376,37861,37552,47864,24594,46058,83608,78372,80193,15741,64247,17149,86678,93403,52915,99774,11432,26055,90884,61397,36200,70428,93401,53726,83310,21034,68586,23922,38066,81470,61108,98583,76623,45403,53212,30214,17007,17495,24941,81853,28722,50221,49923,84502,30356,66467,26000,81809,34982,57581,23556,27059,65866,76980,25984,77592,89797,93183,23787,18803,96461,71113,11406,52216,10184,43777,20411,96836,70244,81943,38707,18188,24348,13106,37645,77102,23165,92469,26501,59712,66483,44516,79324,38715,37806,88054,27064,19536,25564,14832,15320,71064,27491,30293,22414,29465,40338,61352,20721,59623,54728,29887,26171,35456,10890,36092,28782,26331,88540,27450,84804,95660,81726,23053,30852,22971,12055,16695,86414,94467,44284,86120,11626,65221,56782,73991,55820,41600,35460,24771,44219,43877,74528,58846,87712,13645,24141,11925,13269,39292,21195,44874,63661,57300,69235,72804,22383,45024,44618,48609,28923,37755,12074,55776,63260,40689,80339,20825,63167,85903,69100,62019,67357,92329,46524,27062,90979,77820,12372,96232,31715,86350,29603,58539,69654,12569,49259,75542,54460,31496,85441,61628,10841,22908,88348,57300,99031,28822,49171,10976,83156,12040,66976,19279,85874,57725,11020,39380,82817,71940,94411,60078,44047,26889,55076,74113,89295,95142,65595,67820,85325,98811,93482,92392,61539,25261,57294,86888,61617,73419,28086,95281,38259,11336,54833,75548,52670,77673,41478,58421,19567,70305,12019,16727,25458,46600,98897,54928,66030,39713,59769,65376,28975,22709,90879,30176,48612,41031,49669,41802,47089,28931,16715,25911,67944,36438,91022,66041,71520,13589,84442,22199,55026,85991,46468,85777,50838,45886,20841,21410,78887,70243,64458,53770,58516,64640,49553,92764,66091,91337,20227,53645,52192,83973,16630,96814,16125,46246,54856,10536,15138,47678,94643,16892,23400,10855,60458,10558,70742,73796,64365,29883,22672,17275,40071,72294,36580,21458,64129,89451,46839,68430,87440,83306,17380,30271,20637,83283,15548,63623,90631,16525,33160,16318,14165,93669,97630,62960,40608,87803,16440,27861,62353,88729,68094,57199,47269,60776,41068,94947,20142,91775,73370,63606,30689,94662,33986,73058,11401,39769,82336,25002,58361,99256,23196,23511,80571,86877,63226,90243,45648,62567,42522,26580,72231,60113,59067,47836,93089,23267,71124,63528,82195,23914,35801,16490,34983,70900,34865,72060,59385,33656,80552,41304,40859,87484,47112,97177,65505,60863,73306,32134,40253,31954,69802,36892,97165,99322,13535,90458,97693,66911,85352,11170,92502,78402,14138,99618,95305,94342,72273,44986,78364,37916,10401,55629,38832,76124,58769,47545,68248,39232,55720,33484,79549,69279,70326,29702,42614,20183,40975,41883,55653,96220,10305,95025,74758,36473,74190,91833,36781,90365,64795,33572,13419,59207,72946,61699,84139,24656,76576,70144,99695,12368,22932,96536,45696,28497,98646,69204,54939,85188,53260,67348,71493,43396,40612,48099,49092,44982,99602,52260,80602,42704,78579,76750,82000,60325,13826,37738,49556,90540,79137,28689,86784,56784,66915,93381,27281,87076,92757,87718,60412,21962,65605,21181,79626,41120,71833,80087,31701,69407,30722,38645,49833,16207,63169,65082,29193,36131,32648,19802,34981,89419,12877,70288,61765,81634,44362,66274,56631,60465,96564,16633,40171,46541,40787,98550,92515,32203,53522,53594,23471,83174,90005,11849,71830,17573,33749,70808,84019,44729,19180,80416,31655,69799,52622,77559,90774,98821,54294,47157,60636,78413,84205,87604,32970,78515,32956,56440,38414,65963,20454,43611,63424,98866,63944,50190,18584,87326,83269,45838,82361,48711,93762,54263,47235,68828,47805,48979,21660,30879,21076,48012,19394,39290,12670,25298,34973,43845,67368,57893,22523,24903,93026,43085,31566,28548,97963,34433,49372,43542,82637,25853,96691,15503,46953,79624,30390,63241,27669,95579,64978,16033,67789,24470,34472,28151,80487,42337,39226,14433,14173,72365,56636,59395,90112,11960,69464,83245,38993,97295,80363,86162,92018,44197,34654,99133,85519,24389,44826,79284,29753,20535,37735,20785,82286,37762,26116,52330,24205,50906,30328,86946,82462,99161,75539,54006,13711,39080,86837,82369,69124,15381,58450,82057,90189,71471,39810,31109,71161,63320,50441,64010,17775,53353,50950,72527,26413,82449,22709,85446,37013,29410,33083,68525,50799,40776,68053,22064,27425,51225,21652,43965,35603,50284,48362,33838,62192,54964,86973,56282,86673,75473,57480,58436,46569,23117,92330,20638,46220,12853,58310,39666,97801,25387,75716,59376,18984,29449,59566,60142,35262,73436,30556,84008,28226,58028,20850,84071,15428,93479,12225,80375,50622,74826,85520,50384,26155,85683,26925,34060,54782,40895,65687,85875,20650,27950,11365,94460,67208,81241,58465,84945,46134,44539,87439,20339,26085,34441,42236,54475,63013,51121,64108,39096,28731,89387,30442,77071,72861,14146,36280,95321,89070,94691,87300,35390,83213,44690,73527,20724,70895,87633,97222,21459,12112,70097,87675,22039,73501,15406,94375,50988,92416,91307,79577,46207,61676,60102,40185,76837,11366,64951,41167,40753,18087,86492,96863,70072,69620,90277,44269,23227,71406,47492,32402,51195,84973,66504,48722,70913,57274,14634,11409,48904,66390,71020,32548,50424,62686,23612,70503,64250,86295,47661,42505,98185,11081,28275,82105,77690,36673,15438,29866,13635,97535,75446,34989,13386,61997,86663,37307,23098,23013,28101,46890,50977,15265,95344,13071,54215,54278,50963,75883,11586,32174,69987,25237,40351,19137,66150,10868,16365,38247,11847,19446,92083,53435,95187,79437,38764,60042,68646,52649,21505,46512,68780,83432,78045,86623,52436,18490,60739,37959,97483,42019,71514,78080,22300,76388,25997,20652,62334,50126,89187,72289,70458,79226,45464,32279,58082,94630,83361,12058,99005,76985,43901,76428,48483,78799,17286,98046,46358,36498,77547,13436,91674,14319,60803,60788,58630,64251,12559,40579,50150,30447,33831,94636,12710,53675,34146,38905,11598,28030,79206,62187,32903,32144,23113,78760,61902,13731,60071,43951,94320,76271,71087,33530,85499,19936,83754,83961,80120,85764,47234,35993,77655,25463,49581,74957,66219,45762,11912,68257,17870,24454,13759,72070,16166,36314,96529,18016,48699,69126,42934,56887,24774,69993,65089,32059,70379,24239,38253,50120,57677,44861,64913,83778,71499,97479,21342,52504,95329,94317,96052,58325,52233,68042,98592,42845,17840,15826,80851,61272,94964,55370,40484,74011,65203,89320,17933,29866,91428,82107,37782,65822,82707,92421,37629,24136,82977,59900,41654,50990,20783,97230,36394,92417,15146,68887,73391,26972,75451,97223,66238,31149,18933,13502,71640,63098,39534,66599,39495,52884,85965,71335,30789,26733,35133,88116,43764,75413,25769,52040,45313,70921,61391,26018,17024,26507,47577,99082,78756,89106,47422,32203,43066,65157,36173,67686,62892,31863,36046,28459,83676,71278,86291,41731,25154,23127,95428,88957,72821,52749,31434,36077,34894,38422,40834,70439,59659,12435,99738,93543,61322,65570,71109,46101,82002,66522,50597,78493,72753,75187,81477,23004,95748,52744,82084,25424,14074,72929,43681,35678,36738,38688,29320,35403,83333,57546,27213,57750,86945,90176,27229,80400,26344,62398,38424,52113,10237,33265,88532,16549,12088,33520,24517,67886,16328,40188,50757,33368,77853,41836,27496,21343,26341,13546,50641,98221,55464,57744,64115,30220,90373,69205,93539,29417,88931,31881,92187,84574,36750,95413,32854,11949,41252,41155,41667,49127,65810,10624,16096,15544,85511,97656,67165,30527,20181,32592,69713,42130,72423,58997,92174,17782,75607,90352,71338,86631,64257,97494,52583,85954,21481,17287,80690,68850,96673,86740,99827,38978,81537,21595,67134,90317,80029,21878,91122,50959,88764,12760,57091,59111,88065,80957,43315,83016,36098,47450,11667,65525,18251,15473,59536,41517,55762,41689,66324,34792,60930,29606,49652,32965,93946,58017,84794,44973,76165,83505,73056,52863,97131,85303,97786,53235,28348,80839,55679,58591,69330,87337,75354,33484,72464,98262,42327,90459,17748,29543,21685,85661,32547,32269,56209,23633,13285,77413,97397,48676,39767,62514,15993,94351,60691,28884,63870,86011,69635,22469,25620,95616,19299,75290,91840,83163,79089,32188,95298,54236,24904,74660,64998,21089,12096,23080,11034,76878,99661,42947,20416,36830,17614,46724,12898,19812,98769,56693,56901,16940,87806,91887,60017,84625,99228,65571,83279,85743,67830,99953,66693,46787,23402,64048,46252,89969,64639,92126,36049,82663,93992,94290,25841,83670,23098,53264,41237,27682,50159,31056,26487,70035,97139,54817,13008,49637,10273,21743,81455,90637,61791,47997,90686,63522,71363,45095,86447,96892,55632,45820,31561,45200,75175,80901,42939,52530,61242,65738,87265,97580,17615,25276,95212,13786,79532,88515,20438,29408,91927,11291,44157,35053,65755,98777,51085,86695,47750,19665,58506,54543,50978,58087,45363,62024,17411,54720,96844,73687,59506,83319,12828,28411,30059,19492,92203,78727,24292,81766,41569,14234,35658,50006,29130,29195,11628,56550,86639,38063,76974,85307,89161,36111,73999,36199,48369,37786,37280,72370,45721,93715,60028,60737,24720,96371,55800,31073,55193,50892,90033,13189,30064,37508,50255,13723,86968,97838,36815,34572,65218,98501,99686,22765,95017,51265,44839,16184,17594,39650,73617,70300,38995,88533,92743,44419,29876,51299,21929,47968,76385,15126,90707,51951,54987,60216,76128,52375,50998,64025,53991,62578,88320,28909,99604,25758,45061,44029,89825,49629,22340,18501,33153,12899,86102,58952,32387,44405,80614,27689,83906,24999,45535,41510,75448,16719,86859,42740,60193,35952,92472,19502,42811,90301,81566,36819,22964,63591,52333,36622,69817,29749,82219,79830,22138,82914,43904,47937,77218,12966,77151,92939,31710,74192,21212,14186,20540,52203,34281,88043,83642,60178,43041,70218,83892,62624,71318,79826,51405,97290,76965,48984,29112,39305,91584,91976,96447,21314,14408,63574,83820,86293,38723,10652,18567,52534,18187,47676,77774,61168,31087,50084,44324,58435,65728,33348,84664,18381,67036,70683,74338,13143,25880,43692,93839,80787,32794,75590,68426,96980,53068,69558,31031,21302,14504,30143,15336,78338,69823,81932,39621,20471,37544,90082,81589,65344,56985,62420,70043,49746,31461,68023,89442,81658,11852,14861,66582,29868,85669,61512,94889,12849,51626,94770,10712,16995,39795,40371,21426,99977,88417,62292,40147,37324,13905,53508,87499,89148,65914,56894,67325,54071,73774,59636,38469,34272,21871,32169,95212,85807,77223,94141,62789,71703,33169,51696,41131,13769,80647,34651,13937,84371,92866,55514,28207,82499,95077,35699,81814,34936,21950,62118,24286,29534,13777,68596,96508,79811,58223,69298,30481,19246,78636,51727,53573,74900,87152,57136,40079,83798,71462,69354,84108,12718,99638,49783,91422,18471,43920,20825,52879,74380,51108,14364,48481,43343,72446,55442,99825,81837,54995,20387,33919,40307,19802,45838,31718,54716,35473,66416,18597,23655,43154,76110,80378,21627,20950,39638,74565,60694,96455,85974,55885,14995,51535,27436,83367,56690,11738,30513,98838,43151,57271,68058,26118,37639,86358,98955,66306,24228,44588,67782,83514,76360,58274,61990,51397,62272,42797,21280,56754,35422,92246,97349,51835,10136,31927,45626,73767,90989,40166,18419,99343,18238,88945,40972,41303,36570,44693,98676,21353,96390,99453,57671,39248,66436,89477,65899,38034,35805,81252,57076,26031,44111,22485,35105,59125,59332,56905,42025,88174,14644,23305,12260,28011,22100,58058,93164,92823,51416,20580,44186,16017,25722,29613,99386,72257,50052,80219,97539,45251,66233,93186,28169,74002,72814,54759,40769,58552,58955,23620,60918,16829,50019,34132,37579,30471,99698,65000,10744,11293,82107,22176,96863,28512,97293,91804,83196,28565,38969,75822,36045,21605,17547,15172,52610,54622,85643,41080,34560,30474,77058,89234,50768,59830,50397,50596,21497,60219,86388,11486,44546,30647,79086,76715,30830,29712,80576,65408,64851,24896,57340,94962,24107,37606,90062,66421,13061,26949,53841,88687,56415,24196,35800,80311,23783,59872,55041,79790,28755,78966,74214,14166,94527,73251,19741,90395,23960,42824,11977,94404,72360,68795,96958,39971,48064,66819,92657,94427,96582,19000,41371,41161,10058,80695,73488,70562,58462,86561,56371,41738,14312,54275,16949,81712,42626,76588,23150,38992,31546,33229,56315,37390,25683,73894,27920,27026,26906,17154,91640,95124,37224,41925,65113,45571,71846,76879,37562,47995,46065,71542,80190,14172,78520,23490,77827,63888,83009,75777,57136,39425,85552,52464,76776,33392,64565,89794,89134,27647,13997,22408,51577,79909,82195,10177,21879,52972,12683,69104,33478,96773,73789,60217,98182,73520,81301,48920,89580,97188,39434,15630,25061,77976,93180,52012,75437,46344,28247,29441,92894,36733,53399,81916,67856,55500,66457,56567,96935,79923,97532,20293,90237,20816,48301,51008,94947,90198,63664,20807,55013,90293,14201,81920,26467,90629,24039,62989,88918,35554,35507,77181,43557,37951,61074,93616,24496,95418,42829,83757,62425,35644,15343,13528,49854,64015,86799,19097,95272,43513,92654,13193,45379,17279,52998,82684,14717,80940,72215,55974,58103,33220,21824,14230,96399,63649,81462,48365,47668,13959,18124,95939,44513,79611,56588,45403,47023,82926,59589,78371,71352,25948,67197,11927,15533,27476,17024,42474,42078,45514,85835,58209,68628,84336,41087,63428,37765,87770,49035,47047,73571,60359,64475,62226,31653,45903,66992,30113,53266,33484,57082,34272,75892,11451,68723,85893,76937,96777,72573,94561,51898,87198,91682,83137,63661,59582,58551,92636,55246,36714,66064,17720,40891,66593,34878,34333,74985,93972,72083,99150,81268,75405,79074,32923,43163,89838,73119,82865,59133,51902,85013,94337,79617,71747,70089,91359,86909,31956,12413,33149,92298,44505,61252,47208,29281,76958,66070,11327,38161,62467,79823,91717,23682,32295,34535,22123,41191,16896,37381,76685,46436,16841,93938,53708,59644,42687,18538,26499,59280,17576,53173,83477,77331,78157,19443,44398,56144,79096,52728,86145,59582,94577,29144,47314,65739,25313,61935,98381,39264,67129,91299,47789,48070,90075,52021,33275,37561,11111,54109,71547,32079,80068,21815,98482,65649,25883,17280,69151,78718,30239,69059,57025,61068,77789,44557,33383,87540,16453,53160,44930,39642,74206,63213,44405,97498,77113,77274,80828,40252,32576,96703,68395,12136,53186,29904,71258,64191,84422,60905,81835,45434,75441,76413,32684,55051,66026,38568,40252,76614,93679,47015,80376,41466,59200,24815,40766,28274,97616,96639,42066,29298,22201,96901,43872,16124,58571,87535,48546,45471,19984,10455,66733,29254,51314,78160,89711,38431,22840,71064,85667,13549,21954,19454,14975,65221,88259,31992,59541,52415,31043,44947,64915,74255,69244,31948,78769,96789,91754,90911,76618,56503,73654,27423,72943,41702,40183,68348,90095,98619,38675,40189,41070,29037,34042,32682,57530,20848,68656,39236,75593,42207,73388,32327,57987,41140,95896,98538,64869,25700,30040,88891,35754,32979,10345,36802,65251,71783,77623,32942,37641,36298,50515,51711,23218,70340,63611,92991,11750,51124,45324,41768,14608,68708,33847,42443,96463,37896,72876,67229,17919,79699,61511,15510,21529,39858,18892,82196,48219,91510,43529,46957,92267,83148,70032,41476,49555,51447,63983,40817,41701,39189,27728,97335,79055,38211,64371,46256,12179,23636,14405,21236,48430,63770,93427,79150,74056,70047,40874,36815,52694,77963,76318,10935,35072,27099,81058,49919,97622,83610,22059,43569,20090,19907,10633,69887,24918,61706,95028,70926,21471,67163,34477,22598,69377,60368,21886,57640,39537,67922,49452,31061,32409,83636,92191,18495,23613,25298,83108,41786,61891,53762,55006,24069,98161,43970,10464,92998,80038,36140,28697,27316,20994,21853,51232,53427,88447,61421,46890,52560,80522,81775,44132,17391,20653,44441,21420,53742,45833,14864,73600,67692,44646,63991,11771,24914,25681,48741,99940,51253,65225,33071,28446,50773,75237,36892,68266,78367,38444,57857,77503,14621,98768,37773,53445,15830,48423,16943,89443,69078,23772,49461,33638,75262,50121,48902,10164,50657,22068,62921,13714,20448,44047,93557,35475,35942,34153,35149,92832,16729,35594,83964,72611,37519,35901,39389,87588,74688,65092,86173,80529,77333,52663,44399,17259,50250,33829,53908,48569,70016,63535,11403,33753,24046,41378,86373,24358,84024,91532,55304,65496,41927,28469,24620,72563,79814,70911,58796,97839,13936,76373,14978,71300,66295,11105,39565,62124,95485,19572,60382,60527,42692,95962,12539,93574,78398,59825,93673,63369,40110,82947,20802,67295,38397,29039,58338,42097,24839,98254,11706,79236,65776,31550,59990,10461,64121,21923,75783,52042,41851,54980,50227,13629,94804,74739,71663,84706,37299,21123,23897,21297,91633,86186,25086,72480,44050,55112,54134,49750,99224,78594,26026,15668,80498,63672,11731,82704,37147,19394,58062,60010,33155,49712,24721,11205,60963,30432,18652,13247,12907,29949,40438,87020,54077,94086,56316,28976,74166,73636,69919,96128,87882,60434,19207,70787,79962,67722,36731,52059,73722,60143,15884,94732,87266,11083,88201,74812,29053,79016,89771,80125,27893,13658,91838,40506,35969,62635,81841,81849,43221,45601,94196,62548,75578,53307,41812,14775,76780,97376,98018,16608,30742,23074,70855,98464,34529,75392,57687,34868,23374,21343,15646,10231,31275,97471,45121,99869,16343,37269,89684,17699,54829,92182,67815,98425,10276,40598,65584,83803,88476,53311,33367,45953,28256,20363,86248,66481,27329,88721,29286,41686,34008,10085,48629,20492,48015,15611,92237,97075,72040,30473,67781,95872,64295,92571,39169,72457,82997,21203,36319,92513,96554,90456,61934,83517,78359,51213,23525,28418,34382,36244,17805,42258,39231,15257,77384,75507,50706,60673,52355,11341,79076,34052,20014,75547,85796,59992,76577,61161,94036,79134,56002,96337,43252,26153,32403,44035,78733,96966,83618,12968,54309,20563,63911,24211,41902,69896,45346,13890,52512,84957,69446,82250,76562,42792,28190,77980,64071,47422,53623,66656,80984,70366,67571,88863,80340,81924,49102,51442,64799,74212,84974,34033,42529,47888,76023,97984,94892,41929,24152,17278,38172,85086,94863,47965,12960,96366,67452,57705,11427,39965,16547,58635,85029,16710,60724,32201,92954,45669,35234,21872,88013,39895,40835,13046,99389,81702,57243,73596,82857,46010,52264,65999,65393,25298,28175,67489,30301,50593,45731,13875,19103,48404,54763,17982,76470,95086,81157,79609,69832,92151,66190,68000,80367,56642,79420,96648,20444,81073,71691,57707,49507,62679,23723,41559,19217,42217,31311,93358,80820,62061,79153,57874,16965,61782,74999,69850,56801,18598,78619,60690,47503,37203,21174,31805,75489,73577,70522,21919,88868,98786,55061,86265,14171,86636,48138,88067,23650,40674,65614,50137,50093,55158,74492,56905,74335,25381,95876,49174,59405,80886,29267,60527,29744,41531,37038,98948,81703,66217,79515,25696,71124,16257,44922,40318,14130,49978,52280,29709,66163,95041,46093,27967,23501,37258,54343,83756,14178,68062,74948,24346,92867,68455,42842,26104,43425,61007,50430,91117,23185,37486,33335,28079,98786,99125,23761,26233,78784,54135,84877,25980,22477,89781,69147,38248,50718,22706,25761,83082,52979,84429,62754,23528,84574,52802,38429,92659,63783,69052,50590,61766,74664,45055,98382,97158,13646,64693,23127,71569,51533,92400,90726,81710,26136,90699,91920,60055,67811,20902,66221,48155,21526,29789,17471,57746,54237,43337,33526,33868,34035,12425,41375,84395,67599,42533,17748,62831,84778,59697,92031,91511,10079,57026,11594,67758,43136,34739,47292,32998,12893,22418,76795,56340,54205,71792,97681,34373,76701,69494,31080,94449,15364,65446,33749,28479,89694,54473,54403,79746,41315,56831,17002,27729,94379,90694,88587,38018,52790,99834,85430,92846,92826,26900,57317,41964,11282,91391,95282,30117,52896,38810,33121,80979,30986,87302,68751,85958,74341,85675,18094,36951,75066,47185,50601,97844,25405,18876,80648,16511,16915,51849,51681,43954,68553,85183,96358,78281,13067,35695,87260,84902,53691,86653,67568,77908,31625,66559,76613,93942,30707,68213,85020,10261,75570,26702,92053,45680,34772,86181,43546,96557,83872,71413,10117,88597,50424,41214,29890,54788,97325,81216,14396,47051,26993,29204,26658,19868,13920,66695,19990,33155,23841,72120,16836,30079,21198,98940,47870,28992,43862,38807,62870,53392,82012,40047,50062,51891,93183,67013,17018,72657,72690,74412,57785,73175,99959,51634,99890,44369,84185,61206,73794,26326,76666,57646,20307,65498,44504,32001,14300,34361,85473,68847,21551,81316,14078,96392,15853,89177,59399,55374,61685,21180,62550,15162,89231,87597,99671,70958,40880,75606,57630,90348,24063,18746,26754,87148,39063,29496,53335,93444,14980,77925,89589,29399,84741,77603,27435,96519,82375,64770,70414,18893,79103,50807,92038,54107,68617,38144,34831,93215,49170,44377,82603,31432,20085,96707,92931,69221,38708,96631,53765,96256,58922,10259,38321,74977,66302,27434,34822,64352,47314,71503,34735,10457,85532,27542,60699,30917,62183,79474,22257,17041,76714,30628,78263,83326,79465,23700,42897,64796,75581,92020,55056,10800,61467,45051,14257,83014,35285,74226,83330,86977,37007,81454,96940,58958,31606,17974,64999,37995,50461,28619,67955,25002,32268,75943,47482,60927,30158,11993,50060,53937,19946,55432,23045,76637,44947,12657,51638,73755,48266,48837,98155,77010,80074,57226,33513,91301,34759,68044,79949,91277,66980,30023,25547,31746,15122,17492,55953,36556,12229,76001,77165,46505,73768,18976,17825,44855,49953,73627,64330,28184,55455,88692,75408,74882,79296,46774,70522,23586,87626,43091,55952,33387,11130,59723,88439,41005,66350,76908,21257,92351,62708,20647,26068,56079,93052,81720,34763,19217,26253,59088,35064,52615,55256,21945,41883,27220,89645,32216,48009,74836,61943,13691,73871,86432,35349,14407,45568,64028,59499,59781,13588,26798,48055,33594,46678,25195,91489,75410,84648,42573,67907,13456,70833,91379,66633,27062,19399,83835,40654,16289,56055,89107,74966,70882,34661,67473,99646,36450,82341,63958,37005,56278,15784,96721,11535,73750,41521,21013,80932,16181,66402,57343,98288,44492,56107,83809,48876,47232,60456,29954,91382,60158,92415,89192,36869,31096,39959,46024,27448,48754,88780,55196,71167,52257,47014,19347,39431,93613,28938,97674,68979,98652,74153,61852,29716,26656,41141,48779,98206,35214,76313,98322,45169,78981,25798,37249,28761,82572,65665,62426,40338,93705,55187,51483,63440,10648,79436,31560,23243,13993,55246,32431,44176,17168,18856,24983,85734,28379,37321,22675,69073,91144,62575,67437,11550,50298,42038,80797,21491,19321,70759,47296,63048,89809,25308,12976,94457,10484,40665,83804,36737,96643,57006,61720,92902,38353,51026,47296,44505,64281,33060,50419,22877,21793,20304,55809,60408,77326,68717,91969,13290,12678,71430,74143,83367,48560,79922,94816,94751,54410,97033,52453,82380,34790,65943,78965,51794,39298,22279,40653,50530,61584,33279,93123,23806,50240,39421,92240,52371,23540,21815,18884,72662,81453,11666,58283,24363,62460,10697,57944,17359,55995,19943,43360,61117,77386,92267,99624,36470,38681,98386,65398,97706,55249,24730,59554,41982,16786,86390,45395,47096,73008,31869,42356,51879,45741,91253,69698,50536,77162,31559,47229,66218,25441,70378,59876,57511,37513,14484,62119,56810,53071,23431,42587,89755,62481,23701,16844,79308,11214,99271,43371,81848,99572,78291,55860,29035,17579,93085,46769,16072,51661,18898,39903,12140,33098,73073,13648,45650,65562,47758,22261,86616,32513,85439,80388,29674,29597,64197,98012,18014,31920,79370,77096,67879,78745,14818,17266,76898,59357,34748,43669,12612,32642,56538,35950,45559,98665,72919,40763,93715,50360,55341,31898,21603,90154,92878,82838,99546,78429,83284,18190,27648,57317,67296,68194,96963,84856,69611,79058,81506,77462,68810,40254,32686,85226,60611,32353,52439,52667,57375,95974,73764,92097,66484,75533,58242,37176,30479,40627,39358,36765,34926,54127,32721,68603,55957,91350,30649,57317,28355,76838,71388,37758,43471,57815,68160,25554,48451,58283,89007,80672,28527,45397,15907,20845,82620,95797,53978,44596,83284,85730,85710,44065,74685,86830,51783,51259,87070,83615,88087,81673,68706,46705,40152,28635,77644,10420,41716,13792,28233,88865,76528,11495,14858,95792,85086,45081,60988,64194,13747,68546,67155,79924,83714,47797,22129,31452,53497,80359,91356,30967,17434,54506,86557,69047,44368,36666,99556,34820,75951,44134,30274,71452,52717,47855,13285,87686,90384,17250,42055,33091,15650,11086,78543,46848,79069,15991,84603,41183,88344,88909,22120,64460,26647,37977,28426,25651,99686,34870,59306,14927,43264,25196,34273,25066,48378,56439,52213,19550,68218,97369,95610,13191,64609,34139,11181,99179,29324,63663,11138,97432,49132,74489,59425,24183,25110,60351,40474,68096,69315,19632,66353,78166,47654,16593,78816,51073,40707,75667,94089,60997,64252,43118,95687,23670,32191,29638,57063,37744,45129,85421,46448,53754,43813,51479,81791,21657,41390,43663,58185,75892,46254,90336,14863,33991,60854,13719,59315,53934,37127,72717,64168,74807,20351,35571,11068,27369,86589,20769,88324,69388,53713,66276,78171,35938,91497,54279,48744,71740,10256,32692,86961,47628,71740,20415,85083,68543,99661,98815,10085,94113,69184,18116,79940,60890,24090,62620,86568,66750,74209,12856,17031,67782,28608,75733,31441,46437,72527,17092,15743,64430,99590,77946,69122,16149,21335,71586,63375,38993,80463,47906,71294,20674,26126,93456,61100,48106,23932,47166,45123,92085,86459,26881,23285,90786,40425,94546,34187,21966,34197,77390,37190,48203,41035,52716,10045,62506,71767,82657,58034,42088,30293,39941,11554,84102,18394,97284,96366,99123,29578,29536,55699,64554,99808,69874,12223,68080,42686,39578,97114,43803,65999,80236,80185,36543,71708,83052,89941,59844,67778,35412,36063,59936,23758,80463,35473,12955,83436,45236,95463,40829,94340,67407,34984,17511,55628,38161,69768,42473,13800,70828,40070,58314,15403,92813,91512,37016,86624,69736,44658,47344,49690,13084,88953,79375,87636,62263,34543,17151,26402,17704,23690,92384,38544,30232,58108,44886,31162,32353,35755,52456,18041,27203,14499,69365,48753,77915,65099,32371,43611,69049,45496,57322,83765,19021,37226,17415,96973,79888,85232,61710,67624,41064,45868,97523,13477,39393,57210,39421,83927,14352,13109,63046,30153,33946,28075,84094,31354,38493,58973,83736,19687,46485,50068,59387,75014,54848,62615,99165,74699,46860,14291,30097,76490,83594,63535,99844,63084,58114,79444,82304,11714,45927,92840,10179,57042,48476,38678,94662,45845,96191,72918,42753,94627,78789,32013,13809,45512,93872,94315,99317,38994,55872,32249,13808,16599,47241,67303,39684,79434,75108,96244,99727,49183,24482,26583,72860,79776,45993,66659,33679,48192,42708,15281,82216,27071,87652,41143,57501,51844,96661,33638,82147,18298,44220,99148,59697,20153,70642,53034,20213,33732,80465,60117,66818,82443,58635,64871,39219,73821,44146,53940,58592,94842,76751,19138,72618,43408,18853,45343,38688,50982,44667,69654,25341,29677,57069,21601,31908,66913,10279,37480,23476,15715,34033,88266,81659,78217,38534,79654,14500,96178,89868,88853,54032,15334,86687,29354,28174,79540,16337,20684,19717,65793,58968,21170,22890,54347,54058,35123,49138,90543,35463,65248,32633,82708,95187,91617,94322,13291,85074,95254,83066,85562,62469,40024,10919,35002,81510,20067,80115,70477,97531,93950,74092,41385,80711,14600,93119,94865,16746,97350,85771,48076,82778,94357,27818,68992,91834,29471,28163,78841,61301,24257,44731,78309,57802,75060,62573,41774,58461,92699,30711,86482,86490,10577,36339,47352,98622,64719,81653,54176,61348,31888,37914,21305,83306,69664,16854,21601,43957,57113,87615,91437,28086,25304,81752,77065,63353,55292,70133,65230,65796,58122,35840,25207,68114,79883,56091,91903,91814,61300,92757,61515,39112,24226,65127,75348,10229,52744,40775,84599,44639,87863,88340,14824,78924,45400,56525,75687,57471,69934,15970,35190,86278,45396,83464,41048,88533,96492,95698,27525,73677,48122,71938,88067,56578,29696,68716,46474,52096,56685,33698,73805,16249,45364,11116,80840,61401,11725,29754,59605,41451,11926,12777,43299,41096,94229,19855,54765,15926,21043,46684,80607,14005,28318,95437,42617,11062,79520,96020,46871,75575,29183,17599,69292,76814,18043,78321,58538,74028,54299,35296,31816,96258,93612,54611,60511,27199,78292,96239,87639,36053,30884,17185,31640,39840,19708,25217,15747,25530,14798,85128,13736,58770,12603,84070,96453,58985,72413,93338,36728,99312,94640,10619,82917,73546,80062,82209,16340,59766,18060,85017,45510,61356,40135,97961,60526,73215,88221,15884,43537,32625,10962,93261,82617,87082,90089,56948,45710,47804,16402,87404,88620,57201,63049,39880,45250,43160,56088,92914,74048,78137,69867,35988,55039,64559,13064,77607,81864,91577,75558,40071,72161,50502,12425,80767,18049,30118,11097,95683,96037,87630,34383,39516,71922,21561,81714,59889,83123,35685,17595,89154,69842,84879,37787,50193,75590,42427,93928,21636,59787,48880,38714,33416,11316,10042,19305,26380,69105,10133,82357,82503,87763,43568,59032,50979,31886,10190,39008,42760,78381,49411,69596,19138,65880,76944,62625,62984,50273,47708,62648,13938,82401,73851,51968,12187,78284,80986,13029,80307,57892,92335,89830,95484,15044,12705,61027,47088,38555,54863,99109,87724,96199,59723,39043,85584,40256,13546,17831,81335,20828,28937,75389,18741,18362,25566,86306,66949,78329,29572,23486,28356,49323,72749,46118,41621,45441,36622,70058,35284,28258,87921,31837,49283,85487,47306,37186,85032,63573,32404,94884,48823,64232,75465,59545,89534,25853,14443,10066,26727,63334,55357,24476,87537,10400,11611,60485,58946,87083,78569,58126,73037,14664,45822,61542,57706,68893,30312,70876,90941,14505,62994,57859,78827,70086,88735,44819,52163,88025,89817,22603,75043,94586,70467,96649,63572,87898,96229,85872,35254,54963,52516,53667,19684,13540,79163,91509,90013,54876,19569,83442,70198,52787,95204,63468,72111,13151,53761,34330,92845,87506,52990,90536,40373,14471,89762,17347,32636,98256,76680,89916,47792,91994,21738,70055,34695,53958,47239,68964,39189,30246,73984,74819,83858,64004,90174,16266,98453,51909,85047,26442,13046,23679,91008,33431,21238,75673,79507,67139,65149,96820,16920,23033,12731,91064,97386,52420,25199,30228,58296,17831,59311,72650,90690,80380,22990,23573,62724,46366,99101,25118,61413,15541,22359,67518,74665,53479,60536,79642,28116,60984,76255,14784,23526,95218,85766,15167,25515,35443,91797,66372,22960,20394,26900,20276,75796,72526,20981,56945,91435,91908,35093,93315,26382,47214,95724,47826,17634,14449,59699,88667,92398,54257,65234,63456,66064,40318,51028,48802,65777,90430,56528,59298,75731,47087,72663,89177,14933,20190,66405,69953,40293,75485,20428,72331,58243,60946,68706,93775,84662,14819,91282,48217,69840,46473,71852,21461,68605,30634,15139,55958,57287,35473,31271,25434,65509,73361,93776,60246,38416,63077,56234,46761,88761,22419,61351,49063,44179,90090,11317,70764,35173,45594,35214,69364,41710,44306,74272,28197,62966,67747,25360,21087,66298,99863,30408,36178,95291,73258,30151,60493,84877,86504,35806,45942,85995,26613,16604,35963,14961,42356,72223,47915,67079,65060,21733,17930,62904,10730,69897,96763,18421,82874,66037,59196,59522,75593,51078,78626,68546,27667,67126,26994,35343,74665,72320,32945,47593,63674,63656,70555,19453,53511,61031,93710,37004,27024,70500,17362,49946,78522,50623,18996,79942,40994,95588,72072,19464,58349,10391,50409,63053,75982,72539,46922,41759,17569,37915,36349,24935,89714,75260,63390,20161,28954,51228,64750,29932,73401,78860,79874,16248,59001,47767,61722,25890,12940,67668,76581,61891,24977,91167,75181,44435,65505,26987,41341,46470,66727,40912,40385,17449,49842,64236,69480,24770,91721,83037,33856,99364,15127,18323,52818,43742,56942,64054,53760,61359,75816,95483,62283,52234,38773,34767,87342,76273,38887,52818,43864,53298,32098,97496,67136,39250,39590,49347,60821,31937,67051,38345,51761,70329,67878,31469,73215,45845,51366,88860,88862,90378,26465,75552,55494,93455,27418,20983,71058,52039,52385,16469,98848,15209,18553,99150,15891,59408,93859,99715,76763,97820,14494,47957,93337,40524,27350,45434,99041,29823,54282,57936,43329,50113,92358,73533,78198,38333,98233,90349,55713,61649,12726,91427,44152,56481,56044,74507,61194,82036,84935,80590,27417,85503,11945,17037,87029,71244,77026,21646,94521,89783,87360,61203,20584,53785,50944,99563,45660,27370,93996,56531,48552,63100,80552,76791,80306,38281,83817,43370,34765,70866,20070,47256,55318,91874,53280,44194,47825,62021,92317,46977,23225,92159,71142,51568,69943,21352,33455,34620,41993,16749,92494,39880,12360,55862,72696,19842,98479,17884,48077,56092,82079,67240,24780,95990,53034,66889,46542,20248,11595,49793,89193,11029,72809,25887,99790,56942,70582,79572,90547,97380,42317,16957,92255,63879,41412,75091,33902,49666,51938,26452,29109,79841,89637,78927,58491,24932,93959,26572,43041,52224,50506,13057,37753,15526,12237,43257,38595,35246,43772,97195,33405,90910,29837,16117,65924,33057,20085,15547,98401,24781,35945,85184,15793,13708,91001,99538,60586,84054,96945,74493,38491,25548,91385,51513,36158,83479,42733,13230,12417,53733,94389,55719,83862,47916,97669,66043,30907,28719,27370,34283,80137,66618,85282,60652,43757,29659,89378,32115,78370,70879,73580,32886,70477,91467,59238,75667,12710,72408,92318,71938,36573,85168,84846,59148,29576,45457,47936,66973,85262,42348,91703,77450,37255,43402,90707,41995,73255,44057,27285,17753,94104,30695,63339,10777,77881,37600,86674,30965,25317,43508,54115,59906,61088,96906,19421,32983,88000,93658,24503,41504,28336,53821,51414,44578,43548,10563,41216,75753,70125,49144,29612,81247,75963,20545,38703,59174,27092,45511,79742,38469,35762,16939,85679,91206,72867,34903,13114,58749,51085,90955,68319,76754,21357,73288,46883,84358,69120,20116,13221,39702,23715,45565,16903,75465,71122,67919,56588,54058,45558,83563,13100,60112,41280,49976,26299,97872,52903,97733,11488,77788,66303,68731,82760,64302,51749,51573,40384,15601,85574,64751,81147,36188,32902,42285,57112,70800,73055,42378,15559,63859,82013,97445,36418,25954,27610,54838,82104,17915,92572,54356,29943,75564,57866,34993,42425,28263,46821,89335,87828,79990,98335,79177,58240,56524,11778,41756,89861,58291,21780,14435,51783,47621,98474,49075,76574,63001,44533,49541,41041,82485,18956,22107,64864,57930,86148,71879,17047,34407,17813,35155,11246,35659,44871,49512,90817,97500,84163,23205,64637,10024,80959,76269,54817,39722,85778,23873,43040,54653,19775,37485,93736,93371,83866,13301,81525,69195,13562,16456,51662,35761,30762,49764,76414,60163,23372,84297,53315,53126,58624,69989,46676,38510,64051,40161,88415,41873,10045,64567,81247,76031,10762,42305,51688,24375,36662,58155,13619,14441,67989,24121,34937,84866,43401,11586,42239,97533,62101,50916,92738,48393,62044,61914,33589,41776,61841,12604,59879,57754,14267,66005,97799,11190,53361,86500,81822,31471,93180,53954,25504,69570,87266,81642,89022,34319,45768,13368,68733,97667,98531,95520,43097,52588,52606,64121,13742,23485,76557,93799,90535,77603,67254,13193,46187,96675,84951,40651,60246,78568,64560,55535,35474,40403,25702,93500,76375,95667,88929,95194,74461,48909,43721,10337,51964,74020,94364,64851,94259,18472,84772,97427,99018,49394,27581,67860,37092,36652,12417,26849,74735,49434,79372,32309,92811,86929,87210,19144,10125,55199,74330,96578,30350,80085,29308,16742,41529,36167,89001,71179,63657,54285,67950,38898,39711,43655,27484,75918,27782,70754,28177,17978,50652,85896,42486,57564,26564,87204,37343,66290,11096,59167,82437,56118,14782,58945,98582,32084,23179,74627,75433,68207,49343,61189,76403,90948,63965,38747,97074,76272,71292,18938,12205,17143,91665,99147,12780,27730,47946,13866,66842,76466,40277,98034,95266,19676,30450,94234,12989,69239,81907,37498,92060,35532,52880,14987,82504,40081,72760,66117,17679,73314,26792,24081,23704,83634,16486,54266,63914,29829,63715,54721,67413,33624,43758,37641,61426,17451,60910,18050,79322,73999,95985,95503,64593,77679,68596,13986,12469,30945,28131,85756,21545,49503,81067,79577,82116,75812,11190,30953,53408,10594,11226,70507,48451,38214,21094,59721,35497,89902,80963,99055,81739,55638,59532,61499,11412,41098,17944,98876,84736,86634,17744,12697,61741,63996,79325,23747,38581,31352,75283,79046,27765,48367,74819,71017,14990,25635,39334,86680,79364,91467,86411,26560,16012,94184,86335,56211,18215,85248,49698,87331,46303,26622,82924,57459,73238,36721,90115,33351,96879,47502,26165,60980,96514,66638,18666,96964,77116,67780,55405,29993,40533,35852,46339,55476,41596,15979,16208,19042,49760,89121,91696,35553,19665,59443,15183,58503,93558,30160,30620,13812,43731,56928,93524,79822,19509,83791,99462,42260,40795,18371,78946,45121,81892,44249,33494,26096,38625,76491,69204,21345,23996,21490,15224,83951,37847,67882,55884,33621,21420,46010,70685,29656,43699,44398,51285,33593,75975,91667,85399,26262,18044,95597,55988,42801,37106,69625,26540,80985,96751,39507,73121,56376,24383,26685,42583,26521,15689,57331,77386,35731,20122,71740,49054,20931,67175,32014,24811,48819,18944,48432,88486,25727,69416,95046,58246,82261,93695,92542,72763,45430,86331,51222,14177,72706,57754,69160,28506,69138,60727,43790,49081,29984,95150,43996,88769,62816,57048,84324,90224,87108,53400,26920,96520,50505,77397,94618,66398,53535,78812,75990,74799,91200,34247,62959,65326,16769,66940,86247,88679,76323,53253,57225,28031,82603,55431,31467,93344,49765,16059,63881,46498,70721,82167,58430,20704,91496,56165,94500,64747,97496,75619,11358,31323,16497,99991,46140,70129,52352,80376,77255,30612,35043,89971,96321,39548,41531,40527,38466,77003,64511,25579,93681,97498,98902,83195,66875,16502,62758,37681,14877,50807,40623,69574,44049,24232,44291,75063,31642,92317,39588,10874,62543,19903,83389,19513,13334,43943,35218,26200,49118,10075,98677,45710,71693,30740,97615,80904,39501,63711,29759,75848,95952,25312,78931,29904,87685,11004,32506,87429,87917,60965,73682,59370,76050,84253,92009,89599,89347,65307,99300,52621,53535,82753,87554,84621,65292,70323,75036,51037,44100,50506,17397,67578,39517,79664,43217,38207,59830,15398,97234,72784,21774,60412,27113,58017,76155,21558,93489,24767,15816,42142,21646,83655,22762,47882,38529,35638,49678,80121,36316,80049,66258,98037,24331,45966,46181,63837,31354,58758,73972,94517,55941,50957,86887,93397,55149,69632,17610,21225,86420,94315,98089,11026,78846,39297,66528,28736,48978,14602,57672,22111,46848,29067,82536,78582,44592,28153,82865,50267,68434,24454,42550,36348,80517,20255,44185,70924,12682,79435,81938,16307,55008,22231,54147,72070,55941,71905,27744,87519,27427,39673,59840,46770,18284,35281,48858,32223,43420,14158,22822,94460,62129,88953,40308,79577,38715,65758,73998,48711,49728,38778,74141,23523,48245,66494,22047,47589,16128,57135,90056,88796,22262,97588,33296,82757,50700,44920,11261,75708,64214,96500,87217,87345,16329,87609,31462,16426,41126,91331,92895,35402,95483,96576,54528,65129,37185,34669,90779,16111,22496,67944,93062,79499,55919,63975,17979,61726,75232,79287,24351,64551,93505,70029,57330,39099,96873,57198,92143,52815,13286,10797,60968,95690,66974,92906,85973,15076,81063,54182,95144,90728,74644,60291,89746,60206,72735,36428,35315,65804,66743,82527,25368,66906,19481,54464,46503,87737,85905,35102,72109,45949,95199,17911,70291,12931,47466,49761,71108,55705,71789,64484,59580,50363,39273,26177,20150,35502,41921,10258,33453,14220,99474,77315,59852,82592,51712,61907,41793,56910,95997,67978,10162,44547,75318,53849,92108,32634,90894,12385,69399,74474,47487,74944,38535,66334,44685,86530,83438,19714,81573,46292,34118,50402,56241,57710,55622,90112,89672,85191,84799,61545,52913,71668,60431,12799,13870,68959,54728,61054,14343,38765,55664,34991,74967,22484,16684,14894,68634,77509,14425,17551,12705,94633,70958,42970,26606,63890,91479,36013,24816,40711,75854,55633,44701,14569,25325,80989,49045,28971,50924,53245,45380,95978,10911,28745,21675,95026,10910,49241,48614,98724,47963,79252,77741,33413,26051,56090,62077,76489,62474,92123,65308,29829,83794,57425,32515,10037,31068,86212,53568,21663,97910,69747,30756,24017,20335,13578,87927,90119,65390,11916,46845,80536,98813,30570,26176,98617,50873,14329,34504,36887,52942,71929,81312,42514,89170,78570,65460,16196,35556,44987,85416,70720,65995,76973,42895,92209,86554,53213,15107,50129,66345,77966,87673,92866,80071,57592,78895,45574,28972,81238,46863,65835,16853,79070,77920,56467,81939,18708,76355,16276,90944,65905,26510,51525,96195,14036,99061,54472,28386,71786,96309,54555,43125,42554,98776,29756,18920,77033,96033,83669,49066,31115,36257,41098,83536,31217,60536,51346,67385,61563,38692,66605,24069,66455,75424,95075,64641,72077,64685,76858,26771,88951,82915,23207,43218,38415,77946,25555,54630,90740,23144,65216,19695,24463,76256,98088,74594,63949,52300,71533,33201,70232,37233,76044,87125,69814,94163,68894,54961,38667,68008,71520,80573,88346,31713,24812,46774,14102,21895,87623,30027,48023,83711,31974,43783,53298,70610,24449,92534,74823,85231,55867,80308,67168,44186,44362,29990,95360,81771,12171,93405,66272,25317,29022,50751,22773,53315,51995,50051,68463,72510,98380,52619,85223,82990,37541,60201,50681,10443,50852,86661,44827,69263,93795,89481,37377,37179,58662,65727,30604,86750,14651,90515,25709,41913,74167,74104,29363,70609,89604,53430,98748,90684,21855,68883,60484,21604,72741,57030,11117,15069,15767,26818,34263,12971,26099,12880,84576,11881,92264,94242,81136,49276,98097,59032,38074,87287,37977,93931,18112,10250,70029,58892,38336,97289,76079,37445,68768,70058,33828,95389,51509,50167,84096,14337,95463,94875,25425,96697,39443,30130,30694,16246,75823,52532,78457,70878,23648,51097,91835,31675,91933,12988,33730,57343,12573,97810,32564,72162,41621,95210,78404,44673,44951,39779,45645,15071,86083,66815,57982,37782,99025,94442,82229,77342,27016,81551,39439,88568,62899,97023,82383,33677,39190,96101,63873,57391,34452,51177,66874,54076,21484,15417,46022,32425,59296,31839,45361,55607,94306,72342,20584,57854,63642,99742,35143,54832,65568,79272,25858,89402,51845,94029,81354,39844,28111,26606,99212,10121,80568,33243,12184,18364,60515,57712,67755,74964,69885,42974,49236,60456,72887,53550,51329,26564,33877,52294,57641,68882,16225,71920,43315,33267,30026,22946,38986,33122,19423,49542,46039,69286,46477,88344,13287,59801,69683,79242,61412,22927,50399,94302,65121,26950,37738,84518,67655,65105,46880,36171,86404,34771,88469,84910,67706,70749,52287,10503,82912,81711,84670,88709,60057,90952,44338,86443,66962,26029,76644,14306,86348,53108,56309,96308,63516,87236,51829,11717,21559,18323,44060,79056,89330,28593,19398,54326,36725,18478,51419,39395,25731,49650,63419,34503,17280,67066,61094,50046,88255,11730,29532,16509,95094,13856,14580,94860,99125,66401,65370,22217,16136,30302,56960,43554,76539,87017,30717,65578,52675,75851,56121,32133,18573,81743,45226,60067,90569,31847,33834,18714,12996,68722,26139,58462,85634,95802,61492,29025,10312,89782,30915,53289,53989,32495,83824,33015,94387,77591,87766,77303,46992,94425,90021,62687,92777,54241,98763,85726,49609,78492,14178,95180,87126,73061,70804,93743,50051,38830,75927,27775,30492,28247,24399,97098,16396,68769,92944,56835,72253,91447,64114,19570,61941,54595,79477,94520,54822,60972,43963,24072,35264,14040,30483,89310,73211,31202,35985,87433,58481,43220,88297,55644,20985,89532,65169,80705,26225,52878,55454,41937,68153,78128,44798,37037,24333,86144,50486,74299,38772,19411,14514,48617,69133,97795,22785,74345,61896,31926,84657,72378,97414,22803,42670,68292,87650,97160,88940,73262,98246,58150,33643,21606,93613,37815,50558,21406,75032,43195,25038,88591,60965,60821,74260,24873,19364,78755,48931,31872,58757,79887,86213,39165,16305,64842,27362,30940,69360,35677,92903,76261,88629,91085,51766,38953,65899,13579,34751,37318,18107,17208,40892,13306,81771,10573,21439,63776,10176,73376,47097,74874,64732,12681,43819,54743,99010,49305,28598,24441,28639,44263,77228,87303,41551,19103,86343,13758,65684,83981,90665,35815,41214,65393,85104,53834,93811,30733,59143,75280,14891,63805,34113,27428,85981,34318,14907,63065,41576,25956,40970,81545,78912,10105,66441,43604,23029,42317,42365,52484,15576,51294,96404,86330,26703,95950,55082,75977,43800,83597,26115,79638,92912,86423,90596,77811,97355,41504,70358,45334,18940,72963,15024,45939,71766,55497,76382,70214,65201,91045,54805,33663,27452,67096,61735,37062,87494,48686,23197,24577,50440,82464,45105,23881,72213,87422,73651,56356,20589,35196,53072,21611,95345,25920,36316,58183,14753,56625,95932,40367,15171,87628,23188,58286,39879,15436,62005,96746,31037,30772,74113,26814,64020,99250,54263,85399,45900,49597,30661,99860,28860,20706,22007,77462,22925,19412,66098,79275,65062,48132,52885,34368,83113,18978,40139,59174,79329,38592,64869,65154,67206,51898,35102,37804,60370,31761,18188,27831,28613,15371,63123,26060,26143,18959,42726,66467,84558,77262,59142,55359,54976,72546,49668,27111,94761,79635,78130,95089,65697,80390,38657,76391,13635,13861,25213,76490,73846,94017,11678,68228,79018,86373,71054,82610,91014,94677,29388,96359,50715,83922,65196,12144,63196,78810,93295,50803,45701,57372,21077,32731,16571,85103,91441,55096,28849,13423,67176,30159,15954,29156,34025,74519,20578,97871,96361,27962,27742,81425,91521,83018,16171,65634,31316,80312,14902,63410,10761,17075,47353,69628,54025,33901,90577,99276,28095,99530,44418,67453,19342,25911,35701,56742,18995,21970,67467,32379,84249,12125,45048,95264,62447,94111,77743,78112,70930,38085,16817,14318,64599,42682,36922,21738,57100,54318,27588,78075,71005,63146,23095,71364,57422,36653,55507,84904,21824,25404,71324,73544,45124,46300,14912,26456,49012,71462,29047,48791,20516,15665,24514,24826,83711,21140,39900,53810,31081,37016,88718,59717,91944,21319,73097,45870,86777,74002,13610,38721,46117,25798,76174,70752,93829,73267,67033,69587,19205,29228,87225,96139,56139,29248,82832,71181,36093,31468,28077,54420,90420,78912,76697,22142,90689,29774,30743,76801,78098,36327,20283,19786,55724,53310,86740,65948,23812,41646,48772,17933,83806,89767,66338,48105,89382,60267,65730,76687,93627,81333,97423,16405,58649,12127,77539,11681,32281,73179,13157,53436,76477,35223,19768,37990,31530,20801,47004,11080,12182,20171,34370,70000,97987,33694,23085,57814,47969,15363,77767,57571,40066,61934,76553,91721,96278,97399,30419,55603,67538,92414,46833,28467,44963,71082,20054,85196,17321,29076,66434,10649,27755,79710,45902,71442,67483,43010,17980,64418,99067,68420,96702,62416,29955,36692,65271,87916,32783,75509,97049,92435,89243,53661,95581,94315,50952,91475,17505,48710,96996,44035,28471,72400,21338,62800,22748,21716,11215,63409,85416,87732,59661,11280,38387,33879,19464,22029,61061,69224,88574,31096,35579,27489,48868,35945,54844,51378,85636,10925,30350,35814,22045,42306,83133,56673,45309,80354,52812,11092,64155,75510,35800,20260,82122,70805,60578,69958,42572,37512,90530,71227,72426,90960,29233,93621,54065,42497,20846,48436,16042,14933,98632,61310,86168,70875,71689,28675,30948,28986,62092,91913,55131,16726,33571,53194,13800,11757,23105,38063,15849,73182,81695,21812,57232,65600,76941,71346,80279,86120,95544,54846,30929,61060,79072,22122,51007,82109,26873,30260,76484,44274,89098,39432,13312,98148,38742,57977,43605,25567,29401,97554,82353,88071,55093,65414,65033,34268,81982,59072,48297,38989,24075,20891,57327,32474,81271,34883,79833,53603,94356,49071,84910,98716,25473,70046,56118,71150,10505,52535,45162,46174,90312,27781,88547,60834,99371,10134,10838,32255,57748,49336,71685,19688,62490,89731,65224,61003,17071,74447,79137,18590,74067,58694,66096,37923,48980,99516,35166,87518,91240,96822,23153,20901,21280,97361,58261,74392,53412,69057,41757,12588,16122,29364,70572,53218,50871,40225,64790,13031,33709,62118,25378,37856,17520,72394,22058,71072,60460,32384,51750,40139,48194,92038,23978,81842,12557,74767,74796,85403,23343,77337,33304,44461,48686,33570,77082,37572,44841,54892,45658,33774,95142,58586,45353,76222,98846,18431,44238,17033,77142,63793,38417,47058,44285,13483,63665,67551,25641,37183,22543,73867,62340,11514,21800,28333,23949,18400,88562,38246,19084,17846,21198,73548,50189,67783,74466,35985,45485,75449,36021,78284,77213,87822,23860,77534,10668,19563,13747,38625,68702,98575,62556,73130,60098,71639,48288,72877,16842,88684,74289,79185,77624,53807,65768,36619,60125,27760,13917,62738,11619,80829,65245,71937,14145,39711,14190,75405,57818,15185,52455,70057,82659,64529,59131,80130,94494,14353,93494,43883,84384,84839,93737,55888,35923,95315,73978,39043,26176,79346,24772,85981,31848,77913,71075,48124,40607,26247,87488,15814,82533,40409,63602,53239,23225,99626,59951,64412,94591,29060,92933,46510,62105,43149,72791,51821,76893,15887,55997,83712,35813,43256,83569,93980,13193,91769,52148,13494,51922,18129,44054,78855,77787,86379,81370,73513,65473,59655,92064,24057,68738,33467,75041,92584,41072,36237,76479,44066,72434,47029,29464,73380,47836,43547,78906,70943,95427,89808,58051,84377,93500,62931,60235,35050,74422,84577,38928,49205,39410,77222,53630,17888,32750,44690,44880,40258,12955,17760,81896,50963,23695,93701,84515,72842,51819,91956,85118,83389,94986,31811,64400,80979,11987,41994,16657,43696,99230,50695,53670,76546,90728,62690,19098,77797,78580,22153,49841,49230,12128,75600,30048,92194,70640,48195,43539,72137,14512,57640,15943,92604,76849,98714,33021,25351,85879,48276,82359,88403,60478,96769,51070,65984,55482,16384,59813,34242,86207,75480,94345,28725,70442,27358,84123,87567,54829,12972,54132,58475,83971,88802,33268,54926,75957,84093,44665,70892,74186,35016,45261,76962,78592,61823,10674,47966,24368,37493,87964,39365,44043,34750,29222,82145,86924,64190,25067,30128,81594,97007,27778,84568,47710,56136,31007,22811,38154,30863,67581,75378,45858,76970,12722,84060,74270,54442,96859,88673,78415,62714,24045,56656,12688,50312,39777,28730,18249,27990,74013,88112,26950,39835,93129,94382,43244,19566,38195,24317,30163,99781,17763,21162,93130,50017,89782,38822,24471,88762,12032,36965,68786,50992,90556,26474,80792,40543,54344,62105,38925,36438,96834,15349,69124,14376,14531,75875,92283,85569,74480,39677,19891,13786,83348,10601,91396,51696,69201,32357,24407,15535,55679,45841,51291,25564,52407,10792,80784,18517,90579,87334,88193,18692,28276,36295,37829,46752,62189,18049,74717,12693,93316,96749,48727,84242,96218,94688,76576,21063,46272,16034,56505,86547,64447,32241,36462,79503,90041,48327,74094,81779,27965,40103,81682,68387,48209,93855,93722,63452,68320,91926,22187,41292,54473,22901,68953,61119,94495,27134,27147,67373,59621,31100,73372,29370,67281,65511,75209,34334,36455,87517,27537,97824,71275,87855,44663,71355,70309,59303,84234,33099,12418,29264,12778,98024,53392,40567,88594,60708,31066,48274,13347,57843,71482,77841,32605,94517,44885,48599,70386,90594,84113,63611,70995,42446,31876,71701,88380,88529,35731,78986,19546,73844,91292,87690,91532,39086,89676,32354,37961,61744,15188,35723,30221,59410,48790,16033,43046,16235,95703,46607,38543,27777,37460,30482,41392,16652,61756,18350,66746,10308,35403,18750,28262,26258,62755,40865,37588,77075,27256,26701,23736,25122,36737,96394,26509,55084,69835,87680,19399,97813,23965,92972,41387,38728,43750,59605,63226,38002,75432,50147,43228,85983,96023,53026,50949,14377,94617,97801,35525,92476,51269,18605,51274,26235,14928,71782,48797,85102,29375,50667,62484,33110,14152,18248,94630,45071,88040,31484,19932,80821,50433,92704,51990,41739,68534,87125,99041,57837,94420,27945,90007,26274,78878,63307,34146,43002,24528,22861,27028,25250,76829,56534,80165,29103,83439,60614,90465,36466,42267,50632,15484,24787,41027,36527,47145,17957,86899,69851,99522,41580,55816,16757,96724,46533,34174,29928,97898,55854,98480,92563,53924,86940,32590,88039,95903,16810,48143,16356,73902,90859,52875,50474,97274,45529,99526,93756,47759,44665,56705,20445,25032,96513,87508,98941,82565,39514,28382,44900,90223,10103,64271,81353,43422,52175,58888,71785,82651,18579,13506,16840,18315,56618,87097,69258,62662,20019,32784,17233,20239,50833,82585,59491,42879,99657,82805,93111,74726,85823,18041,75772,14921,89553,16518,70576,24005,91485,88202,58128,99570,83243,25092,88435,53262,59794,94673,89495,54477,80894,59486,65477,13259,79356,96661,62972,63934,97990,95438,54742,19951,86121,30652,36427,80711,32164,78582,73133,45440,10372,97811,74785,71679,95021,43705,72065,59002,23303,20597,82065,21225,35046,62784,42846,97246,21820,14692,67835,20622,98253,68286,52960,55828,22325,53938,17904,17573,95785,81399,39215,61971,42645,32597,54530,11624,69578,91900,51543,10902,60250,55703,12954,35050,78932,85499,11079,75933,34323,38519,31066,65033,81070,85154,34151,24968,39721,58433,81162,79802,34198,79638,22220,38691,77516,27750,73191,89935,20146,86164,75054,77921,16931,24498,11591,29416,74211,30990,29801,75416,13196,85404,88419,83151,53594,61900,48509,53681,53995,46183,86561,56631,21005,67445,23726,31262,47029,11367,93586,21710,31089,60082,89237,63086,37976,49702,58843,50959,78934,78360,16568,44073,37302,49022,57437,76451,21766,91341,59596,15433,10161,89661,91523,89748,68175,53139,11386,59528,79840,75620,54709,16179,67964,63800,89487,27970,75950,42240,44226,42927,81097,20118,44870,89719,33404,65577,47531,78116,66656,54367,99009,11085,90114,47521,87180,97695,28570,26368,83258,38553,65393,79184,32380,91833,41057,53176,41467,38437,42103,86501,75528,67915,74203,75517,45089,47223,31506,78032,75367,43515,65232,10749,72583,44839,51578,17449,56165,27947,68457,51319,31128,56142,39817,37182,93330,67471,42656,73405,22321,34862,44285,22865,40258,84452,84324,49778,28871,21735,70258,60425,79761,21859,43373,21237,58262,72776,43240,79252,74242,82225,33485,73606,38279,13676,28080,47181,96298,36575,27111,30475,26827,83091,16594,47371,15519,23725,75039,22448,45648,69101,61357,58611,23242,78077,95746,55265,72180,86442,61316,62327,90540,61249,78420,27387,43900,50218,78535,33592,13950,60951,86661,74074,46681,15081,99341,69616,23269,73581,71609,94533,46377,22665,58867,54371,42763,85005,61008,50752,37769,47646,97249,81562,82622,54758,50610,59366,51411,28845,14067,30637,37352,32200,15248,12175,84618,17833,53812,26774,19083,19465,28313,69649,46945,26469,20945,32353,80383,46187,81954,56756,56664,83588,58699,48795,39098,12355,99448,23040,11953,26921,74068,93327,55603,72939,36642,68108,99126,90871,68086,86129,80929,64294,94529,46634,34210,14250,19459,18116,39698,77693,86569,82225,61520,55775,10127,28214,88196,72596,35182,38482,41194,74169,57539,24330,84333,23188,42266,44147,92725,34819,16389,87617,32585,84287,23705,22748,88618,44895,94600,13138,56467,29729,22782,96580,62894,90663,89994,63156,62514,97016,40432,42865,93827,30525,48454,73126,93910,37818,30526,51474,36717,39804,63241,66058,20188,94870,67580,89843,41140,32086,99666,76410,60320,15799,14324,84437,89982,73973,85504,96115,29997,18221,55825,20551,71754,54197,82586,66735,62901,77723,70775,33729,26541,13890,82587,27794,30417,99739,70470,47833,80755,17829,57571,31443,98853,42505,91007,91198,35070,12274,47413,80932,89299,10423,97744,51944,90161,65363,94629,24439,15406,16998,40379,62227,55673,90229,27429,35953,71286,11785,72823,82349,67996,39865,52512,85994,91212,49167,77416,19530,47706,82159,98581,55057,91094,99041,16905,68846,88446,62160,45788,77089,64772,42307,51982,50509,67591,14188,98587,48400,49184,30495,41655,29045,17402,39442,59741,35988,57480,60487,77040,90608,87676,78444,93259,22898,46866,27671,51903,59293,32282,35049,93983,39073,79180,97574,24132,94585,64429,23142,52167,60055,49406,64310,78142,78813,51191,81955,32570,44376,74591,95289,34850,26336,30964,67223,46184,19386,15096,52362,18203,75445,91042,32952,52645,43433,93418,14429,27082,95787,33294,27268,23831,97299,13695,22690,85887,44493,31302,62622,17839,64389,25818,27657,29367,52802,93743,63486,68494,94502,87433,67432,61963,75437,66737,22028,74353,96577,24352,30341,16622,13423,54035,37685,90291,78469,69428,90667,57873,70501,14098,51094,45352,36069,34513,60392,50658,85338,47090,88880,80796,48441,19799,66602,40096,78694,26784,31974,41697,69358,77432,84273,30278,43266,79763,19542,14768,42509,38444,62038,93971,50243,27651,35182,40251,51209,52320,61731,19551,66022,21466,41666,11615,49560,65384,62747,48422,76009,66423,12113,37207,69920,30291,63932,46340,18988,10576,92329,20891,47409,23907,95150,46670,52359,81633,34061,21339,85587,20005,41621,95539,95372,50521,77006,48288,68122,64511,27563,34022,90900,49467,84585,85148,92591,18655,19555,17346,82818,57752,33423,79359,33705,74918,43530,56819,17202,72255,20385,80734,35053,96760,94928,85036,76494,73619,31799,73935,36333,83351,80971,27610,50160,20265,26881,29529,19767,51081,45047,21927,38525,43641,12235,66060,13446,97001,72449,70748,82573,75776,89947,21232,45758,54423,54215,50147,26941,37810,17261,88859,77514,25103,55097,27216,45597,83154,66360,46069,59145,69120,25992,90393,67085,81717,38183,21692,66773,39301,74219,43729,28355,37635,29231,72320,86699,16219,39228,75947,64882,59948,59684,65011,92656,16163,14513,49738,56216,22122,39739,77586,11659,48693,36577,41132,13629,96181,33303,46559,96134,19172,50697,21003,95818,79517,13868,50372,18302,25696,10924,68091,69761,89570,96393,64246,62158,37620,33361,21519,39551,42781,65777,45273,51921,81956,26343,86623,77151,33720,14697,86709,18375,13774,18764,67116,56777,80319,78759,72054,59345,16983,88805,41111,62044,14207,56916,12181,64228,77334,84640,79463,76111,87928,51722,14467,25417,11689,12413,55574,15555,44874,74095,44647,42079,31187,40515,64160,52926,96240,74908,71281,89553,61859,96685,20851,18593,53856,84999,11270,16354,21934,46267,20329,77544,17590,37166,64105,75027,14381,78879,19136,77882,41254,43460,92770,95377,61444,39110,15621,18330,31487,71844,56199,19908,42668,87764,77713,79034,34303,61473,93842,55600,56520,56235,48034,73517,84190,38562,22221,16126,44159,12770,31435,72455,17477,37293,36168,15460,71672,81063,47959,45598,37987,33204,53798,61939,86578,12611,36576,34137,84388,81797,59741,93821,13438,74204,62824,20857,36490,72171,27710,80905,33099,95608,13126,22733,68790,93563,36203,48872,12014,90885,99603,41343,74285,99642,77556,96575,99490,79573,22145,15510,40200,38660,96746,69973,56778,72817,57830,18899,80868,65244,65085,44269,54270,87697,95240,84828,61738,64794,43355,46390,11270,54294,63206,13003,21942,50705,52070,82545,24584,73153,25010,87337,45040,73201,24408,12031,33530,56131,35671,65764,44391,36248,82699,76009,61285,15094,79971,40076,13439,95561,34534,85295,47281,12351,67480,24041,62493,27811,87867,26813,20068,96354,41932,25874,93344,34587,66350,30266,24611,27594,82333,83531,73375,51564,44653,77902,57368,56975,91202,98320,14502,96048,56891,70102,54277,11163,78312,74365,36365,58403,81602,85443,60327,97207,21247,58426,77102,97572,32838,96558,15272,44506,25185,76548,99208,26053,47782,84141,37941,63885,23567,73953,60065,50779,92884,46823,60071,99340,37605,77219,69192,33784,89933,48652,50011,75771,40234,23203,87234,52339,80522,21669,94585,78165,94619,23716,84097,59899,60228,74206,21663,39754,52075,96700,94958,97600,60411,96134,74561,19212,10720,49675,53893,63833,30872,29209,79993,18034,85454,51622,56251,43173,60723,70786,19624,90829,84991,53112,64474,65850,44672,25711,11566,95238,31109,25933,89410,78948,61713,45637,92735,85294,15452,19252,70738,39476,88641,63597,55392,69004,97145,83663,64979,65304,38829,18224,78794,96627,75097,11644,21486,58981,65615,39440,93043,60485,76725,61304,13349,63102,49945,93983,96512,27337,11168,18523,73315,12395,74674,94878,15984,56398,84514,43950,97729,57007,65015,81306,64336,39343,83902,44266,62999,22652,49858,98212,76218,64508,34843,71325,34503,85239,46211,95308,33596,75366,53343,32440,81464,23592,93565,67367,19772,81711,27942,47451,63681,17235,21301,34328,35664,59288,14360,30640,68991,87110,75776,46466,41254,50479,45313,84341,90273,92436,57458,69681,70433,28512,48351,78616,13852,49106,31219,56597,41142,96609,74762,82644,91263,74860,17904,28160,49944,54654,44737,44218,83216,52220,27877,87089,89351,14886,28506,97536,56872,28792,79686,48638,16197,48803,23210,50452,53396,45933,54284,82926,94453,23677,38637,12012,78776,64177,11878,19199,25006,49833,39679,31039,29040,32371,40390,60668,59143,70516,79632,26446,98044,60895,37469,15381,93342,84792,70599,77820,34150,35589,34462,49471,44587,50190,43735,53729,41888,46693,51572,54440,78273,54060,52813,77049,39727,66977,81361,40938,40275,73741,83516,44051,77619,20336,42626,98891,87010,88434,88062,89648,10611,52340,30846,35576,37579,79943,66791,77616,12814,22537,42762,37661,36810,72790,53554,21438,18579,77273,95264,67687,61751,32338,59228,25004,77110,12129,71870,13177,84346,23154,13600,66779,57913,51093,16390,40601,28197,11125,50774,69986,13296,66165,20648,18500,12967,69713,31983,20177,23179,86939,74521,29172,56909,98067,24810,84236,83629,12955,91419,67432,85905,87818,97274,53064,74548,56930,91099,22890,33711,22336,31866,26797,37653,13599,79886,39345,76602,74116,25355,25911,27522,12113,61498,37304,16045,96692,83930,68960,11201,32361,28207,44567,39500,82161,31564,14493,12501,96105,88023,77628,70223,35792,69289,81955,50442,61725,35091,14653,70795,91616,92668,68644,27020,21657,21485,31969,98560,17092,97171,46106,36169,55167,86919,19869,24886,28613,86620,62189,13789,93085,44477,23670,44988,12881,66027,66500,72684,58032,60748,58301,69926,26537,40363,60299,83074,49813,90965,98003,74706,24293,44695,79349,65083,92253,80955,65985,97705,21592,45187,63953,13969,10254,82191,32990,43450,42156,66766,64200,27411,89681,22218,18951,14955,35535,35319,64392,34912,14304,23813,30239,98202,43228,86348,89968,67425,90067,30836,94095,26636,50664,65011,66111,86870,77316,88127,26688,59282,34787,86557,59461,99795,28864,70206,37355,44823,60877,26292,63107,96706,40025,89150,17788,69992,33267,68080,23224,56100,41790,92903,12991,79792,74585,51748,52630,12194,88424,30417,38768,97827,53336,57769,20644,46268,56113,48871,36727,87225,73441,99974,14653,62338,11165,19362,60216,84267,69053,96521,63452,81035,74176,94462,29017,35037,70235,98066,69377,74488,99585,83651,79409,54846,51607,57121,94012,72528,63028,90030,20035,58854,88950,38632,72968,38299,69306,79671,74253,72692,95058,36223,37528,13376,18680,22571,60427,96385,98085,21008,37202,76608,36388,77211,76938,78533,83396,77438,78809,94700,73606,95187,68011,96146,81824,64690,31349,89789,72299,99280,39876,96774,11120,72013,45516,42660,77285,12172,46583,61281,75255,44299,53295,81568,48513,11975,22346,32861,23762,70758,72251,81247,16490,36101,69816,84620,76021,22153,23265,99565,12831,98639,55097,98904,99901,43160,68904,97244,98200,38146,31950,44323,10793,27574,98261,67317,53174,25172,35852,67935,77903,91331,23627,17859,76506,17044,66307,77558,36289,62263,36588,11575,34041,21688,69598,19559,49433,85827,93729,41356,43192,15660,39147,51812,93283,75056,89074,88002,14143,72269,23711,65376,71911,57709,52446,68296,46369,54011,55127,98457,88641,65811,68688,46415,22267,10297,89626,98087,25949,20691,21989,97419,21034,25623,46104,39334,93013,40143,81847,43750,22988,73569,68875,98197,88619,21210,84811,38800,89389,33501,42470,16740,81510,99427,53863,53955,86489,78408,48742,89696,63983,27599,78280,32493,97680,68302,20458,44110,98427,70479,21326,58957,68900,62243,68318,69141,72031,76989,96938,25872,94487,41098,76763,19337,11905,79913,15669,40610,75199,82000,66154,10605,62632,58298,61093,28348,98823,63922,93950,47254,59342,43070,34822,55771,44775,23467,88461,38626,65963,65294,84237,75662,58429,54221,99000,14786,41249,68669,47958,43427,43885,36443,82123,41199,71948,28235,19247,12233,83368,36075,78791,69940,51269,34502,30513,70571,21008,33264,89942,18062,88072,20948,41371,84553,93580,23198,98471,84728,74889,91487,56679,29443,46467,30815,84871,86633,14236,41122,74028,51222,13815,29229,66652,51765,53425,76838,30087,43708,22578,46377,56490,13396,91847,87033,46767,42754,28644,72630,70954,10967,53917,88265,75187,36970,48748,70620,78818,66425,27527,74124,77786,36279,27247,65763,97518,42022,38169,74283,46029,95241,97895,20165,14919,83121,49757,35021,96741,14863,27426,58231,71685,35455,18800,30953,46318,78942,90112,94738,47778,56739,54120,12482,56410,64073,67661,58322,19214,73697,72462,47064,92330,46089,31278,71213,33709,87772,42256,14140,98253,95021,75629,61223,75786,28186,31879,95225,84549,85788,17923,41872,95288,98189,85781,81940,78952,65165,23265,96249,91473,14680,20605,75648,71576,81359,50130,34593,37365,35909,37706,25977,33071,29674,46896,55659,48361,82902,50158,41965,56543,19791,58307,31366,44858,58513,25629,38805,43316,50856,83030,26568,57170,10982,21656,12552,47945,24521,95473,62119,40783,18291,44868,90878,27980,91547,75683,90188,49412,13525,62470,33915,92688,19339,22135,53373,81861,87128,86808,36991,71675,56870,99746,86744,48435,56821,97747,48576,20079,47126,27809,35977,82645,50111,54294,66827,14168,50003,36228,48674,49634,42528,31568,89535,22314,35610,60645,53940,55426,74941,62413,38989,81209,62451,45757,42189,74980,79133,24620,43050,40100,10377,36497,56826,55141,99909,65380,22811,20368,71020,71260,48972,77096,30631,69319,36241,46030,72732,40394,51727,71834,34377,99062,65483,84728,59350,17410,61304,59590,40269,20682,29617,54290,83522,17273,15907,14387,12989,79652,89794,57954,26587,27889,32042,33384,50908,16048,69378,61770,79279,51396,55654,36759,35961,40210,62573,59457,21564,51962,41078,61373,21264,27324,41279,69625,56072,24485,43752,12897,82513,24478,86294,24044,99850,45059,79578,24459,89291,56814,36922,36897,18054,83479,47179,16371,69963,61768,33207,80064,41319,42751,24368,24449,99498,13306,75686,28807,89640,38409,16780,60323,37177,19813,17575,42017,17425,25861,91876,89752,89252,36090,69182,90443,90784,86420,32051,20894,55126,76226,77345,56782,46911,39536,41574,90461,63830,52608,62465,53267,22783,50301,71959,82269,90973,73872,30692,39544,34040,85799,51610,38909,92018,75881,18891,52378,41312,31069,83344,44925,54021,64814,86256,63295,64431,75996,30452,43617,26999,26363,66166,82984,68046,96458,42293,19927,75177,70140,42916,86423,94609,69381,84091,98930,22946,46028,81723,57924,93076,34783,64278,46727,57261,62485,69462,77592,98021,50141,77362,12475,68130,62191,40842,87843,41572,88275,58228,72820,17170,39067,52029,46468,99180,43931,72003,83892,47492,30783,78741,65991,36342,48019,29954,92029,62640,14927,81321,92874,48286,25646,49827,57229,27237,18461,76137,91509,58321,28508,76445,44119,91415,98566,82467,98774,55152,68916,78283,96905,92150,93496,97639,90608,87580,61556,17380,22437,92849,84226,51403,83250,90579,24790,52400,66988,88242,57154,22781,19677,31111,31245,13975,86594,94876,74380,23753,61225,18325,43877,95013,10802,64161,64642,21504,88831,11347,86282,99225,14351,53300,42344,62498,20554,18023,59658,84076,60541,34238,52860,28790,27132,11343,37796,88066,31454,67330,94877,20479,58421,72737,64218,78834,49594,14823,20757,38901,66135,83374,85615,13629,61572,24758,43488,59446,20454,34420,85367,31259,91731,77882,24786,57752,77586,36467,95801,35970,32373,81575,32433,40840,72113,73332,62317,41151,97266,98745,39487,99669,24670,56566,51811,12121,19456,80744,47320,40617,95445,43882,46424,26036,56629,50668,33747,16320,35275,20553,88152,76907,97187,58493,41962,54407,95135,56561,84054,42847,28804,45455,19888,29070,99428,59113,44333,95506,52615,67071,92727,90799,78065,65151,55409,94597,62052,46772,79925,74001,36945,18524,24046,48880,96112,43419,82597,81618,51175,66663,26354,95017,54088,84007,75106,39995,53713,65698,57270,89488,70570,54874,48989,72858,31832,76728,59734,61845,18374,81825,70089,27770,95273,86499,29038,70117,71850,13524,20680,49740,41999,29721,74157,92902,65403,50691,33699,11790,80593,87742,63662,88620,25340,26112,50558,40301,89315,89414,51875,91281,39477,84463,95003,84989,39048,80299,10280,39267,56702,59008,56280,16957,73362,59217,99868,42775,80024,70129,22370,95358,45912,57837,45407,85647,19205,34032,64801,70004,42608,34959,99276,46684,28134,43926,74542,80228,87361,90681,14556,11106,95951,61519,68205,91865,81274,67546,39740,15248,38282,46685,56239,40481,13451,61022,96451,94502,89393,84452,57359,71377,36049,17578,83384,12838,57610,62390,67480,74279,83738,32122,52194,47469,98270,42643,11701,29781,76026,45794,70413,87759,90330,49920,14529,78623,47436,23663,12011,51746,30894,45454,90107,34767,89485,14385,94587,53346,71706,76358,55844,36003,35798,96125,10233,95302,26999,49043,75061,72427,36279,27953,90423,90215,48306,94318,30418,46661,66071,97724,67316,66305,95637,92617,97136,72275,67864,93756,29380,47150,39534,97856,17269,31768,12258,93984,85428,79669,69853,10955,98933,33740,71416,70204,40281,73223,54047,72826,75695,72047,57203,28721,18292,53508,26101,23210,40898,91035,68718,64617,11282,58596,53964,90446,27436,78232,39724,64614,70736,27048,86860,79294,89680,59664,93451,25248,82804,88032,63956,45344,60555,80710,36037,91346,71671,74805,28423,84209,75333,77279,37936,84979,73964,91100,53848,99036,66406,39663,71868,37731,29626,12756,39281,72524,81773,89875,23341,50632,12732,91286,96588,11658,56308,57994,15551,58553,18717,84992,97772,15278,81494,90360,34632,71886,68324,13210,88671,62406,52694,40052,26639,27525,79402,48873,79061,74175,72350,85695,44428,79112,65052,72475,37869,46133,23367,81859,12133,56753,43908,53323,34012,83926,35737,24840,80951,20532,81193,39058,62124,98366,78906,89929,99716,55699,68264,33540,52215,62967,84234,41528,92210,22425,95950,24343,59118,86116,84100,30118,72212,71888,25225,55578,35067,99713,71711,40493,34132,29393,81900,95252,39159,42085,98908,90623,69328,19606,89690,68383,58213,84711,62890,27452,16794,80715,32034,15182,34821,52671,64366,15394,97637,65145,24412,69500,91600,76524,37416,49794,47983,75048,31517,22157,87650,80274,96829,38016,35722,39468,76382,49190,31091,63176,89066,65023,15956,63936,98672,62850,76117,20152,28462,97780,71673,40797,25825,61387,91003,58694,56633,36594,51178,48047,41223,94323,33274,79029,52724,69456,34006,97029,24858,84825,42440,52479,57144,70348,60641,21905,64859,50038,47002,35570,40985,78404,25170,46050,73053,71482,80747,18341,46901,26293,10856,48989,99316,53016,70438,48027,54382,67414,53904,65669,38962,47361,66745,86529,37701,85385,47792,25397,25590,40446,24598,70538,74690,99969,25449,74401,77724,28920,95164,77436,33076,30528,81640,91966,35752,12822,36078,97736,70887,41956,38207,21133,36672,42874,60000,18489,68536,26377,63086,57839,12979,43389,60455,83626,44725,45425,42160,57556,38335,78681,88867,46184,37359,42010,47709,45013,80836,51907,15351,60040,57202,91944,94300,58243,83803,45703,59338,85595,14025,85317,50491,75657,28101,14042,91919,47621,17124,39755,87326,58162,56225,93268,50753,97016,73992,13068,66501,41810,82224,98077,76384,92986,76387,61639,75652,25681,71312,29571,93127,74919,62671,43690,77646,28281,31212,37566,55291,42382,70615,44993,35320,89049,94640,40385,84841,89468,94100,14801,67866,89230,15423,27689,42751,68602,37200,86490,13351,48882,50627,84333,14560,90972,24817,37635,66943,77007,79900,45226,63136,94258,24895,62191,28320,93510,57325,45247,65094,36214,58620,45221,71770,43218,26944,79538,43383,16393,54636,13596,26030,32089,17857,11726,20317,30876,61443,14857,81395,78206,56153,29458,58512,85965,67704,66920,88445,70049,59531,98354,21001,95718,38874,40608,81231,37254,90472,91383,87858,96787,57306,25500,41907,72437,28577,81067,95892,66974,34573,54953,93512,80620,54661,76530,99224,64269,72357,51590,45783,78877,43350,32638,26862,16577,72282,14159,91362,68473,65917,65400,37286,48019,55528,35798,36505,89245,74542,61612,89185,53431,35809,93205,62535,11556,84433,66160,60114,76505,83417,66502,99681,77210,41510,75159,61505,17397,13387,65310,91953,51042,67905,90750,56723,25021,69756,42462,69750,82471,39662,62547,29544,47117,18694,26692,40658,44492,56869,71053,45990,22565,82710,65479,28632,70712,49613,88268,55403,95307,42159,60667,61926,37986,36464,64903,76826,86225,27733,19171,13464,51218,38951,61559,48359,88688,74199,97027,73722,43938,45462,64567,28270,13367,81165,18793,68155,70826,37480,95381,49961,72962,81291,81695,43908,96214,51403,75677,36388,52305,14794,12369,53144,19787,75189,39704,71231,47863,47199,16402,58308,60042,24424,72775,80596,68765,82027,98959,54967,70125,16447,81398,28549,61849,43196,11059,28273,28535,68668,38615,15977,99406,17744,33759,31734,94028,55813,72467,72259,23377,13496,49973,49815,78393,74671,21766,12803,84072,82443,94958,19621,35195,88502,24756,64893,38125,45871,38047,24107,57106,44819,56843,72688,23107,16579,46221,19671,33793,98032,23527,62820,16806,95944,62764,98693,66552,68950,42576,93326,29365,78278,82224,78531,90637,40042,12997,73668,59738,90474,10400,40596,30696,29667,26201,25317,90773,83296,33968,76117,22075,32165,79838,53434,63060,89154,93583,44767,33020,81065,26765,64302,85102,69655,56427,15441,96274,72817,60008,93955,57244,53594,11352,75465,62829,47139,62683,58208,88590,26549,79137,11259,79267,68514,81041,69971,14854,23206,68833,87110,20711,84042,76340,90347,95932,11024,86975,24149,73704,67227,25724,91849,35872,62696,30494,73193,49667,44138,15727,34890,89850,64103,26462,95436,74588,47268,45784,91338,15247,72182,58649,10315,71810,41049,79511,70599,49295,19119,52519,24730,66089,69857,13905,62695,11865,68608,40572,74550,15361,95704,67472,74423,78539,19883,98737,95374,63611,57216,54984,74004,96591,95753,19384,78058,90754,10332,39243,90297,96545,40918,15308,75640,54454,37410,28820,98423,30231,40913,70406,58563,10627,38500,92633,75915,75820,36847,56201,55933,81742,26120,28972,30147,47664,72552,89324,44696,27216,93743,84744,73201,97389,52986,71043,95913,27547,57647,23497,55525,58934,35095,27627,76015,48934,57558,79400,32844,36025,52285,85350,28259,90095,58700,52249,96473,96775,62181,90301,43873,53660,50122,15678,37624,33876,21615,63114,47694,53476,23409,57123,21756,17111,71015,92449,36602,49329,31382,52307,75927,94831,59936,49693,73839,84580,42804,60098,58980,24181,24098,83644,18906,60525,55582,11367,30468,58795,56293,96547,27266,70338,68120,10482,78576,92286,82115,92302,52044,86512,41313,52041,68573,78397,71661,28392,14135,61099,49169,74791,34930,16183,15461,37556,16791,55064,27650,11593,97578,11066,91804,60731,26860,58495,58995,68631,12204,92101,24827,66469,52957,48062,57107,94422,23845,52880,78477,65779,94666,92331,90126,40811,97603,85054,74650,59234,69407,15117,99418,14116,13936,11911,15101,30447,36584,40601,54138,15680,92925,70754,41588,18438,75584,13042,40804,91931,55185,33453,76254,54060,70016,17014,35308,17891,24396,84287,27229,42914,73836,18727,43557,25265,20692,36116,10902,63674,52494,22080,83514,42633,50842,83412,42640,34837,95383,64691,58178,56296,63970,17633,83533,78171,72944,20998,55822,11253,33402,46288,55796,72379,80323,97107,81911,81235,24892,61762,83790,50537,58428,49524,75296,63815,71621,66815,43755,45954,56995,46345,33681,59974,61801,48314,82558,96867,14446,80781,95471,43475,67894,80559,71766,67324,27650,58830,82361,36768,55688,95905,71350,12629,58741,25075,43234,21482,82434,55706,29482,73057,21962,74477,87749,80084,24455,96872,56570,16364,56204,21133,36831,90164,59170,84787,34295,10690,24610,88538,37427,10289,58347,23492,38421,50267,84206,43830,60377,91830,28472,88613,87394,15894,80174,64691,28997,27238,74934,25603,70791,32983,77045,11648,75205,41624,35484,45261,85712,58831,43507,45924,24597,38436,34606,41941,36172,18827,50346,31448,47349,62869,40375,61759,75473,84303,27909,93591,62782,17292,69764,68454,87733,94651,39072,87255,47959,36060,94254,16931,46960,25952,55724,36971,46850,43490,46025,39757,31255,41918,40594,91319,98532,26264,89759,84804,22468,38479,11850,44387,56507,55287,49378,34297,55445,83513,86606,55081,98166,24209,75177,46824,91769,28924,90109,29078,97092,94453,26311,47417,76481,68416,56186,98965,79770,23437,36803,57690,62630,73506,79149,30090,51391,81846,95025,88410,21276,94297,36881,23764,14842,23261,48432,86435,86607,55289,98257,19029,72915,11572,93153,80949,42978,69020,18802,66228,93113,90897,25008,37534,80649,92518,39175,20460,20462,96084,50412,18430,39366,77398,43749,43132,24658,67291,92109,80682,19160,27631,10703,61569,61263,82003,36824,93198,76446,56782,59461,22487,39744,46348,94293,74310,64363,23716,75436,32536,23789,62036,96753,31891,41318,54340,39066,46422,47508,75484,67194,53836,95385,73362,15428,94458,19340,20763,76780,26257,27376,16449,78540,10450,17964,16353,65860,41901,13852,71919,78577,63075,23095,58871,68349,79762,12100,67319,38801,52499,71350,23734,24740,83247,82760,57556,97405,68097,24531,91642,68058,90627,41246,63505,49717,48354,11862,35473,42623,15228,34754,69643,51448,17982,58914,91204,22234,92623,15479,37493,88166,49910,34443,50993,14970,16232,10322,67166,26931,18652,77421,75968,34083,45043,93165,45016,54194,50468,63654,46465,51071,42047,42168,23946,48866,68934,59827,64572,22920,30954,70872,66853,54316,55524,47229,31572,63763,76034,70240,43299,38714,78435,88955,39105,15236,81969,72112,76558,70966,49632,15644,89474,19133,49709,66091,60097,59147,31767,85765,94442,14815,23056,42157,28188,75627,79476,70392,52627,30483,58630,78145,24271,56325,79985,97697,17119,55450,25564,26678,93667,87748,68762,74597,74836,34758,86185,85053,86328,70652,90985,66352,70328,54330,10256,48918,22191,87165,52734,38885,99445,38821,12711,20662,94782,91028,17462,33609,31826,42282,31589,40753,82919,29079,25331,72752,23146,42748,57845,66912,15379,46669,59275,15632,44155,96848,99546,39006,29175,63943,56242,96863,63139,51101,60679,29435,60948,90034,98995,39196,99380,13830,32989,74202,63480,82839,99659,32364,20469,44394,63929,94584,10494,70644,49196,94273,19501,94584,78441,57881,76901,30372,63347,63657,76094,88871,62946,12161,24033,73263,14971,56951,44320,29727,91853,82486,79425,14382,91722,90487,53288,36766,30795,82424,35456,39136,28386,99947,74616,26443,77330,86405,37231,18682,62430,80242,48662,73337,90929,88891,40413,84818,64655,30936,59141,76824,54080,37219,27772,58963,85858,64814,11473,79619,62077,33833,78019,98757,71312,53170,20461,14854,18689,94167,45463,28805,32082,21902,15616,85183,99094,40428,49015,80065,88123,32002,44918,32025,62373,95025,93099,62009,60880,70566,17821,68073,53027,25178,60402,94072,79525,23768,68959,37795,48971,22902,45963,10059,61947,71540,83014,90131,45945,28414,19488,47206,67715,42651,38609,69143,37007,74538,57736,61391,37766,91806,71105,82694,41919,34644,70617,87660,92664,63106,47189,66589,90880,84042,87831,77248,20933,76453,13689,45814,17028,41438,73544,47605,12994,73999,65885,49263,11252,76997,77333,64146,84575,10548,40176,35308,93629,67892,63189,78369,15019,85518,75902,19540,11364,50160,35340,76343,67108,91983,54625,35881,75303,33205,69331,72535,73166,70497,85885,56326,42152,99308,57898,60021,39544,81591,45977,57853,78748,89360,46232,46047,39404,79557,75626,84545,28668,22622,52560,45891,38133,88066,96049,79222,50231,41433,98334,26998,45772,16594,21730,74345,66619,58187,74794,32224,91285,38777,97742,70218,93659,57855,65361,42483,91917,24351,71004,74150,50926,10274,20813,66815,52269,46493,74281,12661,60750,68351,50946,98481,19097,60872,66196,48394,49718,72663,12402,38932,36305,85049,30510,58605,13956,69419,12309,91354,53447,45593,43742,87852,36483,68555,89339,19084,62855,73694,56470,87031,40185,42410,93980,90961,83215,90572,70850,46650,36078,88201,68713,25074,98535,95922,38530,41981,98010,30735,13237,52563,46234,72824,93237,93022,92997,83631,67648,78764,33078,65628,31091,62435,69753,55972,42438,65183,44592,68409,68523,92599,61025,36504,85213,16794,56803,64649,57780,73736,46866,52164,83610,64836,32172,93192,30600,57494,73749,93355,90739,88056,55866,94669,64478,61696,92356,83822,25194,93055,75217,81525,85098,23938,59304,67566,65755,45795,54743,70078,42839,70754,31619,39329,96848,45399,46271,51552,19796,61710,68157,18360,76229,94060,79436,83695,12730,73610,40086,47415,25222,80590,24298,55998,47057,44268,57642,54832,62020,38106,63801,24323,33688,14306,64174,79483,90724,71442,82242,87293,46070,30860,57957,63106,60931,15243,37649,44400,48891,37680,32553,38922,76093,15014,43639,26493,34692,47757,90158,90869,62169,20038,31912,44752,91043,77973,58452,94106,47426,37247,22290,74210,60657,82613,84575,64981,23334,67416,26596,19179,49805,10456,33268,33099,94642,50972,55496,80667,96353,41667,38270,79405,98800,87303,37835,92509,46415,20436,97936,75857,75913,50158,46478,63805,53808,75907,46351,90502,10547,99974,55632,78890,22781,54420,49701,19533,30026,44973,33768,82717,26934,94063,44921,35238,94771,80009,97902,99510,13470,41840,50863,45633,59066,12404,56628,14999,90172,73930,25596,28263,98787,98870,14777,29701,88400,97327,10812,55110,44527,44151,61553,80892,92895,40317,49081,24722,75737,57573,78948,68871,77935,44651,28788,21529,42811,89865,92102,38122,24668,54174,11115,96411,65363,27953,47051,64525,40052,44490,45220,25100,37900,80127,89692,20190,10803,11255,45871,69398,41083,58155,13245,40386,99902,34322,65935,76540,67893,82756,99522,63602,63863,67169,42209,76323,47637,68281,59664,41869,41084,89606,17073,63653,41914,55108,58719,56405,91455,87320,71186,17573,29803,49397,74185,22206,17366,96036,68827,76660,13867,89548,22938,96641,34246,33108,90360,59079,47351,82914,24380,63515,13629,52971,18920,18679,97858,91195,68213,78266,26292,50081,91934,35612,11004,89017,66232,36726,98069,59001,53246,83138,64907,76939,17184,89070,17414,45305,78322,50759,49467,48088,22505,84425,57924,20655,42066,60289,22829,65549,92091,21371,35910,83765,85219,66745,39099,10716,40559,99262,71380,26770,87053,28481,21925,72495,62745,67869,18725,57933,35055,81690,67347,59670,68140,54267,94982,14499,34882,78798,15637,81803,96705,21286,27701,55303,40097,36268,54987,64044,10672,78842,79754,94731,89047,75407,67557,71441,20741,98893,27679,72529,99618,77534,91225,49327,47010,92034,70250,29162,63758,63426,69073,33151,57457,13147,83632,71661,23645,91873,55476,60302,92546,63725,20878,24924,83653,59487,51755,91890,39446,15964,73917,78302,63838,24044,76065,24024,69831,46551,82587,48896,28170,97412,21870,93305,77776,95886,94782,62110,21519,52579,42834,42136,33075,37807,45906,49789,87415,31367,25898,46187,92462,75169,34810,23513,28306,95085,69241,95385,67416,38193,50384,13259,36659,45957,31637,63082,43973,57500,24585,61628,67455,38788,29309,82152,45979,53685,84384,66576,91308,67692,44965,66022,87993,18813,52732,29151,97321,68830,64937,21612,45637,44124,94274,30829,37063,76444,37252,50730,30909,72539,58996,79182,12511,53783,63871,30160,75173,26056,55554,37504,72962,66921,66256,26435,83783,19020,87856,24092,30507,35047,93761,33020,53940,93410,90361,24633,41690,15421,40451,64466,15433,75077,17942,54054,75925,80638,86953,18587,83573,76428,24528,93735,14181,78257,76083,83623,79444,78743,66301,18251,67762,84928,16887,28462,22334,65948,18167,73152,18972,35737,13185,41424,45346,14083,19162,15177,49169,75476,77129,79664,62942,77533,12654,47902,50010,72298,17157,57496,27049,45557,23557,20517,81703,30288,34454,48141,34463,61694,82253,76430,26418,10944,17602,40043,70418,90734,89911,97707,47696,19210,14045,35845,45807,50576,23848,92288,83464,97936,72441,78459,11454,39579,37632,49076,38258,39255,79890,23891,10811,59901,81965,22976,97080,18765,18614,24237,33136,32129,54451,73773,42292,78300,67338,49667,46887,72713,15523,14021,90483,69525,11498,45669,94470,16499,47562,18271,43146,68273,52793,41352,19513,27959,29010,70265,21352,46085,95321,13006,70361,76287,32516,45099,57361,86560,19756,95694,85269,98204,15786,80088,38534,71101,37215,38941,75576,86971,59220,78914,32291,56579,41619,63349,75974,51640,76979,13012,26526,29621,97561,51917,54264,34023,34456,61017,57757,72215,68766,42426,15183,75643,32569,61848,73811,96939,55187,47886,17407,21781,97002,32436,58446,56051,71319,84529,15521,48547,64797,26352,65114,98287,31800,91583,62027,44293,72139,35694,73118,28559,13424,50833,93433,39086,19839,89364,22547,11055,12036,40224,33680,70236,70954,39274,42769,43934,79049,42439,42161,93174,88109,28855,32010,80651,41125,21654,85736,44214,44188,64517,51677,28820,46208,29610,32627,67974,50981,15978,34446,51640,14382,46242,15730,43284,93441,84986,83964,71756,32794,22714,62153,33575,83444,87822,63815,16466,25263,63137,47995,39493,27554,84382,40095,67982,37479,27610,47518,86703,29824,63559,54228,68302,28877,66489,88674,13814,58942,62796,60672,26376,37428,70748,68791,44589,26155,98537,76010,86596,13733,84329,12547,47620,89596,66176,37820,97866,26898,31619,95103,35364,79231,12279,49729,63965,74670,50764,56007,40297,68606,14405,33143,68037,57572,59992,72861,31968,81643,69856,24551,54895,61486,43465,29554,94920,47242,86932,89610,36967,94340,53330,84055,97507,67667,44236,97168,10001,10444,53070,10496,61478,35210,50244,87456,34389,78246,69166,87058,42357,32462,55156,97317,19174,33369,27965,44076,39203,48307,15311,19999,20782,25332,48201,51072,23930,97762,41917,82482,49174,26540,60178,57136,37840,20609,62568,26782,91044,71579,44855,73731,60253,90928,68976,51667,17360,75659,99109,45754,27284,77962,42460,96480,18461,36122,79407,31290,57481,45013,65612,33395,21704,64560,66548,15475,76060,70586,74888,77360,71084,41175,40168,74062,64870,13051,71009,90969,68934,21689,40485,14471,74638,66279,58960,86657,35986,88186,34159,79058,11029,88029,82590,65908,15789,21284,90688,18198,73202,33673,62023,20784,77702,20175,53849,28006,80813,63104,27729,92764,68886,84773,67497,66889,21767,90029,43128,61062,24094,45870,44609,33729,21789,20500,51202,79441,16921,70419,91294,22264,27216,43022,48080,83056,54437,96672,73826,37260,44351,52282,34803,32160,99793,71942,96233,91656,43340,64720,37399,64038,84084,57563,85147,24650,97446,74771,76209,66494,53856,39726,81381,67856,74637,68129,11816,72269,70762,19444,22693,91632,48197,44244,35941,34039,67329,82652,98555,70002,60917,61698,33464,95346,61635,43202,96104,93226,95588,47897,44063,33960,38858,72096,33616,48870,83391,54562,78747,36242,99752,55126,72732,30969,72106,97691,61690,74236,44991,63363,69355,11182,19674,71950,65280,95320,49095,61360,83696,30293,67839,51995,53048,26204,90938,85146,36266,33774,29785,43024,71942,21243,88433,36779,98778,44001,60433,21963,79156,33222,11900,24636,70454,88508,75168,38258,27926,67804,51673,53554,74584,37229,13749,73684,38005,41891,29506,39156,32397,79788,73895,32810,24252,51742,95106,77625,33199,65292,66420,76478,64683,85760,89063,55730,93702,40994,35033,49164,30565,11732,87027,73993,68850,97943,50446,66415,51476,38704,32966,84274,84019,71219,95582,67796,94256,63801,14034,12343,49064,76912,75815,53240,33158,57292,43615,44167,96862,28952,80904,58227,64766,49626,28704,89954,25315,12679,13605,75204,35018,91349,26025,59333,43934,15010,93422,16467,40105,70962,49862,73404,96524,14891,92611,61457,53044,48401,29089,41636,86196,16456,33738,74841,61878,54058,62402,26951,76024,19082,44825,26433,51581,76604,31442,80542,54133,47347,89623,64486,50891,40229,55387,17485,12038,58640,92066,96376,67521,20620,80279,29619,44299,60738,52186,25614,29411,44952,30843,41883,98630,64900,59079,78239,74000,94509,30676,96605,87702,97857,37793,74847,10568,65334,52696,39565,87818,95285,84062,20556,56888,65765,98324,27593,91553,71012,61372,61590,75227,78524,45794,30408,79437,13545,63481,69590,50774,15435,41507,67745,81206,92953,18046,29875,86371,21258,95154,55994,60744,55841,36814,28138,53333,96156,76853,24936,42367,65181,63778,84714,16774,48463,60011,17564,65921,73092,35511,42155,82476,53304,75647,43442,81160,86171,92332,62259,70329,69399,52108,44740,47469,94589,15655,37427,63604,77629,31732,91398,38797,17014,59374,55565,46170,84330,30662,40266,82723,83731,54259,21703,74656,29806,45936,73651,20055,61158,92101,49089,96030,34483,46257,40763,81394,98828,66180,69359,28775,71993,52058,93496,71664,60071,92918,61208,21907,16744,93416,64217,30776,60785,59825,83694,47391,22619,38912,99630,62221,32009,22109,99602,46761,22917,63499,28858,56041,42581,42183,94153,39815,44266,48095,49425,38967,55311,28506,81380,99459,31698,13749,64784,12547,56045,25420,78353,77428,57867,86389,25189,52235,77185,24295,40424,82343,90080,33347,39132,10719,71335,21190,71522,15772,18378,90386,36590,32359,74437,56274,69630,54136,35407,16920,68976,17765,56263,48225,58630,20601,72326,97065,31253,18816,95940,53578,67557,53132,77047,45544,51669,67937,92973,21870,77056,84381,57091,91893,19004,17792,12287,83369,58961,76153,90248,43907,87214,43052,10760,71120,13123,85633,14055,81079,30506,95772,52127,77721,63261,15092,38854,94704,65922,92547,95630,42780,18035,64262,68319,58932,22971,52657,52478,72069,66971,10386,97150,18453,19611,31261,96570,24796,67410,93982,10861,74140,78729,24985,29073,95822,10244,12836,64603,57205,88683,39041,61729,89693,32965,53803,62655,12124,23001,76236,82774,66519,28464,39046,61444,52208,54976,47473,65866,28445,38561,87165,95699,13923,48666,10534,30092,87535,77580,92161,32089,43559,79938,35369,86939,84140,67894,20524,98319,77792,96206,33901,24516,92133,76943,84930,61401,14188,22105,21900,71898,45189,58032,71200,45470,42975,41417,78256,56720,28266,45997,61335,50072,44373,51738,99638,35480,22660,48834,25828,45637,18501,22601,26991,90280,71700,28669,51741,38529,28954,20792,92400,41257,55362,99789,30159,34596,64630,50762,39430,44598,26958,27502,67227,48613,48948,21642,69161,29568,42946,78866,13619,63199,14487,85409,61344,27961,56013,30534,88857,82203,59556,84610,53767,65965,37790,54873,48216,28835,71578,83972,10836,23739,46849,49945,82324,28888,42561,52371,98129,34455,49275,67238,15539,94672,11007,18954,99805,12714,22086,53810,10394,24254,67133,75154,55314,87362,72796,26351,41835,56653,49994,38667,60795,11638,66647,40338,37946,82365,63672,72307,40610,91689,66454,33975,55242,33925,68487,32929,37935,62208,82387,67411,98536,69397,21541,53799,22949,67627,15683,67073,98248,18082,49033,37820,84527,49117,46970,74499,23274,32749,83161,71154,14695,11515,31986,33618,69308,86788,11654,28959,83106,21789,62315,51288,64746,68976,28327,30823,54566,92279,48770,66610,31896,75081,76767,82709,27210,63187,15573,24932,36155,78917,39411,32082,32515,85113,59698,82642,85869,44935,66411,50329,12464,74510,41161,61109,62360,17728,21199,70173,27614,73997,35277,39543,82527,54111,70832,13829,76926,53201,53908,49220,48424,58476,94515,61095,77938,56825,75878,78260,48227,66243,90131,47620,42184,50875,39365,71651,45493,15100,86251,54696,52668,87770,69960,98685,43145,68342,28150,37178,49588,15328,69544,83079,53954,82541,85662,12004,77469,55925,87821,59122,55213,27092,41138,24018,78108,84890,25795,80533,10050,66239,38434,37184,91255,28173,48128,14022,59991,83681,25088,43255,34427,93863,70327,56752,73235,46660,25696,90852,63733,90163,36610,14153,50453,33507,49418,17622,81477,70317,95945,16136,60929,10500,80929,49055,43581,84684,68810,92196,63688,21412,68237,67818,78847,50448,82258,68268,35784,99471,93150,60508,35314,81700,53789,26080,71883,17185,98665,77579,16525,68663,36329,28554,88138,97384,33129,45935,29894,16569,14025,27685,51553,23727,25183,19304,90078,25008,52482,36931,90171,92760,40801,69796,81359,39259,29799,39811,32858,92357,71935,87700,72217,82386,26037,24836,91572,44339,36609,39110,71738,24697,98200,43897,56621,95024,83970,32384,95153,59145,61366,26350,50917,43463,40671,23062,43114,73091,52212,37589,58120,10660,21184,74253,86644,45255,98224,76853,96786,35366,14549,14936,71675,75415,14689,76369,48376,86412,89401,13800,59745,91610,70143,36490,28592,71762,79935,76757,38756,99753,27228,22593,18624,50152,30815,75030,99789,71111,27941,93295,73364,54901,19779,26159,15669,66963,67093,67659,18384,16982,62943,35197,21522,36440,50018,69330,22548,73280,58531,38664,80666,98317,74052,20705,29396,75581,26713,11152,95508,15413,98363,70467,75877,11109,93419,82088,81282,20024,91690,23204,49251,65840,50006,75443,52630,15976,76331,61778,68051,52801,94062,62890,85718,93127,20385,23100,64306,77678,12224,58275,31035,21180,95360,51037,32758,96159,39611,90289,64196,55448,47449,33697,38719,74105,80690,46803,93229,81206,15195,63902,48509,67369,61164,79594,38283,57068,82615,54410,19679,43959,13875,22304,63144,25526,79472,48285,60752,96616,95931,98584,14528,44541,80222,65476,70443,97203,70966,44545,13400,44034,50411,91444,97683,40730,55992,42383,60554,88292,26436,58085,42417,90410,74923,78536,57605,14387,97765,30767,17014,19923,61251,61206,70993,64386,77742,58850,60014,88123,38814,47994,81914,80222,33452,15610,99384,94316,86235,78639,82798,96547,61834,51859,37828,75390,15669,18283,29515,13653,52235,86173,48862,77651,28550,33592,41884,78592,33116,16839,85878,83084,83945,34664,92754,90759,77762,44494,14496,43693,23293,13208,31947,18087,90164,46138,93961,33120,70385,41130,70354,60297,63007,38880,95514,69171,95645,82564,87397,96707,83657,77619,76401,19261,28292,79147,16801,47742,84531,92033,81946,52653,36377,58471,62219,69911,72162,51946,34305,85514,25171,53120,15787,66277,86775,58043,88908,86041,85422,77357,92514,41421,13485,74790,65112,66115,19681,11626,90957,52480,39214,98260,72771,97523,46205,72071,79708,88361,25122,28068,94556,70426,81503,68679,44508,86848,62808,80227,45923,88238,33364,20712,75829,56559,77838,78727,68829,53313,82638,11171,69854,20536,38803,26610,42496,20301,30520,28618,94821,73473,93385,10790,46284,72103,47964,12596,26531,71816,98510,11807,66112,16340,59686,52755,57233,71466,85799,19238,24290,83425,63903,23502,46282,48200,26608,56904,82402,25636,23250,12140,30868,57404,80058,42972,60932,84770,45743,77066,73319,87072,47884,28951,40957,17333,97254,69779,64360,31453,89016,39732,67138,30852,87839,19635,83236,22986,75084,56807,85265,19534,87180,88472,66208,56970,89125,70189,35064,16075,32753,85200,45696,63820,85192,79421,87857,53348,72927,29055,98841,25344,61298,35636,79922,38247,31497,10865,67597,32383,87039,16415,38072,22923,34164,48837,29280,46927,42989,19194,43783,73517,62821,32355,29796,84241,93298,39856,16585,89889,96851,15381,64568,82548,88180,18521,86284,98461,53268,11090,60770,45059,86758,18343,25601,21514,23114,31524,10870,44157,53963,32066,86339,46546,24484,49295,50776,77303,66106,23772,73912,72034,76217,71183,70886,40123,73920,28782,63354,83153,54109,75499,92589,93917,90214,16291,42861,78911,42452,21436,15628,58601,44604,85518,72548,10061,55214,27614,29488,62482,92843,48665,89968,47272,29907,74722,23651,20977,13600,71864,31379,98342,97651,14177,21566,45294,85978,71113,38124,28041,11955,68353,60959,18866,82021,43163,77979,91982,10225,76214,34181,22809,65888,84563,40620,58541,94492,92517,77097,36150,25714,67392,99519,81344,13648,93465,52052,38329,92398,51337,48010,63724,91924,38651,77380,39993,81224,56601,77019,91838,62083,76416,39562,54637,41039,57270,58480,54993,61647,71301,83121,45444,25259,12512,85765,54059,76770,72692,87332,47519,16140,65428,51673,11594,32161,27348,57563,67957,45828,95593,74266,65941,42405,85537,98694,79813,27429,66148,44833,29290,50860,82298,89715,89495,64800,65820,53897,41165,89174,31719,35906,28194,60256,76207,79259,93898,60564,49521,26544,45386,89529,37170,13682,58096,89040,90801,82724,31979,81772,91114,48784,97839,38936,27756,19342,22793,10594,23858,30788,53277,44991,69026,41797,59831,46310,87247,12997,44881,67916,96569,70124,97911,57702,94596,82734,31860,91758,75932,91073,52564,77734,68993,15236,36523,69213,45067,50054,52139,64513,73737,28753,96576,89438,84032,12117,49800,12602,88791,89378,97111,39155,59266,93602,78242,95333,18501,39110,42013,91459,61778,71801,67286,40557,14169,24519,66072,47695,22706,74166,64279,35948,75839,65867,87466,36960,47321,23181,89306,56424,24317,65542,83811,55265,92918,81002,30375,98302,23266,68949,41121,37083,29456,33616,20099,66043,56261,68744,14608,79674,33062,40103,46107,80082,46121,94326,24271,76951,41995,63937,97852,89060,22631,72833,98443,75623,70641,99958,68271,24000,16838,52496,41886,42801,71326,42806,23467,78749,95854,41606,30724,73014,30133,29767,87666,65386,60813,74076,82401,98900,71359,94288,61840,27467,90272,84189,49815,36306,73290,36946,60822,64906,62916,77642,47619,40229,43720,33443,67998,68946,56587,46393,80086,89361,65083,95879,45769,93355,75460,40562,53312,45434,68013,47260,67354,55447,46301,80882,77162,84702,68561,23767,62375,24951,26161,55903,91530,62919,79893,50898,52456,54396,57882,25071,19457,56243,20727,18324,83155,29260,83552,50613,50848,27964,53865,25171,60863,58795,21138,96316,36020,48963,23449,34196,62573,22436,91159,87988,52772,23617,36952,36839,54933,74770,27805,69237,55800,36377,99431,44985,18841,61496,68909,45960,49964,67707,27843,42058,30985,88376,73446,81632,30012,85331,18967,99231,10552,23919,31865,71984,69348,30941,37253,77997,92764,18598,65464,94453,21830,87955,88368,79284,19000,25984,33476,61614,43009,78226,59752,24110,29495,93283,88488,49528,90957,54940,93382,37419,58581,82637,57008,71539,69203,44313,63340,85068,17508,83198,44770,24149,25574,86951,58307,11276,81553,69170,78981,64213,47798,91341,38741,69456,66798,39865,23855,64152,98457,39728,30138,81121,38658,83173,72907,25124,93197,56871,73891,90503,11961,39505,32216,20099,58689,72108,55193,73278,65728,21591,12225,71149,77518,41042,56827,62944,81025,27697,69772,97008,73689,84571,72337,96036,48516,84674,76867,69231,28056,75911,67456,98613,94105,98055,44413,25653,23177,66316,87692,10984,83429,64028,95397,44799,46125,34632,19319,53486,52113,60388,45006,31362,72425,44329,67402,59850,45496,17400,87545,15042,89263,85591,59954,67268,76687,78724,64359,26224,72198,63106,34187,59713,39726,38884,32555,53156,89342,31133,93811,86006,28904,97260,54761,95237,84909,66363,66041,90732,30620,99744,94003,74783,13777,72201,63271,19977,40592,79316,94258,47208,20341,63434,70694,81978,35786,15379,68269,62385,26244,87767,99888,12662,90476,66817,41332,27735,64964,20480,20134,47721,89430,10665,29682,47491,97684,72833,79703,91267,54181,53437,91740,68803,17854,43277,63170,93675,66153,50479,33520,49652,92996,81845,65154,19197,94870,30449,80357,30794,26805,77544,14952,76623,81603,54548,42826,67735,40381,53651,97355,28662,68688,33197,73695,56090,77479,50924,92225,79796,16702,44392,60478,10967,61821,31589,69488,65512,34801,28556,36843,16999,95125,41796,73073,17134,99328,77263,56127,79104,16226,94041,58540,96836,61326,92080,81624,37401,88529,34299,71475,53291,36675,66085,81970,57464,85521,37984,82498,29901,95753,66733,63650,16607,92780,48777,67799,39241,38718,42415,21610,97266,49102,45994,57163,79983,13319,35916,51579,74621,83561,20394,67590,87995,56598,65676,19690,51935,57281,34716,49961,88358,49249,37997,36638,37448,36104,27581,13042,74868,18693,55507,33811,10445,35129,31278,68849,64607,44599,73240,58505,49104,78722,90268,32294,10265,57840,46622,43279,36024,96156,37319,45114,84287,57697,20511,77540,47930,49707,32077,47482,71110,68945,59431,55496,50760,27293,46015,44947,17299,85851,38769,44868,15153,44123,68834,36892,50110,66211,32038,24371,94281,60541,87929,36327,48015,20411,19393,66636,14496,34847,65870,74954,38222,30877,91230,47936,53708,58289,90452,94839,92131,59482,51011,91065,43816,97776,65966,57004,24747,69112,25190,58771,80709,53364,45511,57138,59363,97301,36928,44173,98892,90439,24263,44190,37530,72161,84070,92121,30440,21844,98523,78623,15255,56530,69955,59324,67924,17586,98206,12190,61063,89384,77386,48856,61384,65821,24618,91919,48426,72768,79911,58018,63828,50128,72774,47908,51648,80017,93372,65813,57230,36229,18527,15561,32066,28269,52382,80306,22303,88316,51859,73762,52601,54341,22491,69814,10024,47587,44129,76789,92086,58300,99363,55667,38139,73548,29948,37711,38858,82462,93074,26271,57444,27557,62938,45722,59075,71558,13522,95859,27721,60961,91412,65695,71335,69763,45640,37977,74838,86826,44044,11555,29512,39364,56402,16252,37213,77532,43109,33504,32322,71050,11627,32301,83010,29676,27264,18345,85112,59352,24415,54885,31275,15642,42449,84860,92498,95654,90986,88702,51918,56762,73431,99804,41137,92154,12836,54851,26657,34483,75443,77962,88465,59320,55659,92189,32746,95055,67012,44845,64576,19186,13046,37508,39825,67834,39835,45582,71263,52790,67311,95224,72298,79780,14146,33571,10839,75807,56690,57186,20934,89314,90137,65549,25345,15403,87333,84354,72833,74285,89889,86196,61086,53165,85154,15694,38564,32949,65726,12312,31201,10705,55599,66952,92428,77474,27307,12561,48308,61779,12698,84227,15095,32854,88509,99630,84184,34327,49734,10861,89117,11141,82940,78652,49840,48451,61075,67187,28110,31732,25826,87380,92487,17245,32347,30874,86716,14267,58369,22919,61746,36973,37223,50876,93627,40119,95286,23688,16917,97852,96321,97235,36368,24120,29046,67281,81449,20187,86522,62774,29861,46868,58151,94237,70735,22648,10153,22920,23956,72401,33237,84273,21362,19646,58987,62823,88880,70654,63900,59688,49916,18159,16173,64451,91420,15400,28576,58725,40135,56489,76319,73496,72861,59715,79045,73453,81060,68046,95125,74810,77226,78127,18469,31003,61051,81723,23398,14469,17952,31070,61902,46465,68948,38684,36797,60527,60349,72738,53243,27649,53462,11408,96747,92495,15154,39993,36264,10079,74804,82834,52694,97334,19159,10817,81552,98790,87167,75914,94417,36343,68734,39752,34876,92884,40840,69521,26773,13691,85864,88261,89695,44770,64401,32936,44119,38008,79806,71884,88394,95502,94539,58273,14619,46504,62492,56257,82284,41882,76415,58027,93167,48292,20306,27361,24131,98510,41137,21677,46321,50543,29936,27214,48275,18302,72620,71676,80569,13923,81861,38873,35993,40279,86923,32000,18469,38483,50438,99005,17394,46280,86262,65467,20561,81245,41568,79437,91484,39143,86339,13079,20539,63889,28407,98586,27727,56390,49738,60303,74898,10929,56708,64138,60019,55914,40883,29535,26019,99105,56211,29600,67031,83010,28462,12069,97943,98030,50229,25809,77856,81685,97353,88019,65759,72965,22719,27534,89213,58237,22325,72434,22884,90201,38836,12117,30031,10463,80105,85206,62480,61423,38410,81381,20359,73935,58951,50489,83528,48195,30660,18322,69372,89758,10148,97608,80567,16251,56755,36423,17045,94294,32981,78406,53800,41288,94673,77022,18177,22319,35889,86027,19353,52629,79908,81096,62088,45249,31734,94523,90510,93119,51969,28202,90798,29885,33847,86750,59250,37676,34913,43748,10646,83066,64318,27626,62832,45443,29555,80335,20542,70285,80586,90204,96284,90337,67895,10213,87244,95085,36703,22090,12272,26204,73626,72340,83514,59883,56915,84267,81465,71058,66890,50713,44931,78034,58278,23783,51947,10551,65719,66634,23749,84273,33975,44547,77541,47392,83413,32842,99452,94930,86364,21110,18591,60285,45420,78171,53718,92323,72578,32025,99532,16581,38264,29133,59992,24496,25548,65460,49999,93328,12299,58843,38968,49301,91382,43346,11141,42161,33339,54470,96972,21688,92795,33085,90590,64759,98736,44788,41557,47048,19745,74583,99938,71274,93514,10741,12808,50942,46754,86767,41503,60455,75046,18106,63650,66118,71052,65290,74015,78205,54720,72605,15281,48730,33885,57670,24528,65280,15904,72734,35168,62880,50023,14140,92916,40612,73240,56744,85271,75143,63791,63009,62622,85609,81898,48804,30483,99097,61703,47770,10367,29808,16819,68967,51505,68164,31176,69035,15330,41691,82934,55792,77566,43899,21177,97457,77856,19471,71655,80412,94610,15956,24810,58659,80060,21616,72112,52502,85707,13444,18867,57020,19335,79305,45384,69719,86062,79980,17039,21323,59281,98174,17609,69472,79538,41242,14496,72229,38436,95523,99387,74547,63968,21710,33724,99799,79901,22511,75431,65777,53972,29445,68164,45019,22771,16852,79014,77896,78209,14969,93637,78350,83553,81853,88611,65942,23659,56965,20295,38440,86850,70546,91315,53079,62565,76822,99329,96215,83138,17774,33559,50125,98872,15322,85892,75463,48723,68348,78679,24679,95086,76826,14310,34871,76463,97597,96979,70776,42420,90026,39368,94313,39209,54720,50654,34699,94142,98912,61450,83338,26794,95153,80461,69969,76192,64041,96043,62893,14236,41212,13919,38306,39614,38554,56517,97783,13094,42501,12145,51053,47306,37440,19720,80728,89987,40659,47496,83550,67478,28474,86000,42211,32097,21779,61470,94497,52807,26667,41129,38033,75052,51096,68381,87518,85898,19311,23733,85015,66126,53435,46689,46424,10258,87376,70266,36502,50521,59801,70051,92410,81021,46861,81555,64026,16049,98916,52835,71967,79528,19463,11816,18347,66002,77235,53957,61847,68893,63375,45818,24590,50355,57724,40820,30398,28689,95382,74327,51495,63437,91748,92845,44077,90125,99285,82522,24693,27200,45660,68894,43904,13724,88315,95757,47162,20745,47457,93877,46835,17903,13505,62983,81395,85143,42827,25294,48810,63869,50013,21128,91616,93810,67395,89031,41404,79698,42587,16532,87328,91913,15983,22263,95881,39406,62504,37037,73399,99008,24372,57958,19128,12291,61196,55226,15886,81193,93100,24204,79984,38785,91821,62220,13211,86157,35649,96107,50974,14413,81063,16054,59689,67895,74923,91734,22697,79930,12965,22519,47332,82646,13659,72112,58895,50746,83167,56236,97242,92423,71488,63052,24303,11924,32077,64685,22631,94922,67693,72316,64660,83011,72017,22404,11359,47081,48987,65468,54717,36037,37887,63067,44939,36245,98163,43133,38394,79743,67813,64197,22950,12126,92806,72536,47492,57613,68620,80886,40601,91384,19166,12163,78312,25320,69820,94242,98157,97836,48242,63636,62087,44497,67988,85884,81313,65464,81788,96588,91861,89095,43891,25350,82618,57234,52187,19041,69205,70241,11053,74095,11022,20346,44680,65579,56813,12260,64496,59925,72872,83273,31495,96712,67595,35689,18739,90547,74787,88492,54762,61499,60080,12847,71732,13510,71093,23113,54405,45562,18971,59751,45654,77547,63780,83736,35371,69480,28572,75267,35683,10341,21652,45576,79275,76036,80765,63197,62450,14875,73954,35486,27533,16386,64842,27943,98800,37535,29373,22669,35430,20689,50911,36265,57639,18922,18097,37161,86693,47659,86961,88646,60590,66507,24028,54712,48618,52673,37205,50145,63604,39770,51011,33552,78206,95843,87104,63267,92745,98078,10092,20853,95433,92762,13253,54584,10381,92592,80871,28117,90145,21946,47050,52321,53036,75490,53650,71632,15684,23822,73729,71311,49191,31355,78878,94035,79512,63284,12625,83857,99266,21732,98145,13840,30624,66678,16000,27545,65989,81655,87965,38811,18201,59409,66855,34552,70506,14710,90454,24929,62296,68885,34699,34983,27987,13348,33423,51183,64706,73750,59559,51956,12298,56604,59193,44573,67833,24662,88532,52330,78211,19519,84474,25863,59706,69525,83296,47878,34007,82718,29139,52700,80494,15320,57408,64879,20350,78993,46027,90298,50238,78332,65691,17958,15235,99363,43681,90382,87097,66182,88338,47078,96962,17455,56760,75578,56267,35680,93837,76935,12185,65830,72179,78677,28569,84235,96800,63053,15140,78190,34826,98986,71291,59207,75877,29458,55384,16248,89749,96367,44333,85221,69728,10527,13228,78271,35898,97639,40147,92800,83595,10350,19174,40327,18240,61095,81601,33782,64484,63382,83279,43836,39993,53266,53538,24459,55919,29052,93859,45695,60473,37228,43379,50218,50367,31699,37231,81347,58567,16753,86135,81769,86804,84448,19767,61170,28102,68865,99136,82722,44168,97047,77909,85912,73100,82344,65699,23502,81854,28703,57503,11058,90990,28188,42318,25202,42283,88112,83810,73664,32678,73547,12346,99839,71000,10776,84443,28642,50657,89146,81631,41702,47011,65480,58051,24624,59925,58222,58701,49808,49935,26672,51575,15830,20934,27005,52563,22181,86963,36367,11206,16823,56310,51299,92267,15624,14249,18070,53577,36110,49672,83808,55861,99710,22216,75589,61100,54997,95861,27084,25751,96518,62406,77554,96505,27240,71535,29448,25093,24072,51844,18707,68601,21612,68249,68407,40849,39463,11514,13189,72915,21005,31568,29965,22625,55089,44545,47062,57620,69599,86958,10208,33123,25672,74242,70696,99037,20308,39899,16440,78146,60127,44995,95871,40214,47020,99341,91630,84592,53255,65001,52630,35426,30419,93299,18007,83524,96490,57614,65519,39131,44221,69244,90125,20398,53915,84073,14557,58955,51657,12762,14828,28651,85102,26570,87325,97251,24790,35078,17441,71302,14553,19068,46120,39944,96089,28497,92771,75248,86666,14624,84123,77031,46139,91581,97560,53317,38575,65350,95458,39241,41911,17277,28824,68787,80013,90916,42953,61970,55380,56385,68198,84594,73131,31260,89064,20042,30960,40078,61856,81526,10982,53533,73334,32965,96201,88546,54632,54192,77322,61791,75191,31019,23672,57729,52970,67915,73227,52341,67930,51918,68757,99452,82969,78411,77050,13358,42593,54611,11419,40509,23035,72268,87997,41421,60488,79233,81346,36840,72783,68080,71184,48813,36371,68981,98039,70491,73719,74838,36825,20064,79916,75722,43007,20508,26504,42759,71240,25589,92746,67215,21378,76315,88013,81343,88068,45609,45524,57712,83152,88751,96166,73310,30158,61713,16354,82838,75616,84591,78358,64123,43593,85387,32174,89608,52968,13133,50134,71996,40921,17349,59275,24407,58132,24219,12489,32289,92378,89916,22533,88104,88549,12919,28515,10834,28977,30753,57259,93975,86075,70256,52174,63521,56325,10785,96291,86596,67064,39435,36184,71168,22594,43845,21544,96806,52984,46818,45424,77819,33329,64680,39038,55672,11807,44461,35545,43922,38088,72416,10518,51030,12074,66241,52100,57386,67060,93135,18818,98766,53528,76077,32877,16116,90296,79074,83372,32007,49782,20693,34600,99379,13782,24473,16548,12406,61054,55515,86105,12717,18488,28214,16560,20993,17784,76786,94834,27626,79188,68768,22587,26918,33561,48785,24104,17007,78446,65790,34338,19796,39846,42988,35217,52455,44091,32323,68876,39101,80360,92223,76454,22169,93748,26841,53441,73726,97130,37138,23846,37355,35204,25115,69371,36626,59883,42073,19576,72783,64848,91381,52672,18627,19378,48208,40076,79792,17422,76000,22224,45643,49792,69921,88832,40284,91026,92481,69135,26844,71563,30813,92917,11698,89109,79463,46282,78376,25956,74472,28317,89392,24085,94708,59569,58402,47889,18407,54952,27394,10226,32770,62937,50988,74409,81323,26756,57617,10124,35438,20761,25504,83758,78525,91809,49747,45639,86360,78423,74396,61365,89014,27763,27348,40043,31383,46170,97336,64991,23903,22706,53005,95242,25188,83692,44279,22310,59610,61882,50154,10737,41994,51842,43844,18192,47033,87057,18783,21238,78842,93540,65510,62098,27092,89035,75129,89349,27884,36595,76729,43937,94564,60700,30339,92612,13588,57916,54994,66002,25477,81238,25807,49632,79075,57180,45368,50836,47887,36055,29638,38938,14839,78224,92740,32488,37024,32013,76156,93944,80867,54992,59688,97651,95534,49148,85622,18223,15831,97910,76158,71841,21784,47690,55278,33098,36836,73494,87357,96471,75085,98189,67925,14133,86667,89107,63098,97966,97815,17072,91270,67992,10138,84582,42327,34350,25239,14679,43971,94606,42960,24313,74693,76816,72563,20818,13150,21082,84487,57273,91874,38747,39054,80080,78609,52354,24795,92956,32250,99770,33855,85458,32429,57295,27487,35081,22586,44156,20959,91642,87444,96475,51967,92005,64012,74344,27256,14945,98740,41573,27879,58342,18318,42149,51523,26984,12313,28313,32968,32227,77416,37135,68733,54980,88641,17887,51568,83819,38249,88482,74801,35720,76077,24303,97151,77720,45160,86811,53789,99146,40407,92271,22562,68402,12336,49112,56428,10953,14819,80489,65676,31901,57103,84132,23606,88998,39279,67996,31648,41582,61556,18493,99309,52964,58727,91909,49639,23690,90468,14070,41329,97301,86911,13260,42926,91675,11488,72220,53108,31971,51613,63425,28060,52474,27322,55952,79148,99097,79262,29758,66703,54324,72456,51870,58562,81581,91404,28272,17745,84081,41592,17238,77826,38671,55573,42897,33720,72452,86202,37269,45097,20858,53398,30581,15034,37712,64550,54844,67598,66039,63784,98800,28331,40249,34418,65338,13256,80627,71879,25123,81536,49772,12064,56566,40772,51848,14433,26804,80529,63061,74645,80605,18456,81342,29592,91418,11286,76245,24272,65978,80767,18602,52995,10806,16607,65828,66485,29511,82670,73758,69233,74776,59081,25935,91572,59894,94802,71728,13210,29077,67213,46717,31745,41390,86897,63772,95674,33238,86681,84264,83136,48908,31667,56527,42077,81637,69797,73545,78680,24150,59570,17555,30478,88055,27791,75148,54676,81939,54269,92575,26860,89198,78952,57256,59911,35566,36204,45988,40518,35635,94189,97067,11930,85736,91656,90514,58040,32160,33666,57022,14044,52670,41316,56669,72003,53764,89574,19575,92118,95593,34022,26745,32963,55173,27844,42078,34649,26954,90701,54652,89781,73840,13389,12107,46840,52896,17936,19347,37095,99334,85967,38984,40227,24627,22394,95826,46042,37198,48252,97465,62556,86813,99976,16160,64053,75720,56438,25332,90509,39106,74991,35510,19600,47478,61916,11776,30934,44535,85165,55493,93666,92974,10821,82458,87637,40112,15773,61906,76844,62325,69425,75038,45009,79793,17128,90357,49052,77348,70373,63605,27926,37417,87340,25155,46215,35046,83324,86034,54567,78370,24503,34142,43806,32827,78371,55432,55405,82218,82169,68808,48459,74825,13581,23285,58901,92387,67213,90748,39147,47065,15373,73790,53241,36891,44040,61534,97755,22866,45057,79800,15698,26580,53144,84796,65127,81347,82393,66130,98228,93579,97809,64685,43888,46537,27929,63494,97444,33181,94908,14716,85383,29977,21144,83329,11997,73558,18150,37968,18229,34497,79561,46322,46784,59734,80713,75508,59741,11728,25380,67240,86024,70702,23289,95328,40598,28630,54910,17544,17511,44625,26526,13131,96725,97082,68849,52286,44422,28181,23640,98744,17616,31899,45418,47450,86469,54871,14946,50717,83881,40373,20621,91556,22753,83352,30134,10211,67707,74774,59121,90773,46615,68031,50385,78979,90932,30105,50755,99109,24489,13915,84900,21254,90911,84319,37230,28454,57285,87390,88947,61747,87363,82157,73703,70686,62294,30195,54447,64760,73210,20968,21354,29320,24210,82978,14489,45015,27226,50306,62379,70840,76693,65664,79634,26431,66317,57424,56614,84777,72533,71998,59475,88450,98161,93601,21520,28571,40763,72024,44196,61260,42397,11862,65494,62554,31956,12255,85717,24406,59074,76003,92538,84140,85762,13244,57048,82617,15188,95552,98459,48614,91795,89110,86060,47616,13388,84415,85000,32299,76894,96715,77312,77861,20060,93694,96908,61934,62285,44989,51008,56459,77197,44583,52810,55601,71398,20780,79892,18637,73834,35486,67745,67642,28918,85117,88097,93300,72027,71350,55319,42305,10958,79041,76284,12572,31596,41161,97578,27183,50833,67245,26184,65778,74331,29460,90920,51751,15987,39010,94221,57448,88556,80119,81533,70792,93478,12084,69647,15748,45858,46126,13128,56448,17635,89807,16822,48426,35236,72530,28693,75120,62322,96892,96351,85715,32309,39153,59806,26634,59636,77578,24477,54178,29285,39593,80651,47979,77796,93869,53565,84305,31486,38722,58902,94941,17962,81227,49347,23949,89333,51908,74761,19465,19000,46305,34738,86989,48100,82405,93378,39276,70892,87417,12777,45029,10674,52583,68580,68423,51631,12130,21556,84630,14850,14891,29013,16560,31698,69462,78132,58909,43402,95292,74845,27178,99105,39423,42928,80984,99487,81561,31316,41706,20192,37467,18101,91335,75124,21208,94007,47408,67935,22914,66742,69031,61692,52449,63735,28002,49132,32628,25502,40727,43602,60649,28647,30548,93607,41994,29292,43066,85580,96981,33985,76131,70448,35515,65806,55716,20465,44419,19238,27903,91730,68927,94237,36795,63931,96090,70772,66006,14034,98916,24617,70270,83481,16713,27572,40971,58626,35570,55585,24272,13658,98569,44975,57900,22953,44744,16739,67253,98516,75049,80117,19855,48251,69984,42550,71796,11908,52303,37525,96599,63955,38320,75967,14694,18421,54722,76924,47209,21492,45467,75712,96217,96467,71999,19138,35267,16092,16618,52326,67487,89194,77690,95735,99440,15044,90247,95621,72382,37571,80163,71149,62275,80988,58022,42916,44994,18422,74111,98880,20541,32158,28915,33206,62274,25134,41816,56086,81489,21295,71814,53378,11661,61571,32492,46223,54001,51074,98552,67624,90512,46657,65794,72977,65014,73693,50858,84251,10888,77276,95530,20645,94017,16522,51782,87122,18576,23274,76435,87912,61078,91146,11489,74263,31758,35178,74566,50443,22569,53706,50234,26784,20410,33979,98816,82220,57974,91456,52738,89385,97737,61479,63960,52378,18523,74790,78541,80873,45209,14314,32464,65528,35504,78640,95160,85498,41731,91973,71910,43069,66336,30110,95752,80596,32642,72715,36977,69840,56221,32733,83357,22685,92370,19829,59384,53003,29843,97445,52113,89264,30158,64919,49202,91425,82923,47644,19885,11810,41343,76066,12903,46593,33700,90679,76630,50369,83875,57086,93800,59537,83606,72507,14176,30615,64805,87070,32349,70947,66675,89066,73565,27455,79594,61033,62125,32846,62851,57038,78457,62118,35929,60567,22387,59369,42995,65325,63120,16049,44137,53353,68877,25068,65762,29181,60134,80651,30796,18585,56160,20297,88968,14979,68668,51061,30053,36660,30514,37546,36299,39561,49882,20361,37059,83915,10224,70597,89133,67409,88254,98541,82264,77568,49279,93215,16933,51618,96099,38560,94931,93860,51704,17307,40483,97417,26665,33427,48364,63092,48025,16679,54806,42807,21906,51556,44236,99154,89629,22276,11260,26886,86279,24649,55284,56141,89071,99826,49172,40193,66099,39686,18983,82536,12049,64644,66229,60842,83656,66591,55910,31659,31591,61513,15450,22877,81710,76884,19170,43966,13589,94935,41907,20080,26052,69642,40512,27642,76679,39790,48123,82209,96083,98910,70630,47553,87737,18239,32653,49848,39823,49348,11598,62368,45439,95658,59019,14262,61665,67231,22398,34275,72754,11590,51853,22247,80575,29040,70257,96234,89475,48068,13242,83459,53963,18288,35866,12851,71072,16710,46265,19089,38232,26427,85747,96945,97338,85749,93249,66254,94856,24862,82185,91550,49796,65100,82010,31667,47526,48759,86215,68916,44408,24116,11270,72017,66235,84726,15154,21956,88816,12911,79118,21083,61910,98137,81030,55921,76749,12399,91989,57506,71920,99789,44234,93227,32784,74826,41839,16281,90431,45404,22032,36667,74715,34698,55266,46493,27693,98294,55409,11936,28431,26516,87347,71100,84971,25511,32828,91260,35781,98668,35680,17098,21386,42133,15040,66022,87317,16626,59202,40775,49703,41149,22775,17696,81872,96821,51258,46957,92999,75475,48031,60225,80900,88794,47572,77491,91033,94138,24031,82911,97271,57099,99455,83926,58661,25621,22619,25617,31632,41870,31096,29362,55505,68222,59282,11911,77326,92608,28139,37934,50676,55735,50745,39362,35761,35791,21072,87120,93764,25439,12300,27546,30068,23210,47516,46761,29874,41395,34086,15527,76830,73184,28767,41860,57867,73750,75099,90741,96288,45402,14986,46174,76305,49385,90705,78873,14532,21471,76611,18410,31695,84847,54323,24360,11443,67581,12125,36369,28049,75081,18300,99357,68368,27324,71137,43966,43068,32112,40058,96873,45035,60394,20964,87710,57539,56347,69458,87735,85854,20910,33758,87243,20181,86458,29533,80002,57431,24615,79847,92222,92659,75585,16244,56376,36991,24152,33111,81752,34015,86711,77604,15061,35127,74024,94324,90929,16842,42347,67090,84392,44338,95406,60374,23525,60476,35849,78079,99623,61812,59518,30076,91240,62121,70297,64795,80720,75940,82479,56512,32844,14795,49772,12720,69250,34307,19954,24528,28056,22125,51963,13330,59396,48924,60042,67063,94693,40375,52368,18938,66174,39479,10262,72869,33227,42249,16051,82449,37231,50876,55098,72891,39183,76757,84203,59673,58529,82229,32674,84604,65429,15714,51729,93234,14745,49340,38974,37870,28830,22924,58585,12191,55918,98138,52897,82227,90463,26411,61676,99920,55566,30122,91500,28443,61210,98798,40487,56212,36375,22220,93604,23023,95787,64733,80065,75904,63405,21030,86189,76778,39894,13038,21359,40824,54260,11085,36345,81335,93180,46422,87715,33514,85593,41151,80137,26878,57883,56610,18066,93217,88500,87519,98209,89910,62701,53481,63338,45207,29173,94518,70517,97231,24701,14350,85257,37865,29554,50933,56031,32038,77758,89613,30906,26950,52443,16448,65961,54061,26319,10256,10238,59903,21470,64012,22038,95590,91106,49831,75117,74434,60021,54622,29120,69165,76426,64895,57117,54585,96115,79005,74948,76942,15140,85439,14803,20251,92548,29239,68301,37403,37412,98750,13982,15549,68423,82567,59028,19406,98995,72358,95646,78342,10487,47408,23674,33627,14762,96340,17719,76404,61597,15156,98386,32717,29177,76581,67597,48954,61020,92201,93778,81198,56240,71609,67927,69930,23885,79291,90562,61682,93817,67208,54939,46587,92631,87153,43298,37587,84694,38789,47617,45457,18803,59882,72621,28546,49956,35761,56549,64276,88861,43218,73939,61290,15706,65968,67410,59456,30839,81350,15784,87887,61376,31559,18269,93380,23373,97279,27315,88416,16858,89910,84620,72351,91924,26373,27255,96723,19847,17684,42201,15189,43941,57990,62195,87986,14283,33328,15192,55190,49100,45925,89530,11179,57179,37121,15233,88491,99021,78047,81568,19982,83151,67121,34998,35905,23161,34850,90019,75773,24772,15026,66631,90634,16246,57277,14884,60339,12222,16319,37278,59592,41611,79456,96807,99786,12719,62474,12535,58580,70487,81154,86046,20821,95509,70124,78511,13494,80512,50213,88003,45048,85216,27579,62450,73561,27479,24685,44076,71697,36886,50942,68325,89444,59733,95672,71654,78612,69428,56022,95919,73969,22285,59204,99325,34890,19850,49421,63077,80680,42958,36731,49022,20382,74198,37246,80970,10227,46066,49354,59044,81466,69424,56772,41019,11256,31174,49405,90218,78996,69246,48087,18354,94331,68529,91634,95019,12242,23388,54911,24448,66171,59475,35213,29617,92410,68221,77499,70352,24975,34709,35414,60620,47927,45414,98753,78915,63433,26903,23100,46362,67169,85765,78536,91667,18355,81069,16366,16862,60511,40650,48473,61985,58680,65717,48833,17029,66081,74064,80332,47274,74786,68280,93021,54484,47466,27501,28596,40626,81880,62675,41223,98298,39115,35837,80355,63497,65533,66849,25338,53759,63457,94898,15462,40406,59762,32662,67288,61711,21430,63097,41529,99867,21359,47115,22557,73004,24659,71594,52964,27843,34128,76649,58647,26674,38342,36121,76274,22031,98372,70272,38872,60538,17573,18140,66562,23286,83131,17613,84172,87638,94312,44405,76775,62678,13442,57707,20069,30240,94208,62562,22622,25830,19802,43045,85005,21034,98401,78859,96001,10548,73415,43127,53611,28325,80302,85028,18583,44789,81419,68810,41542,23453,79106,78299,18246,17859,82128,17806,59664,11262,17748,24756,30432,35662,11295,91449,77345,22733,64214,62432,41502,93594,40303,52905,78346,85912,99387,62908,43096,69485,94868,25676,84828,75991,56882,25558,60077,87601,93455,35735,33179,85583,97821,32279,12306,11302,45941,32121,78278,77798,27537,20809,74872,55054,94955,59808,51870,57650,49138,66614,36120,21247,43596,89562,42095,96203,66883,20384,30428,30549,33496,37525,17088,98978,34166,33310,83505,71381,72263,64868,33152,20373,95015,74986,25119,28942,56964,51622,56968,17685,93249,47254,65037,54672,18931,10347,47184,58590,59533,55159,53931,48100,74016,35989,64531,31741,21374,47718,56890,78149,31123,26062,72542,19400,93187,23368,76629,10087,88079,33835,19717,32360,60824,50465,96163,98433,33946,56745,23736,25573,90021,94160,28374,61186,12411,78787,71897,87688,56825,23250,55716,32782,20799,30563,65282,17246,91163,41092,67678,62423,45830,47118,70170,78851,40125,23904,86141,40703,58093,48991,80677,72995,78535,53782,63898,13076,61698,80686,44289,68008,60879,37269,24826,53985,37229,37353,56049,79922,67426,63103,98952,55529,90445,29076,85022,50012,95533,23304,78108,57341,37465,35811,11217,18171,40871,55865,71730,83774,10467,35526,80164,72593,26620,56209,55428,91163,54738,89370,70660,69904,30127,51134,62331,34321,53157,21799,30859,23047,55795,84515,81798,54073,75632,95983,77446,21205,58418,14806,66064,86944,88141,87078,43082,54545,46181,78239,98387,92171,56348,67298,51398,82997,58813,62923,10486,34942,32327,71077,60972,42897,43793,34099,43436,96821,53018,10945,54180,54652,71229,47864,15145,10442,73840,85406,67158,42146,33728,53186,51831,36744,21179,27095,74757,58067,48113,84599,99180,63001,74539,21780,22652,47087,43824,31958,88207,83521,57264,80550,35906,88928,71021,69879,93393,12505,25558,29020,95408,43091,38281,10560,86459,97272,45911,24601,65154,85258,51070,43170,49562,44509,87598,81222,33139,49211,16255,58450,98487,68418,17405,34430,80757,53657,72447,96626,10125,23320,46398,43464,36002,38279,57274,66012,56922,98840,57920,70540,39588,23402,79415,72499,19876,79761,10915,16311,59111,58108,27772,56400,17192,75629,19877,84522,65875,15591,29592,97474,35078,99714,77951,68747,47288,51160,25597,69037,15402,65095,11461,34592,53028,21506,12934,61139,61585,30614,26409,19678,41440,70887,13320,26442,34720,36106,71004,69648,79918,98213,43829,47506,59144,85623,23453,30729,52637,21533,46824,99185,24444,47986,92939,30931,75268,40487,48920,91452,71574,98099,44721,87920,44720,52731,67137,27190,28918,82267,76026,90619,56667,26761,28015,91422,23391,62112,83923,66389,98595,41305,67988,34216,73038,49297,87271,19039,43492,11458,77554,60812,11084,89152,33621,33084,38428,56544,19745,44214,38969,42666,66404,14759,10347,30809,12070,96979,91058,21674,50004,99148,15155,23127,19400,59098,95300,91006,45632,87131,65108,91453,21576,69268,42846,74046,19246,76709,87002,94971,35538,19672,30952,13863,34383,89971,48650,79712,10399,72233,12044,93622,64557,91432,12484,70659,17915,21658,76595,27002,39545,62243,48636,87770,49176,23227,48998,47827,85321,22503,49230,11149,98215,31955,80434,26839,68270,78373,71276,98765,70436,24842,94761,45659,49686,67699,51494,16890,81955,70539,14579,99666,10349,29102,13104,32559,31738,87964,74800,84637,68383,77611,43152,88052,26746,25808,14840,68101,62645,96016,62932,65425,36770,65071,95559,24851,60745,36699,52383,25598,77123,53673,95819,92581,28126,54547,32859,22577,30158,81303,96057,62568,27837,97377,96332,47253,17737,64231,93808,14823,36142,40843,30516,17922,34766,21152,22840,51358,75360,67593,27710,53090,45111,81948,29251,48739,54337,59991,93184,27165,77188,59611,15099,13365,27737,77886,28781,18606,56090,37145,98903,95876,13308,84394,35684,49463,41045,22292,80811,24318,58164,78528,77556,89283,50749,14176,80627,33743,98175,88217,11412,25704,42531,41163,67513,26114,15694,42700,49057,90483,92657,40446,98823,84237,90185,68147,34599,11655,39306,38049,36489,73147,67805,26759,73000,97198,83353,64319,24263,97314,26041,25059,14461,89009,46550,44211,17700,85713,55849,95409,41979,55009,59925,31502,54231,82467,31512,21874,76621,87647,39025,53044,58114,25841,50570,88170,71350,37750,26405,11622,29586,80483,21522,45598,16094,40334,28887,12260,17961,27281,74950,38207,95110,12237,98509,96819,30256,34668,74925,84188,29940,87468,45033,62773,35405,50841,19145,73841,34258,99768,85753,60289,97691,83928,43386,87729,23345,87949,49331,62088,65900,11496,75768,65556,68477,47862,68243,86762,87157,94743,68514,50463,39334,67633,36801,30421,74663,39090,56987,27703,93681,86851,93279,92003,14130,40056,57884,87629,28510,17307,29344,77925,88422,15076,96421,23753,53636,83591,29944,45891,47671,44319,50780,75920,14518,79296,74615,52400,65335,32400,92257,85641,34273,78138,87654,80445,39181,32027,68972,48284,39941,47819,81728,17035,33074,20703,27160,50816,46016,43835,34871,93267,48019,79741,94202,56974,44165,68690,44143,21178,64167,60953,19943,18045,13696,87897,28429,86495,10313,93276,22901,57289,82270,57161,52393,90062,52544,60724,73154,11010,87485,21159,84343,15345,70952,36718,12327,42106,99399,46179,31004,60273,94225,83612,55986,62700,61400,34121,27246,36486,23522,72445,32101,36095,85730,28824,22231,35875,20655,53553,32021,74692,96037,47155,31414,70690,56127,75511,91765,92611,86886,56966,63193,49497,85948,92741,37359,64436,26009,95158,44221,42136,11686,41618,81870,80672,88109,86768,83463,51665,93759,24216,49536,91704,89481,15008,96931,26569,11690,22650,10358,38607,42049,10307,56107,90692,89992,61637,36115,22435,42150,83468,42348,18297,46341,36783,52094,16886,94626,77710,68181,29730,28385,83568,38637,82660,13029,65005,66450,26534,29347,41507,45660,32906,39229,77772,62748,78019,34374,64348,49636,78069,14325,35309,48560,89123,31417,47309,67869,25025,17017,13615,59011,31669,29693,74223,28551,33319,15441,35195,77890,28752,90754,83435,53263,31089,12948,55159,35823,97170,26983,93141,51327,28207,27269,86785,78806,68177,69729,40829,58875,84848,47365,87343,64071,87555,22245,66160,61903,11709,16666,69444,39012,27145,69149,52439,23092,41325,65495,67682,35085,84844,73555,90534,93974,55205,78635,90651,23473,10879,60963,93578,99585,12464,28959,23630,51194,21828,11458,64305,10215,15150,85997,29236,60123,29529,27243,11588,82484,76290,28343,52709,75825,95368,33600,15774,19159,44709,51556,80431,79034,48218,99362,75185,14309,39855,95093,87998,16014,68445,20888,21105,42849,10404,95222,36109,65376,28159,41249,61749,28155,67476,51927,68743,71475,17336,83952,42148,83296,72759,63557,47952,49415,34194,27396,78766,49871,37470,85254,66063,58972,31678,45410,36375,61976,43666,16959,19679,81768,70936,54749,58010,21120,73221,68969,39250,23864,45000,14077,54461,98105,29240,32531,43886,82153,93086,12575,38158,78074,43620,10952,24296,95873,73172,17801,72604,86480,13563,49303,63205,93124,88554,68531,81652,81985,28360,73319,62416,86678,76177,64389,62648,58174,41525,69969,83388,70236,12899,95838,62131,54520,48753,76705,83740,12078,62096,67266,25064,19376,47617,38489,56888,99280,89941,24817,23749,49506,87680,82503,97673,56102,15469,35607,64362,35934,10256,51884,82854,10847,60161,77642,34943,61737,44562,70125,86296,31620,68284,75381,29324,93282,41933,32461,87179,28237,72473,97330,54248,65579,21989,52508,34528,47379,64926,89260,35368,31518,43004,37174,13806,69235,29132,13929,67728,17026,85106,92224,95411,64217,17310,50314,98498,89479,27144,43228,75234,28312,68769,42048,85212,48122,39234,58480,53588,92044,95833,96921,66425,10177,50817,78507,17080,36910,42724,47019,95646,87286,49792,40256,12776,69944,19261,58701,36797,99071,31307,36815,35513,24111,27662,29972,87915,64960,12561,70865,79020,98809,50647,51786,25595,73796,56872,42495,55706,67522,71386,23156,66526,83013,38922,23436,98951,95391,91718,89923,43597,67580,33578,44829,38886,59212,61280,60343,22966,28137,65113,96800,47410,30417,75413,83007,54644,63050,21934,62954,14003,47108,40756,20408,96942,25187,95429,46430,52020,34586,78819,65692,39139,53915,96852,70694,48034,89659,25870,32706,75985,60928,59890,29893,93694,15030,90454,83790,30945,88439,69295,60441,73273,62305,88247,37756,55173,44892,18949,31192,84161,79723,14004,80530,33789,46810,34631,13635,11664,46784,57773,22686,89325,68414,96323,38795,47994,73014,53556,93150,19846,93576,32105,79720,92732,49531,23505,83246,36467,11834,18414,20962,52904,74055,51031,91725,33927,84525,71988,73080,69481,75071,14424,85746,10755,29212,89195,78626,16264,44992,49190,85984,34427,49965,85401,86086,27631,38070,52766,65435,82125,63280,23936,16706,71317,93140,23689,26963,66852,90963,61957,75762,63536,74662,42052,42546,28747,68667,72952,59579,73944,35977,81330,58418,83544,64761,98139,42562,89601,44630,95668,52313,80581,32346,57378,26878,31819,78170,92671,42365,16217,81890,13808,75682,22489,38179,12585,44945,43344,23594,69208,68164,61278,90315,32492,74118,24475,77403,21892,79218,41856,32709,66150,88288,82867,45603,20317,50303,48808,23341,28298,59250,16012,35658,56844,60621,85934,38362,87634,99957,59021,13053,78801,88648,75348,95037,83011,87322,61841,69585,33926,56648,51310,87277,80090,24125,27811,24605,90870,65010,99254,38463,40939,22758,39899,46396,85163,34236,23490,95188,73219,88985,40370,60055,54684,79356,25486,47775,78548,11995,99044,85272,62872,31563,26672,65014,79881,63945,91294,26718,81356,72243,34182,28051,29818,53719,15388,98870,82913,44943,11390,46094,62870,62301,67448,34300,12262,66578,96546,42987,21167,56670,42000,55261,41021,37278,23307,14688,43152,70478,67344,76569,36748,49130,18480,43570,82782,80314,70583,70697,67582,36934,95102,62041,73758,68141,44241,68049,34825,44673,66953,84836,13272,68864,52692,76549,71707,65636,73021,18510,17970,25054,64034,62245,64675,52206,12804,14538,72277,73060,71556,34170,62161,97406,84218,49645,93204,51065,62751,58991,56762,66230,42817,40869,16380,25123,39936,43084,26576,62711,55185,32639,20221,66134,35764,41860,84610,49825,69849,15811,91684,40962,29327,22695,88645,61739,73792,59070,60466,67264,85704,28139,49332,75916,84566,16609,92887,29078,73667,33027,53571,56062,27873,76944,19942,30856,24092,68601,83595,62314,91549,80843,53408,43810,82805,36141,15002,33391,16600,34427,54052,18127,91940,21172,85665,62653,89367,69657,86690,10570,59890,54406,15418,81592,85343,66436,32862,64094,63913,21551,69865,40465,81016,98844,59827,57091,77745,95592,76264,47701,92144,18424,40833,13611,86476,25449,60599,54199,10613,88384,53348,28568,62388,81606,70889,36775,61339,58402,80996,26079,14770,18399,59768,30808,65009,21457,95390,80729,72021,28299,84985,81106,48403,43536,93159,73352,90185,72518,60849,95513,62136,67593,89424,80103,58027,61665,27748,26015,82628,48794,12274,39000,42103,10641,79989,97171,68867,32667,12694,24260,93154,53897,79944,69135,25022,87270,82955,95418,41212,94928,79945,21426,18538,84802,26577,41394,96329,48483,79175,61481,18946,78185,19891,70157,69698,98951,16929,11724,85973,79055,98612,71154,31398,10242,20354,27937,15073,74029,73298,66208,27945,10665,12097,33703,26828,63228,93678,63853,54251,37168,14252,40377,77487,85769,69367,52167,64704,56791,12099,11337,40211,76243,78340,67151,92252,58418,60630,91081,22078,37024,49100,18475,13645,15362,47983,26403,92172,25637,53820,82478,81465,81868,70030,89172,42043,98050,78442,61610,24061,46948,49924,74381,40722,99187,82950,27356,22617,78502,76072,64727,46208,28205,69420,38060,20325,89421,81409,83036,20407,70126,75386,88997,43864,96278,40726,46549,78565,41264,24953,93463,92502,52035,15074,94309,74482,23843,31285,80687,91821,97298,39592,42913,38766,98829,71134,73352,80935,57831,56811,76110,46090,23553,87352,76127,44095,34240,61290,51335,76822,10611,97892,12486,95119,83795,38864,78989,97265,81884,30650,73546,32941,46158,73874,75220,18408,67888,64034,79135,40695,64524,59776,40856,21965,21374,56589,65912,64769,81132,67228,73965,56981,74159,79031,24782,13829,86754,52717,33452,31738,93145,20898,81280,46473,60458,91051,89536,54727,88969,78982,41807,15982,75973,25939,76324,31630,64922,41335,97016,76255,76337,68765,84065,80244,62761,24304,56884,67159,76833,73352,89174,20151,94482,48122,87309,46223,54259,66870,25099,28137,15953,28420,54717,15319,66729,77747,88698,80519,59118,17760,70573,62262,62133,78072,75222,92065,67267,83775,80353,28697,71038,66347,12964,64432,27292,42328,67753,75533,42539,71867,77024,93249,34815,25405,94631,21349,27337,61319,97847,54079,91400,89439,53958,42315,30001,18521,56362,55719,30780,79354,68135,79897,44358,88361,83235,41558,67414,54379,44017,21496,89830,50647,66820,34282,51862,35504,35127,20858,57787,57010,59878,79908,54588,54484,82805,57642,36457,74557,20538,48957,35263,22489,26586,93854,49671,21162,23165,52812,50210,49023,48593,25168,26285,44922,83432,19063,72101,92282,35901,66666,83037,50860,66456,34060,19934,49717,51316,46061,58031,65113,10437,30547,18472,88596,20579,42304,58127,46706,76795,27891,48033,62396,76160,65199,85803,41852,93938,60817,69544,95012,46228,54364,97435,19940,84234,50646,49830,91988,44335,24429,99572,41412,92824,93211,22026,18221,74522,40747,27457,71713,89599,29877,17185,68997,46032,37150,37883,52244,53991,19904,95630,98248,77718,33841,59329,92983,21158,38775,55475,74359,74133,44154,46908,76032,83954,58575,81882,15200,40534,83864,85889,94954,83060,38491,80815,63025,82579,58295,49090,92368,50167,55243,77905,33995,35292,43365,80331,19198,27892,28263,69750,42886,72949,83088,53317,97574,75143,85870,47625,88535,65678,70066,20744,50313,25115,60686,44081,92247,89479,38650,68567,75977,66725,79599,11862,89519,57952,40777,27364,58221,57057,46871,22357,22523,36292,87725,28756,53493,60270,64682,88876,69712,62022,60043,49125,26922,38320,84899,58463,10321,62483,53620,77935,29165,80044,47283,23549,72219,50335,30935,95609,92949,55216,91844,75433,58089,91135,71945,93110,78180,96932,55305,25554,24432,86401,14800,93907,55714,46552,55028,25289,20836,19181,62113,46249,53100,94604,39719,53466,31512,12892,94052,35257,44439,27246,16115,26198,81492,81249,70725,29796,76343,45305,21728,61704,54601,34232,78185,68555,12411,19046,70369,72790,30749,82517,16263,11625,47279,31535,74372,63661,21797,22109,81818,65658,63391,22121,80955,62818,27653,81990,97473,98054,73496,75591,29654,34547,65739,19535,14483,21513,46791,22567,34343,18410,67433,52567,70915,46325,86705,75929,79634,26522,36410,42499,47174,64497,63206,16335,96960,77479,44470,35006,71084,95876,40720,37640,91252,95379,88861,10344,45037,57433,59711,57627,68123,73602,63860,99315,49572,84941,46395,99680,88144,94166,84339,58439,84253,19587,21242,55670,66557,14615,58347,73601,22051,62595,66631,11476,78511,56977,63149,52685,69634,43362,85336,72253,32030,58781,12430,42224,79257,66418,76999,71136,31522,35509,42784,32056,76813,38449,44627,41031,52540,62741,99932,16306,15164,35083,55511,91921,24056,57546,51769,56356,28935,92618,44436,52681,66695,92315,59769,27697,46931,47201,28437,11235,26277,76612,72755,65163,69306,89342,23078,75124,55388,69786,17843,49740,64339,46104,69221,69460,93551,94986,19568,45663,62635,45713,42279,60596,76655,51243,51983,65400,17534,12707,51379,86190,47557,26877,13616,68013,49405,56364,59724,60188,75091,47653,20578,13638,12293,24362,19834,46950,95213,74646,90960,18158,46192,83903,69228,46919,72182,41175,25943,52565,28174,45903,44964,42752,53916,15753,75708,87402,83833,69094,34852,29596,14958,64310,72370,34685,93604,87204,79166,71338,75381,10041,27263,14893,31627,83021,80578,65842,70303,68789,17536,60841,23754,95467,50517,96307,36987,55182,88108,64074,31315,50610,38166,81145,89542,69264,58197,85471,86456,31829,49922,31691,53481,57535,23186,28520,12316,18450,32445,52492,49637,24053,45622,68616,63776,47602,63717,48374,66443,87515,62404,47717,86934,62422,57939,78240,84105,95326,40806,36170,98932,28716,15466,45788,97715,96933,71732,70384,46098,25902,40558,41045,87236,25873,89559,61085,25392,38281,25005,51215,14953,97512,23798,62083,29172,85059,15858,37033,96401,51170,94308,20559,29034,22667,25094,18339,36023,64664,59465,45290,85408,41402,20820,68753,54170,27282,63522,88951,44184,86409,36962,48416,35378,43041,56354,31510,89993,38573,26464,94880,57230,44700,64966,30812,73604,44555,97933,15827,86166,24848,32653,36273,78523,47002,85593,54585,80154,77396,58337,70772,56762,65000,90012,91276,70562,70921,45221,10781,17072,80023,83544,50579,28372,71478,57276,36791,74859,58303,10420,53221,62529,62701,94796,64988,68311,19091,41435,66599,54938,84825,59751,66230,77337,38334,48922,56404,80173,91138,18625,29323,88134,89056,55636,22971,82045,41266,99496,54376,58480,52540,91819,57162,17245,51511,81092,70918,72765,47106,28020,27958,15735,95150,38832,58136,96832,62398,86229,90244,10631,15657,78191,74497,45149,56010,15983,94622,49301,93115,15891,51013,72413,72891,73106,72821,91377,72948,72575,18038,94510,29689,12189,10714,42183,73915,37398,17666,85822,11135,32443,42995,62617,31863,15968,69947,77246,66613,55069,78652,34929,40077,81160,21389,43686,33286,26235,31175,84994,93672,43931,22555,26397,38863,83576,51699,73543,54229,13168,89500,10453,34582,53770,76126,78479,39393,93994,59349,74306,89267,78366,90391,78803,46526,71435,32147,60003,39122,34506,26556,94496,86552,28163,94398,65880,97694,31529,33758,79499,80996,46777,12286,56145,73538,29024,46703,79275,42086,30366,83650,16239,22435,89308,34540,82617,15102,45688,30640,23536,43229,32561,53413,16389,86358,93628,61016,11259,50667,18097,33249,16370,89813,30498,49125,30966,19415,19274,21993,27736,72962,19243,12781,71912,75858,25337,36973,61374,83349,16532,82815,33637,12749,89498,27207,65783,44336,97349,17841,27094,93069,36433,90363,58461,36351,83427,59451,14312,46450,89449,60813,38338,85689,86613,51345,65400,19812,12642,36195,39598,41737,73782,56677,24508,53143,84690,82492,43943,40587,83710,81903,63682,11458,76211,54697,55693,89310,68175,13878,88730,16207,92236,72501,75577,94122,17237,94986,52198,61104,58883,44284,11582,47913,95844,78542,18942,33359,42347,74169,31026,13875,39778,75137,73831,76132,25845,21795,60746,40790,29413,75257,73078,45894,68155,91529,83406,56894,41901,85366,43944,15007,32224,50073,27271,89001,16917,59292,44382,79043,63841,75553,55734,60430,47982,38439,42680,99185,39088,20167,39107,93055,42604,87686,29907,65907,82233,96913,41676,38504,58637,15381,46776,30921,88321,30426,86125,83284,84000,89843,52018,86929,48585,16021,21296,34559,23022,22151,91333,22227,56046,45128,81161,56275,18783,56199,70565,77058,72769,16334,97845,93980,72048,42266,25603,57400,72074,70342,48107,55248,27319,89665,32082,50228,61318,54615,14181,77122,76576,11584,99912,81545,85264,33625,62752,78356,36694,12055,39902,42719,67769,65776,28935,74613,92153,33008,26345,64119,39184,24717,46306,43860,27258,62339,84324,60274,40593,23925,17874,41557,94229,19363,65780,33789,47998,30667,70865,95580,14635,41601,32338,87775,31307,56149,98633,51040,56600,79210,79394,38461,57695,18915,81905,40031,59507,98104,25535,47612,96490,27755,60906,28648,56938,22232,89731,51586,32639,81137,27596,14468,39081,78521,62905,32842,59244,10835,57088,87549,29295,39012,22094,58943,74352,63385,38195,98604,63777,29297,83320,66120,74398,30461,88572,96628,98588,49640,22564,70885,19867,34663,93351,55642,64154,13334,89961,17106,65920,50411,87805,78907,43381,93650,99257,45716,79022,20491,44996,21978,50040,18347,64020,35170,59243,51334,90099,59625,89553,75694,15729,76449,66907,14426,38427,65753,43524,66273,29254,74478,40224,44359,72915,83984,58255,51807,83183,41205,70339,60056,74678,29928,33293,92909,42069,10485,82737,39700,38126,59311,72297,12359,48187,57321,36623,17261,29040,65216,83673,92931,77576,19218,55031,77640,13678,71675,24838,73047,91807,19479,38210,29710,94022,43347,15304,26600,46559,87117,89989,22936,93150,52386,95171,35305,26412,40592,17720,92424,14411,81090,98528,28422,23093,42212,67803,63195,86056,16478,11752,39585,70476,84739,85102,59384,58338,38292,87161,17164,50508,14345,31433,68999,17830,66166,59478,84373,73264,70755,68295,59544,89986,84247,62176,52903,89816,37795,93428,78968,72791,83095,60233,37349,55910,70489,32085,80475,19320,94744,82774,76117,18576,18350,90151,57490,32493,79512,56342,68930,93507,85677,95270,33654,53432,94140,25208,72413,96898,81240,35663,69853,18734,24697,70990,93592,57047,14998,45998,30617,45134,77048,56978,35283,76000,54581,38740,35530,16361,72754,51085,86593,26404,32479,27787,41403,16462,93062,58623,25976,14539,98238,20890,50780,87117,89994,78991,83754,91569,41291,26442,17920,67386,18604,20733,78290,65329,97974,36516,92558,98831,67002,53389,15073,58245,73774,51650,63563,66132,91597,71009,51041,53587,75154,37826,31393,93708,20635,72576,30136,69598,16681,37112,48238,98588,57089,44585,53143,13830,50363,52410,57951,55320,96446,70598,90159,58803,64531,77734,89207,20900,57715,26705,51607,61511,40884,32279,37592,85213,40500,36844,82622,22787,33987,12582,69776,38121,30493,18314,51070,60457,33944,34249,74949,27320,65972,87299,48901,54543,49762,62796,49553,81934,57754,49396,13279,11428,11342,92470,41545,96669,44907,38194,12393,45734,46549,81651,77520,74049,44727,84408,68816,96115,51514,80331,97514,94741,18116,59947,42659,32297,81154,38253,96567,56281,92462,53648,83132,20888,31267,53820,25520,46458,58221,98524,12697,15072,61809,31693,64858,23378,74201,36693,98379,12715,93229,84069,55408,39131,22571,95899,90183,23024,34778,81259,30099,21878,35680,61314,61430,30838,45892,41720,64447,87408,79654,22044,27905,74768,23616,64608,10654,87607,96058,31881,82773,91384,52214,97263,94659,86753,62417,42551,26127,42128,25832,63741,14006,45563,93604,22882,21020,59572,63722,62868,96081,15882,69574,81327,62910,83042,64631,61646,28627,27401,88450,22250,11618,17867,98124,34897,61578,78783,93527,27880,70291,97258,67871,20517,48590,51745,47698,78044,68990,13265,59543,35004,58365,41805,65670,69022,39613,95689,74444,33502,32060,73440,44684,19725,95127,18677,47262,47355,10470,12256,25601,39542,82666,71071,70496,78351,69992,31106,15867,73905,13689,15266,19329,80099,17617,21792,69180,55539,50659,78260,62772,75787,58385,47549,51893,90853,41963,35939,45789,68075,22029,46499,85848,49718,16098,19723,40776,14708,57462,63142,20363,95979,22983,70519,50625,61367,15053,48583,87713,50374,80427,43067,73412,14849,12405,70645,16968,61220,43914,68847,67817,76858,82541,15807,11057,30864,97467,72637,32988,88684,29324,75011,52169,40355,29230,63524,56789,20553,27515,61993,14629,21114,53472,99769,33272,63736,24141,66581,53026,36928,32171,64881,98125,45385,73782,21955,96502,57226,77426,46608,30337,97494,17215,73324,91940,71310,29902,69657,96334,85081,45868,22222,40688,95725,53962,52094,48180,19595,65579,78036,96927,80977,78103,49302,17177,85002,99821,94663,52420,74079,19683,58284,13262,29278,83871,95994,50843,47115,86608,65278,90258,60879,84694,63359,47783,35812,26461,69068,87894,37927,43716,83328,53272,23780,46754,19738,68374,54431,41616,10930,68834,72478,30530,46744,12573,11510,29184,18643,62220,43799,26509,57003,21324,94708,37380,92902,43721,35274,25230,56009,19148,26331,20842,13529,72983,79237,37194,31984,71835,88433,64119,37513,86001,70110,98779,80003,61965,24367,35502,45347,13949,99311,18898,67229,69807,50593,63859,24326,34439,95461,68496,38045,71404,65960,21278,73344,93198,38484,54336,22301,17800,58043,46737,19305,65690,50123,14872,41302,15496,35956,28498,61935,29860,66354,56844,81914,40066,37059,46523,22548,18119,36225,27262,13014,76918,16651,72789,61714,31509,51109,53651,35700,23872,18292,28262,42145,61064,56191,18282,90488,40126,87637,77821,36923,91026,94678,28968,45302,11326,29096,94603,70882,41889,87444,96667,61191,75314,28617,31591,69446,97840,83520,58765,50810,61472,15595,97624,22591,97283,13582,47240,22701,87027,27351,40592,83356,60403,12281,44551,21217,38068,21695,59511,64848,95198,30220,83779,68197,89313,11345,69986,36384,33909,89753,47615,61223,83001,52913,16717,33274,48097,93483,59467,34370,30652,16365,43269,27484,70978,95383,57207,94606,35057,17842,50147,43369,68221,60018,37882,38849,54544,92849,19267,73060,64792,52691,10516,11897,63500,58106,98293,65120,43215,58707,94706,44408,50763,50613,25168,50308,27216,97623,48700,77197,84180,30971,96987,68171,64132,29951,49940,54657,18916,24788,78286,28087,13908,75561,11743,86775,52459,91403,68108,23483,31905,74733,40580,48809,18012,19896,85286,63433,22528,72874,79184,10524,95184,83956,67569,55195,10097,23129,93787,36804,55082,41092,37872,95448,69897,16623,91184,43144,42838,12944,21260,98871,53828,10118,41803,81684,74758,31267,61215,57587,73719,83035,59520,23962,97605,68869,82404,22722,73991,55656,82787,77440,50810,82122,63630,79212,66786,66140,41320,24371,73346,70674,33452,30097,68908,41901,48772,40877,58557,57052,29741,64973,25640,36143,31665,43037,74045,76292,14334,96309,37629,99744,15568,15565,67808,77102,60007,77043,74741,63292,10464,65114,65390,10552,55168,36965,86265,50865,50706,49248,19179,25099,83961,42719,83490,68619,21585,94770,45664,63188,74276,27775,74377,16172,18469,43890,77236,38414,44741,57552,60894,81119,66739,30014,18576,21226,33662,24266,15890,67183,39968,13784,81765,26656,67029,97248,58357,30100,80024,27661,86947,44468,35089,29373,82772,73140,44425,96909,77195,89910,57617,29964,67743,83910,80732,51734,93253,42338,11704,63848,71999,48706,87516,37907,91807,81321,48728,42038,70586,45102,15174,62364,81966,83149,91857,74562,81302,23814,64642,98404,39743,63290,88236,92229,24926,66745,82388,13555,43195,41848,60616,36788,13144,52774,69776,54329,16976,65494,69129,67863,70660,92617,69411,37231,33038,89856,38643,64185,73018,16176,58055,87800,62011,62534,44198,34782,80997,73781,21132,73022,62481,68826,36953,73880,76360,98488,27554,83873,41083,74088,16857,71143,89493,57488,34868,36871,44913,99937,47458,90724,47177,25549,72382,45018,60274,66643,43594,47975,90748,21810,67761,16670,87177,23632,35999,63871,72731,68137,70388,11700,27101,47916,61523,41431,29110,36450,90186,25378,64551,32109,36230,82154,93306,29348,70778,14127,48985,41869,85593,46506,19351,94189,35610,24056,86497,81965,96182,76720,50120,97809,40398,38936,19524,75100,27279,78429,23035,77989,98172,73523,43783,57400,27460,89865,25483,53862,24734,64138,36988,52989,51650,60500,64706,86553,28816,54253,41750,51410,84045,91877,29750,83028,34476,41875,92792,69077,76440,83415,60388,76624,23102,23578,57252,42031,96301,71248,94615,66576,72832,69703,40058,69188,40698,80906,71253,66918,41553,25560,21556,59632,50753,16973,33870,71442,49297,54536,75213,30703,72955,59123,53437,32674,63004,97041,94851,26274,43755,16476,99307,23305,43818,45620,28904,50123,79749,17796,96256,60242,52180,51749,71913,52262,72653,30197,53717,91042,21160,84088,78443,20266,44263,11269,70043,41846,61281,12954,84726,59208,46460,91542,28686,71439,40168,53102,89277,82407,95270,45446,57078,85235,78843,81812,31891,82776,90751,84469,22660,55956,40685,46041,30873,87576,80422,99558,37902,75731,63825,46088,25602,19034,55191,10585,60914,13633,61402,56251,74933,38799,35558,56264,30171,25019,53273,32343,73181,77970,22252,41052,34141,12114,66135,66389,19789,10390,55290,39450,17083,30172,93530,40748,49970,61387,69558,17526,34416,23621,36809,30611,94092,60314,88329,38707,89031,42837,19581,16896,75223,70866,53542,33409,62929,13131,57437,14122,41117,37311,98376,16809,70399,46459,78156,10459,24316,22755,54509,98775,63377,74712,79816,13457,92173,31771,69583,96237,29617,33022,13118,85068,66404,39685,46183,12893,90127,44711,89527,91938,67139,82414,43058,62158,72032,74085,43705,89172,61064,61081,41326,87902,61188,78945,83336,26096,86546,14759,40422,14838,79411,18996,37524,25325,56107,62315,81559,43159,38013,60022,61829,86455,48342,65542,12824,76012,20628,81430,56740,69103,94962,32852,97276,75497,18040,65417,54897,79646,84680,99972,41563,70148,76181,76580,24822,82849,56952,61119,45064,35880,46750,31160,84925,78851,80094,76582,37984,52970,24671,55812,84552,18532,74577,70656,59048,18587,42036,98816,12451,66823,97149,78602,31207,34383,26231,89270,62801,20611,53187,49610,18124,85352,43681,27242,99432,82591,43191,68494,52263,37763,13475,76055,98782,35006,18530,89378,32228,52864,94725,68002,82199,42851,66768,85700,76396,24258,38373,31302,23262,34513,44901,63862,25998,63338,23151,39311,27474,99026,34155,88979,52821,38548,26061,81902,29257,54987,45205,80248,63084,68467,23539,69543,69580,65093,15069,97414,52624,65460,19930,87902,38177,38655,85844,98272,33485,82535,95555,26089,56125,43773,10277,49718,31873,69898,16140,41310,32925,28407,76479,88468,68625,90992,30768,31049,23061,85759,73585,12699,51128,37561,90425,61646,59597,93771,87164,17162,51897,24824,19137,13069,25610,81112,57374,83666,43236,78690,13070,64771,55345,43065,46879,56306,60939,67453,21456,99800,82492,41689,51123,37832,59202,70982,58369,60365,74228,26404,75806,77877,91253,60862,40351,17307,69860,39694,11958,91342,24851,59564,56802,79051,34094,48068,42060,26951,39683,90508,22025,57109,50181,64634,64693,15435,64296,59464,81315,22130,13592,19015,90371,11536,89128,21568,74491,97608,81992,33705,12549,57554,55480,10209,88430,26397,83435,40321,53876,77541,18915,67429,59092,22735,98725,13593,41075,70002,29796,39088,63562,93464,30072,19548,65343,85694,81203,61504,89539,71945,54042,58126,68723,85321,53576,41825,95623,40767,31383,54627,88225,54061,35161,54252,52445,98240,58802,22522,39177,90348,18286,89870,86599,69004,34508,27927,11502,73352,11883,62363,51226,61534,45754,52720,27623,71065,83663,81957,80263,12567,75533,97132,56365,16796,84437,24411,28920,63790,47493,13477,49642,22140,82554,33030,95945,68628,91664,85068,88195,81083,87064,84699,66051,57022,41890,87638,20116,65372,24121,73165,80684,11853,56399,24651,19924,67535,91982,90936,10713,23858,33531,25748,25835,37052,20176,87193,57871,19981,35731,79276,58358,71028,84195,43469,62933,37211,16955,46677,65594,94026,81301,88881,14041,71423,99729,78147,33770,26298,25022,94128,98218,38080,34011,36261,94025,52250,37830,96492,52626,17076,12066,95718,11936,58783,97621,40312,30907,58531,26945,62835,42615,18944,83631,90199,39840,12078,29864,95404,71161,27777,27187,62607,82836,45690,98104,48223,86312,88363,44535,57716,22106,50112,81121,45994,85744,27448,65526,23276,21116,81653,14449,39790,68250,73411,45408,94277,37862,36572,98816,47454,26509,33065,78413,89505,65058,13304,44885,18902,87924,93993,69430,75746,59425,28681,42715,26832,57327,34153,88311,34924,35347,34804,62192,60087,19070,13403,88517,36549,87780,93885,85778,80315,98088,83333,85159,46096,56369,29853,44536,69696,47241,67924,10460,85245,80372,56526,30398,81046,29639,26146,82022,51486,56353,65868,18533,77588,83684,72227,99158,83617,14011,35739,99127,49633,90961,93679,41008,52796,56066,77148,51940,86466,20396,71634,66657,56567,26010,50815,38526,44498,44793,79072,43456,75469,64159,25748,83632,43236,38775,63972,73400,78330,50911,37831,27636,83752,93166,48001,59056,95264,13343,36811,40984,73347,53683,86733,26840,59252,15251,46951,55836,52226,37268,51627,94435,56256,65738,21071,37319,37582,93258,26548,25673,39633,79462,58526,92340,84147,25389,75106,77202,72246,78379,33432,20597,89983,84318,98436,71617,72324,20211,42820,73594,19972,30733,79563,62147,39343,26055,84980,84270,28213,60043,77524,34607,51663,79209,30914,60817,50369,92816,89758,61981,48446,90942,30530,31347,70639,13013,31443,89767,58627,29254,28192,32024,92158,51232,27643,53287,67146,76976,34485,22061,68639,18837,93820,20311,24371,91214,83725,82030,73686,74214,20740,93356,30521,23690,48036,23054,31835,92383,93436,71268,58053,83898,57415,88812,22161,40784,43125,33729,70028,59065,51954,49395,11236,42169,66493,44470,85430,23687,52473,82138,89087,88345,52696,69823,96919,58494,78891,57372,88255,61738,64273,30833,49280,26746,42352,91926,94502,93017,13214,48201,82912,96494,30441,95409,94538,25586,77214,64840,36144,14290,78959,58448,95149,30039,30811,55648,75609,70321,95340,48433,18281,67255,97059,28177,30578,95633,35079,71885,58430,23197,65357,38505,51495,56196,15801,60810,70889,77422,60525,44401,35408,15583,64766,13493,60140,21386,13639,33808,21629,89618,51864,61043,79759,94089,45450,88150,14811,68939,78362,55545,83184,23612,95172,17504,78161,42298,92654,46766,99516,90649,95183,40186,84381,20433,34115,34461,90371,84796,22017,96182,36464,92451,97508,75662,11270,17610,54776,95179,91886,38819,52472,41924,49471,96047,80976,72709,99833,85798,30655,42093,77682,60222,87345,66240,72042,65662,24706,55304,60279,65066,17451,13094,31935,83271,26560,42809,88891,38922,81958,59954,52695,10080,76858,42115,57285,20496,33119,52998,21627,45741,19065,90059,69703,69628,59304,51339,45646,87184,19313,23037,35527,88659,55561,42358,88339,65423,42190,80652,66758,86370,52419,70071,56905,72105,26773,89406,86938,29120,23400,42932,61927,54773,73739,73773,58482,60119,51838,55283,52040,92439,92967,12403,76185,58648,99897,69649,11691,38118,38699,65890,47198,34529,95921,61863,71333,83561,33536,54362,36524,65202,49780,60401,21049,90580,14524,78356,55592,66391,36249,13862,99698,10708,86425,41711,55184,87514,88072,37824,65636,36375,97657,67504,76767,76538,92625,42808,66075,10388,99998,95252,21632,27235,82206,91386,91181,58889,60927,15813,80662,48836,98161,77396,90566,11921,23051,94768,54277,94897,87320,44797,60862,29569,48495,89617,57819,35150,53715,90908,81032,14298,28590,57242,44581,25523,75205,69483,63703,75255,66958,61951,30626,79120,30035,83529,23992,95292,47168,40004,53351,13882,19700,80283,23765,57654,21901,64761,54394,49836,46894,76199,74248,61887,27699,41050,24261,64214,18536,72043,53564,48544,69913,84395,20678,22092,86672,49079,88885,73600,16057,30270,60705,71036,86792,58173,72317,81007,49271,80191,68171,95623,57996,24887,53986,43919,26481,27926,74955,32823,46123,95105,62454,24300,46073,31503,62297,26465,77575,35717,56618,81021,91630,83744,68643,35189,89156,64933,33116,44123,89189,88679,22262,27199,18599,10334,20706,59672,20255,34646,23642,12683,64056,28248,36445,36723,80957,33003,86364,23518,81168,67046,33802,64373,49122,52592,17276,86873,68000,98693,68800,10913,39171,95002,31083,76943,55255,16654,86275,82003,77805,20768,63895,42819,14497,70345,66350,79286,37885,44082,15476,61317,20109,43886,34403,34476,36224,21514,93929,66708,43134,44695,48634,60567,16931,80259,33562,90466,16871,46614,74429,12918,64183,31564,59637,20171,52434,91412,75367,96691,33535,36971,61120,67514,30930,52745,64794,36373,52672,77611,95373,79183,95920,91756,61381,27503,44448,72611,74672,38912,15492,66093,94886,81242,22416,67231,11207,37295,64543,61349,78295,65321,80947,83392,57777,32609,76156,99986,57583,86269,69749,55208,39490,88528,90809,99493,42217,19929,23260,56863,54951,69530,63406,73439,56530,20363,70160,32761,89572,64322,90248,12206,18084,36271,99816,99763,22640,36877,17294,20687,41427,30441,39903,80366,59443,70561,82629,88547,74744,16241,73064,42248,37822,54409,82846,61809,48723,99900,14654,37508,97604,48959,64291,18037,41492,65785,16838,23504,12133,37018,44587,29620,40633,26152,82844,93697,54129,29877,34549,68522,61623,89267,78765,88541,21618,37681,12169,78250,75604,66116,51141,63455,37980,26031,72306,37550,11918,59052,95274,24037,63497,35112,71809,63730,70577,61470,45835,91303,84488,21727,45023,11301,45359,14025,44997,61327,96073,22286,86296,33759,28392,71555,93985,44800,70588,92186,89417,82970,52585,41325,78771,93245,71200,48426,54140,21235,62728,14566,64321,76307,52250,91319,26838,50349,70575,72554,49780,41105,24516,10143,10568,27493,68016,33131,55271,53167,45506,84272,94136,83225,70116,37793,75925,57654,78977,13715,34096,64463,46638,17634,17686,97676,10010,85642,95289,17829,42483,20450,68592,64707,79545,62736,71233,93739,49139,79624,81900,17945,93973,70919,85596,16659,20928,61193,67098,71395,23985,98401,65734,45810,78998,39302,27031,20752,50218,60332,18969,43309,87942,63914,20020,21465,50421,90757,30206,93150,23797,45089,97381,26584,27499,37955,87289,73492,87206,58145,67628,55627,70003,69409,13383,26766,25094,43664,29000,18937,22514,75926,73575,24576,43692,97916,67403,23232,30444,42204,43171,46008,72449,50922,16880,63653,18402,98704,52154,25302,78162,54618,45751,52906,74973,52955,44306,63104,38628,59029,15457,68157,33521,78129,33204,37763,26744,40876,15799,29227,26553,35338,47042,98186,36579,21047,59326,49715,86412,40869,28609,42624,75643,65266,54081,37209,63442,55989,18011,43081,26871,77424,62707,58772,46039,58684,59759,25008,71555,57800,14865,31995,32559,85359,26510,36329,47425,61428,92102,63955,42777,59212,44755,33881,17489,60543,52029,81037,80357,62717,17022,10606,71452,16002,16926,64726,95334,74795,70497,29605,71936,82399,40650,57319,32811,90051,77103,77554,38966,88686,67601,61592,50362,39633,27239,24798,95728,59690,42966,50960,69038,88218,89432,24521,97326,78377,25841,55964,25893,14380,72632,95723,50581,20566,13456,25751,17596,90068,65493,47116,99647,85095,28853,18986,32774,63053,98944,12224,72622,36158,21465,19762,53049,30867,97529,98692,50617,23005,82237,40267,82852,10611,90783,96334,53087,79913,18107,46330,26584,48803,55417,34495,18990,63274,69457,28891,75010,11342,49468,26731,45742,68264,76571,90394,31815,16094,23228,62750,19354,16037,13647,59966,50580,59295,65772,13191,24221,66053,23600,11837,10591,47112,87127,77094,77589,93556,99703,96264,10228,66544,74452,34554,86731,94536,27609,87758,11304,66454,33319,16915,65051,78762,90734,49186,13531,80485,87429,21841,53709,59779,31044,21267,51778,26728,25294,54371,28836,74308,48980,88072,60105,52167,29619,31801,71424,53113,62320,39558,84272,64070,34747,11964,57968,14949,15508,60692,61249,71553,38254,78256,46889,48498,65550,94758,62692,93506,92494,28778,74891,96217,40507,65945,20432,12173,59350,13810,67420,82477,95112,91465,47355,69685,18120,60708,21627,32360,92786,92362,27643,47470,55822,39053,56586,38162,35480,52214,61772,46004,19242,47308,87220,68206,53016,19340,83066,46315,29051,67608,39839,93060,30136,76239,96088,56329,79704,94758,32586,43048,63751,64592,89223,96830,52433,52026,13785,98102,39124,89728,34479,31960,96503,24584,62945,64894,25033,90720,93770,61176,50602,52462,83741,53670,83122,48862,87262,59313,76680,70649,68275,38732,91096,52735,45981,61158,81972,74401,93632,94465,58828,16777,39543,13401,98106,80367,63471,29749,63226,87187,40537,73363,95547,76864,12995,28018,12691,81020,65516,64947,50109,81778,84416,14662,56470,41896,39258,45217,30490,64619,97503,26076,71849,11979,34243,47588,27627,79910,25386,92921,30816,88118,43305,84551,11759,63383,99917,30795,10574,43775,28244,86098,78897,89228,96989,55329,74755,96523,47172,57340,86293,80141,78657,92476,15710,88052,24968,98094,19240,54498,76225,95897,28377,56194,52257,44486,38173,70254,74914,40382,83014,88835,53850,47060,11214,55977,59517,31409,87473,46798,29989,16648,13013,63703,90260,78221,32578,93527,67533,89978,30014,27517,25663,58299,86815,98750,27180,91836,32711,97427,24263,30195,37602,80806,32847,15057,17588,71451,86440,58610,75498,11765,77834,87151,74687,65441,93887,24887,99655,89884,27384,30471,74191,81686,14283,58462,65505,94917,96582,41655,60059,95185,54324,20087,41722,40855,95047,85231,77567,43171,16083,69760,50827,29257,47152,27301,87663,79709,10980,79735,58401,84569,81218,20732,61963,57463,79265,98210,11525,13985,19296,91967,10567,68920,37267,38753,73306,48235,94896,36429,53150,80667,61644,84191,47302,17607,94717,65369,27090,20543,15751,11353,19704,58131,21868,65781,67543,42318,33337,87151,92141,33680,13883,15515,92669,62633,61893,12293,17273,47738,94051,11614,75856,89807,73270,68475,85879,70732,24229,71815,68972,15745,94963,14966,12607,35227,72254,89166,50776,41500,88707,45063,95381,48199,26942,55104,63381,29962,47898,12263,72970,82228,50165,35462,93563,50693,47375,17480,38309,34194,13560,85385,68209,74068,63478,68890,89679,55280,48849,20379,98209,63355,29666,34605,77873,66609,57920,26407,95425,60726,66989,56491,50620,34131,37378,68631,57297,84175,76977,71484,58177,52239,62299,66277,43511,20805,86424,12037,52292,84074,29830,24397,69007,17228,16569,53298,25570,56832,95902,76353,94658,21852,52046,19267,32687,86970,67498,77007,10674,27543,59183,16708,28717,44145,19943,78450,97714,56006,29438,16011,32830,94823,23373,69565,92209,70265,91392,85402,31625,86750,67418,36291,29014,63827,57005,49331,59422,43737,76396,70631,14405,95184,80799,56451,63252,96029,11710,31520,41990,45574,86935,67135,12120,39060,98546,52979,62556,91532,73636,67952,24650,31708,53746,39928,20597,15960,81072,76245,45998,74613,23701,73499,49965,77436,36474,79750,79217,76545,31790,64806,16720,12841,99167,35817,14180,31459,23881,87337,12726,80130,93498,93148,78515,53916,80246,61261,84211,64809,29687,29318,95047,94069,60014,75669,76560,38435,79248,80252,85211,13109,96219,60601,51756,87810,74468,50753,72847,25238,62973,22649,83407,91512,43941,44453,58394,85499,94791,89062,58671,74530,21238,81254,68154,74900,94215,13433,94468,99339,62292,77798,27778,43158,29020,81620,93086,16796,75787,19382,23494,20725,58622,17150,99067,12914,42224,61538,83535,33467,45053,14362,23428,88201,29648,93753,56080,84964,21515,63920,54216,81254,18780,27294,71274,26284,65743,94160,56575,63966,69467,48136,86778,70328,39688,86978,53846,50672,28045,40690,25307,53995,16223,43375,49302,19033,33241,13458,58707,36624,48530,79323,25821,29473,48421,48376,63974,28183,60401,82156,40906,78105,29719,60770,37893,61924,74937,80036,67520,63971,63237,50381,39443,91474,84056,96296,14455,61213,75665,88524,51981,22024,39909,49408,68343,76983,78052,48221,44335,82906,41687,31106,73073,35235,25866,99158,71506,26716,71413,93240,82594,45441,68274,91710,57691,82920,93839,30492,33968,96827,10468,30040,76581,45977,41815,61733,14661,95780,54790,91345,25451,85228,15106,39095,36014,28846,54564,18173,19316,62510,46179,94822,51518,18514,93584,82646,17487,55557,53712,56112,48159,51120,68340,70172,86974,64674,13449,50682,24160,37339,53384,16578,19116,58025,92258,30173,98143,82417,66072,58885,18435,92015,32062,18134,18959,62481,26294,40523,90388,13628,26797,83121,67936,49747,39825,87095,85396,73260,69303,71742,70647,31104,16117,64616,61919,18538,68764,87429,30544,21484,21232,79538,20315,67628,58896,45682,82321,37670,54314,22500,70117,30514,62110,10836,55526,50249,56884,62140,56934,35139,93571,61750,69026,37272,79660,92146,54364,32542,81248,38102,79705,28289,15693,69798,37420,71346,42636,98321,49057,37325,27707,36198,61901,48097,63921,78311,48919,45576,67400,55119,15566,43579,43318,47590,26504,83821,24411,57554,99391,69121,31999,80405,83291,43990,65603,72512,40694,38344,56580,48232,17657,90451,21937,44289,15183,80881,54244,99001,71951,22321,73701,11315,98383,38706,97035,63958,80247,17860,43550,57582,39257,41194,81524,64103,57342,92579,77756,76178,91191,22666,42982,62170,72194,95385,16678,95170,19461,54986,73623,86605,89591,78948,22796,34979,90238,40555,24873,17866,78760,78052,29059,55601,11500,45307,60623,76440,38661,87381,25468,88215,98401,30648,82985,34930,87138,83538,56682,63749,45125,38639,38433,42195,49411,49052,13136,65668,54096,33362,82869,20304,10027,33915,36079,73699,65362,95733,15926,88352,76731,68260,31651,14574,87854,68766,24867,70213,90889,95933,58936,54634,50483,26920,97452,27166,39867,47527,18564,19638,19629,26606,67039,33665,48673,63280,35992,15133,38858,68704,13052,30292,32015,34487,40918,71720,85995,82570,55612,14776,51396,50924,21209,44023,38907,56925,14249,90899,45340,67397,97340,41230,15935,85463,66484,13233,51995,78142,14919,65273,44411,98078,80966,21478,94702,48320,20187,36583,54075,96862,91342,28619,89833,62027,90239,89765,44586,21895,27860,55142,52464,14843,21328,65599,37525,15756,49288,52380,61960,95099,49300,75382,52939,23406,55677,42438,10695,19222,30531,19371,68758,96253,28525,96724,90657,39084,77976,26155,40656,20256,98891,12304,64474,91157,36744,57707,40626,56164,27021,67827,28141,87037,91399,59626,44751,13225,22153,66261,57986,31501,24419,62292,15766,28078,40370,97399,57584,64492,30406,66407,94188,86693,72670,61797,70069,69289,66139,57718,39556,69585,83484,65707,11833,34706,83320,50492,14359,71683,41030,64349,86532,91605,69440,33354,29467,25053,81694,95892,20680,11546,24137,91810,15450,65916,86161,70004,48900,97771,60354,16427,52638,59936,43967,24475,70036,39464,20092,32652,36962,53149,21216,43207,19392,29346,64336,22171,49677,21058,97367,13085,58693,64163,28208,56841,57916,35685,84209,12837,51066,42872,88262,58868,35086,27186,50213,32413,52776,37461,28077,95908,73666,16631,46253,62356,20826,54336,73804,82216,16206,66561,60472,19546,50273,46709,32580,16503,61293,78858,92682,81465,39238,45563,44996,83573,48635,13895,19573,39387,25521,84109,49137,47885,71120,73770,93321,83913,37400,50648,40677,48110,77022,92385,49284,11461,16813,60144,73111,48641,30812,52259,23631,11462,69778,98031,37951,42607,28764,38797,89284,71834,55756,19701,73378,26085,22387,31333,30150,82159,86740,35672,22651,27684,84252,90046,58670,70391,92007,71601,45564,33695,20007,96566,75268,33871,89347,67899,58163,61628,97961,41115,99796,93569,25031,57464,60281,38600,86011,20428,45171,45701,81842,54686,80765,97233,57039,94726,31184,97509,60890,45865,56657,90834,41768,25386,40376,67590,10029,93984,73652,69787,76332,64951,99137,48309,65911,44241,35479,30393,79230,52304,78778,88326,89562,57298,52017,41203,84987,43542,51445,88405,28806,40371,89705,83846,98036,70570,74172,82338,11871,28057,73251,65164,26460,74849,65789,95779,49932,89793,42959,23746,75645,21082,99654,85177,40306,67167,24565,74496,36900,52106,39225,67197,94416,71939,65087,52477,79216,51897,76731,76023,12777,24412,83467,75666,52893,55562,52002,83263,83328,67578,91913,24683,20877,97632,87327,18125,89568,83176,98172,13678,86006,21979,89816,39667,34495,77086,99964,38202,39636,40130,50794,79704,89695,46462,67934,25736,19170,31102,32881,10525,25228,98600,58472,44378,85366,85799,37695,74840,89413,24897,40686,72488,60875,80775,74397,11305,15287,66789,94303,43753,28447,77049,26945,31684,46344,17309,29680,36084,44525,65010,69911,55127,58016,71315,17093,20766,46456,40826,78104,52071,82785,83678,94460,18907,10553,18499,65334,34407,51046,28431,32528,89616,75980,46629,47627,92727,79944,80598,58912,21321,71638,16319,82673,43832,87941,12800,78635,53402,13536,20835,34071,15682,55529,55206,46917,14052,88188,10694,13869,42410,95292,49934,58038,42592,23823,45762,62387,78741,75385,84077,14967,47179,33817,26192,16944,12967,90423,76660,66034,60911,49959,35927,12042,20648,16946,39263,20058,97080,84414,48929,93505,73563,65367,25790,96082,99850,90077,28006,15491,18132,74256,32502,70243,68448,16609,84005,13367,20541,18267,99650,86728,56957,85707,99964,42659,73355,45872,57948,49035,27191,61829,90452,48545,54190,76491,63419,83551,14105,57057,25565,85837,12451,57371,47975,20153,21660,83490,22017,24151,27106,67099,86487,49252,59108,51079,40086,97758,79455,31165,97497,88546,12069,80090,11704,75835,69859,57160,67260,94462,73404,83369,78293,34791,18578,20679,85931,43918,15436,73835,38570,64929,96457,29986,31418,83012,79748,38195,88394,47334,11691,35202,22102,64906,58610,17721,87810,42114,51341,83688,56116,30115,17394,49631,44564,28566,77846,69195,71650,82261,43273,79421,68272,88540,81736,41355,11577,83830,33255,25792,61315,63621,54746,58599,73380,40641,92383,35537,59315,43312,35440,20437,89417,85802,38394,42316,79651,59176,31381,87579,31153,61796,37203,88910,57427,80129,99462,40063,44069,89892,58477,24896,77841,39273,67348,98968,40113,67582,60154,60588,22223,83993,36605,67974,46273,78282,96346,66764,70339,40441,38429,36138,14524,76823,58641,49243,98145,21958,69741,13135,89066,20937,43805,90180,12788,23028,58973,95539,11049,50533,91776,26838,75783,16036,43657,81425,52518,55504,89455,89526,83173,11010,28097,15645,27655,89030,13590,63917,43322,68492,86289,69562,99837,63977,78942,58891,55149,35047,99472,97038,67927,99624,66866,80905,52701,57045,41847,23062,85521,44436,56802,98317,63300,53446,61730,60136,36862,21052,42144,56123,10678,11047,88858,51624,27480,55461,60713,28755,69298,83927,78347,16691,85139,82952,31233,58487,72449,58755,88500,11094,53825,49267,96258,96451,70571,23226,82176,34569,79941,35959,98527,41704,61465,15849,13100,93796,34491,38871,15907,87372,42000,91765,15085,50592,89125,17245,65441,82540,85546,33596,22484,41301,24445,39059,91023,74511,41552,94580,48951,35664,68162,55743,19113,65923,34371,40472,93796,95250,42071,13758,50916,29593,21909,41418,71093,66550,66079,98048,25753,85976,71703,67567,26293,96327,73569,74295,15264,87441,95252,77677,50892,14474,40778,61212,72363,23163,90815,15956,10165,35197,92344,85644,26851,22715,86380,85600,77103,44644,18340,92891,40092,37848,34236,19068,31885,96425,61603,58692,21936,50550,66191,66607,81897,74282,31310,75743,20467,59085,66466,30383,38610,91426,87552,94326,83664,61189,45046,54307,60154,69323,15819,31469,43448,96624,20475,93792,76962,30018,72695,27875,96352,44911,87102,60861,18384,89015,45664,36303,79188,89053,79235,43949,27732,16308,85852,42333,95504,22821,55090,94661,27909,42088,33759,15346,56724,17508,99698,81598,13604,93719,62079,10916,57060,12917,17535,33515,27855,69939,68450,26186,13725,35075,23953,89510,35250,54167,29446,51381,17971,34793,87155,72909,16288,20857,18137,10251,69486,35454,82962,86925,13739,25698,93498,67728,51341,56742,62350,71255,53631,42518,15884,35761,10192,32051,36837,37848,15980,47758,56881,70836,63684,85848,60983,57230,14939,68423,30551,17981,58180,95061,35834,87657,82392,55113,52156,54031,50856,15672,26388,50292,73982,33931,87850,34017,38521,77186,89445,91771,23610,80900,42924,49105,79531,19007,21213,87732,25655,21697,61705,56920,29509,83790,34465,63094,46835,44354,99700,98956,20773,53366,70372,78349,59884,55529,68648,52429,55605,27787,22495,48076,73513,25191,26987,93202,64703,34592,57583,48728,97652,13586,11712,17374,78873,41861,11180,34941,21611,23509,85672,22182,71917,34897,10620,19364,45665,35444,37866,13567,70068,51177,72101,11815,45159,64908,88153,56115,99038,17817,65084,11241,11418,99753,30162,53870,85438,54097,49403,62040,88887,16187,51260,11862,76456,52074,21221,40435,88947,64123,18205,83328,93865,83871,55733,44356,68485,48929,41767,68360,90481,70124,39060,15480,78028,29453,81208,46779,12303,84649,37758,51990,60248,19740,92079,56065,20868,36236,37994,21158,80019,94272,20052,72815,71325,34127,56442,58662,20250,17563,54678,76738,41577,51965,23543,39073,98545,80058,42514,19869,13915,71259,13338,94138,50190,91951,82700,21844,25694,85739,67826,37805,44335,84902,82485,89880,45158,91323,64169,59893,62481,40760,71464,57318,44529,25145,71578,97154,75547,28039,91236,68044,16013,85038,45558,88318,42898,38048,94178,74950,27189,56007,72321,11574,48010,29378,74259,32407,68637,43009,54284,21501,46000,55510,93462,39954,50196,48996,17024,65263,70897,47034,96284,36299,40037,97144,20026,17580,58901,88876,88822,89874,22373,35102,13663,51819,29218,25530,99048,31584,42401,74136,42398,32849,65933,96377,49987,30453,56119,62831,30789,31399,18848,69969,35823,24768,14917,47200,30484,63940,22977,56521,27493,28052,46598,68529,45066,45998,49283,76931,41368,13148,73682,49900,85019,23606,83334,96425,38871,69273,57474,82309,46920,62331,12919,43973,29544,35335,62536,30918,87666,30392,52724,26028,44340,50831,44848,81718,87163,63906,90777,23757,24264,85101,45852,91126,50904,70887,81806,27082,37581,83251,33084,17779,66792,60106,91831,64772,76200,57892,42718,17322,96414,21488,77070,74430,34583,53163,93574,54911,75888,97813,98382,89441,37146,19051,61790,99986,92092,52231,12392,19822,70825,71970,41830,92828,75432,28489,91115,50030,49255,41022,61630,69732,81817,12243,35558,21716,81946,53964,88211,85280,78909,38357,74522,35109,54578,49345,84055,22606,63610,26562,11047,75361,56194,75179,46827,68422,40355,76645,57265,80786,91551,23320,65759,46447,61520,23511,69523,91846,74263,13662,75007,43887,57500,33815,62280,28231,81757,68395,24032,87416,44359,65615,39774,71567,38711,27294,37588,89608,55223,72389,78031,34631,81010,83154,21034,59886,92011,32981,78304,92956,43574,10808,75083,13758,28112,69484,29471,80534,16233,70150,57323,19747,63225,30187,29696,52988,38684,17673,58677,31059,39157,96016,65566,57243,37192,80430,67612,89463,40319,18509,16061,71361,13294,21174,66235,71202,32574,93312,75838,44565,71556,57626,60915,31311,46183,69664,11273,80876,71431,84018,46033,22886,53735,29461,13583,90006,67982,52744,90986,19019,74330,72196,98584,47872,20068,99433,11411,73422,60833,27000,81128,55596,97986,12023,70829,82188,79540,75488,52885,94645,68438,56338,27450,56704,97132,53976,28029,87996,39545,29413,91777,91490,33715,59014,66023,51481,96835,42652,50040,89349,78454,42185,80925,49430,83762,26547,61796,91180,28855,39181,29098,12342,80768,66925,39990,86400,35503,29220,76410,62775,86904,12958,42382,81368,56578,52127,15284,14464,23810,55976,19281,35794,21532,72395,24194,17068,10115,74917,65597,84994,77011,64422,57314,12500,61618,44106,18698,78944,86544,47112,22861,66803,88258,88816,82043,79451,55955,53996,60640,31656,18078,94092,13009,75927,22146,41453,74932,55590,87852,74238,68375,65419,21223,10150,46091,93165,67904,17228,15649,92907,87381,10153,82135,11960,56901,87040,95325,90493,61290,49178,84421,57526,84736,66299,40175,12775,29412,34424,73097,63998,60880,78230,95916,19260,99208,41267,70891,45816,54356,73767,34018,39378,71869,65600,42658,50079,52852,95569,65669,31860,95660,30387,52776,64414,37676,76662,86550,32475,89023,48788,62896,45041,68504,60592,91329,91073,73343,80563,25338,93013,53193,79236,76915,35795,93407,10019,58693,44053,43709,69294,58523,65300,80532,77574,94332,41504,95595,68394,76151,57647,43516,27699,44115,51035,67451,99208,62757,96879,62598,73862,91831,14647,55830,49597,21249,97394,93269,23325,31876,24386,13790,48868,16645,27955,17264,67149,19990,66423,39500,16891,13324,86345,48822,38877,41340,91407,96540,72554,73545,50043,81231,96000,10974,35457,41684,84913,97671,93319,48398,84294,70750,40361,61867,46415,47208,63722,24632,69380,13913,51208,19312,41029,44420,23363,82911,58820,11235,24547,35657,26683,66313,90971,60651,20199,19400,19153,84241,41477,33733,90242,18280,70982,69244,23870,70484,87558,75058,55204,13571,59557,94218,28830,71255,55079,60969,38152,45348,78438,32773,41410,40221,33621,95480,23268,97662,72993,56854,26077,15175,36704,70875,45528,36091,58396,88997,28383,98066,34318,82179,41893,57270,54798,19439,19920,72047,65650,91617,66294,41740,44156,76487,66728,29422,30472,76832,49028,50764,39889,41792,99066,69060,52672,19861,67278,70725,67706,28005,26997,73008,52718,64366,12964,82186,25110,43636,35036,86095,89717,75014,24069,85691,92246,34563,62824,51510,83418,69508,23398,62545,51361,19536,70330,28361,68883,45967,66176,85871,89201,92862,18527,84669,35805,51030,41749,26969,42630,84196,27301,39866,92549,83551,19988,33281,89203,84099,55535,60545,24340,88370,63372,52378,18644,96041,19588,50339,81705,82137,11444,21305,92759,72133,84783,97919,50005,84323,41614,16378,53569,62563,80755,90431,95056,59169,66826,73925,63790,42449,55641,46567,61907,79397,73413,11157,84982,65106,27624,96919,71123,71332,73177,11686,49838,29058,82553,93827,35845,32483,45425,35510,65000,51811,85151,70415,10920,48945,80988,25224,77761,68688,60616,62043,93674,91354,79168,96776,80674,38940,53402,17107,97084,98762,65357,90607,35516,27640,75424,87976,91030,73603,56927,87728,81045,36486,32669,81354,95559,48435,51078,66020,46372,22432,16815,24921,30502,29391,34221,81747,49690,54942,58209,48181,49650,60150,25365,73491,98373,36597,69765,99576,27826,71248,41376,82482,46744,16961,54799,72047,67008,33326,27587,51048,20602,86301,75894,52954,52228,44452,98683,62044,89739,52922,22649,72020,22333,34163,76121,61200,55214,94711,66230,76117,24276,60122,44277,12023,73060,32167,79681,69101,31830,23607,30440,49013,64776,82138,29970,73826,53141,50293,50973,78874,55356,21927,75050,75247,39983,55672,20262,15982,19490,36444,57981,48935,40044,26621,22390,88071,81618,19792,51660,52310,45409,52885,24033,61183,98601,13297,88482,41323,80553,41176,76887,11876,30141,84190,87174,17578,87126,73931,47322,66157,10296,79101,26978,73121,69892,50888,20830,29885,59143,35817,42098,79390,61883,11671,58552,30109,92981,58805,81392,49485,49765,25501,22757,58722,21747,38927,31447,18198,46460,22104,47550,48383,54935,47413,74866,13661,74767,27342,40368,72907,93103,83886,21330,46507,87613,45456,79204,59337,25131,39494,91292,59907,19833,66700,96648,65932,39531,38815,16792,44385,79803,17771,91887,76218,82763,17701,42115,11603,71572,35068,31330,42403,53377,98528,22580,31533,91523,45787,94328,52385,85330,23445,10032,78553,28483,47877,76970,35422,74608,18453,14700,51956,81630,34575,70098,67896,69379,23844,97298,49254,33115,15778,97780,18497,52432,37258,71075,87124,20320,73309,59909,84579,82608,94354,41359,36100,75389,41587,41541,65729,10045,15783,83919,87355,35067,94570,84571,74035,47171,66563,21366,79086,37845,18583,58560,12575,45020,10230,33788,52237,55791,14215,49593,99583,88322,48172,12979,14143,83568,66146,94576,68081,78235,24821,41091,20498,46779,62934,18077,54823,51408,54117,23670,16890,77720,19702,92769,49568,41120,47705,51374,19951,36560,19071,82172,79273,42876,40777,55505,72685,94693,61257,89128,78276,16426,76087,90826,86440,38539,28243,89451,47926,63007,98730,12662,60530,96026,84439,97063,48070,62690,46309,38632,76690,29014,71929,40189,25212,73167,86967,38817,46767,68130,53618,23424,29663,26113,57536,97116,89029,25296,49616,17794,83189,19208,78646,55426,80822,27500,15191,52481,17075,24290,26172,72145,22499,35314,52912,47414,88376,15792,93200,95933,62960,36172,82949,66464,15673,94478,77585,61822,26921,17353,71525,74045,30051,32302,87514,93963,21004,93435,88765,25263,48775,18878,84492,48901,65381,69209,55265,69349,31493,83833,13576,72059,53013,35329,72747,26044,80888,30326,58098,87470,46898,77443,58367,78089,93930,67549,74125,12606,42757,64771,59709,67016,68480,49422,60692,16148,67434,68288,12947,45668,19368,58218,14880,92148,43977,28242,91320,89183,96914,69468,11572,47459,85738,81382,23413,20325,31673,89233,44210,21575,57812,41598,80672,74987,40536,74896,74581,10692,23810,62881,27254,14897,59436,39498,24302,56609,49723,18689,98703,29380,49743,19833,84138,52746,81224,48170,22466,21579,69896,19537,25019,47723,53912,22694,58073,17590,57118,53166,46901,62004,99100,29223,93631,95878,39040,84746,99015,47110,55975,65451,83792,62010,27440,59247,28657,67872,22835,99058,55213,11945,43676,14968,32672,62842,36618,66175,98022,82866,50340,59513,60891,70614,10628,62263,40739,69732,51046,30383,51214,77314,65200,19676,22856,48904,57160,44515,95877,47796,82654,14348,46169,71628,95646,62702,77609,27649,66182,84739,72386,52049,19981,41596,85383,50214,34746,34355,93464,75049,10355,50334,72783,40071,58302,37338,32387,38190,67100,90428,68596,82347,87216,77379,64629,38605,35533,14938,66113,29112,59296,25248,21953,44202,79885,15020,14019,40288,59945,96487,98346,42958,69275,40310,12713,32834,28403,43245,50194,41795,98630,60989,96069,96259,31648,42028,42381,78142,67665,27976,75386,45013,22611,57051,91272,38666,44780,79540,79006,46830,92030,61766,70131,87326,16229,62554,22554,79199,46793,57852,70016,39020,69464,51729,99000,65165,86465,12058,63294,13069,16264,17374,29040,32241,31925,55993,48430,25035,49685,40913,42694,51109,47710,76766,30240,47430,48289,74455,30945,89503,64572,91488,54749,84195,71631,90451,73772,44507,63504,91565,98841,73011,13228,12614,58568,41765,53169,23356,82559,44395,48170,35737,25293,69746,24507,59881,33425,25014,82496,81936,86996,23263,87657,90227,22669,77929,32379,23000,61118,26404,47134,58834,26529,26236,64389,93674,23949,78131,66400,57313,21704,30927,32339,71916,42813,24599,77323,15726,96060,60047,74771,92896,78512,81531,66755,30715,88851,48353,77955,64613,80954,60173,76006,82845,55234,60488,38728,61151,83103,74289,75979,24009,75358,21301,14606,29595,29158,60363,73951,93326,95753,45746,99496,77292,92962,22871,72355,19528,54032,59877,86735,95286,71666,30688,64126,62828,16972,51502,97362,10098,48508,67882,48722,56866,45995,39084,74758,77620,82708,11663,28012,42667,85001,59058,28396,95888,87019,90957,75243,84751,62522,25282,89453,91068,74019,40937,51757,47580,99746,88836,10761,47626,12981,68659,60338,42748,39139,30825,83170,27987,10369,93498,98638,57228,21321,20293,24323,85408,22589,76084,62698,70217,68231,28260,73748,78705,56092,27737,45179,58856,81187,40363,48094,79986,97286,78875,15701,14326,17428,10111,18217,30727,82271,20169,98576,66481,18233,15556,19753,39839,96338,72360,29227,80675,84761,73313,54256,27423,17669,90091,49580,28414,41379,12227,43359,82626,12462,82527,40427,23991,34372,68552,74409,45644,24782,40033,78075,34329,94610,72945,55966,91115,67425,54790,55814,31209,16025,17604,74670,14094,61109,12285,39963,21244,89040,18717,82704,81898,89090,41087,36136,88914,82517,76559,35887,61428,31281,27194,35179,64629,47695,26479,56118,74378,37993,70328,90484,50856,59423,95577,26999,48374,23064,63448,65171,97662,52854,78065,20731,63798,57314,40232,36485,94596,50161,27276,39780,59580,43749,98739,64291,30365,15402,32872,71859,83471,28346,35054,64218,42507,56577,20538,74785,33449,20061,62500,81476,35770,38348,72597,22854,40777,71551,91909,48871,75574,85198,23373,33924,86652,36114,57946,25105,20484,64978,71160,21449,54375,55587,81182,31883,89693,57892,11666,29023,72743,81416,11112,56437,11468,93859,87197,59026,72406,65379,40574,98371,65375,58257,41090,96909,62839,31632,74683,98167,50341,57035,90962,58283,13009,91638,67691,41606,46104,64319,36938,30378,15987,17360,15132,54377,23788,69177,40950,99045,19727,92172,58704,59841,61369,81390,94120,89194,29388,25153,48680,85874,21054,99437,35392,13544,17916,89343,22701,81025,24711,69897,61149,59246,88388,44052,42111,81601,95252,31783,78765,19089,67895,99686,68307,43808,27017,49755,41453,67848,36439,65537,80187,30470,23870,33458,35373,78157,24900,69540,47703,31871,16986,12310,54040,97401,39776,45281,15763,28504,25363,76375,31404,93563,57942,89132,78300,76088,42917,56142,78761,39318,90282,56917,65253,69896,51136,83504,54488,56833,60843,70477,12007,91779,48852,53549,16486,32243,15884,46900,54948,25941,63297,50593,51126,22264,70675,70060,39968,75304,35321,92266,42402,68531,15165,27656,55012,80499,12791,16293,52858,20241,69147,10016,84795,71835,81045,24850,62072,50512,36139,80802,18980,27613,85559,70597,80190,39090,13647,12207,69728,93716,50129,27314,61203,26481,37101,74447,99965,50942,26589,50828,75735,29374,85340,55787,21645,68395,55821,93803,62605,24790,26744,91738,99519,31332,90195,48669,92462,93450,13345,23540,22554,62478,40220,42117,16237,42030,61706,12886,98145,22573,70617,41295,64300,65439,83459,91619,15021,50995,40704,21817,12249,76788,26389,76493,62687,32322,64869,92817,47607,35198,79956,64173,98550,42428,76203,70833,12152,84471,87341,15045,58817,47610,18703,76532,12595,84888,72074,44218,35983,91419,15370,82874,55756,67735,25394,12174,64381,86326,75594,71685,18743,39475,40755,39290,11818,97324,35246,39993,17968,29179,29152,62593,72940,85726,84722,78596,53299,10579,79313,55651,21580,10328,47517,51994,35482,82154,75394,76309,24564,81076,30290,50062,98455,72666,47982,89629,40976,10525,14888,50330,72867,80677,91909,63756,49392,93152,25601,91296,57252,14056,98699,41305,74713,36052,94012,82173,94399,68043,83347,38877,12191,49532,48235,86343,28869,11637,87963,82399,92655,93375,66484,38137,17631,74038,46779,42429,92446,12765,99287,79356,98337,57921,15394,68038,70012,84422,72281,31567,97324,63729,48335,22141,99542,79999,66850,76344,13834,17795,76103,25165,18075,93510,98348,35733,90275,53116,84042,79249,57154,75300,49255,91211,75893,57351,57288,56630,62438,45143,89002,46323,88021,93370,16938,64594,69314,26791,50799,95214,37104,70167,70997,37871,28422,99065,15194,67384,76581,26399,53417,57579,24166,97665,19726,29660,58030,55068,78590,44002,23492,23241,23203,60530,15404,42392,59712,70719,88904,47928,80992,81733,41055,66016,12727,58250,45413,46331,59832,48347,89884,28207,12808,99303,29149,53405,11390,87979,51362,79963,76990,16497,99377,14712,42008,55620,70341,57209,14180,52206,33232,64083,14293,84077,29102,75113,49088,89577,50965,32737,99757,97444,96553,83274,70663,92923,75213,22104,45526,68334,14322,53476,23898,24925,16686,86123,82779,32412,87702,19691,64244,50928,78036,88174,66922,78229,11735,94044,28663,46199,12028,53606,32790,21092,84061,17566,31862,58134,12317,95877,98596,59427,53839,53236,43543,69285,85416,72704,25789,38699,69075,32543,40381,91686,99816,41301,64282,38527,85746,61585,70027,35403,23067,57171,38017,71428,42511,41998,13435,96859,90399,76700,50525,69402,28484,16006,18773,87897,98525,58382,33367,69648,62315,79313,60133,23908,24874,25634,86604,92073,12995,44234,57046,80211,74870,20363,32128,63923,57023,74830,71305,97329,51062,52174,97949,19680,16052,35437,97296,46028,45144,47055,12551,70955,39918,68985,85612,27403,76699,31655,55362,67850,77506,43097,72308,18020,26873,84211,53918,51737,62783,97425,19833,20172,72124,56843,14060,72955,95319,50104,12709,59525,13450,63965,40515,21180,57805,15496,99868,26699,72371,80535,96479,44168,51751,24332,91985,33435,87014,13936,83761,37854,86880,12035,13296,93319,59396,42922,75372,72996,40718,43041,73994,73522,79486,76465,69901,33557,28930,79085,62057,32204,89636,75989,67532,70989,65421,49715,42076,33538,55803,53174,84407,21212,54633,92864,61479,18878,94888,90289,21649,95942,70908,25777,29851,96935,45745,58474,32071,32529,11943,41104,57268,14469,82931,37604,54852,42519,13249,47030,82855,47480,85161,14348,14024,32230,69715,95983,10339,64415,89115,66514,93993,33558,21351,12944,25303,68012,88986,16746,24067,38920,23996,61613,11928,39661,83511,22446,91222,27369,46595,87533,96801,58094,75398,41478,11220,21582,62663,78940,30808,58112,78841,88990,29517,38653,50780,25336,55829,98222,24897,77741,81895,78084,75440,71693,31440,85827,71464,62934,16858,81641,75785,62369,22107,26407,51447,24154,35616,85472,52779,95402,16848,69776,60088,69993,46863,53624,41423,95193,10731,89445,60609,60427,90768,28881,46154,81545,78128,63865,86188,66911,30551,71605,38889,20311,58854,73664,93543,42049,27855,55214,70878,27234,65296,70360,78570,87227,22750,57254,96603,98330,18614,49879,77377,87048,27292,81562,25845,37634,26647,38173,69250,30415,80214,50011,55734,92034,65897,38294,54244,79685,50481,47424,21567,22270,71463,53953,85149,83239,62702,82195,77053,47617,98764,98724,78412,79987,50745,85339,27882,33385,35262,72589,77816,45604,97948,18412,23167,56225,81049,15210,54777,11032,21183,16556,69553,78881,64995,78054,20814,26527,67662,22137,74995,53664,97170,31592,26811,70394,51814,16256,12587,22467,57199,80724,49980,90582,48359,70100,78967,17685,25568,93286,51592,62220,73134,76125,32735,34198,77745,46270,54018,32842,71929,26269,81497,56642,75267,84082,53109,55315,59392,56544,74724,21603,41082,15839,81788,87217,79179,90668,45243,28995,80769,94442,58319,58036,61148,81364,27843,10387,12187,95910,62188,66266,92967,12808,19546,49105,76050,87193,16100,11656,22034,72127,88487,43515,89865,89916,78794,89858,93843,34871,18350,77339,37680,14005,20342,40535,89436,18174,70711,44264,29314,88941,60354,62821,79665,79979,39540,69751,38130,39759,95711,81831,16608,61844,95877,81307,89543,72814,66271,62506,85628,81468,46578,32598,26195,45573,51345,90126,11891,47945,89966,17072,36111,10887,57986,60215,85679,39632,40713,29244,26309,94806,59335,98359,28570,63673,61226,20596,50015,37878,37284,14715,64364,70426,15897,96627,83170,96499,52198,52457,11249,34370,54025,15175,24727,65444,90055,11591,83636,30951,78832,77291,89726,30427,54322,49624,53686,51268,52970,22196,42922,27651,70039,80745,47882,91613,12515,67430,67267,67047,66330,81952,73399,35427,95502,14258,99975,28133,27779,30519,65029,11857,82117,11892,80339,62452,67705,71555,36242,59567,71343,82112,95028,22485,74833,80668,80063,20605,43157,28778,57968,97756,30183,65532,57208,60067,60514,72175,33986,93330,32313,42353,82734,99586,44938,12279,66627,32503,72888,14724,26771,41563,13036,90964,54712,62571,17296,40917,89673,14582,57205,40702,68699,87997,78667,36116,25801,20632,24980,73799,35178,42518,37775,93089,73510,86147,89779,69016,35396,96853,67599,51523,99486,55221,96271,72041,99067,20626,38159,49226,58220,12571,81269,81970,56979,98285,57763,78433,78489,11710,47098,98160,44756,85887,27826,44188,91839,81162,59548,27311,62590,70237,29601,26004,55086,47457,40612,27251,64735,64957,26953,28410,67757,18942,37234,18188,38097,39485,29749,31862,24496,19151,49538,15153,73926,55077,25323,66336,33143,94595,17350,37136,15486,59225,88858,55859,44292,94378,58652,95909,58457,71838,44137,16309,32941,87016,78861,27536,69402,70550,18745,56508,57017,84823,40981,35278,88386,89251,17530,95327,15495,37005,93744,37465,85973,43526,45722,85585,27812,24535,85181,99567,84299,65939,49837,26146,42986,74628,70625,63163,70868,10150,37493,46524,63517,53084,20152,25875,76744,24996,25021,58849,43143,22145,84089,81041,85204,59109,14801,19343,77438,77510,61104,43179,76817,51404,93587,23195,43217,59442,33483,48960,62252,75256,48169,83102,60341,42690,82301,81857,87628,50840,27556,39056,63056,68865,53124,54006,10716,19938,28580,23543,34940,55828,24727,34255,88644,83816,19670,55370,85494,34042,45116,59802,94952,10611,78002,81992,16247,68431,13414,78217,37468,59374,93188,52660,94495,52666,90219,50766,15318,53805,56623,11932,14707,20254,81956,70905,91286,15091,10250,80838,41324,89343,33887,49030,72844,35939,34517,28687,70855,63149,31756,75028,60614,60034,23801,31790,61355,61464,13405,49401,79013,93471,26914,45256,33928,89792,66772,46985,54639,32057,79848,70034,58585,34131,19465,49843,58762,92239,10885,28549,11880,88480,63526,16468,49082,84452,63376,62065,99474,84768,36368,59075,91179,32923,98984,45194,21298,54563,22133,83160,91534,79329,68494,94288,88493,47892,27014,19002,96716,86667,66028,92650,68642,14198,73158,83713,15361,27822,30386,60005,33520,39147,40829,96260,77672,24378,65187,19153,77117,90550,81960,79275,28233,20251,74413,79823,31148,24569,78912,65129,88627,71770,86841,97497,44029,96592,43987,78125,67692,58466,69433,33429,49722,42029,17957,55245,68981,52174,22566,16539,13793,44642,82351,95277,75048,70520,26539,24650,93828,76961,89453,67427,73019,76291,76813,36971,46820,61450,91477,60168,57467,15363,68188,99255,53288,25443,95342,61134,26327,56582,11675,42149,30238,53193,39634,61300,41814,58664,34230,50397,57144,63466,99794,27752,15171,47582,66409,43968,97694,38575,40676,28029,45597,63361,80476,24407,76537,57060,37331,34861,86056,28687,32542,77931,98719,31463,31472,87487,58588,93524,61747,24150,82851,22419,11586,39049,46086,43110,82082,22805,26756,89784,43927,23721,89656,61731,17793,43579,19381,86534,94259,65556,67296,95177,15920,48029,89649,36657,63065,86436,64401,75525,44494,75330,68979,18673,80079,75745,86555,47930,70077,11087,46986,14895,44549,81426,21906,75227,53068,87274,46723,29841,65420,30875,44551,93758,46755,89312,41310,37184,86918,23933,35021,30007,65229,33341,81696,90205,25408,49872,22661,74649,87538,66790,89010,86440,87027,11551,78725,78959,69268,70533,48173,16171,53375,12725,65686,70024,65590,35919,50578,48543,75347,16480,68837,44023,53689,27625,69160,89296,47556,77179,15756,66339,78726,89525,11634,80823,97066,24153,18744,57768,13591,47896,10505,87775,36503,99715,51244,36890,53586,57751,74281,94024,59454,64873,67247,79851,16305,41962,87017,36031,23187,39017,77574,94288,32805,18311,97094,87449,49370,50473,12576,84954,87385,68930,45274,89176,53604,32268,77848,70778,28624,80364,40702,31252,63424,34399,31537,19134,24409,36945,17148,58480,96200,81014,87599,96698,40594,10723,89252,22847,46868,39307,82323,13968,78907,90219,82086,10841,79833,96695,84355,71141,92461,33698,24026,24318,34245,89560,58210,55612,49237,34137,94952,40620,68152,13630,57340,79577,25658,42395,88415,57454,90698,81719,55283,90876,95000,95031,51541,20675,72718,99909,65107,38138,45140,75966,85684,71386,15680,74028,68172,32484,43085,84569,78515,97163,55416,36674,20925,24337,87079,85663,73349,13365,94763,42865,32535,76573,83237,88712,56949,43652,99835,33274,63588,88416,54009,18941,62514,99729,89586,87320,65355,84666,64355,38907,43500,62990,76416,97574,43527,66058,27147,51468,48801,57958,27234,55230,26095,35762,22577,68949,35159,91056,89539,41935,76704,40378,81919,54435,12349,77188,87099,75467,90648,37579,78937,99018,72491,30036,59038,51714,18784,86782,21445,44448,44187,94350,15157,51082,97871,21045,92479,75230,63179,42859,32599,94585,47151,64241,98093,18669,84935,41735,82188,20182,16432,90137,49892,13039,20015,85816,28158,50908,44076,68916,16868,71481,83283,14581,87331,17351,10757,40628,46854,21481,34810,84643,95508,63036,25857,85656,72041,55116,85788,42160,55539,58846,13469,33603,44937,13180,85236,13190,87890,24235,21504,76733,56279,78784,19821,25840,55139,98812,98446,80035,26090,41698,74407,23901,63881,76333,37839,58364,40325,63452,17812,12535,11256,40260,69695,35200,24325,45367,63628,81644,82286,16754,40365,53808,40879,30067,86867,55039,50653,77045,86195,94655,57951,15352,59537,69300,75908,16125,71873,49816,94843,77603,26170,22692,29118,65662,81437,14523,25050,36477,90821,14136,37791,47431,86973,37095,42869,94356,73194,32877,81226,92922,42757,73071,94853,11103,19549,18694,68935,76757,36302,52263,73393,75110,23453,71877,73639,43570,40243,93333,89052,25170,16963,91634,62217,14380,31685,87438,84649,64649,84227,24806,21268,74166,84739,79333,96418,80173,51063,46749,44718,97403,76894,75050,60625,82779,91021,30134,40184,19277,75066,10093,69292,29489,83452,85975,14439,18060,13742,46814,91671,12901,30570,74109,54841,58136,73103,67603,22605,54395,47826,14582,78470,88201,63245,80265,59669,45635,24313,28134,97241,15732,25968,31467,60689,74380,98587,12266,62423,90923,53687,71215,25799,49661,40690,31294,29379,71920,72091,44999,90418,86075,40032,48345,90971,12386,25002,65886,84589,62795,33570,49757,49128,60793,49528,42434,22622,12760,97733,61320,39744,43356,27179,45414,15235,40766,91352,51838,71827,37283,48844,20076,82390,72792,11766,89836,61746,62785,96590,98748,45888,13747,18255,47905,65742,65829,56512,22904,47095,48683,12353,46921,82565,35596,39230,81812,39945,67437,59278,87938,10535,91931,78670,60353,92808,90303,82469,67265,55856,29023,88327,11159,70411,62895,97666,23285,63396,95523,30010,17097,89818,61814,19308,30597,56963,65952,79489,91407,82427,22445,66171,38976,41672,98336,67402,71377,51864,65443,58616,57632,84631,94482,41733,52662,10117,42040,44440,17315,41035,29232,16978,51009,22932,22982,68456,35345,29180,38340,53417,19155,68567,28101,80281,34267,15803,38654,47307,93820,23128,86186,24539,98297,18844,27792,27428,29051,33715,24076,26781,81793,32905,98071,30040,28538,36831,85526,92727,91697,89021,20944,16326,94886,57456,84333,14886,24374,62282,64430,68752,86100,40241,74584,59342,71873,10808,36720,63857,46135,52046,33427,55340,67792,78321,18482,46836,68634,61344,84969,95399,82976,98639,16729,43318,81689,52712,90113,82430,52056,46381,70679,22454,51712,21664,98440,56144,55849,79440,80530,15760,26468,85444,51478,19160,59817,25490,95534,78419,33234,29144,77837,10630,70375,89450,67905,74679,51725,84198,76560,29373,95826,36067,92060,59081,84353,89674,36911,63820,39677,83949,93568,80986,69689,43301,76927,55496,14442,42174,32498,65994,55304,80473,99144,91050,21642,34613,93058,70456,37010,45754,85400,74434,49043,30241,35041,45698,82266,79528,30021,73762,39231,45983,73416,99987,46458,84443,28704,99181,10935,94346,28059,67177,95243,50657,41545,75792,59183,43848,88627,13233,28297,74705,73629,61723,48132,89315,58389,26165,69126,14091,27415,71332,52782,11637,53084,20536,85785,54620,79680,49594,83983,68127,46761,80900,32626,29156,43162,71362,44651,29193,94866,23248,62885,62253,80337,53506,99884,43872,45076,75190,61022,77106,31427,58044,99828,80340,56606,71782,28822,19830,83662,16697,61068,81739,14633,81762,36251,59447,53116,59507,30007,23722,62209,47247,69511,69151,40280,99997,62295,66675,62659,26209,81365,39370,21065,85137,95787,74627,76385,22080,58319,74940,25104,77249,66436,31202,17821,55924,43230,28910,12058,27158,27302,18923,86513,23886,24977,36311,33765,57068,64675,78924,59505,50991,45808,16438,13765,29366,38835,52798,38108,18517,80806,36356,75437,96945,19146,12706,50712,51533,96719,54954,97239,75983,10941,10806,47234,35967,74210,26418,44274,23739,74216,34138,80802,92238,48787,32645,27200,41098,97292,90281,59929,76640,73456,72914,28873,50361,47753,39308,58517,87424,73831,40189,30221,71013,80277,12664,86774,64926,77397,35417,44708,88044,13552,70640,12527,60304,62075,25661,98849,42976,66577,57293,36695,86861,43006,65921,57369,61918,40980,34078,34768,74108,78040,48450,98148,40499,75211,59836,98000,71484,78121,95115,96267,84486,85447,69723,81600,51299,68485,87558,18592,92593,66738,74716,77257,72739,85749,54525,43332,87129,53918,87998,71016,64687,10786,80421,47419,55629,15239,51537,45552,94951,35752,40039,55070,58831,42065,82386,27679,97062,49703,84083,62510,74012,39705,12859,45337,64217,72541,66345,68532,92416,48280,91447,81355,54515,59430,25509,95511,57574,57925,34123,31146,97252,91129,27529,15706,99490,40392,37708,52639,57065,93182,25965,79205,91422,14714,69611,29652,35003,41812,49986,55144,86160,91206,85350,29160,85243,10227,76679,52613,47471,19182,97113,83053,77362,26640,67831,43323,48711,72170,87682,74104,94238,15429,99955,59473,87555,98149,42460,66457,49806,93038,49146,99326,97206,73136,98021,66748,93240,65438,73423,54748,91657,37453,78103,69890,27661,69121,55307,37551,40651,80589,36769,87406,34785,76732,30128,74890,81504,51506,10349,31268,52207,81599,73883,51762,14954,17456,47685,34573,92129,18831,15613,42386,84131,49894,68087,77297,99339,69231,93630,92129,27706,42189,91289,85249,41365,58385,52006,40899,13157,95970,40512,45407,85029,31281,65687,54416,59090,59258,91646,98302,62144,41702,80701,69222,72227,92318,35319,67348,33139,38708,37555,43645,60965,82574,23131,60891,99217,79466,59593,87900,12108,37044,78648,88413,75733,46860,46358,63719,19589,57481,93129,80279,32691,49727,33738,18039,73271,35288,26948,53415,43335,50398,56951,61427,47277,74683,37043,79076,91249,56366,99044,33859,92477,85639,53750,61411,40574,54149,82709,32661,27785,72739,29289,85907,53501,48545,77023,38293,69468,45682,32528,35024,82244,65058,95971,91156,16045,16061,62709,41786,80541,81082,47369,85256,77272,32314,87083,30520,24742,70112,54300,18817,12519,98665,72663,28433,55967,31845,60471,66770,44698,83836,13512,71925,59663,51877,92426,80038,98017,27122,87021,31609,85329,49874,21370,86782,76014,57888,51394,73531,84891,52697,43557,36810,89391,51516,52653,23941,33888,24775,48338,79928,95895,81148,31836,97701,92623,65916,23884,90166,43995,89472,30407,22425,90476,69184,72571,90990,88895,27460,34976,26513,95792,45442,73238,87748,22865,52859,47052,70021,39939,69064,35073,89266,82319,24487,76142,80541,25035,49536,72691,62601,72384,61131,85939,52289,94761,37682,63789,50701,57668,61558,48681,74005,64483,50591,81599,96190,29473,23209,18393,64173,56400,32670,53835,88265,19608,93099,15826,74823,65447,12228,70182,82536,43173,63247,45052,43453,47667,15235,85001,79648,11364,64888,44264,80134,90025,61575,68779,67904,82498,56461,64480,31162,80616,17654,87632,48523,45139,45140,84424,49535,30733,14893,95017,73153,67271,95035,25308,49110,81671,73236,54408,19127,76718,22997,78166,25694,81451,33857,74945,53326,14935,82698,76408,27769,97811,34441,22653,41871,94929,54559,79312,85941,86768,85632,73912,17945,82327,16196,87794,40263,90408,34404,69200,27094,47327,52226,65220,25954,99073,70800,76098,71978,13654,24644,73693,16694,62988,56596,68127,73829,30944,80418,75139,49559,19604,81286,79099,48658,24028,79092,41039,66037,95852,94221,20360,53124,67210,79303,97175,18430,35457,32362,54679,80066,89473,87944,48626,52776,46536,30352,94689,23542,17617,59089,80105,61472,32058,83726,59531,39420,14373,55379,14711,64662,31362,71915,89473,11490,13042,39655,92355,80102,40398,54078,10864,69622,27370,62475,39253,54689,68592,60615,33083,73993,82688,14917,53983,89049,42884,88733,86126,94393,32572,93415,56077,19918,48232,98801,75819,32802,28694,98391,27414,38929,83094,67242,22040,11216,31775,75636,75660,31390,98152,88278,64144,20101,20450,70988,48200,32156,86031,15536,98717,57086,68758,89972,24901,26660,49277,59887,73293,99821,52661,70468,63599,90366,21852,97985,29017,88510,27929,30430,58757,17479,76104,49045,77025,18207,31951,77822,75509,52657,74937,11570,77077,51756,22958,94524,91525,42346,78359,17574,34889,72663,57933,88004,21245,66674,79457,24274,48079,11858,30267,50302,52367,90055,17233,19707,28726,69371,21001,32583,49799,79131,72357,17602,54830,81313,27819,96773,83725,85961,80067,35076,29689,20719,16989,61896,26350,23687,88623,66263,77837,63094,69000,70848,16628,90421,97144,61535,15429,91478,43386,71991,58320,12190,43666,90793,60219,75704,18790,44800,50847,25654,33884,63308,63691,90986,12685,72863,50384,42061,15875,73876,25562,20071,40251,28835,95599,49462,63739,59057,26936,52692,35429,83396,82560,77599,82311,97561,27886,89990,62125,26647,76987,92786,85973,94264,56018,60997,14084,56358,79826,43205,72731,82549,57502,21788,99736,54904,67604,79851,37853,28583,47536,92862,62351,72334,80129,44316,41269,49332,96199,34037,48620,72901,29954,44700,24384,63986,33151,73599,14351,58333,43001,24805,59434,27117,79225,28709,59765,41428,62841,13190,91877,62788,75001,75458,73306,27720,76103,40735,25108,61402,38111,58612,75784,70104,62562,12603,84910,64247,58329,17108,14319,62322,93429,59356,15813,70926,70225,15891,19627,11722,15650,64960,59694,40202,68326,36570,62697,87227,83937,78398,93462,44389,48709,58395,61912,41079,83605,54323,61447,54843,72319,40618,22276,10357,13214,49003,68133,90834,44437,24862,92969,34521,21145,55093,97832,15802,29433,16547,29299,59501,50464,68565,56050,92899,43083,12656,62198,77441,64446,33859,25311,35347,75522,37110,51352,14936,50755,80013,84495,41409,56209,46895,32786,99846,81185,70203,62482,47259,32027,72104,43114,77109,48293,77919,25582,51087,56947,36527,76448,16680,53804,59398,36091,62785,97253,21538,29299,70527,88433,46439,23211,30335,49888,98077,29860,94303,32785,94458,65623,39549,49603,82431,88127,96843,54612,36022,75380,87759,68171,10646,47301,65390,55981,30661,80697,79739,13502,93039,65405,24892,86456,22356,74568,43163,14299,54064,87243,44485,75210,69280,85146,79058,48993,19991,80170,82699,74450,98003,30479,50330,65983,56372,67381,90459,80721,48695,97501,74433,61907,39602,81490,41170,84221,98214,83644,36216,29638,40638,66496,60897,35633,59424,65695,50608,18087,94664,27450,43406,78491,46556,24874,15006,86295,52415,67666,27948,45913,79189,92989,58480,86677,70428,58610,77353,18042,50483,82772,12399,20366,81374,23122,65805,86228,56641,50187,67485,47097,33406,58450,61691,17462,65898,71573,60418,64451,26530,29038,13324,80332,63769,18141,69687,74646,51727,25630,49311,19163,83630,96385,84787,13916,96060,96772,28434,91182,86414,56495,57105,37323,82898,39707,32875,10445,38148,31407,47245,86333,80851,20117,10799,29078,77400,21468,83331,99130,91479,71212,18821,53195,63440,97100,73604,52407,45340,98378,96016,48840,67559,52035,54044,67451,76318,73183,97800,71213,74604,90488,61690,92157,50937,26318,25045,73187,75208,85164,73040,59752,98188,12016,38640,89770,75116,57005,79728,62735,65403,78997,15109,95052,91361,40191,76548,72921,13493,80808,67949,31948,84509,89689,77483,61336,33028,44905,96875,26778,20474,10416,32756,48758,50162,26330,97985,83306,77497,85652,36478,49076,35606,86633,34077,77618,41478,47079,70148,20367,77568,31644,91407,53163,28825,10119,48298,30436,88682,18487,44908,27549,97546,37285,41077,91039,87386,27264,79920,20269,54033,89021,28153,59859,21789,84495,46952,71433,22944,17124,50277,17741,66111,90520,17957,24855,44177,96753,53521,10597,52751,37029,37196,88665,92780,95287,72301,37572,57872,88029,68696,51669,53274,49068,95326,21052,92927,65915,94213,39815,55665,81893,77602,32146,84235,42050,74908,68963,90995,87549,29518,25127,53354,39164,88250,95166,45320,90470,92526,50307,48893,80785,94573,27941,78716,41978,18342,56553,58009,10882,20559,78471,61608,78268,77758,89886,22613,19506,89657,63229,46379,88134,56631,45543,18271,22312,88356,85530,47045,64450,41223,39276,45057,33408,46060,21308,29416,42104,77613,81083,50743,92305,93446,85279,27214,43082,61253,54429,84859,40662,53233,79864,97435,59682,27517,64728,78740,73135,71213,13994,97042,26031,25265,87754,79688,36902,66651,92605,44315,39464,25518,74971,57676,75743,62943,78867,93282,59204,99842,76333,97595,52509,31810,50881,26744,99440,74467,65412,76644,76940,22495,72991,69666,48777,42964,96562,35825,97570,79857,14921,32079,17308,18524,79995,40402,50168,44400,26189,32999,58172,97868,51922,12170,45611,33658,92415,82070,28118,23596,63082,53835,28628,79730,99918,66708,75842,91613,98986,25760,71046,25465,55513,62778,81534,18372,98867,64336,96906,71150,18300,30080,97309,66587,23084,89855,19052,92481,80979,86383,31094,62368,70969,56203,22638,53147,88546,63965,51480,79899,82882,85469,20530,18093,40956,57272,80376,96086,55261,61531,28190,50248,13659,85839,27010,53013,83437,97151,20417,91602,53658,33837,16185,65117,59200,28828,21854,83763,60642,22365,43599,83659,31148,86886,53404,73946,37563,57803,26794,55717,16609,30374,41233,70853,41616,43790,57187,24222,51620,77338,94992,61102,87248,89132,69092,48179,81101,93482,69534,63833,46482,95818,30729,33283,55822,88845,74645,45871,99830,50206,58646,13032,89181,87821,74067,40118,30364,70772,58676,69047,31086,24824,81725,22461,82655,16123,43643,57614,64788,10003,70554,35718,21836,53251,66048,72366,70566,63821,83034,45635,94439,46204,80393,97362,17073,69707,63362,13674,72627,32743,27980,66275,38205,20254,84193,66069,66268,91114,93268,23645,66282,73601,93653,31189,29838,93410,74238,71357,93711,94372,20097,15360,30013,99937,76500,70282,26190,42143,18675,48610,14766,68212,88278,42578,61784,77882,77390,87001,96046,12605,49427,27430,87852,22921,57865,65357,70867,26584,37594,96645,75898,94792,92159,16552,49377,13974,42978,74999,44705,63121,40720,92575,30457,92747,45490,56610,34632,67690,11704,14922,18932,58920,12769,89663,70714,14778,85803,84496,27827,55682,81940,89720,71390,68164,42170,11479,85088,91228,48289,47282,70286,78535,58494,98474,58157,33481,55913,22953,39711,25714,63705,17636,10963,41843,96108,25991,70964,51837,96601,39422,13026,43617,32105,43587,65754,75696,69379,36836,28310,63586,31081,80091,52055,13155,38673,11631,64712,53106,43364,80946,64827,30070,50238,73592,88109,65522,54187,38286,97574,34059,54341,90596,14466,68947,90001,99386,13504,48962,97228,47707,84667,23396,90695,19536,84274,38967,58677,91990,38123,84237,48252,17347,23726,46447,42434,85776,74923,70118,18026,25671,19561,67123,35318,24468,23511,53882,29281,99682,51638,27987,90575,72165,59909,65471,17538,38649,32611,90472,77937,38260,36331,52736,65968,78253,69653,68792,82289,98340,41340,47917,47908,22359,35091,42876,45689,15189,68838,57237,21013,74156,68158,49434,78023,57897,48954,73053,64337,56172,42732,58526,84788,77733,98919,21829,33183,98661,35227,26562,57018,54900,91631,83970,54501,19613,27218,13866,78414,48538,37531,96712,55065,29530,86471,73666,57481,81823,27542,80585,63581,75190,71607,67399,64941,63513,19379,68735,32556,31396,56069,94857,28468,78213,41013,18181,35040,49261,40474,19516,17059,87204,57636,71782,72473,30187,83336,12764,35611,31019,77232,48434,21591,87089,20767,63331,74889,23537,27770,42459,70526,63162,51406,56763,56121,53038,78743,54676,19876,61269,51586,72025,23447,70117,32920,90139,20300,55158,76246,87427,66655,76279,35108,36312,46994,69959,82034,94622,22562,90875,97745,36691,25950,21529,20711,84205,53711,72955,66892,13410,47994,10813,74957,21692,51286,44134,21234,37469,21548,52042,23569,98255,87692,52008,83099,17425,88772,47471,28994,38668,52631,72003,97284,76024,86259,13014,34382,79237,22364,83990,95046,36023,22705,12797,57147,17171,72341,58775,75987,41040,37663,10688,97426,59727,61255,77852,25307,85962,74792,47365,68166,56221,62637,36496,72966,29221,66652,56713,84482,58488,58882,46788,93062,45532,89680,75214,44725,19609,80298,70104,51359,69017,62497,94677,92217,25254,73803,98252,97951,40716,59551,51189,44096,23277,79630,66004,64115,64079,69988,54649,91864,68156,35403,21260,17207,30761,79665,97625,85076,10874,81434,75259,26296,56713,36575,74802,62826,42434,14769,25131,61396,30588,20212,74927,13596,85806,80869,47668,50429,69490,70407,16504,29121,46804,98715,31379,95952,29679,69409,52357,49616,75047,97548,63310,91477,51647,27840,19083,91736,33232,92214,66841,64906,37789,28682,94184,15722,34932,19668,91334,63283,49002,56341,87282,13098,58700,13712,15637,67750,23321,74556,77382,61337,96269,71302,75017,86599,71432,94799,38993,55302,14398,47389,21640,97193,25866,43706,22504,51841,10310,20441,10199,25741,68839,92126,94909,49551,88490,49812,62743,63223,28394,25545,72188,86236,73482,28154,22094,33173,86698,93490,57227,22305,69647,81177,55713,32317,49964,94665,13732,58869,64819,46107,58825,95214,84474,29528,39088,95904,17159,16843,47615,32373,29735,42354,12240,93715,14110,83522,48590,75656,26411,43438,49717,22622,71300,83165,44435,40369,99613,83222,38088,45730,10053,83654,83244,36155,97355,90485,19190,12110,47829,48103,36659,16957,88606,41615,11956,30665,27741,18347,27114,24775,19456,43278,50120,51976,21310,13506,85787,19206,55934,15003,34726,26937,30770,26280,61167,63871,99215,80544,62878,32170,90698,13429,39239,77012,92276,71641,97987,42806,20797,13229,90717,35431,49558,34464,63270,56173,40931,17599,57634,44160,94638,11633,44985,41356,17025,24300,88736,77326,12275,40517,94465,48548,26146,87967,66044,37794,71081,82203,70220,62027,24040,97194,22396,67633,88984,46064,26063,13206,59185,54378,59717,83454,71568,14392,54390,36942,57011,84728,93245,38039,96980,62869,22385,39695,53462,34396,94031,97928,61379,62466,65750,98870,64476,36455,96743,33819,41803,11364,55043,92817,29188,46892,93612,81822,58764,41423,59026,26002,26920,51058,62542,45685,26399,69412,82639,74368,81987,87589,21874,40197,48479,93239,37736,50391,33071,43975,90294,14294,99463,66030,24206,20292,42399,16306,63797,39614,86513,92875,40341,89280,89188,86520,25380,36876,95500,89833,97340,92698,14573,19882,13706,17361,32638,88304,38241,71540,30290,32693,32235,95913,84311,69266,49553,21058,64322,77220,24399,24240,95803,13233,27471,65238,60430,23268,12818,67668,17441,16865,94380,22486,25613,89513,62014,74895,58416,65409,51347,29701,19151,42508,81814,60087,69902,59969,78516,23725,43815,93989,75040,65555,63579,28285,31303,48210,90118,44504,22565,13886,69598,14685,74617,78495,74380,69270,67181,96450,82514,20361,83143,70836,52557,39701,76974,91736,44753,74224,95482,34668,92144,93659,45602,71834,60026,31473,53319,71856,53480,10915,89921,32434,49208,23524,48320,71892,63451,57378,83381,85615,76009,18824,64877,19015,31077,28307,82340,57702,46626,72286,54073,29025,56784,34157,12690,75436,12256,88833,46697,96106,27239,28103,55276,92437,87935,52183,20284,98533,28905,81352,66917,95984,14100,28608,27982,65424,93867,47311,43281,33936,57439,80676,38740,11213,59292,91256,74221,63255,12082,83798,38865,87651,22714,31274,19381,14949,20319,51660,56037,48003,53011,30339,96446,15521,75323,30452,44427,78659,53353,29462,88081,53064,88977,46516,54518,58020,73369,58535,90073,72410,25155,88648,60714,25824,62255,48207,21460,63493,43437,27135,24723,83512,38413,56711,12500,34120,50075,47938,31620,33985,58819,35227,47103,18567,31238,28350,46805,33169,83742,32734,74980,31100,57570,19425,37140,83314,45926,49759,95933,24847,30293,95326,50855,69929,38376,47332,13602,77206,98725,51490,71514,31357,31983,58722,90615,83899,38669,63863,23115,94594,40888,63523,63584,28630,82648,86501,22813,18297,29445,72607,47706,61829,27966,38864,29639,71418,86810,47069,22373,38769,78684,39191,72426,20837,55107,51157,76827,36097,27310,26672,90483,33813,71703,77116,15278,48334,96278,36571,27499,42219,30632,78762,96029,25837,93876,71723,94314,89283,89478,68780,72238,72628,83445,95766,90539,17752,12475,25811,75930,69984,83761,40545,70301,32057,58200,31452,74945,39664,91218,77207,46504,71622,36931,23926,41693,56273,36728,59209,51363,68699,93164,80048,48446,27282,31956,10680,65465,95101,81256,95775,37092,65909,16247,38163,99537,94872,62545,42803,21428,84269,63043,55126,63858,17500,36709,80936,40307,65770,68507,66025,90851,99353,98758,24894,93571,27585,15910,18569,56400,43771,69977,75617,20199,82764,68249,98244,94253,48979,52239,17874,32691,43096,57714,65116,36255,68793,33933,64649,64777,99139,93039,64372,79271,27189,34952,73682,63926,18032,79410,40036,47495,19291,24515,74711,60595,15782,80393,73629,43406,60044,18091,46418,59240,75365,96895,12676,70054,88106,32533,14395,14981,65831,90740,79986,42119,33409,45882,72996,60431,79101,43971,22384,39423,37641,54423,18142,42031,57894,42711,30584,90134,12485,66464,52035,68655,79195,84193,75828,50751,68273,97908,38085,89488,55326,35253,29703,85216,56253,78154,97304,31603,69890,10578,13935,41843,44538,29305,19250,68933,77303,65161,26551,48108,49793,34685,54681,28329,75846,11073,90671,16437,50225,28904,69025,21246,92151,36282,39050,38822,73643,87049,74679,60568,73078,19173,61665,25756,56101,26411,58480,46532,26616,34203,50752,92148,11075,95240,76090,68506,17561,32307,75033,20287,62254,87075,63333,36853,90222,19724,77035,90402,77449,39276,60352,85879,85236,45269,24339,71477,27641,23817,54918,44396,35475,25273,58053,73636,86819,10489,46515,33048,32370,34722,30352,42474,61717,37141,64603,45687,87087,86361,50751,64364,66424,93997,90660,48154,13248,60944,80859,88753,11946,65059,55635,86029,47372,60422,97000,10424,96345,15056,52280,63435,58167,55168,92333,52200,65887,40362,50282,39746,85546,11781,22474,78659,86025,28656,24883,87217,96222,40193,57570,31325,40519,94283,66165,64137,64155,40069,56036,96732,19545,64985,85510,61014,30328,43530,64603,42994,96073,66645,25378,87526,43390,48174,80660,98036,89210,62761,72102,52605,40084,44007,26752,49188,78854,58875,97118,61486,89686,29836,46811,33960,27412,95143,16313,40373,25236,88956,40210,48978,68091,97417,89803,83711,60406,69924,93298,35108,16172,76572,77198,55851,22972,17416,83863,30516,51793,13450,86258,34223,45031,88895,75129,76375,43770,98455,89142,48668,44958,40390,62781,54112,85071,59903,97930,65879,64081,47857,21630,99737,46180,76042,44375,29498,51383,64451,42259,89138,70748,41524,60067,92969,95907,60765,99444,14905,57563,58183,18601,44902,79644,61215,10533,61553,54131,27838,25351,69377,29067,64812,30279,93498,65495,47625,20633,39566,42001,24185,75084,57529,46832,60200,96333,17156,61026,28514,72659,56933,73754,24655,73310,41269,47731,95123,30024,57385,82307,25166,92398,80232,52540,25978,30374,48973,64457,22963,45224,93462,67319,30529,45386,39219,46399,74844,14296,98912,26976,31649,25611,97646,76070,30465,56309,27109,26566,54333,25387,25075,70635,51715,69401,78242,37985,21973,26884,27863,78966,67283,17926,48765,44187,92997,46578,95737,54356,55443,13280,18592,91896,89577,26479,94197,58424,65670,90824,46456,42848,27456,29343,39089,15227,47944,49803,10124,62395,55801,16568,71593,52161,74023,26630,74482,44148,67576,28975,62454,91229,18498,82365,93695,37013,13154,45897,12145,84268,82693,48416,82468,19092,98298,63828,77003,86875,30913,48937,96781,21034,74102,29468,29992,44773,18919,84288,65915,39524,89719,74559,62146,93538,79478,59459,93564,90829,58608,43747,24560,78623,13384,69128,57666,22938,65001,10520,90018,87559,85058,58970,14838,33313,66415,35221,16336,11120,19386,44293,34249,65807,24383,37397,71549,85675,79446,45540,74027,51131,98215,88721,42876,42341,25762,59214,63737,26032,22197,73398,56005,82296,33490,61314,41313,42176,76492,12047,10799,98767,56011,76069,97992,60025,29384,70624,95860,29129,41734,93919,88522,44774,28121,20624,88118,18722,79978,18488,92898,86429,96903,37555,11008,34318,93683,90227,69658,94976,31902,88728,44940,24466,64664,80650,40427,46687,82737,38221,38361,26462,82619,92022,32582,14548,14659,95396,76728,32932,77300,63259,62525,55608,57007,90025,91375,63052,56342,51189,50384,59180,14890,72077,60579,30163,53144,22723,14014,18084,46758,32292,16915,87485,29798,46198,55367,61665,91045,36977,52998,84563,32638,14559,76524,94367,46626,60949,85915,21286,52020,55693,19521,41034,42055,10670,33592,46759,25554,13780,27714,78020,29798,51598,78034,93914,41422,10368,79703,90545,79667,71248,46572,47984,45393,63653,85812,39715,61116,61559,44198,50418,70734,44140,48135,93549,30111,77206,72685,15348,67285,41413,46247,67225,63629,63676,78743,24889,65650,18537,78651,87718,11733,44466,26292,68390,53417,92105,98404,93842,90834,19774,90824,68271,11845,83717,39566,16899,73608,34083,62382,80556,62205,72336,74135,79581,59181,13725,32221,15873,45464,42806,55414,72010,38123,24186,33267,45104,94453,84762,13556,13927,86706,74357,12716,75703,70029,81057,69785,73519,51153,77098,47868,99574,72198,59319,86784,21432,17191,53126,19460,30292,74033,11234,19891,63729,13610,53410,54101,56000,10058,73453,36466,81839,50311,80212,90476,89277,16933,21742,30331,12624,86281,34779,41264,77692,51459,60557,79707,44927,51447,95732,17411,28106,99600,84032,73850,50244,41816,71793,10513,55752,35245,66702,91972,74321,81889,79964,75464,49101,93520,37143,61900,63236,25616,86090,15546,55210,19818,76467,68543,94328,44563,80693,32352,11051,75768,61403,92297,25158,31563,16100,77862,96415,51688,99806,46756,73355,88707,75367,93375,29691,47085,29782,70620,79461,73434,91068,70850,85042,23202,74225,72329,14299,19563,23902,90101,32152,92071,53052,32194,95662,10637,29257,77522,50733,81595,25442,74991,46434,51403,25297,14393,60207,55531,77806,80451,19481,86525,96478,87519,47757,34938,40621,60088,69761,30845,55237,95919,35668,81696,20836,76662,33529,15768,57182,34056,54466,84158,45687,89396,22562,50996,25253,66663,63524,77148,53191,63909,56058,35272,75032,14344,95813,22120,55007,46931,82638,54907,73212,20767,29162,94875,37242,84281,62529,50174,31181,60002,59629,10598,20266,41815,15257,81329,17716,17498,28740,95689,62093,44967,51346,86203,33955,32568,68916,15146,71922,76242,89363,67415,85841,73680,54932,93851,92248,85316,77330,23650,68875,34677,52044,65731,16439,52214,60692,49195,35367,73035,62842,67127,80479,22457,38375,16579,83560,20761,92609,17316,29409,89492,38928,23429,21367,48585,44107,89947,54909,27565,33662,88324,34891,18821,36189,18018,14478,42914,98553,99626,89536,94884,22439,27059,48126,45879,22629,33239,96489,86506,74878,64835,69163,12705,99212,79970,91679,95365,35116,17603,41913,27307,40138,92202,99939,26611,42071,26021,48572,44085,63537,78813,94298,98581,19722,16437,92198,71314,29377,20465,57534,98786,96581,39209,30248,78091,88259,63118,40841,10288,72549,25570,69535,12792,89308,72982,62903,56496,62422,95504,69122,81066,15432,24901,14874,72548,43828,11526,51032,48751,59624,50003,61743,85047,74329,23277,16399,94461,60780,47627,26119,29849,16219,64596,94576,44875,29252,51273,43479,14659,77570,11316,11944,39596,47952,32739,81659,21177,62039,43271,69067,47244,12028,76912,13431,65493,61059,38129,97337,74454,14526,68868,61131,38076,63945,62014,79945,34518,39921,57002,99567,98643,81698,84177,29029,80484,40596,60917,41953,51795,96043,79850,68425,13007,18580,79830,58572,35004,94367,70525,32438,69804,49841,74438,31265,56994,14697,10704,42839,98881,17465,55320,97833,90389,16525,50153,90289,42311,66060,59607,63207,13028,14009,65137,61568,85172,49693,19398,56869,78331,73909,74437,45680,67189,73476,19188,56836,10873,58002,16325,51623,77421,11107,41408,82120,10496,90353,77233,70112,87134,45430,15614,21362,41315,61376,10268,21013,68996,93436,52831,15846,79781,92275,99395,55202,97433,40130,48368,33275,92030,52754,90381,59153,45930,13840,84814,12684,32294,75181,69894,63324,12100,26339,22667,19273,54335,33644,67715,92541,15034,38017,70093,58082,47205,11681,74480,31295,73628,97444,91723,54817,53428,76396,67902,40763,36811,72903,56456,55695,25803,22379,36902,39262,23820,66462,76939,53287,27172,20308,27553,62970,13097,70087,92412,95534,95946,86031,69462,73237,44959,97648,90294,71036,10993,91584,32064,24458,35379,16456,66229,31274,29470,84207,43958,34739,26761,87984,39399,35770,14486,36826,72366,15351,31956,82950,13109,32382,90920,29198,49327,90855,96257,90304,86421,95051,31352,13773,71049,74141,88559,79012,68229,86155,70670,25357,44414,92479,74312,17070,51065,40777,59804,59337,24984,78985,90119,29501,79353,10921,52990,13092,71690,66375,70022,36634,17246,91949,38144,73716,18927,82858,12429,94907,58795,77342,81461,34907,63474,58773,58942,61495,53969,13358,53326,25635,62205,93663,59991,64894,57968,44523,52482,11607,85567,50035,85673,68476,79235,84882,42989,52007,48302,52894,16404,16180,46804,87169,62870,60779,89322,35774,36651,29497,28837,36782,79296,64557,61722,90112,51212,51802,96554,71926,93746,57212,48788,21947,36613,55027,65029,42012,12964,14796,65750,15673,18967,91742,11159,60191,65930,31590,29753,66296,95165,90721,69814,69785,77462,43781,26585,26629,90183,58946,70567,85010,88084,14614,78809,21689,18402,77706,64673,25034,58283,73025,45154,51371,29608,66720,85071,31499,76931,65400,19994,39067,73469,47273,25506,94770,59779,19274,24108,40623,12856,46340,50997,89943,24812,74424,95097,88413,66592,87562,28365,10020,15914,90770,51254,95168,78307,74357,88361,54193,31689,98200,99805,38209,43145,33461,97524,56801,82099,37063,66146,75813,89565,83477,98904,54607,78688,23877,80893,13819,53058,80480,41348,67729,78877,53323,90780,33901,56514,12953,23932,78527,25227,76740,85255,52145,40070,87340,19462,67132,77438,36214,84439,34660,86171,34714,30821,69530,10618,49921,53401,90574,37677,82044,95655,89324,59292,48051,64772,60907,18515,51243,62916,76966,51216,39817,45216,63303,19412,51905,21729,75983,41595,74500,57466,42712,88657,69286,50451,49645,88719,28820,61050,81947,54264,15220,20253,15855,51095,63860,92736,68737,10752,77834,51227,37377,74184,19364,68019,71550,63306,55512,60718,40942,14329,53173,60296,50274,24381,65896,70924,61553,77734,55178,56975,24859,42969,31311,90960,15873,68308,26250,23374,41870,65781,95579,85947,37563,94008,21914,98840,23165,53437,13000,79327,78424,48272,44063,94614,77902,31411,32194,50519,50510,10090,14001,69622,34184,79905,51462,15130,69549,49746,70942,57598,84591,95257,34213,35798,95195,87463,24498,39989,91680,41673,44759,16321,83287,93812,89891,64767,90559,21415,55063,71738,37853,59205,69221,14069,62758,96272,33578,21933,31818,42574,64773,33385,93148,43580,96684,67235,37481,16330,64129,72460,86823,46854,88912,39233,25236,77488,12814,16443,69027,14517,15948,40742,19108,27917,92038,74153,92399,76745,55870,37310,53979,12440,23966,50340,17312,81281,92917,71773,46767,73008,86667,30810,76894,23785,94853,55927,20280,46552,13239,44293,10074,59235,86570,11238,31851,32683,66364,55598,38218,87763,68695,24091,75423,16477,35722,58502,94585,36490,77966,32242,85506,72223,73864,97376,24458,21521,72421,46532,58104,37489,82998,88432,31820,69408,43407,26181,34937,60978,19647,54750,17211,79012,94047,52546,42616,59032,61638,44171,80225,82405,10922,82493,90256,86944,77249,48276,77056,84227,77431,74518,98648,59528,82781,97226,65998,44185,89060,17836,55477,75578,66504,31063,70345,96061,39654,28748,41039,50878,95463,42819,38497,20287,95796,31062,44500,25417,78981,71611,80565,84022,82852,36190,97029,80856,75774,23552,89914,96112,47028,32520,19407,88963,49194,94889,39100,93241,37739,29338,43179,39498,78561,47886,26563,91372,23167,60915,28306,38469,44236,12442,14006,19569,49538,89712,39333,41938,24657,85967,41661,14079,76906,37532,87234,38745,51699,29235,54897,75250,63807,65973,37187,96819,25346,76031,57201,99850,90275,26770,85669,13188,98852,87687,90313,10418,33993,16006,56922,68236,47824,15743,12104,47129,13611,71204,69172,20294,72238,40236,16810,40582,74050,21232,70299,60381,16866,36500,68383,14861,82522,44912,70888,99045,65375,18138,59363,20076,49410,39063,53494,19093,15663,98261,64383,15419,20989,43144,33681,57477,96225,41290,99111,43219,75390,38081,80194,34417,71680,14912,35439,12499,24732,87704,30604,26017,16326,69690,30823,96032,58158,81876,16197,29377,74592,68430,78143,67050,78851,98862,21559,75035,96524,60992,30011,44870,74218,49904,34345,81343,61660,52871,46958,39538,11513,23268,92322,80075,40079,35260,97066,29028,73358,90832,24455,56385,90693,79880,57899,15813,72095,14308,85592,93068,76114,15226,77228,75474,99803,19178,52124,20867,10087,21257,48438,77136,93587,18499,32790,26323,97154,60665,95092,26816,23176,37143,18014,50229,83553,98616,74636,53115,71323,74535,90285,44372,70292,26012,20687,91818,27145,83725,52737,63020,92235,14032,56002,94093,33093,17861,39624,53811,97835,73796,66490,86641,77249,29118,18698,92392,99417,41882,74691,75229,13102,57821,52642,67430,92841,42591,44629,34778,93608,39302,41457,85341,90237,91736,37555,13368,67757,67808,28051,83411,38901,42105,80812,50214,47108,57604,48098,21874,50579,57989,33418,15405,16425,66431,87928,86530,62646,30460,95858,62385,23403,21993,49860,41908,21504,96592,13080,64692,60882,75659,19111,50525,54228,42305,81474,51706,41908,81813,85269,75324,98540,98980,20536,54098,59843,69850,66551,73857,94246,14859,12911,52490,18080,68428,54840,96788,91778,22627,98922,52065,68027,31385,69499,27242,46865,83020,46996,29918,85768,89159,35413,85904,12098,11859,46531,52339,84983,37326,32638,81923,97283,98931,73516,91436,45580,15020,95162,56482,21214,37147,90318,69487,30145,78233,47928,78526,27763,50509,65339,66210,15261,90669,69636,29996,90777,67144,30311,89630,32701,23404,60242,16311,10882,28153,51756,42199,58048,11245,58868,59810,37622,81494,33332,22188,46738,89423,82723,65215,98245,97978,86708,77479,90680,76792,54348,54604,65346,76762,69154,66142,14539,97521,94767,29604,28326,79695,28359,85995,93347,48518,68421,56958,97607,55752,99625,45769,58958,52570,60404,31725,97468,82311,78884,46620,17955,50564,40758,61828,31537,47912,44989,23722,46648,66124,69837,96055,60603,98754,67684,83730,67382,54842,15795,73049,32697,93923,94867,32409,53034,50130,18786,37643,18778,87559,48445,87935,36635,54209,24316,99370,68153,20041,93717,56235,27067,30555,65504,91424,10429,34669,94923,73829,37106,68593,57130,40003,92718,74231,43197,64864,17098,33055,41053,35888,10194,38634,88387,37522,10990,58411,45480,34781,23992,28349,26931,55953,51190,29226,55425,30431,96691,41389,86260,88067,33512,23931,61936,76913,47880,40358,47809,13213,66660,10959,94897,37408,62484,84279,61407,19773,99441,41365,82051,12086,10145,12176,82619,67951,21906,83458,35429,18924,67346,92301,87700,29224,59292,52949,65610,77124,58778,44530,18633,53095,20270,71267,65400,38633,99768,34700,24673,24947,59000,88574,53394,75738,18359,16163,48043,71310,34677,60351,43901,93934,25040,90017,65699,46731,34416,73206,61337,31193,14986,31865,86055,73702,84557,68425,79627,29733,16519,35361,14955,93771,79539,86653,23249,66954,18470,64420,36460,90333,23504,71694,35778,36102,25401,21884,32975,67504,53428,43666,49967,39221,51557,26494,17309,45058,31917,25249,93645,82537,50551,34384,57111,95368,98933,34804,36370,35096,76086,52638,64054,84324,40690,30730,85713,82774,73012,70563,90463,60729,76894,75473,72434,34736,55462,80159,48743,17200,65926,70590,16904,97956,12324,77546,96232,37396,56098,12135,70478,23455,23266,12435,90269,93006,77487,92329,54062,25794,64816,53803,22844,92941,17055,11091,57003,44057,22994,58518,63755,71617,58248,96943,61611,47649,41640,55204,19005,80239,79524,61295,45908,24305,64309,41753,79647,75271,55121,97978,48606,68002,83973,67580,89801,22119,77269,54791,17421,75751,10983,82095,60533,33591,40782,77235,95293,29620,53159,18182,87795,25120,58574,31764,37530,65727,88755,97281,28717,10226,69226,67302,93713,60006,52949,11571,48053,95092,16225,45992,86790,72769,58182,44054,90377,76367,24729,36325,40311,60970,13489,53178,92731,61625,22052,38163,48200,52448,10539,49469,49018,11793,80249,57678,46805,61501,76291,95276,62444,97093,47473,75713,90485,94895,14909,52501,85721,75246,33091,21877,68490,40132,88490,57104,56638,59532,76589,39620,23092,64803,30071,25417,66067,91036,76104,97508,75704,96304,22709,69376,95705,70547,44208,16597,46259,66069,90952,15009,37529,97972,19254,24935,36268,17082,54227,54878,65306,71581,55561,74964,29669,58451,74944,63235,39610,46566,45630,43906,13870,31182,74938,86861,93588,25403,65544,50979,30725,59536,94950,18204,30151,52826,36485,60450,91039,15020,47245,82432,61938,40339,47310,17019,23356,54923,66441,73280,57281,61866,76271,89345,61714,30927,30745,43256,23530,55527,17799,58494,48559,45390,15819,82991,52959,62720,42914,72220,86400,77659,59479,26173,17437,70630,47727,26111,79554,93652,66572,20987,79749,69448,31055,17311,39062,16196,97633,51718,99244,48965,15563,72033,56679,76913,72559,38368,57162,15380,87078,82644,52994,79529,33718,54273,22983,44865,56339,42005,93094,40036,76144,55483,32544,15444,33230,68348,72230,98412,77243,72948,55666,61289,46956,13663,42681,19727,90381,19675,13064,80913,60825,76358,50519,89035,40596,93588,20598,42974,27171,33863,83970,37453,72274,99067,53460,10476,51635,65894,46881,60099,55905,18982,18491,57963,49997,16547,95519,83246,50975,23492,59318,71717,75850,60174,70164,63962,18862,68977,79396,22449,40335,45357,43638,43465,20567,94915,70432,63426,38624,35299,98210,47559,69932,80013,32379,45262,25899,47843,39935,33893,53106,23494,54938,15769,19043,50782,74485,66787,63164,61163,98789,34647,96023,57075,74589,91034,22056,84959,45790,15322,72310,62120,63104,63414,29862,26530,39889,41394,84809,91162,21640,13602,20116,61091,43255,20571,38430,15531,19159,38824,79840,47887,42501,70634,52958,66991,82431,53224,23560,37539,77789,51796,36373,65652,81890,41406,46237,45237,72142,50563,63400,50366,42385,75880,84053,18847,36000,10858,35357,49453,74060,57432,51193,74055,88870,47635,30740,53110,95283,79191,16688,63954,75548,96476,65144,79512,51665,77255,59308,59507,63485,69774,97175,37004,97759,44082,35343,86710,62295,73844,75447,80439,62616,68396,16454,85608,68818,93480,54466,13019,27856,16631,16750,21468,44426,99162,32794,79485,59867,80454,21797,34217,44999,82732,41286,26711,74658,38326,50166,33232,81439,16547,20798,86497,79357,66550,20026,41208,42585,66906,44277,88608,97978,48910,24287,99564,21074,74853,75328,63967,73153,91711,66217,89805,48482,89461,92028,19821,77819,69789,67987,58910,56719,86087,58515,67189,51150,73332,68506,27143,20450,15217,34794,12587,31698,81505,25269,44106,62372,73464,90048,39459,61845,91922,94693,53574,17352,53166,78763,57606,91809,97708,73119,37602,93787,50433,65585,90481,76479,61421,31668,91846,80539,65235,98875,24368,44434,65143,72408,32743,40127,17762,34120,47795,14171,29520,44099,52377,25621,44121,49773,88852,76843,81010,37609,86010,62621,95152,24169,82727,41063,78282,25688,45690,76629,71331,38059,46183,84086,60578,26567,57447,70417,36562,76250,84611,24332,98717,70366,38137,14746,99225,35299,91990,86511,42003,56863,36684,11687,83856,80997,65482,60263,84463,13736,82579,13665,61618,77811,59753,79264,27502,94456,17005,42147,74489,39660,38096,47845,25881,99444,41427,38103,73047,74500,85039,91469,93732,82915,13123,20186,77243,95391,97372,63640,61834,28466,62079,79472,24351,87128,97423,64873,79597,93249,97378,80777,81303,31360,89634,27406,18519,37617,75123,27689,41647,86103,66911,27200,87433,23228,66449,92777,73426,94084,57914,26931,53876,41916,87872,80422,81361,36056,19214,92985,13161,54118,66567,33288,92896,88039,78067,72083,64051,80875,83360,17077,95218,58918,96368,14108,18878,49827,93057,39746,88331,28735,24736,19091,87046,14242,75264,10284,88354,32045,44718,83434,47734,53570,94961,36399,41676,69946,58227,51628,85193,89122,39030,90265,12892,80695,77838,68045,53459,31861,62689,13504,66045,35648,68796,97237,69704,40344,68448,58077,31802,66862,83773,31753,33777,27899,41854,90563,27605,56574,83274,20454,95680,49649,53069,56745,68646,23463,93647,40494,85970,26098,48968,43417,91070,53014,85397,67767,40872,11121,38560,37124,58816,63252,74562,56057,20358,25417,71989,85080,15608,89064,10201,96736,15006,34125,69407,73312,96479,18950,10852,45433,28269,85027,72211,52803,11770,62362,19042,33344,41135,16953,87182,56763,72833,44363,25283,41194,18922,58112,76960,87036,46757,30091,52759,72831,65647,33637,59500,81403,29632,78435,28420,63596,16904,87657,50516,54078,72563,66529,82497,56586,11428,68985,43239,86926,43827,43735,68056,75945,68051,40878,91802,62700,66637,19858,96988,56528,58138,71341,93278,88982,65131,46628,56330,80468,40234,17056,47668,54366,78000,68040,24358,87754,14147,30280,56255,64526,45438,71365,77456,53694,82801,87752,52393,61188,97822,75188,99352,35997,55789,42880,47017,41339,16844,54684,94688,91744,53746,72939,10543,53165,98760,53973,97998,93814,75636,53277,59732,37789,93390,77476,58021,79840,63029,51617,60248,95479,18637,46376,18818,74901,77773,40149,59415,45333,92678,11938,78647,34053,23721,96472,84450,72439,79298,82517,76906,42872,71082,81811,97749,53505,44609,43671,50339,97327,33463,85581,87247,29823,62387,61475,13621,15299,20251,81973,95227,13605,70331,16331,43486,79133,28288,16906,65150,87380,96168,17284,32329,86853,20767,87168,36321,79645,58493,32080,14413,88911,53900,99320,11114,35696,16823,86654,70652,23675,29500,52397,44827,81867,27169,67859,33091,27230,69817,66594,52516,74803,10852,82884,74269,73849,64103,37269,10648,34287,20111,68758,71342,81397,51965,62472,47306,80613,26786,67875,34778,20615,10097,65398,24015,48149,96117,53121,33357,81437,14267,68511,29644,78127,47877,90189,69605,40636,51753,71052,65771,51525,54500,90424,74047,13317,96911,72887,68184,33765,67191,50600,27510,92090,54320,15856,38111,38066,64094,89951,98782,17410,56012,42288,19631,51781,74593,16410,43347,82988,32319,53852,56292,24788,38554,97045,21496,63643,27929,62445,32777,67465,33219,76773,30081,70050,17632,82494,10749,11558,46340,53649,26104,18401,63735,87891,83203,52047,76225,53825,22405,76662,97580,38025,25505,43364,91728,95826,90545,97617,37328,90750,71625,28870,96742,50298,88012,29250,26348,79470,93132,92439,71291,28406,22270,39843,37122,31754,90813,43884,15797,75412,74048,83648,95651,34006,44341,45139,92845,68102,85958,90181,97390,78425,20583,75401,64431,65983,35071,47531,86139,42316,13890,67799,87737,27094,48189,43905,91077,30629,50924,15418,82764,83311,49166,44911,81834,96726,27041,54132,39867,24579,67759,73821,32989,94940,55318,63512,10199,75268,48976,21746,34343,12937,76920,43966,21127,12003,90551,80702,68004,62901,65536,95740,44112,65638,33077,97208,95092,66880,68339,52403,55975,40360,84537,80267,40754,60583,64763,46919,10219,44557,79228,85683,62171,87025,18244,24760,67450,11418,49575,76102,14303,98312,24153,14662,40774,92209,12581,39166,72028,21669,22472,31529,51443,66293,14624,60744,20626,76075,12936,30616,97099,51188,52695,82575,61674,96262,52844,36541,39417,58663,24385,44994,49526,65427,21744,36960,91721,17171,20988,55744,65185,48065,32591,33201,50307,42757,72947,37882,21098,61777,57834,50136,97647,31402,74700,75766,55284,71030,23481,55480,30110,47280,41970,62575,97467,24100,62195,45132,87038,32050,84093,37905,14836,84423,89389,98269,71935,33278,36471,78057,28690,23818,27217,28805,57576,52305,59780,75526,13619,50395,40193,49400,43525,26127,70340,81722,29523,87859,64747,26902,16588,76989,23675,36456,26750,10153,83070,25120,72113,34433,59003,96181,80507,96003,63695,58205,30855,28737,39588,92491,62972,56425,33966,17249,84140,29750,82680,38861,78336,62771,57331,87620,74471,15362,58793,80897,55249,75325,77990,72759,83980,27102,64000,70629,32256,96420,24908,67497,80017,50949,74039,57582,61114,28727,11142,40218,59473,66832,82433,62606,69537,22255,65802,85811,63932,42122,31578,37913,78552,27898,42340,35763,62305,88044,11348,54652,70381,25074,69577,15067,15080,56067,56260,94067,98477,46594,20490,25431,37578,86220,49928,34106,83805,88497,17562,32104,55401,65527,97363,76704,84038,26540,61370,69900,92396,77063,78577,25875,16623,68384,90748,60498,81856,80729,29550,40444,62647,65281,91389,15142,71311,74528,21615,61739,52358,66568,88242,35028,66413,12419,77041,48403,58645,39121,10745,46093,24813,19786,95871,99638,70023,83176,26603,45460,91579,53050,45222,98313,80814,92038,24676,52493,59635,77021,26745,97124,14664,54819,40725,42977,54086,62896,96187,99537,42607,54547,40424,63321,70141,83581,36415,35874,76539,34945,65924,58275,70469,90618,76574,36947,23068,73094,84804,26764,26235,45524,47656,72420,53114,54045,69893,73687,29913,91805,21884,49459,72231,32369,57221,67468,44941,21266,93073,43237,89720,12900,81670,72795,32610,61508,49051,94476,13792,42366,30190,24842,68443,15983,13880,34799,60242,56658,42550,67878,91508,45301,88175,23697,75058,41533,99244,46041,34230,70108,16843,37783,29300,78979,36871,92940,86506,61018,53845,14369,87281,45715,67614,62683,11465,75358,76379,86754,68833,53801,70114,99206,78891,99103,10307,49358,50690,90290,40570,60643,64518,30503,70990,76274,64032,81784,26895,36273,95495,39016,47920,39320,77750,89987,96290,87154,72840,15783,43178,40272,97293,11699,27800,68850,17099,44888,31405,81893,73975,74131,76229,25361,92103,52348,42729,63068,29634,20972,65322,86338,60778,88372,62265,71966,24709,58224,83284,23313,92092,96681,31802,30276,81689,91584,64321,78718,81129,66014,20695,28244,68977,13588,54751,65138,85767,75835,18765,35878,50931,65362,72430,38672,70275,98280,31109,63918,95054,63202,87455,73094,24371,43592,87346,23024,31325,63931,38744,20639,28054,20047,44297,74514,70587,37463,53891,22880,73295,71469,94727,57104,85507,40290,11693,62465,25459,41764,12148,16162,47938,41042,10996,15194,53305,99529,89717,96706,45400,13975,83972,46071,68226,69046,53528,54271,19540,63547,46521,40411,75039,27646,93049,19666,42687,73802,27225,79539,79183,66994,36238,94693,55966,54925,60099,56139,24661,53075,72639,24564,35363,11623,57491,13158,46006,57165,37349,97536,63363,90943,71821,75585,55970,71934,59412,56586,95421,56544,39794,58066,57639,48904,10515,60803,84269,14137,12146,23059,47267,70560,20912,28915,22744,56756,27042,55873,19021,64957,69941,29873,27949,16610,74211,63205,67416,47803,98067,44832,52683,98352,21407,38652,15601,34758,70288,90130,30697,55471,90520,56822,80961,40215,23579,77857,73956,55456,18993,56173,13651,80842,86598,89434,10792,39190,17280,30013,34265,59725,50837,59142,40871,35950,96493,58841,20803,63593,45461,44061,33372,98381,54567,78664,40779,67170,97930,76896,36475,44019,65277,40439,19660,50183,50135,22699,82340,30526,74686,43389,40373,23194,94887,49573,62453,16457,52503,58393,90663,23059,61747,19315,79181,79413,54788,74456,18225,44891,36153,51611,70942,36034,45209,96360,99360,23642,81595,96002,63896,57383,40812,77517,35271,61261,70000,84603,41910,62039,87105,27660,31088,16099,13321,89245,66770,37397,64126,33186,56618,88492,73276,34022,61717,51646,98168,59111,35598,22917,61431,54128,26630,50237,25804,60836,69898,27984,54978,40041,61978,94954,83497,12516,12000,18152,52894,43854,18998,10974,71052,85504,91544,94073,33797,10142,27765,89841,30395,61230,56847,78259,92990,73877,41759,90438,94513,53858,94411,62406,15575,27282,70607,81573,29963,27862,48386,33262,87648,54796,97816,59885,32018,26938,23780,41351,23727,46942,22965,64488,41955,82664,87427,85584,26658,75513,54024,58169,34569,69185,24033,72277,55909,72539,30070,43549,18058,26982,58449,15855,83212,16110,55455,19858,28313,64257,40902,54965,91148,21299,86681,19430,18156,72420,60388,61733,71178,71703,22241,94759,82836,94908,47928,40767,98516,98793,36673,51603,28758,43199,24481,43117,98137,33840,68665,56203,41021,16428,79385,49647,72517,55115,54368,11401,10712,26105,20413,37728,85606,58073,37892,71623,69039,42549,24393,10046,42878,22135,72900,84488,26935,61919,38610,41829,52880,42285,49618,66171,77714,33356,36041,70442,65985,45572,37679,46560,14397,38211,37415,64291,97364,34177,77135,58271,63386,99319,84023,42603,66011,89971,55033,28005,27294,70335,56472,17345,49472,99695,77509,11133,24116,19421,36598,40727,53014,66223,41999,55014,29163,48067,34886,59665,87798,93201,41486,90698,39040,28569,35931,61632,55789,52259,87168,42362,71671,92024,23625,49447,20137,89596,48967,18311,62520,83405,85931,83142,66464,62835,34077,79851,56048,73906,21836,77100,51801,28305,58909,53455,14463,20964,92338,69107,21054,16812,54874,99317,55537,14213,86689,98337,34161,29030,14874,79080,97991,73137,92443,93656,45904,88043,85946,76708,90490,64557,40673,69616,45376,16085,99195,42435,76212,70606,77911,13416,12864,62950,62680,26339,17589,86280,90900,71540,61854,95337,55188,52772,35955,42962,74604,11958,57213,11584,97002,99820,78104,54161,34358,35281,31261,90656,14246,77133,39199,42412,55928,84480,95229,61233,97140,63144,91419,50662,45254,49959,90927,31372,79814,49693,97073,74342,89584,61080,65730,28158,22388,36131,36301,88583,78700,17042,70807,49470,20783,68902,68658,61640,58651,69203,40633,61866,36009,68467,20076,53485,32134,22838,17678,79324,79077,59097,63262,12259,98119,71726,10665,71722,64094,30754,15924,26736,75306,36666,28544,19454,45552,77608,81150,89923,78832,79413,58788,73858,23865,80088,66117,28829,82282,44825,51420,28893,79957,39393,54686,74732,64218,14724,54290,76682,84704,35507,43265,46743,68817,47909,52048,15921,51031,13054,22992,20559,92148,54182,14534,30351,42071,72009,37907,89999,78458,94426,20388,41888,87209,48452,42509,74509,20708,25626,35325,63331,29814,34976,65640,68160,46587,76788,26369,11969,45153,78446,49926,41489,35754,28213,89980,24313,81503,96561,25751,83075,92082,38976,18434,59905,20154,14973,56630,27346,92284,43584,40724,85703,60073,31654,86578,95645,31049,26704,37470,50887,18333,70668,34903,94885,87178,66759,50108,41150,32624,83610,71547,83755,54002,52698,58392,27482,13378,68634,71043,84620,57725,64714,76753,78481,95088,56586,20762,46925,93212,15104,18944,53960,67805,16385,65414,56829,82532,95828,13191,95823,28428,87114,49125,43595,11339,91939,62102,12986,19278,10321,25835,39874,47251,51033,49018,82077,50393,63435,84059,93910,76256,14417,16218,79651,23421,78282,50311,32355,50344,44143,59121,35491,63283,28775,52290,39611,94149,65959,84210,18320,62578,64630,89808,61357,33159,47005,86109,15981,70240,89649,18730,43286,44019,75972,72318,56807,62856,72616,86400,67647,63501,39539,29456,30798,84058,88212,90043,69104,71324,11983,81602,14127,95452,42422,75802,14099,96357,75137,82025,39656,44595,91197,99022,58046,39356,52127,85167,42528,67795,23676,37363,33475,65376,21887,13594,68216,93859,67788,55375,97824,85287,71933,12753,21156,76557,12721,33154,66500,83278,86702,13443,86412,41863,19476,82504,83064,79162,85292,12070,13831,83935,66046,31009,27732,93690,15669,48289,74140,32912,35014,24874,78644,43354,21331,51297,52533,89404,65318,33520,25127,56293,60778,90625,56365,36997,29823,25600,79630,25765,29087,13167,22803,17798,43732,39439,63193,89901,21632,91311,61153,98602,71960,56199,29148,85891,51047,92328,56338,31491,76035,90931,52872,27165,94107,14552,22752,53481,50107,43256,13643,45569,17824,57173,58427,67063,96706,66598,80600,44252,72198,62270,24709,99442,99479,94877,87046,28382,70033,79900,82148,43114,42319,22178,57452,12527,60317,93820,77849,78991,65242,42785,78431,95141,56112,30762,27446,31774,24046,50108,95185,49968,40849,85331,77489,82708,35734,93706,77780,59744,87278,52977,25653,76229,70436,74333,57788,77179,46129,93705,90784,70670,98465,33980,31405,25747,86650,16269,87474,90571,87527,34077,20360,58497,82123,38319,91199,20032,57240,80138,45372,68463,71660,58253,49316,76475,99677,38494,83808,86607,92914,77779,77706,95060,25514,15627,71081,59521,81156,68865,80035,12102,19919,23195,82827,94518,42606,28687,95014,57619,15113,31376,45480,56940,58038,68641,43034,61339,92022,53788,51551,84368,43183,99548,17038,92254,46448,64085,44334,91460,17107,83218,70712,38638,88663,35133,70196,74396,76315,87552,69822,30059,49128,94472,49117,47115,88790,35805,66111,24858,86342,46251,66837,32524,48912,52537,25872,18934,60939,65199,91317,36236,21147,78800,88120,90340,50826,47619,85682,70783,74723,21372,56440,81492,89343,99334,27840,73624,58778,17204,39027,73236,69241,82135,14348,31932,90791,44838,22433,12985,78419,45861,71908,57779,45857,36858,68641,72243,95790,16180,13797,74774,29711,91300,86891,90132,16363,71427,65609,90128,37087,12636,66929,74612,14656,30311,11999,35104,36334,41799,56800,51113,83060,83078,88644,34529,33164,31328,75386,21284,86277,56447,13760,38313,99832,31794,18297,39694,89852,13823,47099,16053,95451,50750,75433,81848,97319,80382,48442,74666,24214,72394,33689,39739,55530,91519,80240,66610,86374,93072,95800,94849,90738,78710,50387,85670,67950,72836,86815,69896,80516,34225,67715,39682,81810,60658,60627,93995,88507,39439,61847,79540,97472,33831,63412,60787,75688,60022,49897,58365,48544,19235,47269,57805,63721,14192,17853,20361,71453,83939,59385,38128,56204,59504,67630,34126,29198,97851,48502,97934,48645,48864,47302,99186,23933,56066,59601,82840,13157,35061,45063,25758,13932,49888,65878,74505,37099,58505,24911,74211,19861,70334,53279,66270,72679,17049,66384,46730,56682,11326,62625,22729,67294,12032,73179,52518,55347,74307,59478,17748,10758,59532,79134,69782,89505,60476,57581,40109,38580,69296,64291,48262,56736,71338,65068,19360,10889,93045,24319,37725,19467,27032,92267,88368,54201,76602,56532,10765,20660,79782,16101,95958,35167,91365,78529,15178,77796,21152,49760,42720,82045,91155,63583,87366,92588,25937,14233,27256,82349,29037,64817,18899,34404,15563,64147,39824,46429,94179,96098,65136,84528,50612,99708,14166,45387,30011,73575,21913,11670,66929,91318,69523,65453,47878,27056,89064,87252,19546,40718,40023,87937,88583,13621,57097,34656,66965,27607,71799,34733,84018,12029,16278,20681,54682,54844,47932,88922,88282,29358,38854,29992,74946,39505,71246,79582,29755,73653,74879,28914,27807,31981,30665,89331,60211,57569,73911,44847,56346,52835,97937,12094,56361,77670,45213,54451,37621,51962,43221,23512,22128,82720,70976,82991,11686,58071,47913,18319,96618,49616,94460,94534,91777,58014,47079,23652,69659,56184,87167,84026,77493,65221,16905,13827,78496,95153,85658,88125,92859,60804,19455,63379,62469,13587,86929,38096,62908,39253,32113,29619,51479,55624,83794,36635,58965,82483,73473,73250,21237,45816,40570,57076,77765,45985,10666,24648,97294,51070,79402,60284,20283,38456,86529,50658,45182,12855,96644,16417,52690,85927,75131,17506,41208,19026,31966,57375,14943,98975,41742,23638,36365,11201,50088,49421,89864,70107,28039,33949,47127,21140,31934,97235,70807,42605,11392,38900,11015,36434,68307,82550,27574,91643,92378,74432,94313,92698,50391,55088,84470,82812,58856,25117,52135,81886,91078,25542,35310,86179,62027,91234,15103,71299,89393,83206,64776,15911,56431,99575,72228,49062,87778,65060,83231,23120,83076,75223,67762,50324,96136,79333,95571,98566,81704,68463,58867,67011,68261,37356,35632,34854,96682,57670,87700,71024,68376,72403,35667,27213,66559,33065,38209,85451,57010,91290,59801,93357,26976,71624,16560,98757,84668,91320,50261,33255,23845,81146,50528,69160,86532,60133,54196,58468,18383,78155,42327,35567,47804,21562,60887,90234,38767,15788,79940,74229,38243,38358,53850,63359,31325,45672,47642,74146,14810,74871,44217,93270,40230,21244,71080,71329,49152,77940,43931,21092,62201,72248,64956,60113,24045,87918,77997,63522,68370,26344,47481,92308,87836,79128,19052,51041,67032,83107,71284,32765,18703,87587,95319,12783,20095,62133,15020,93093,21808,57530,77032,18801,71569,65346,34058,30409,96915,15762,16204,73963,37403,54490,35771,32473,18798,38655,65613,18525,32593,42735,62605,32022,59685,99057,60051,40792,56469,57996,47732,60362,62219,26809,61130,56824,34964,18262,42553,88711,27114,78023,21014,54307,90865,11603,20051,70142,47133,42358,88646,37800,62348,78389,63811,83812,60212,98451,77261,94507,73299,25789,15339,16145,94106,44251,92335,51216,94488,30895,65633,70916,73913,24770,45745,20694,90528,26059,51785,56111,64770,91717,52070,94088,64062,31720,96709,54606,23787,74539,82964,49271,49992,59032,33371,32319,11372,62849,58660,77442,84124,73307,95528,31880,84281,39595,57519,87775,50588,30827,27708,85516,31093,20795,56800,76290,48712,73611,29741,99677,96511,94064,42044,70050,89080,32957,90885,81534,49909,48313,19689,43705,39191,34373,72483,64071,94642,28344,43694,19749,67860,99955,73156,83932,28608,42630,93966,12450,73772,86208,77674,38196,99020,57811,26165,90832,67239,54343,62169,36870,43457,14802,53354,67817,87754,26389,15707,25996,91133,24550,68506,84267,68466,41427,26378,10645,51119,46283,33588,64132,87112,61035,57610,96834,38792,10929,71267,85981,57204,34648,84128,92844,18937,67044,16810,86487,76256,31787,84341,34675,69667,64300,27445,20068,47890,38110,46295,53454,14746,26754,92746,66533,30445,14961,96979,73680,36601,42109,73899,18633,62349,48545,73757,43100,63552,61832,67216,50492,88904,38896,92350,77944,16495,94706,72761,88655,42618,24305,80878,65387,32670,48023,95553,63610,72261,42066,30363,30393,86401,62718,18584,34126,93099,75081,36431,67282,29090,68113,91410,28590,86794,42821,65199,53790,41010,40563,91919,87718,27609,96431,60772,41807,70067,59100,71097,45327,18817,24391,37374,58601,96238,26566,90410,27255,69273,69503,15404,91220,52586,81514,10758,25842,87899,17289,91930,48558,41674,38775,34594,16406,17542,49396,45103,89512,97130,16496,13993,42891,43272,38548,15664,67194,54669,99483,34618,13878,70202,28828,12947,74493,84239,32941,79632,45456,87759,38657,63762,93704,24063,12162,54101,28122,23677,52346,51058,60967,75196,25414,43319,29570,67395,29401,39026,52745,30399,35379,15792,74209,70706,80211,99245,81820,29331,24140,60082,90846,87367,84856,35290,85440,62839,18043,46168,62248,70609,73681,76924,18191,70801,87818,73893,23001,34982,23987,37564,29096,37751,53945,92427,40235,91034,38767,65617,32984,23656,81449,30482,34042,32925,78270,52353,26683,90309,24145,83415,62282,71975,52638,45554,78610,66716,62593,22163,81854,12723,68750,33947,33337,52448,29109,69209,33428,43556,58130,39866,39183,46065,23398,12052,34347,89707,61343,28067,44024,60315,49403,21499,87519,15364,30791,18223,36104,70183,52294,86071,39824,94772,35045,47457,19512,17389,76617,91358,68969,64810,41964,98026,64629,64420,83584,20261,15836,21873,24030,55892,41934,13172,30115,68092,61280,41149,42019,32680,44380,98160,67683,28387,61568,58301,79088,98236,50832,27469,93712,14848,99630,55955,48596,27069,43320,30811,18464,65447,27263,41829,39319,77026,70213,35193,33452,36281,62749,71592,43688,13461,50532,28027,72010,16958,90174,86451,64543,66269,44972,48205,51752,44034,22575,31234,71294,47600,74616,61885,98797,53864,99972,14641,55554,66035,56828,28628,39052,74847,59651,49133,69458,61956,74401,67243,24998,31734,57977,60662,34191,53004,24262,67093,72752,75808,30211,79938,44854,17900,21141,89355,44877,26938,27484,78273,54359,85455,15196,54839,14701,63606,74653,41189,54919,23659,77815,47034,49578,32373,12074,51851,42353,89146,91975,87456,63540,49577,94041,93960,30937,23482,16220,33194,75187,26718,64997,17412,75276,87681,16646,79860,74977,19534,10892,46185,27133,12656,53670,77445,42006,17004,99118,48806,46196,82396,86430,64973,31980,78201,17113,22574,96164,16800,41104,11845,79233,49168,44518,37243,58361,53538,28800,65512,24195,62875,44712,54187,63031,57298,96863,24520,87802,98792,58411,65120,65767,97884,44511,78150,20341,31011,50230,21471,77830,74153,58819,30528,97044,67352,81776,24151,22651,75883,60922,38373,79215,88560,25241,75089,63410,13179,71408,35351,87248,95149,89057,47414,81200,74007,35898,46618,82705,19618,53561,40561,25772,83452,20581,38681,90099,47142,74590,26107,41477,11134,68065,32839,96380,51343,93224,18295,95145,25480,67347,62054,56271,67067,57880,46989,70285,18197,23372,32584,41793,50270,56897,71611,21842,66795,60283,81435,63114,25468,66561,28040,58390,24744,47859,13917,55035,14964,49634,22418,16013,50771,15991,11151,54323,69334,76964,74446,40884,44916,19082,62160,46232,70307,92165,26671,67784,65192,60430,13013,92211,41694,25550,43357,46719,52737,56800,90112,15552,95134,56325,23940,82335,48523,19847,48347,97353,69675,87870,84922,73655,49020,24791,90238,44233,61741,62148,11074,67913,83929,42780,69718,29488,79532,45815,19983,34057,44884,71326,78625,59443,43804,47123,93955,29443,36315,23326,59395,16741,24822,33217,65060,72166,34108,42671,57246,68689,19907,61760,31972,34532,14809,68381,96619,79027,66993,92548,23305,80410,44094,92046,64406,92093,35569,85782,52755,92261,98079,81521,64695,96879,55439,11929,81888,83114,34746,92605,75833,87644,76013,61898,20217,48608,53855,48841,78166,62480,44495,88336,43897,49012,50508,85340,19617,76020,68481,21996,63507,50014,62462,34981,99528,97500,35431,56195,69080,12273,15623,60868,25113,95852,56772,21136,95005,68296,74523,13291,44982,34015,70593,43024,73054,15366,26646,96960,22064,81411,17712,79804,40496,65188,22872,86667,33683,70192,81585,24037,35575,79370,51875,85230,99297,22348,65287,65750,16022,94607,87795,63842,67633,80041,42788,60698,68240,72867,66755,87925,81049,96882,62108,99105,57159,91470,34104,78214,52129,33723,44768,40842,63020,71863,24253,44281,52392,78465,98021,82559,16611,18080,91749,45087,29557,85970,21810,76079,17996,82147,29920,10501,58641,49138,58119,52536,71166,65398,48960,62987,89481,56354,21908,72285,71105,34943,34029,90875,44450,10928,65917,93342,88444,14735,82752,99242,32315,32642,24116,59413,36419,94927,25128,97579,96136,75814,57417,79725,82957,91620,93963,89398,73077,34356,85725,54725,61026,14916,26268,15019,35495,31112,91897,80394,56480,25174,33902,76972,55821,77426,92318,20062,58926,59034,56735,56757,32708,31653,23593,39454,61447,96153,92648,95829,28949,71179,23995,60327,26214,53766,16527,68885,48799,36731,95549,70694,65631,14255,25355,56495,74266,29039,49120,94465,15089,10218,28135,40600,93039,32608,56834,16101,62677,55102,91151,61354,52276,67424,93746,48859,33604,37122,45526,15560,33671,54612,58019,96389,14328,24998,98026,64214,88713,56371,21910,75454,66402,54241,10364,66476,28523,39366,13177,93361,36332,92597,98128,80385,98030,39572,75827,71610,98704,28198,56416,20824,71602,45444,37034,95394,23693,19170,72146,14892,12836,61968,12736,81656,23023,84699,80634,54990,51978,93964,93034,67780,49096,91982,93263,16609,89159,52333,48851,38367,58990,33887,22470,87600,81912,86606,53022,96096,41578,71662,73265,19546,96029,93163,54328,40852,34019,65446,13722,67732,74575,40721,44769,59283,64993,83220,33365,83268,75948,38390,72968,62241,88501,77942,10027,93231,16284,52301,98892,40892,31568,44209,93619,63970,83104,76129,55980,50658,46389,67310,91796,77319,88621,42325,36122,21733,39837,52011,19484,69127,88996,90242,33688,11755,88758,17192,60568,33763,90617,88150,79557,27425,96952,77824,22536,17648,54669,26660,51005,30039,34139,89016,56584,92801,50732,24709,53613,98157,27876,34035,89694,85490,22404,53744,74554,20456,29777,27815,33699,32363,30584,15196,78110,62870,42153,93309,23954,55055,48277,92589,78399,82762,37018,23219,86708,31141,18340,19553,20855,26741,24208,60483,26652,76977,46266,56791,74017,70066,34677,38287,75681,34227,56616,96911,66665,69206,57019,64421,87637,44582,31740,35237,87517,93430,33602,53971,32705,17919,97776,76212,92845,54405,65304,96006,55656,77678,34587,34630,43714,70806,68152,62239,81992,43767,65813,38433,25346,71560,31158,92294,40242,33550,57571,86062,12715,57288,56157,35722,32197,46793,23461,71020,52716,96082,42085,83592,62873,27161,70167,48082,48857,25500,59676,84807,12266,83611,29226,45924,81493,34348,32517,94479,62863,24331,90159,45241,50956,44797,44985,92474,96745,20845,70955,66483,22621,31095,89967,75316,99305,12041,51278,39128,85257,82307,49033,97870,96455,46855,41642,20293,19337,93299,24515,30209,29481,29661,21116,78652,38397,60478,29377,62689,50845,10469,96128,24766,53575,32472,55988,59560,27927,85170,93804,19644,75758,38027,26136,25148,55830,73999,55404,51408,92950,45136,55536,12571,14450,85667,71837,22915,64556,62840,68217,18164,12916,35850,52332,87792,75643,65330,58080,58579,36707,50536,81735,32189,98178,67647,78893,67515,40167,43246,21000,72961,37543,22413,76818,25262,15085,55379,87646,58134,12636,33639,20921,87682,23308,14430,88909,87814,64096,42517,45342,63036,23729,55719,11955,74973,28995,49087,78062,34145,44876,28630,52132,50698,39899,66482,92300,94827,80279,79175,92501,39994,36570,72921,99625,20051,25564,51429,76944,24419,70827,32246,87079,97109,73396,20638,87285,33899,30886,76051,86618,11098,46763,18109,19090,10774,65421,92542,70276,32082,65998,88162,14433,23110,14139,73624,85072,79126,96096,58001,16880,59318,49431,55854,86440,79231,55160,21087,80518,88738,61285,48649,26200,15771,64720,91071,53689,12631,74524,15112,28645,13332,54720,16185,10740,70552,50652,67202,89072,37328,37663,48681,95571,76365,41741,29162,12356,22205,13527,90331,91468,73458,59635,53328,53506,53721,77682,62053,46548,50899,51069,13652,37580,69832,34095,95102,77589,25992,65064,40637,97120,66150,42467,53961,98577,61999,65721,69916,25729,31506,25188,90439,61890,78998,40783,14903,42317,83611,84249,18025,91742,36965,65696,47390,73218,76952,77085,98499,39718,92850,17465,93370,92869,32553,98945,22351,22425,17353,62129,56786,97858,15315,44454,75211,81347,83524,14014,33683,66797,44851,86034,58944,88138,10960,40498,15252,15326,75102,91052,85611,29539,12177,57563,36160,25659,91400,32186,42169,72538,59549,51517,38683,66834,77509,73860,91973,92394,30357,58370,29539,74251,42279,37004,45007,80562,62411,47603,21725,33351,18333,23437,45573,47639,59927,50335,34561,24891,28388,91440,76896,15047,32562,36202,79817,45859,97870,63477,49343,14868,56608,57678,15917,84360,17892,36167,55096,34525,46502,33754,35621,26106,48198,51366,14496,79501,77530,60149,76978,84474,53997,58438,94489,78675,22990,11416,23443,18916,62566,44609,91440,52355,85298,39594,54305,36481,56924,24316,25998,91078,98008,95088,36390,86399,36672,95723,23574,77279,19446,64106,70911,55212,87356,94620,68788,48027,64865,10673,30514,45371,60013,14597,82040,86104,58349,38778,45274,92787,71647,12148,87011,73580,77367,44340,25095,15446,22068,48956,81866,25652,70482,83250,93768,96765,12457,56605,12199,95387,68828,50010,71729,98589,55592,84620,14216,41508,76569,93650,30446,38140,76180,44448,53361,55660,56476,77793,19766,68572,11825,32671,79638,36584,66770,72706,89555,83658,29684,99526,19353,39788,64415,24635,32465,25472,34475,77806,40026,98579,90652,91544,19212,58744,15036,85050,75612,73382,82967,65092,78859,52602,45802,40750,53240,68649,41229,57898,35858,33807,50107,71498,31287,26251,43320,52189,57260,17218,30216,36639,97255,96438,80766,35798,85123,77372,15419,23901,15320,99045,37095,60201,97162,22650,97546,57241,75246,81443,21327,86524,12474,87780,16906,20718,46674,50356,20174,30308,50385,68791,59694,64758,19598,93859,22091,85980,80244,31603,82533,75690,15170,75062,65726,44244,51744,24731,61484,51106,33756,52124,77274,42211,20807,22990,77045,36694,70674,33848,70213,99549,15428,98535,14966,87729,64419,80619,41623,99583,16385,77684,59452,12808,26057,69307,34622,88827,10014,63393,62551,38410,94150,48245,30738,79051,43340,96169,98468,86897,26761,63614,45299,63055,28161,23023,49364,93820,48221,51935,93454,38746,11011,15854,22151,98187,66223,76422,75535,21066,32772,66790,89078,59706,21074,55650,25228,19701,56669,83698,57180,28850,33180,74758,51557,44173,79908,12863,83882,59851,29524,35704,97201,34263,75220,77442,26158,27788,65512,53170,69313,86503,35016,50863,60841,23584,18931,69335,70122,95208,14290,40368,45069,50786,85680,55725,92882,26011,57135,19869,15882,25343,71160,40025,75060,22050,62236,94367,73972,95208,81986,72841,33862,56036,88076,65328,61340,56970,19398,97089,69935,57996,99037,73374,25622,83166,79481,19034,51854,94545,52643,76799,53418,94333,11821,48404,14943,46636,84165,57037,88965,71113,79185,94270,95794,65168,61241,77021,89194,89718,51875,49734,45865,27387,32748,81236,56067,76242,96479,93478,81762,42850,68827,70948,10913,49108,72801,40406,94414,47822,93416,89698,38539,97060,87031,57965,23544,38511,94482,71333,42018,14027,97977,74660,62730,43242,88752,12822,39311,32237,25963,52205,35010,33416,77341,88328,41572,75589,68152,37234,41573,76347,46769,34321,76915,20071,59487,51079,53198,83370,74598,32487,91873,44187,20602,11868,32613,13320,70487,67275,56976,11867,74196,29385,65505,57012,42895,41268,66266,99496,59034,83831,14877,96233,56245,38919,74627,44517,20753,72349,71328,65781,43342,29989,83202,11714,57834,65294,86204,98208,36009,61738,37014,85309,19879,76411,45003,25126,89867,48215,24150,89502,12205,60276,45910,87169,31187,82820,98400,29919,83051,33483,53283,39988,66488,69939,44015,31816,79198,82177,22172,79265,54670,15830,19086,31912,24113,38491,81491,93139,66101,90997,60103,35513,45105,13355,25619,60854,13975,41251,20675,59200,99970,20004,35989,45481,46447,83719,20296,67076,41205,19981,98621,50462,99303,70040,13182,47736,13270,22702,76603,86616,69447,67047,47088,79707,18681,95356,54756,97593,55788,88693,72474,54206,74832,62632,18973,53830,23172,14594,28811,88271,65958,32589,70000,50801,79717,29698,83679,73039,21603,83685,85175,17568,37139,32166,21663,35849,61825,77387,13265,23586,90359,71149,59499,27442,92105,20649,55167,93667,71582,38666,27053,81545,11055,56125,62083,56021,33850,78916,58041,69225,99089,68457,89246,95883,35618,61481,13609,78689,60787,94539,64640,40030,49469,39593,75449,75764,57799,37853,36128,10943,92688,12760,32752,46026,12068,12559,79450,31621,84724,61145,13917,36092,88877,93117,81647,21677,23241,84477,85965,23342,33411,42784,33516,92931,20318,68945,12287,60694,79793,42215,44753,63368,17099,58656,73109,78624,19861,81556,91116,15170,96351,14096,10482,24496,73626,61649,96068,26177,93125,59365,27760,72838,72136,40819,75946,53480,97741,66869,79252,96337,29682,18119,32394,35312,50740,22052,72884,63194,97703,64153,52362,95901,27552,89647,69083,94007,71445,77074,30721,44657,57235,60988,98588,31530,22464,28558,75591,46368,34227,92915,57633,37693,69144,18449,73026,65887,75799,18515,71513,45333,19570,21365,63740,40810,77707,62172,21986,84514,31055,15949,31085,71582,69610,91097,28772,66921,12083,60309,92366,45086,51554,16038,54924,28576,99438,24805,22816,80731,24743,60320,20087,86487,92955,55404,62180,33817,17644,94949,78111,86404,18140,78763,11735,52498,21467,25739,12754,42037,19054,53891,65544,38672,35907,59681,54100,31088,57219,30174,27479,28534,81419,27815,11165,89111,86648,34565,40010,34343,78596,44534,49080,69623,94240,33624,86913,62820,89819,81752,11382,17333,58384,15780,21320,30035,50148,62773,59820,96177,41166,28964,48445,75117,93005,63801,65670,59268,70562,19285,55735,94052,96928,54892,49220,93027,57574,92328,75396,21869,66886,57645,93411,65711,88119,11643,19704,40955,13641,69308,17830,93415,64259,92859,96110,61939,80167,92304,53278,55240,90679,28220,95126,79892,86682,59203,90978,80358,44720,34564,95548,17806,53160,69471,95507,46802,42896,64404,99131,33026,46440,97553,48677,34152,26346,63661,40628,76138,39887,97617,37970,57741,17961,63300,13127,28350,16324,56909,91661,12053,46825,88424,57637,90985,34372,13584,17892,57731,66898,30582,92197,70528,36923,85548,64442,57745,39960,88041,59646,14105,44046,24759,61755,17016,62925,12771,74221,97718,83524,93688,93845,17299,29372,94189,21479,52470,19482,88162,63694,99792,34166,46031,59402,16498,39015,83463,47773,97273,39274,29133,31920,75281,30104,34003,43228,25281,39412,25924,74819,49518,16723,79763,29111,71050,27605,39869,84562,82697,93446,15859,11747,27295,31313,41172,83841,94455,85713,14642,89326,50556,85247,24348,74849,32740,69813,83799,79815,89358,72491,38112,10816,19172,33872,80319,77589,61353,26393,11944,19303,21830,46989,46920,62529,10440,83672,20193,76782,62942,69273,73987,81990,28013,50682,11016,16070,83567,46891,18766,90873,92879,84667,47552,17592,71860,30875,76151,27198,16941,20079,73036,71113,40052,54245,85002,42407,82565,10249,56625,54561,66398,43961,29452,84569,30561,32905,48612,23456,66697,57103,12262,42919,36193,61747,92350,21390,18234,56791,19299,77266,68051,87740,42550,30089,43001,86102,85960,92547,95718,92522,18292,63263,81103,84694,92918,56044,55551,60691,29771,56798,76558,81967,69363,14467,40170,72804,56682,45663,97080,70996,63619,81033,22456,95679,75112,27748,69351,68070,91504,69211,38779,66292,14318,37938,37540,13652,16319,78632,93436,56142,56585,17649,78101,77275,71858,72113,29436,19786,32443,94954,90269,55386,60517,86761,13830,70330,55100,62774,11357,44539,37693,13029,90714,81584,48490,44946,95700,82440,68514,97563,73499,21530,40236,11832,43997,48901,15520,17279,34394,71461,87592,63528,52056,79927,43214,31282,55520,19012,12076,43374,95258,89897,29817,22089,16466,96131,77074,58465,38483,38754,57750,57729,40375,18901,56258,66796,58958,24082,48506,78529,57715,58883,94018,56836,35336,89095,72669,99780,86122,22901,82039,74643,68545,61188,54678,72835,62491,75123,12122,44956,67821,65411,88306,57426,92156,40629,64075,17193,34622,81027,36387,36317,18531,88622,60970,49599,90109,25709,73444,82695,89168,36160,88528,15444,98372,34982,15795,12769,67223,82702,18598,61082,33782,82232,34625,50129,47222,96645,67145,12474,55641,29429,36756,32083,78562,14155,93086,74136,42831,52475,22305,47323,67427,59453,70373,12178,37313,72189,23719,91765,78517,80174,41911,48083,18164,72463,41028,87548,93140,85115,21272,17412,44887,83188,55051,83688,82835,35057,81191,32604,22113,38191,68581,45259,83904,47346,52820,27587,62495,94419,40058,40283,13507,43380,87950,51606,11566,13088,28256,55923,71607,70239,18863,48710,73903,88508,41314,71748,49852,47918,50027,86629,81241,18848,49460,78205,68814,15116,79668,21231,73996,64850,32985,59524,61532,64448,79669,33925,77499,66427,79719,27616,69496,45200,91215,22375,48664,96107,10080,91527,78851,80448,56568,46028,24358,42133,78833,42224,77985,69441,67552,38684,83506,75248,77543,78566,98914,41810,54904,82479,23774,58671,85260,13153,64527,78413,34334,60490,58489,90709,15674,97068,57574,19785,50890,97339,13037,35864,41758,86389,94350,67560,93566,56087,37937,57979,41778,96140,21225,76297,13497,54632,63398,34049,96715,26925,68938,65914,49561,10824,49298,22837,63826,79325,91882,78032,17998,27267,34239,66872,91481,54604,62684,18810,19259,57214,60918,49611,42780,92578,56034,10504,65909,53718,80151,33796,14760,41355,52079,44633,48211,25184,80412,19003,79600,88806,71435,74365,40144,96318,41626,47929,48385,23949,37610,73741,86669,22350,23192,31835,43081,93220,90669,16174,69401,52545,41727,44536,47837,36412,30430,80044,81863,18016,73379,68896,78724,56527,10755,20530,35609,46353,28331,33417,55089,72672,73558,62494,29897,32208,69326,54441,75286,26877,14852,77806,99752,84196,12308,19814,20948,30222,98161,25304,89844,98046,11792,15858,39933,96410,25687,42252,63736,91560,96379,89812,22956,79475,45528,37887,27903,75325,75996,29031,85330,24171,47337,43433,32736,66129,15528,99030,79697,32071,43900,90427,36313,43670,91810,53495,38234,43347,87795,74093,19121,92701,18002,88448,69534,48866,60745,75089,34277,76214,57023,63977,43562,41935,14361,78563,64243,53143,24387,60507,61017,84190,87933,43733,80838,32164,18740,85078,19235,30588,28248,16479,57039,30702,99473,90529,36360,82129,75879,55828,50270,78446,29360,63076,33677,67788,52927,10386,44133,26977,65048,32100,27508,84775,41875,40441,19306,43610,47290,93994,64527,12739,26520,62387,44943,37450,38391,78215,66382,14026,54410,59882,96093,54960,36798,18944,74288,60505,83289,77296,29433,36768,83075,20579,40776,86453,41298,98366,96969,53993,28332,98378,82221,17465,59780,14812,27141,64629,51561,12965,62625,12680,92895,44293,12677,58079,30720,70816,30714,88794,16548,59578,38869,29572,34034,17565,49660,61304,19807,41268,27473,91368,19106,12933,21963,95511,38228,24420,29156,21339,23151,28956,17520,62191,22123,73357,34859,68721,38575,25423,75340,64959,33476,66898,50155,73452,10738,10766,28383,55614,95732,69820,88685,28769,13093,76462,13927,73275,54300,70349,90708,91946,14299,27396,20229,42340,21001,40476,23160,62717,82528,97820,11047,79151,21029,20367,79557,43084,38130,34997,89955,63557,85417,27184,29257,88561,69881,88652,36430,63709,65855,65706,17883,44817,35686,77775,79283,17927,75514,60921,30793,30771,28261,34500,39345,96769,85239,28183,27446,56620,17473,97112,73352,34393,71527,82142,37745,59329,21089,15940,97096,32751,33487,60781,38588,63183,73887,70836,16720,97814,14776,50786,89478,12172,41328,98269,97790,45924,91636,82841,10634,37488,40682,32167,97557,72601,50723,35456,84535,81713,41603,84728,24226,40962,62600,53797,24428,25671,62252,47472,27132,48015,27225,15492,20358,82958,44119,87222,92452,89573,18335,10365,41155,21838,88084,19962,26918,49481,99484,25275,69936,17222,94939,69462,42520,13860,87497,34094,79941,58914,22849,62176,96063,20638,43727,51708,23943,66789,26541,52698,33240,91526,61951,93072,82141,12430,75158,96727,36199,73668,42160,45565,38310,73816,31086,92657,11298,65245,23573,61722,58038,75152,32053,42938,96580,22881,26381,67147,38790,62893,67651,77211,13205,78959,52361,57469,61491,42907,86839,87987,37428,53937,19780,98924,29042,82465,78286,97739,33954,74242,22454,63736,72366,48397,75382,20689,24348,73323,31475,69828,26178,28460,45531,22875,20008,19571,63351,12430,87649,82254,28304,11729,31440,56706,14582,96782,67677,89931,78219,96806,16638,70003,47154,87931,17254,40607,87389,43090,13382,59756,87278,74616,34737,33039,48293,35157,54854,41584,77261,81887,95810,72900,48169,89103,37370,51904,19988,79667,59111,72222,64647,56729,31387,42816,22408,98109,49974,98518,79335,38488,81987,52819,89928,43395,92676,40453,10063,23387,75094,25970,40922,36118,71547,97602,89961,81583,27175,77603,77149,36173,63991,79280,35581,83197,10845,96021,75064,20056,21120,82745,17275,66047,46985,95064,81022,44344,69779,66313,47020,53744,50275,81873,65751,99652,23528,47376,36581,27985,95437,94532,93754,57553,13427,11400,11089,66068,15071,52640,90788,77214,12058,47750,40118,12348,25484,89395,33385,89076,27569,35574,56216,14287,51129,56787,19451,95855,58513,68786,65604,28397,45896,19565,72896,40699,63472,22564,69501,95618,54392,26408,55341,98777,31461,50832,98580,70083,31460,51210,66775,24861,41984,97621,60941,83476,72529,73031,72250,97201,22063,67575,98138,28101,46293,42812,69792,75410,17915,19103,57402,48711,39475,93586,13496,86667,46824,72777,81568,95268,79613,19805,47784,66442,94820,22070,48647,10440,36675,53165,69821,56157,53741,22724,47915,89141,11212,98731,95176,54496,86865,49397,47939,60109,10223,58044,96150,69430,43585,82772,14260,42114,47988,33840,29574,30179,73196,99321,29699,82249,54360,24217,42350,33698,40629,69610,92220,79909,46372,43511,42250,25832,85901,56769,60441,25318,90043,97555,13325,29263,27444,69860,74180,98194,31699,46005,36605,59604,51526,90232,74925,16275,91011,21128,44925,30510,24419,38711,31874,83183,39348,27052,73932,74606,24876,82618,89103,44900,88906,92858,13821,97482,97555,71575,61569,61135,48330,44348,15355,89010,36961,82742,31381,60924,59696,74110,51389,45796,91773,55934,46894,98803,19771,31906,82795,21015,55747,63052,43306,76267,76397,60612,34994,18198,60691,55326,50074,57033,33625,95600,27621,40811,26350,31473,73904,51256,15850,69581,84526,10285,31163,72860,66137,47205,60221,43237,80562,53430,50007,30114,91355,86548,18347,97776,10350,14641,47403,29605,71933,66222,78845,64394,21227,91804,82458,86608,54140,48292,46349,19975,35006,60049,46251,70100,29187,26038,57483,24580,76080,16929,46491,62235,12039,13796,16330,87963,67309,35330,13979,44442,78796,95839,53278,80430,82205,68150,74557,97862,10963,13132,23735,73902,58798,59422,10340,46949,78654,11266,31300,65025,81792,91710,57232,69663,29562,22165,28717,70571,13563,69971,74395,14160,19445,64996,76144,51962,87347,41591,96145,24626,86831,70759,46052,91315,63168,51896,62785,98913,69962,28937,44012,13509,52203,85861,12409,26889,72522,43964,43242,38602,25798,31837,66047,63102,26575,21437,38744,14164,65553,67755,76759,94809,81030,94135,88376,88184,11961,40046,46163,94168,75950,57137,10515,66745,26322,24131,54033,37777,24004,34788,81593,42416,20567,85519,53025,82155,85037,15616,26436,36695,90470,15623,95257,56624,38265,27233,26789,51085,50944,64430,36516,29344,57142,81983,50936,72622,55549,11949,59480,15102,17070,74097,16387,17732,13714,67554,70185,90778,87359,97962,23946,26729,74330,19932,48763,27288,37117,71488,25076,23888,40017,48678,16829,50415,79784,49307,55779,14799,96453,46843,39903,94158,36628,46515,12575,44240,27723,84329,64230,57275,95557,89105,22998,13950,72840,10705,91574,25273,61748,51958,12335,55501,38045,36669,28901,98363,18009,57502,63963,17157,85049,64493,99197,62542,58501,64040,74095,73866,48420,26663,72204,42994,30407,47314,67036,14109,56206,43917,47325,31207,37643,35526,97420,95624,13402,91448,80348,59529,64079,61430,97129,32272,40920,33412,70021,34722,29809,65890,46565,99437,85095,22973,57281,93570,89661,17735,21747,71084,24817,37599,93054,55814,63253,49865,15047,71120,98391,72939,97548,10884,72102,65174,64320,93810,66015,45286,95483,71129,30384,18489,17084,50478,55433,28435,45594,69879,77364,21408,30292,71872,46584,42497,92861,70218,78008,98005,14485,37052,64089,25025,85863,19944,96134,26428,26271,64103,76862,90803,95386,59745,23277,58412,14770,37858,23382,80394,50227,76436,55681,58960,47360,51773,59343,54197,71703,18077,31924,76734,50648,42291,61315,27004,96237,60659,45321,68558,33777,53042,79736,24755,72903,67389,20648,40036,62736,40568,66794,83578,44700,89647,76988,70994,94367,54539,45867,22869,40716,91768,35967,75871,30476,76715,34888,84782,16057,54134,22790,78656,71486,32919,56501,29722,91828,94641,41433,19896,11265,99836,97875,79809,27054,89728,57110,63758,63544,35617,73375,12650,81187,20434,95856,74156,25396,90700,91780,74494,72040,78705,67082,57577,38627,43034,17736,40501,82071,66875,34779,82565,24252,57024,80064,21214,63290,84371,55393,19481,29956,49362,50833,47587,75925,18144,22242,47256,28311,79765,19437,74235,95240,61830,84864,94616,54741,16757,32824,23369,61028,66090,78187,80166,23231,75346,69117,39420,91697,85387,78001,37281,69435,10673,85060,17234,41229,74893,18550,17861,46145,62106,51845,15221,53035,46798,87969,17668,57753,50689,17599,64397,57226,52154,73583,63194,99418,96827,98981,76312,15047,17573,96378,27533,20730,93709,60065,13370,85334,22190,87451,77101,74674,63321,13610,11494,61070,26903,98443,68015,43855,33107,16492,23449,39100,53032,50909,60929,81395,71893,81736,76267,89518,43429,16897,85107,79850,90525,24622,70108,90906,88208,32369,78061,22278,39749,32675,86901,77154,90365,72569,27533,10141,79097,56105,24981,19739,64712,66005,80546,96137,82555,53652,33406,92653,91259,57641,12154,34062,35833,53400,74563,47374,54316,92498,82760,26111,85103,51383,73866,32377,34282,12953,74783,80243,88664,51132,86311,92669,55629,73033,99542,85163,50973,19142,57661,24340,23397,29007,43156,45531,52510,99453,64268,47826,38127,63609,10892,72632,31607,26589,52802,23789,43538,85304,18763,22888,24996,21115,47598,40023,58609,60458,15556,73974,90762,33062,14115,71237,50786,78467,16772,69451,53881,39505,10484,34865,83036,87430,83752,64602,81503,32752,78002,66122,62069,31718,27401,72457,69288,45430,38132,74896,47235,50161,18010,33740,45627,27469,46980,30933,55733,98975,72483,66541,32180,39361,42299,80569,39618,81674,78847,76343,77348,84666,74782,66930,67439,78485,93739,78071,53161,33794,95213,29520,36920,82712,69733,56771,22773,62510,44552,37403,26486,99115,46490,42518,33383,89976,97968,16415,17906,22896,45714,33594,15441,61549,31258,89713,54424,29304,67940,26067,77758,76734,40819,70052,20607,70134,76397,51566,78811,66331,81233,25715,37862,45531,20998,25317,41450,73671,40707,91836,28210,31068,49527,63275,17119,10604,54126,82807,96977,25481,79714,86390,53532,53657,91509,76705,29706,73059,33039,46666,78420,81941,29015,54184,96055,95091,13867,41818,41051,12327,85570,29043,76631,95670,44111,80280,22522,33634,62801,49666,55203,58276,52230,43924,29723,28042,89607,15817,92246,32530,23657,97517,59859,13218,40116,12733,71280,37176,31847,24120,91125,81218,92016,24974,74568,78803,59408,35756,96989,91206,47811,24285,61791,25613,35480,74854,99010,63438,82562,61064,44600,10646,78998,49543,18311,36034,84098,50057,58875,95095,83335,30918,78957,96183,64990,95606,78397,88530,66203,13615,54743,13111,90744,70290,17361,80839,91532,98821,62607,55651,75082,86499,42692,87842,78263,91878,14661,49486,98148,14479,85258,98790,84814,54059,45966,67707,40572,82541,20492,17917,97525,24097,72253,18667,80506,57101,33427,71393,16041,53083,41516,14869,81725,84398,73592,83404,21179,94818,28351,53697,66183,74730,81559,50741,14031,96667,90702,96828,45698,27156,43275,45998,83644,92585,37251,84008,73731,53159,57591,20216,58262,70173,57324,35520,28703,48280,13506,85048,39579,28090,83162,44152,96305,13350,69833,61549,59951,99814,50087,88822,73179,50023,52799,96461,74463,96973,74761,95928,53408,16312,15157,22370,51715,67722,17192,37017,93514,91720,36831,24942,12334,85187,45969,10514,23006,87713,32189,88444,58910,61589,14201,87280,66667,92642,43980,61415,62509,55749,15982,75856,98777,36814,82703,46246,13606,32718,12277,76488,49595,59553,10636,54981,92061,86997,90007,63746,39403,34911,26887,35104,39431,55565,79174,66662,83886,43278,95804,45402,41584,77925,78369,11244,11341,20144,48840,43384,46597,65715,39466,79501,91958,93549,99169,50125,87404,75366,59886,24812,30192,94497,35863,54628,75980,47981,58253,61907,33883,55079,67182,97330,59244,85929,44112,10741,84671,28414,74790,83323,51330,77281,72946,52797,68818,80953,74172,12119,73849,74959,65674,31978,78746,70686,81498,57975,41600,52816,60519,18614,36606,91874,11670,28800,66177,89849,30661,59292,45179,49846,74433,59299,90844,20535,19350,74238,89465,70051,24701,87679,80299,83798,22557,11868,21250,48936,33553,65386,45849,54836,13735,24604,30829,43211,47952,89402,81462,86948,87567,65398,13126,97690,98963,59355,60042,75386,26789,84593,42497,56101,72153,56575,91017,26870,76095,40875,20518,46893,34203,61068,64799,29643,84812,14039,86142,43277,59108,37814,64891,41762,46931,46091,77035,91411,48686,75580,84306,80652,99661,36600,36198,63597,22880,93837,64005,63963,89264,89891,74325,15941,90197,31791,86752,62306,75256,37659,64748,77790,74080,58929,61972,28308,71204,40734,84258,20004,94002,62558,45622,41678,49789,46029,77446,95559,83518,26409,39517,93389,34282,75608,40551,47297,65976,94048,44173,84628,23654,44429,76985,52148,66391,40100,54168,41329,84671,38083,32060,40092,64269,65819,89527,15370,98184,75551,37371,35355,39005,62358,63168,53985,12963,96417,85245,60647,40449,36106,61312,16435,42487,26707,61561,47351,60288,55857,85214,48090,25972,20086,51224,17573,19317,69724,15749,57800,74740,26639,36689,65155,51345,10119,95872,84489,10959,21296,79671,22032,77918,42818,59568,47502,54059,37318,56429,26232,45300,65625,50651,40440,91324,27714,38034,92266,26713,88127,95099,99716,81250,94085,45270,59912,99337,57120,66064,28250,94231,51155,32070,60976,23896,65640,25737,35310,47672,94538,60475,83282,81441,58740,55951,29285,16288,27580,34198,67370,98330,77257,88385,98305,98539,21460,42808,61465,85987,32317,38297,58655,60088,79322,25915,67966,24333,32257,88775,20964,28174,88838,62491,55532,70704,97823,64883,47415,91152,88691,92322,51414,93677,60674,39608,28930,41551,23394,81572,39026,50589,75247,83622,59960,41696,71424,34556,42116,21824,13635,22638,95952,17773,38099,92413,19438,59189,51301,42631,93917,93862,98422,99169,52935,70702,55916,58765,90356,98539,37522,37132,23060,16387,99332,40461,28559,62781,62635,11947,78310,58263,49163,30511,83067,21806,70266,15188,53471,70686,61332,34185,78825,70033,81302,22896,31592,18346,64194,41014,81096,22588,56214,13487,22248,35280,97998,24742,33881,54708,90752,88726,82880,34128,20773,48590,79377,36591,50569,55399,18740,59563,96283,36852,53015,87345,48150,70764,97092,36771,46897,30246,14096,86344,65706,66157,92238,28107,90525,96532,85984,13656,17082,53170,96910,21762,45862,75565,22448,27912,82174,10180,33920,34999,52874,60374,86788,44054,23616,25864,68650,69166,85104,51816,62407,40205,76550,97782,73579,74767,55041,97199,70054,30305,66416,47399,82651,39011,34996,28464,98086,34701,95417,16790,41639,16693,50638,61945,15723,84656,11298,58077,34983,40532,15521,14334,64966,36646,36415,48080,87038,10439,51186,11705,44054,53139,95657,39407,14772,77500,28310,83431,50838,50413,52034,15700,51021,30047,32648,50670,46384,74172,69381,12468,30589,42086,82747,32217,71169,49629,86251,96353,97405,31952,95826,10426,57946,59946,67808,68063,16831,74003,20824,22954,53604,56443,65144,46710,92057,53844,79578,65951,28453,74982,79377,74067,44731,83212,75308,95469,82976,13314,32445,98186,98830,14911,69207,93972,48259,83208,97945,12924,49254,45226,11114,16490,61392,68769,17490,40340,77655,12510,34250,44029,94642,15925,24516,88769,20761,88953,34543,40404,87127,43819,17280,20878,60883,49839,62407,97438,42761,65523,42747,17397,15775,12780,68108,23886,51903,39147,54800,16869,86215,69176,49657,30222,14281,80023,54514,28386,26814,52971,46136,40836,80753,10979,41639,90261,41072,39358,40443,45531,71683,74821,20343,44505,68499,46979,41669,59096,96749,49983,42543,79265,95887,17586,34498,43140,83106,50980,42193,93192,47588,57304,42037,15608,64711,60312,47025,64719,71770,64687,65935,78235,11315,88042,62480,23629,30990,67852,16700,15165,37188,81241,53424,35067,10762,79029,81588,65153,82119,59535,34292,68232,48066,83154,28132,31882,31094,69659,35324,40119,92654,23203,38067,61196,70965,66627,11539,43055,25332,93497,55800,51730,54366,61163,34908,99583,59175,56388,90674,14548,65468,78054,75448,22384,12660,67942,82899,67219,44523,32018,45811,48211,14963,90602,42386,96170,76282,19918,94631,79757,26230,97877,37284,18835,57234,90756,61931,47068,87585,30087,66190,63889,76480,98185,57174,53186,87244,85048,78041,56127,90142,61218,95343,78655,50893,11361,94600,99234,71540,90764,23287,49278,56571,24055,12639,66534,98037,26442,78807,87307,41054,27341,86000,56738,63490,88012,37501,98638,75704,88764,87140,32869,61922,75178,22772,35971,43429,44811,95400,11377,85757,20782,95617,42249,80616,51726,75173,34766,84099,30049,83067,30359,10321,72657,62093,28071,48314,13895,13118,75976,59722,70006,17803,95401,81538,95571,87111,31824,28023,20167,39833,31992,77247,49749,40827,91351,65994,64237,33286,77226,46015,57315,96934,54831,13954,91470,92300,63959,49833,88505,23690,96119,70201,12653,78292,68852,76963,93103,89532,65179,26157,42941,76342,32592,86472,39302,90776,23404,27698,13206,53494,66265,96766,68344,54481,89208,69764,80923,90755,40421,94943,10391,81807,65600,79198,31128,40614,62355,42628,10130,91482,92775,49450,45207,95393,59391,51047,29230,15657,60717,64415,12938,35457,64768,58988,75279,70036,38978,28117,59853,40463,54401,79528,12887,21295,82465,62830,58664,35769,86836,18993,18699,21841,38694,69366,86423,42778,61223,72322,78632,35969,50313,58671,49661,61632,25340,73736,88919,15375,27142,18900,21258,89816,66214,77978,99353,19320,37329,54371,62531,32220,95904,17181,65916,33438,11397,96623,16430,82854,41034,76905,16217,12935,39185,17243,43318,29892,32485,36755,16494,94114,36195,36001,87340,46642,36444,65169,37869,80760,74355,85749,14122,73445,92531,77237,78511,75122,82175,10429,70205,69268,83652,43425,13521,71667,46187,71778,26697,42504,96000,18508,43291,81135,60560,87625,92117,67822,98727,42613,72995,43546,98167,84208,74738,31481,96698,11757,61512,13022,87503,46692,70708,62401,63053,96332,21353,43912,87760,84510,13942,95481,83073,97610,52140,14059,57445,32658,87749,87244,70849,96001,90761,82683,10626,29651,73242,18150,88148,11196,81581,44851,42639,46692,61058,57607,80131,88711,24087,51152,80873,36431,62394,59846,34692,43709,64765,16743,47074,56766,87229,22176,42242,67083,52870,32977,56344,21021,21786,34054,41915,18590,18009,67361,61679,71435,96416,17397,86363,35135,70131,76846,29179,23408,81872,88182,86992,55803,81251,82618,13399,20935,65208,84693,95629,74907,81794,23165,85992,44847,28144,91525,73653,26599,71387,82408,41651,87228,66405,57942,50907,24659,26119,43378,30824,39036,28215,93386,20031,98483,66280,84583,54891,16537,10145,63089,83146,93446,63799,65371,35441,17306,64711,35417,12634,41751,34437,91366,46077,84121,20840,36839,45232,72589,26095,83908,89174,32921,13590,44171,50017,63144,64718,27626,81161,65757,38189,43251,36784,61643,41643,21475,48496,32177,73974,53950,54358,21875,16068,59953,56842,22589,85646,42271,26401,43180,43934,42600,61954,83923,36776,29493,49713,30584,20829,77759,53733,58179,20793,33923,22341,87114,58036,27361,63055,80652,57107,46815,30185,46518,57051,34499,17897,11995,83925,15642,47659,44276,29554,29642,81436,34448,71847,67436,92111,62420,43564,43346,17433,66667,77901,47237,74821,58806,46881,60593,13478,98869,92260,38059,18872,26318,18720,50821,18254,37731,69469,61274,65577,74364,94580,25531,70373,71799,98983,67835,35946,21247,17666,35207,51801,73057,11395,72233,28066,58161,81398,95296,64329,77355,86489,90465,14855,20464,46998,24550,12494,18698,66016,27905,53532,45032,95086,33562,25140,35425,76353,65759,69064,79609,70113,64626,27580,49251,34623,90650,28418,33362,26639,55819,11720,62587,77236,82965,54999,57304,42797,38546,40443,80184,97928,26589,96263,59781,17573,26491,36276,95188,87762,40134,57538,62948,40264,45889,79781,70816,29866,79818,20382,99806,80494,38475,80914,82652,66756,28194,59460,12280,92025,83726,61079,49655,84257,61363,52510,26279,55743,28566,13193,56915,51591,49529,10630,28862,42449,19750,84189,25685,67273,64759,15273,29945,27785,92761,53475,72327,77705,29654,63947,46999,41420,64074,64916,90618,84922,36456,98141,82570,86318,26554,46820,49215,35576,39078,87775,16344,34620,59313,58741,39834,49885,44386,71437,78889,16019,74824,33304,38703,29559,12894,86957,72061,47495,93956,80517,80772,21343,49895,75156,28162,86905,66244,16653,29363,26033,94570,44021,17575,26721,42134,79871,90702,22670,84526,86245,65676,46666,55070,54775,36216,55383,78696,16723,52754,50215,16857,60454,70859,97081,19577,98112,75380,25421,31593,10422,36014,42622,44350,54896,67061,79227,36998,44729,72095,27806,85878,69658,89706,30708,58498,81881,80446,72168,40501,76734,60489,85711,76358,89747,48789,80243,24017,40016,56121,57840,56121,89277,31321,24052,12269,19973,90417,90487,56389,29957,23108,33394,87894,98998,65870,81866,71351,36825,31089,92732,13801,13739,53688,58562,24963,83963,44116,17798,72696,32156,62482,89290,20058,58459,67782,92917,11151,77449,48657,35218,48048,98963,11216,29771,16568,32189,20426,60005,93396,44255,84727,36647,37753,23838,11108,15531,98898,75617,14628,36068,99108,38842,12376,83764,11741,55703,25317,99613,84761,54078,79883,21345,30450,33089,72517,85175,88017,26278,71399,43547,44374,73018,27949,51606,83555,20590,36452,95359,21594,46974,67957,41989,87820,65481,86418,74324,98159,42987,66769,55249,16531,60238,96488,52588,80483,30923,74954,77737,38268,98387,43301,84173,90034,87238,25308,66879,18649,54155,67875,61182,78739,25099,43914,87582,11187,58207,29967,74707,10116,89489,30566,17321,39439,69352,21366,43251,14416,17092,38427,73518,14670,61364,43715,83413,50315,33651,83103,43867,43636,85149,87813,78866,39080,27592,30080,99819,17856,53068,88154,38418,69170,27766,91868,13929,77421,71058,59431,78348,24145,17026,79431,43327,55556,63486,74458,31570,68136,56810,74152,89234,12892,36651,17530,51724,20969,55967,29932,28257,74292,21209,60716,94005,28490,39819,93988,25081,85747,10619,17852,96928,42460,63110,80112,48981,64564,42034,81996,90034,60615,53111,32080,70458,22149,95188,45066,74515,97169,16289,40946,53373,89271,35675,23475,37347,76339,36167,95948,45980,73017,28011,13008,37056,28826,68682,25940,63500,51306,90333,93639,92808,30117,65587,11090,60711,86906,42898,63904,83230,97670,74182,51380,61905,72881,23748,14945,86936,26092,92938,33802,84391,20956,97403,25032,37051,68597,56422,29729,91648,65277,75209,16052,88975,95380,94844,35032,56740,26446,67112,50450,19866,80483,89909,30372,23333,86783,27369,58449,44117,58030,72275,44002,55555,79273,60300,43193,11701,55619,91397,43090,57101,41425,74656,87778,22738,73286,95636,15741,38007,84522,75507,11050,77219,36613,20277,68243,30982,90581,34898,59474,10347,12357,18250,19704,29805,88099,79621,96644,16354,70781,99562,92811,78267,14607,47321,62096,82668,64187,40293,36242,62419,45934,20457,86188,77389,53726,81681,67294,39503,79593,81283,43199,78628,56794,93769,82165,10627,90297,87670,24606,11534,24097,91423,87233,21748,18376,31468,16087,23767,11706,20812,11680,55084,34854,95393,73084,55330,61028,78889,14251,42769,22242,65235,81337,39783,47715,59208,47437,58622,29175,89402,19775,99582,31453,48883,39043,23765,75173,64077,10415,89600,88422,76432,55773,36802,66604,32673,71545,61258,92875,96246,29758,85833,65564,13248,57480,58875,69119,62371,48225,86271,93854,19292,74713,10352,46631,99226,34171,42129,34395,54833,98355,52224,68252,63848,99045,89866,17172,48735,54698,22714,37716,44632,39986,25854,24633,79946,31152,71756,93371,99478,57437,81143,85540,84434,24384,64306,24153,99125,91235,11180,60740,10406,18764,47163,36433,80104,24511,52699,75733,12627,55518,44233,93443,58267,57062,22773,95759,99381,90780,95370,84302,30150,42101,39585,49623,57370,48358,24945,22307,42632,53009,39493,91251,98728,97787,50187,32547,11358,73318,15567,60659,90598,74412,22510,49625,48368,51298,20351,69217,59327,63923,52211,64365,62913,61550,87841,31518,87868,10437,97069,12301,77810,70044,62734,89216,13817,54435,33789,40096,98866,18839,94370,32030,91198,29780,71622,84223,28581,74026,48690,85478,50975,93635,67349,24602,65233,27099,11961,88098,13754,58614,96175,55711,32291,82935,81673,93872,38310,70052,86238,27353,81044,81723,95137,26277,31841,42377,64458,78136,67241,20161,48071,50472,66505,91327,77662,45424,55166,35683,38677,47023,26821,27876,26031,74007,48532,86755,79225,78175,96039,90136,72105,59863,38430,90256,76862,65540,14758,90240,95691,41735,67098,95975,24581,31042,37687,76972,59136,87382,96657,21869,23435,32339,63553,94262,68341,65880,84315,76742,35747,82145,77886,48925,46236,30655,62763,94155,74938,33002,48967,63487,93386,92862,91874,41765,89368,39100,32233,72222,84678,74602,35266,60076,50812,51290,25664,28819,91087,31629,22649,99118,48461,35435,42766,96322,43294,26843,28224,22810,96997,70198,22280,60085,23036,34802,93601,13955,49923,32741,82899,86709,59963,35572,85267,16764,96170,36567,18876,61160,85114,75639,36554,38031,71594,99743,64587,88418,12536,81091,81526,68705,20788,62148,54782,25428,15072,22159,77186,12769,69311,82459,10397,50505,89295,39525,62239,49148,88529,36793,28264,94626,98967,97489,24774,87215,56803,10273,54895,90631,58234,29533,42438,78770,71163,34996,41179,15919,39964,69962,68139,85831,48341,49784,44927,77718,16634,31278,77855,52679,50464,75321,35722,23264,56596,42433,60989,42149,18954,13250,60777,47765,93194,83420,55050,14921,73921,91999,67059,54546,16104,59497,41864,35012,78525,38374,95953,84572,46401,78071,41919,25207,88627,98061,70238,20607,78143,26922,25100,17599,72019,42119,10835,12069,68659,93858,93771,92031,37157,57182,42130,95358,81393,45147,84535,94983,12505,62448,17882,13778,50744,10903,40107,18813,14375,57713,28190,70535,96086,29766,33784,24724,89505,32956,28648,33190,94759,21975,30916,54529,71563,75044,38572,61541,95752,83043,80933,46270,67654,80140,62304,81781,20311,78173,26735,95223,32419,69221,62505,54207,11815,89717,10921,54470,85845,88933,19193,29993,25213,39689,47931,95442,53109,58772,48414,56677,69635,47769,34084,45873,38548,43429,80120,18344,53741,83532,78330,74896,59905,96479,18904,50590,23540,69359,66004,41327,25324,31926,61855,42541,66856,98035,14215,63321,99832,49192,24544,49712,95373,75194,96551,22173,32552,32723,82175,43670,83715,70173,71870,74934,15106,48711,87110,77653,29904,55304,72966,82261,21521,93829,92523,87211,56966,26884,43204,18801,15723,90966,12760,23668,92621,55047,69245,61366,27793,33408,59348,68214,46419,71836,64820,83653,97512,56276,21571,11498,43433,37776,31570,40950,88792,60867,55256,13510,55543,99761,40259,15875,55569,14544,31432,72493,60477,85836,42591,52759,85672,58361,80037,80943,87806,47321,14504,52416,43739,99734,63075,47733,45171,26918,43124,48489,65732,27020,41282,47694,20181,83426,86641,66281,98617,28167,50015,61405,46279,25300,80646,32228,76236,68855,49787,52133,56388,48340,61587,58204,51361,15344,79846,97773,70534,85277,17106,81641,98510,44282,19286,28121,73527,80773,61940,26488,65847,40341,44061,98827,42204,44592,36842,35927,22579,56513,70389,47224,14317,90798,40906,86223,18181,53669,29366,55723,64256,79101,36994,21501,11076,49366,39791,59075,52980,23539,51317,80664,60261,87466,80794,81527,63312,82304,57062,55933,66408,98674,11834,98615,56252,66568,23052,97764,66654,11477,42627,74435,54689,83118,86855,70473,81692,25519,70613,17999,84386,60853,65483,55549,76940,11654,70269,66055,69477,92167,31460,63126,59634,16115,43616,50265,60525,56443,48699,78214,18329,82037,18317,21051,77186,63189,55158,80167,84510,54853,97409,20195,61787,64805,71192,18298,41891,62166,43918,61784,98868,98977,73383,71955,11449,10936,65458,69246,84057,76181,74931,42287,76897,29867,14931,41414,28226,15371,75296,12155,90919,50768,50296,10259,45340,82059,15737,54003,48208,10987,66089,48546,57341,25082,92234,91278,53111,52208,46436,58784,59178,41467,27752,35511,88523,98662,17989,41585,90261,34280,71481,86552,58575,33629,70729,67979,28607,56384,71399,45036,29902,27299,11694,91307,28798,30190,85366,17082,85511,83575,70506,36326,53320,53068,28588,51165,35650,52724,11226,51988,30860,34887,85165,83292,35200,13222,73056,34945,79779,15122,17475,60682,45382,37414,18515,16538,54879,74204,55741,40795,44133,19451,68170,46346,60310,81226,61995,65451,99829,43542,67473,82031,48302,31769,76394,71269,51998,31842,23934,81869,55806,33819,80365,97479,65641,41526,56059,78186,99454,37444,43162,33135,89693,50395,96967,18383,19317,86951,35225,88113,79953,50497,65979,44658,74410,61288,45391,38869,71855,15615,81712,84451,31676,31666,94380,56073,83855,48851,72766,72784,68841,11091,30887,74622,68970,74910,90152,51784,40051,72815,26852,54852,77459,45326,40436,34513,63071,69832,74558,96465,79389,74992,73542,44044,68484,58867,43859,40765,95345,47599,90279,59582,66268,37615,97828,42643,86377,22987,94804,21677,55968,13763,29828,81009,43911,19029,81059,69009,73735,48077,30842,99834,51235,75744,57742,90422,41141,51118,35960,33430,83501,23272,80059,39834,59535,58849,52305,78279,32058,28007,93493,61354,69778,27738,23175,63486,41907,56284,23418,91933,60896,28522,49512,52931,13465,88874,63814,99274,51397,77839,24763,40080,29507,60873,57461,42314,88118,78153,34998,47031,30358,13960,40028,13774,40387,96005,35311,52619,32445,40293,36781,44117,82973,89829,49654,12207,61879,28741,43238,68935,58829,69135,39254,38348,38583,34653,91125,99859,42592,20086,21963,73337,91121,94096,99105,81154,77461,73408,54500,26422,97086,56744,38795,35019,31077,93988,76403,91258,59903,11363,39963,31851,37530,85739,33898,17977,49438,64683,24953,76059,82340,90686,70423,79173,32226,59554,57006,57286,19517,70623,58350,40275,82221,39852,63734,17357,95152,88179,93606,32196,26222,16387,23073,31422,54357,63120,34177,22507,54258,66403,64203,47150,49092,77985,77679,43650,96604,29484,32253,27704,26420,46835,53855,85428,83052,52767,94143,87145,90869,64395,16076,73008,74077,48619,18377,47106,25011,82580,12410,68338,21915,88390,64019,47247,42851,82978,19282,45907,53056,13604,57591,85859,89778,67172,94888,91053,73585,15184,85837,58762,50318,52617,35054,41299,97794,43927,79737,42424,82690,75736,45377,40758,27364,30686,89295,40129,34710,94831,37213,13792,66604,78023,80186,63379,80516,65943,42142,88567,77025,88277,17459,50918,78725,32349,53567,36602,81912,84396,44248,52510,60356,92745,99555,22699,80727,60415,72889,80262,35862,43134,44264,13329,31124,40113,74819,46734,77722,96760,82692,14800,25176,36924,65847,29316,80430,93219,49479,15849,78172,65104,72974,24104,52712,26565,23825,91718,74391,74710,48476,15524,21616,14206,62704,36353,52441,30189,54080,30128,10514,34935,11915,83124,69470,60810,33164,78059,62365,93731,30222,78578,27405,83606,62410,17154,53291,85524,91177,61075,82671,94618,94708,39863,42826,34922,67924,71622,20111,99938,87789,48621,72858,83622,24219,97184,48554,87005,18207,73845,27633,12331,90607,52587,73791,39412,20468,56363,16282,28307,32377,98086,39974,19868,75963,43252,29675,68776,68417,69548,78364,17742,76707,12139,22991,20313,61069,26637,11770,57798,49295,74364,89460,76831,93662,91858,21111,32352,78615,28394,98429,99670,21621,48040,81949,50624,98021,28292,50809,51685,65531,61166,99699,65213,22401,27179,88984,76146,34327,25340,51958,11303,35096,77348,20458,93673,80020,34656,58944,95929,11325,48009,70637,39937,20197,82112,67181,44534,79166,85760,99019,14486,63220,64516,93938,41549,72991,15168,68742,95178,66262,74516,75434,88217,35470,36922,69477,23109,68222,53885,78651,84060,98189,39098,70919,67710,98326,21924,44756,85021,76757,71745,31032,16660,76319,57588,45003,55719,60739,16415,30982,14260,68714,17066,79256,81650,76583,41245,42069,12160,41780,63326,43367,91085,97552,16459,67380,32526,97688,13764,12280,87688,76323,72404,39992,28309,26483,67925,84035,21486,91471,84259,81094,86589,58966,50585,74825,31144,94833,88607,71408,76437,37906,90737,19398,83152,99467,25656,78059,73011,17022,47786,35676,29685,89650,36425,56857,42208,77722,85546,45337,11217,74973,93742,90926,66940,26261,16298,90129,96287,77911,76439,60738,28340,53296,38478,17807,29518,47959,68886,95548,17058,24171,27412,68080,99165,62924,21512,73808,43211,73723,99300,97089,84912,49672,55686,43596,80897,54887,52114,92469,55714,52408,36136,57451,48686,71533,78934,85095,93863,29749,97085,90827,73312,53768,66842,38128,13077,39287,79114,87454,23379,73296,87114,65868,93258,92446,27236,80084,88536,48953,15584,17993,19370,53997,63034,88579,38740,21873,11876,52935,36369,28966,87942,89582,99083,21109,44772,38385,94742,45124,27116,40483,25433,63373,26393,89063,18496,84993,42278,42048,60011,21861,75631,33399,79317,76850,65537,68696,86428,79973,81918,68979,97725,95760,34277,38532,31886,94510,85404,70801,31766,81510,58782,17486,50475,42336,17997,28724,55368,32299,79328,95674,87254,59743,74634,99611,48181,51372,31329,91444,25973,41180,26878,58791,53503,20356,69740,95239,30745,83919,87391,92379,84689,27354,24066,27484,44781,51616,86852,68893,26628,36575,72975,93222,29518,43232,31863,92307,89733,29447,47844,39525,38992,40029,96681,27016,82660,62737,62733,24942,10289,99934,29528,84481,14188,12190,39748,58395,34653,74301,36854,38307,64642,55286,30090,20520,89830,17197,87420,69975,39196,32766,21495,99266,96602,28876,78383,96219,45515,33310,87799,93606,86344,20366,50315,57228,48647,47917,92818,73591,79831,16476,44605,58636,92860,82658,57169,76025,39230,33386,69577,30304,59437,53129,53015,85372,23433,84281,37241,52269,99532,89385,46555,60791,71025,16340,96286,26447,79161,63194,64035,96911,40938,38575,66373,65103,75451,61592,64166,21327,35886,11670,77431,16987,98253,79941,26191,82358,23742,71863,13188,47162,24228,97155,94910,12597,75547,16406,17295,80191,59371,65026,81680,68129,61209,75998,10820,76797,24752,89477,69656,99734,78359,60072,32009,87212,95413,40019,88450,96510,11049,42166,52066,67482,68893,34809,28590,50217,53268,54488,87101,21122,83450,25979,53900,10600,75369,93242,18096,30114,96154,37697,49105,95480,40059,93872,87366,52964,79095,60735,24100,12767,16834,15044,73900,57043,36227,55133,14743,62113,51211,69879,58963,42403,90954,35659,21430,69670,41189,82347,68856,31512,32654,41547,51582,79519,53371,27411,80044,67368,22373,73715,61175,79480,80716,60250,15703,82919,82214,88662,51465,43017,76571,40007,60316,34150,69320,10538,18727,13104,50131,10607,12410,15937,25340,17861,46837,31910,18285,45242,33857,99562,32058,85776,28627,81796,59104,80357,69705,93404,96514,49225,42914,68791,79351,12540,67011,19364,45993,38790,33680,73944,26069,42405,95224,65583,57595,26013,62453,29690,59389,48690,43143,70379,17830,94465,59511,23289,79851,20704,25381,72815,88867,16985,21831,99186,12762,69268,91743,34294,42849,57625,14684,35928,22153,93987,88836,90571,27731,70272,24624,31840,79175,43631,11780,52959,31289,95663,87947,60327,17531,30673,22671,18747,61002,95305,75623,66378,26466,29768,92927,95341,44180,74653,22061,64577,14585,15589,39387,97153,68375,20851,34383,89684,81381,20568,52412,39146,53506,25554,23780,10221,60962,32471,63887,37293,13484,68222,43405,45445,58890,27119,90451,80386,16975,68209,64119,85649,21167,54750,47795,76987,20008,86399,14818,22407,48056,90731,62681,29561,63257,72416,22612,87101,53707,64150,35387,43354,20124,26736,83984,38726,87984,13786,45091,78517,73083,14552,25812,69999,63880,88233,82477,45527,41765,45700,60590,24619,64528,60663,42847,40289,58229,63026,90222,38829,55589,13324,18088,85785,88743,28944,85199,86489,55125,49276,85185,67417,89837,17064,85834,84596,21063,71609,32783,46027,35964,14592,57485,29996,43067,94862,56136,34542,33798,52019,11292,50039,68931,36396,44375,64822,32484,79115,71013,99652,70337,78078,56332,30320,42990,81451,76660,21273,75785,64771,37184,92652,93610,13332,22101,18640,31728,94869,58551,77989,50173,11357,69240,59168,92291,82219,89391,21712,24570,85581,69239,71203,68303,85459,83355,71627,84000,37735,29965,90196,41517,18384,85428,98257,33557,12017,19895,67450,97395,12638,24968,72209,67473,62122,98122,71294,36634,23744,78717,36781,27134,59151,83272,53913,92462,66683,56702,52947,87612,56743,69458,97585,71892,88075,78065,96836,53838,74948,32961,58883,10116,35448,34253,12856,60506,93295,98852,82988,93902,92419,58140,16483,43941,44522,63115,77152,42497,12901,88628,42953,60110,73758,68501,43279,80941,71379,80091,74013,58146,22636,85925,50584,46433,41229,83925,47202,23948,25007,30950,86224,83584,66741,98081,10338,18080,24389,74596,54316,81575,17611,60287,18594,70895,37026,52506,45229,94854,43206,60012,59343,55706,29181,54872,96043,32079,53447,70128,58456,44984,66178,16777,87110,16114,92786,56063,91760,42639,82449,17749,74096,70380,19207,86178,83900,88767,15636,38475,98099,84226,80581,79821,67790,76018,18398,20914,68129,71856,10122,69901,13555,70188,98926,77167,82286,51104,27207,61185,13085,80469,26217,78910,52098,49267,87125,37487,14027,67550,21252,34282,70218,92490,99374,17067,85064,21824,59250,32903,43839,89486,14867,61981,10377,25951,57873,24312,31950,93324,20883,14517,83785,99731,40226,10019,68793,36245,36300,53017,89659,32952,34818,88298,12087,30449,71933,54911,96568,59406,32007,38896,84448,64091,29789,35277,28689,82034,29642,20460,88523,79115,71929,69315,94632,36152,42878,71937,90690,87398,60669,92887,12709,42271,58135,32212,77409,95418,17057,42070,84023,94198,15655,81079,19976,34904,15639,13651,28434,42288,54802,50757,69340,42680,63812,45125,51276,86786,68562,25095,27970,64771,64150,88023,61279,81772,62924,13782,19217,61429,49752,43090,29145,93029,21267,91997,22346,47947,30882,11477,87701,64493,46161,66001,54084,89151,40676,44263,37713,79855,67087,67577,58290,47793,77317,86250,83481,26951,80364,75496,44178,78855,61269,59128,71558,42236,39893,91393,49408,22452,78374,93160,14686,89474,13081,25010,86959,38050,59555,51905,67910,13776,74519,46047,62685,66779,79592,21534,31118,12641,42991,54683,18827,86918,35603,42669,66411,92335,73015,63635,68259,69940,13089,71481,94869,94905,18394,78457,32645,20469,79546,18569,43659,50178,81077,64578,15069,57455,60997,28116,99963,78860,15344,17849,88131,84709,28971,80523,36228,16975,81617,85117,25279,95798,36110,42000,63110,97095,91456,95802,99620,33396,58175,50005,95284,14267,25675,81844,78656,76737,75913,54280,78932,63247,34977,12463,87144,89946,46217,78343,67180,27527,11577,47185,18597,26595,42713,77261,40974,28335,95334,67492,17100,50592,78054,51341,43716,81201,60344,42971,17965,36752,87859,37803,41343,32359,16990,41185,86970,95244,28850,68237,17842,61548,82479,33037,21406,35030,31177,90037,21782,69334,24976,54688,96852,22971,78336,96908,97386,59191,30454,36672,99315,57446,80793,20993,36092,77579,62638,53250,70312,10241,39673,63462,36913,43158,43409,54653,60286,10137,79039,79845,74477,68215,99277,69308,66113,66193,51712,60360,25970,29254,84939,74590,51690,92544,34119,39438,27106,15251,93580,99220,76021,10773,37165,93754,54850,78074,88438,35434,36035,49450,96817,41471,60172,30069,84919,55216,30227,86582,47350,32146,63326,16205,14794,81340,10883,37266,81714,55128,14095,65200,93650,19929,39580,15543,76241,82128,58357,84105,97225,60166,89424,66920,20476,80946,86069,17714,57680,88915,33509,77385,36888,39990,87960,37993,25161,70056,54732,89507,34966,96481,63270,20253,70789,90213,41284,62178,94823,48832,27429,58217,60833,53867,66998,11942,23457,55674,80215,32576,71489,72017,92877,43914,14757,35464,20608,59311,43921,27785,65228,78295,42585,93416,61762,53388,85460,35617,51048,84008,99512,86723,60501,78856,10559,19712,96975,79615,90304,58091,31483,93767,36352,80346,50794,77070,83405,60515,26004,47574,33226,85170,97964,71948,79842,99107,50075,29386,37044,19853,89554,79351,31402,60041,31853,90396,40750,65770,94866,93070,74635,67773,39270,31622,69943,42056,84809,95760,64821,38438,73410,59502,55644,23818,47341,39897,94873,96653,84258,91433,36549,73426,10495,23694,60132,54252,95359,52549,65718,40090,91014,29931,16345,21337,24915,43899,50420,29581,87867,54949,84578,37529,13705,46339,28352,84758,52679,28835,50435,11570,40058,50188,12024,81257,10224,10457,21802,65778,69988,76984,65703,73243,67104,21455,86214,48109,78378,20812,57148,84188,92500,96110,60352,43315,94285,86293,30511,83303,14440,94328,25619,29946,77184,49065,96189,21842,67001,45002,64972,11000,60425,33167,82572,34423,40282,31527,21660,55128,96617,49550,26034,87697,93851,32019,34067,77073,99499,22524,89005,67243,97045,33869,80189,83071,94824,10053,66292,59798,54575,74789,62966,47194,55701,77106,73486,98021,29143,89380,33380,31428,78232,66945,87924,23283,61186,62561,99875,30123,53856,11849,89201,63350,29937,75798,56477,37539,67239,72601,75810,98630,39726,47509,63814,62174,66618,78273,73414,74259,81610,75445,40300,59471,42446,16841,83831,88125,70586,19531,98050,52624,76036,85275,54048,98269,39904,64234,49757,93523,63199,95310,12336,33115,83317,67751,54460,29425,36776,17703,54908,40591,65068,11222,15616,29068,35966,19225,31849,23948,98318,14219,76763,56750,11228,70840,95526,69017,64986,55888,52183,95780,92223,83325,56807,98218,32402,53539,58025,34632,83616,50026,79324,56542,94965,56913,94834,14733,35590,29016,12078,21891,49997,73528,62421,55491,81408,46405,17708,15588,62645,66681,22003,36993,27538,92631,96187,15673,30987,53912,18840,70390,93026,90060,49458,95384,51261,62310,97559,53994,15945,76646,61639,57623,58584,86541,13473,19645,69282,34997,30680,99773,73775,31304,47875,11828,83518,63705,15200,57035,90608,91043,99227,77306,13463,76528,66445,51421,87384,30220,30036,14129,77357,58873,86013,38865,77070,53346,13119,73679,62195,70112,30289,26046,13688,87768,31769,93810,98920,86464,65168,65190,24837,30328,21729,96253,77981,27033,96186,87878,88409,20952,70627,38514,69135,27150,75987,67185,12004,20487,17320,80527,54818,30985,34939,12876,74801,46706,33998,19005,99398,17970,92126,48406,44597,41289,50990,52457,43429,54775,27652,12956,10420,70479,23783,66489,59650,18916,73022,51481,88053,80143,60005,58399,57034,23178,39194,35262,43107,72718,34275,92691,29485,85247,67200,85518,15558,33956,82214,95848,70671,66597,16259,33248,21305,12051,22428,51725,15880,28966,11114,43721,57301,49082,53235,39643,10557,66873,76929,14997,77500,80117,59411,23160,76732,75597,93105,66904,44974,13145,44182,54452,19477,73209,81084,94217,22620,26823,38849,73271,84619,64962,79210,22619,30664,86897,25073,30198,58791,41252,30400,49736,91699,39823,95693,36486,52042,76696,61908,64923,12657,33958,13147,47792,60397,71705,51873,32332,98128,14266,75639,54933,78456,31955,40233,81445,59723,87285,93545,72113,78550,26014,66000,50137,53747,13689,78282,24141,54911,82479,66578,32130,53346,75001,62491,72661,52528,73142,52967,35058,90868,66125,26675,22191,43654,33733,97260,73406,85241,15307,80516,66906,42812,76444,85397,95332,19207,74450,41766,67176,60755,76561,38040,64429,96039,58511,89267,88264,83256,70920,66578,61772,69147,23366,83550,54332,45844,45620,40851,30865,44050,17327,57367,53966,98040,30145,41681,42018,26315,95401,16664,34697,43765,57263,96499,40537,66525,19286,59952,36450,86097,67453,38479,29724,77230,58018,11586,53831,14363,74703,15720,92424,36960,90725,10731,80750,12303,88229,56797,52462,85378,55981,59144,22266,16058,90721,36291,76294,83808,47790,34349,30504,24212,99675,33003,70184,64136,19766,57943,83291,80999,87173,92780,25292,95969,18122,65522,28317,18399,27198,47106,50455,77712,38207,77372,86276,66119,96924,11910,47066,64582,16186,84153,52927,16497,98962,46962,89836,38496,21442,80333,46873,27364,41564,92333,83271,52680,70742,54479,90888,68676,14725,49302,18690,12002,36931,90102,45907,80662,59521,43307,45731,25357,90195,70876,67797,90698,91874,77930,90976,24441,95678,89760,62476,67767,56377,99424,61079,77475,62501,31683,25946,54883,88630,52316,71867,39374,95159,44539,19351,45384,75894,19990,86921,90682,16644,32135,94910,83366,37966,21334,81542,25460,82769,18032,39523,48787,12247,92386,58651,92212,97889,15228,42951,20564,45723,75674,42640,80920,70388,18494,94268,26117,21800,51984,64369,90869,28504,64315,13851,17361,14135,34594,11239,58200,21082,13212,78641,55891,60268,63486,46697,52848,26345,47065,96792,27150,12070,37434,78817,48580,52213,99444,67957,88703,13434,17300,11461,14764,61401,43714,36538,11388,24627,86747,12959,14540,57699,28950,33551,56765,93257,71505,74616,73375,33782,18497,62230,57293,65720,29475,12942,69840,19126,93426,12540,52988,62757,45150,93738,62756,42927,14350,41119,36547,41783,50083,14536,45411,66072,40247,83506,88530,61840,78485,54968,68851,83878,32632,75478,28586,44809,18798,46719,70888,34863,86689,30024,70595,63156,33220,27542,68045,43205,67242,56540,21622,35583,94253,77749,86458,25558,84746,44950,44250,57563,80166,43122,51373,67241,10890,80424,64410,95261,87759,10453,69751,62104,20187,87925,21583,61684,77894,16038,69360,47353,15281,94718,88931,37298,97238,87084,78677,88025,20008,29924,12777,12822,49055,10161,84048,77985,21295,17274,90250,18985,18750,64731,70771,70421,76686,76228,93192,17454,65243,10172,19888,12563,48313,61710,11548,17195,42018,20099,44945,58423,98042,41649,98131,37433,48355,68930,67503,72861,15187,60300,70272,44691,10907,90204,40130,59878,10475,94790,70402,18441,63727,94690,58076,35984,57826,38698,61084,51903,20996,24223,99074,45205,25394,45870,55014,37090,97539,25138,86991,23402,47966,85016,86337,89124,99400,59097,97223,74652,95340,46148,51043,63759,64042,71452,58337,46188,75816,81005,80359,18981,72165,36810,94585,44201,41217,46844,80175,71360,34731,99483,43680,96665,70446,90801,18877,64211,54558,80240,72893,48431,95696,58003,50851,35473,18261,89280,99571,52482,83124,49945,37098,15779,62526,15428,19249,10916,16926,51003,93351,32412,46536,60423,94960,58395,20420,58233,54567,56599,22347,81751,47980,19719,47628,50934,52653,92288,36741,10558,27793,79825,55234,41552,34974,18130,52192,89696,25583,34978,97840,38217,66999,62934,52123,87623,38296,96006,94438,16047,61222,59825,77848,68359,37147,42909,32669,64572,23157,82782,10402,76833,56863,75039,88396,80766,27737,59341,97110,49778,50764,36913,63904,16587,45039,88289,48413,24068,65808,40371,78461,80868,66563,12334,51111,27888,28006,52328,46195,15443,39208,70285,84540,13330,84548,90346,36770,66557,97409,17436,66150,40132,63340,67491,47229,43701,75261,33962,32536,63472,11121,47088,27317,24451,49631,57002,69714,41694,99173,45741,26302,54818,43621,53147,78288,53857,67508,38520,47350,70171,84560,91476,86231,97557,50633,76910,98393,96647,27112,72110,40291,90047,77176,88299,59011,93694,49214,81301,75338,27662,73741,36565,16447,21939,40214,18088,31070,18503,50024,79703,71578,40042,88299,95287,27782,64444,88077,64556,91056,50357,55476,13359,90730,62756,70390,68059,14614,75436,14154,26705,34918,47924,43978,54172,29573,60376,95673,62605,82542,60940,62712,14551,88557,97380,20119,90946,22185,58898,80741,73228,29793,60207,52566,70935,38342,73032,90979,61046,38945,20549,65169,84888,15902,59732,66443,36015,78680,77133,47460,90608,10580,66035,57994,10532,72686,34193,36271,74343,46513,52341,17542,12347,16926,42657,56811,16616,59532,42455,50532,44644,58381,66040,48479,36989,94709,60842,34133,10918,83608,50726,92360,98527,90177,11311,50978,32436,45162,22957,20586,22331,65978,87503,41895,41197,44449,26737,28411,65181,24603,15812,99053,48162,21793,27091,15495,97466,67535,44352,14839,47408,84875,34377,87980,95921,52211,45355,78032,66634,67204,13668,65374,44005,62371,17141,49150,35629,59722,19379,15162,21827,64612,97597,84467,63237,91688,43282,77300,98394,48507,81294,19231,74162,57786,60004,52242,59429,78608,69622,21307,48029,82478,45893,32321,87068,94800,65170,96419,91239,70047,11641,78532,89257,17341,22351,46634,66788,22732,54392,17785,45850,55057,82944,23094,80913,89351,18770,10585,90282,86366,12853,54096,16493,46581,73446,54668,16324,71834,42978,75227,57698,58191,72240,87607,68051,46705,74411,60337,79272,96303,59253,12158,49532,68102,54620,91048,40210,12713,25158,36009,97677,53176,75515,70697,30239,93762,69448,28252,82785,75273,47574,17438,54285,96287,53329,20421,13650,58144,95424,39159,88810,46847,71353,82657,74880,24151,83832,39516,13795,88349,97574,71238,26397,83927,11020,86627,77695,29987,51129,54670,27381,76861,80054,88928,31621,65439,82691,62457,93313,60249,20764,49433,87888,90904,65244,88442,53044,75098,50035,70974,24186,17516,99157,59248,92367,36210,20535,35472,49143,35149,89817,35359,84576,35269,61526,74726,58878,30095,77323,13102,66639,81540,68257,24865,82770,26547,17802,32598,66320,70792,60851,78000,78807,13029,36428,19369,59524,14407,69396,99402,67019,74061,31869,70793,42199,70777,93108,88821,45121,27721,64642,74306,26007,23630,78877,70873,71743,20730,95665,69941,30307,82047,93327,23431,62089,43804,32573,22770,59199,92941,89719,73071,46929,21048,79254,99789,84266,54824,27278,42203,48046,71651,30317,93428,22734,28532,67779,54735,91540,15926,19944,18016,64479,91869,22490,58133,43701,76465,83756,99369,71309,54005,25374,28137,24889,37189,49573,71888,64888,12552,30389,13196,98511,13191,11496,91468,96430,24600,45011,14843,39007,49106,33352,91619,94130,56320,85355,29649,21462,30655,37862,79877,55707,80939,17779,73335,59176,56334,49418,50787,61428,88823,21521,66296,75778,45221,64340,21930,36184,44484,85093,80847,63269,61634,13314,93434,19753,34615,88323,57567,75339,44723,64165,53864,59400,27825,65570,10796,41879,68126,23618,75638,95572,51090,74422,50256,60308,74194,84471,70989,99844,91651,14515,92168,23993,85587,30365,69758,40347,89922,64201,59325,56779,37962,27198,78474,95999,51004,37486,33225,64169,72637,86043,99027,75404,88593,90682,35761,15733,94530,77964,52623,64529,32423,92425,46825,79736,78601,35833,35978,52414,77435,20802,41947,79609,16997,83807,33130,97097,95395,89986,29162,66782,97919,11205,11852,65670,69017,13176,10934,66797,26057,62806,50201,20040,12635,27023,66344,59171,25426,65569,38618,83734,51719,79285,92321,97469,50607,44222,20781,61878,90426,11218,87469,71847,69658,47427,27348,24615,51213,23319,25923,11670,13530,81770,61353,73595,96601,34015,71967,28506,14353,15986,77153,33884,23458,32169,96583,61636,11572,67881,99325,47244,93682,76455,38057,49140,84477,13782,86123,25378,72262,23018,68931,26560,56392,27023,87393,82099,34576,47878,32921,30865,50386,13512,37542,74788,33833,36381,40000,52387,96988,46813,74779,36907,37166,62289,19986,20870,67038,89244,39855,53481,87766,32463,28435,11028,31229,68995,54256,14760,63994,29896,29366,49482,77152,16587,79993,46243,47392,77582,61352,54054,70024,61949,89303,39663,77786,77671,30671,50942,98121,88165,51013,88219,29487,42402,14265,76704,50451,39957,94228,54427,41194,83058,21205,70424,60762,41130,73001,48430,21934,44808,61894,68092,36200,36650,22608,54275,48633,54295,93366,85756,26979,26063,90003,52545,20345,74051,94960,51267,98279,93684,39833,44005,33011,87365,53291,62490,30828,30813,93891,81648,36270,80614,79992,91104,55174,37034,87972,93604,66575,60828,17799,70405,85707,57203,46534,94941,64376,74658,93982,50195,38662,93563,67693,13377,72953,75137,98599,58936,27835,32055,67192,85510,59640,41334,15654,83194,35669,99482,76732,46378,65911,47753,83874,31199,37124,23111,98508,62993,41556,11993,62109,88585,34465,56818,82597,80730,93123,95724,64338,42992,97522,54339,79283,26792,43745,81766,73482,99769,76806,36109,51618,67061,78731,20742,62855,33069,24857,62458,65227,44086,42294,86703,47767,15411,46007,94607,12975,62996,11630,99326,77525,10387,65681,38941,94867,12655,26284,98146,49829,65724,34948,95537,98381,81212,40956,42496,78769,55746,75991,20508,50427,32022,16715,93185,80602,12383,65179,71515,40083,52734,81937,57201,11539,30881,34081,98358,14469,80029,73642,31770,30085,71545,47615,27029,42695,14476,53781,22166,22326,44076,29508,29143,51107,73110,20250,79643,33590,22535,98402,60282,54210,23467,83862,36881,60631,59583,81197,85644,57509,58846,80997,41046,39762,13477,16600,98784,94799,79483,15289,64462,49716,76213,13559,28750,68095,40286,98504,91909,56240,30813,63131,30257,40275,36302,51386,28605,43119,10200,56698,66456,72247,32249,97758,94772,12856,71347,50568,62594,17078,69519,96350,22042,80599,39983,93841,97993,65179,74745,18124,95922,20130,42316,24412,90389,41297,29219,38938,97595,16860,65114,88867,19513,22720,11905,64708,11586,29593,74066,82121,44392,71853,21676,90039,20584,35445,93245,33233,54996,60294,86981,91629,33836,51334,48720,71428,31331,74633,19570,16591,52230,93067,13381,82454,56055,65395,63812,34370,99829,35376,58127,55204,26888,52785,56277,83005,45770,85330,29227,37271,34827,69135,19144,27176,10855,71528,27368,63874,11111,80255,76268,65286,77696,89489,20101,70089,98690,59086,94938,56044,66900,90381,38905,85824,67436,19761,97432,70407,95412,80407,76609,78057,43589,53648,44113,84673,12592,65078,53903,26946,64268,28457,58873,79680,76977,66428,25286,49339,36308,72386,77472,58102,20851,12266,46683,48835,31098,89245,40475,52994,87878,55560,54162,83514,75557,30390,10281,74139,77772,24921,49550,56193,67535,61950,68368,60306,63567,39562,73115,53377,33237,19279,56283,73787,23391,74209,83299,23997,14156,94439,59405,22298,47015,12077,70268,24294,78872,32173,27877,86654,21393,48773,60681,36381,41101,48831,30536,38201,73756,93034,25982,79513,60453,43163,65404,93778,38682,77782,15025,88924,56756,28771,60706,34740,60721,82573,88463,99640,12069,47470,89478,17859,53926,99644,94312,26617,49482,60187,70789,27496,96293,44474,90950,70067,94887,43165,43663,96003,80439,87627,81702,29944,25056,17587,20871,67324,88924,16580,23314,21253,73155,92452,80814,58082,28898,14888,60189,15684,87382,92035,43639,41729,49314,33672,13717,74417,92960,33156,31336,68172,38930,82910,47756,37111,94477,56297,32109,57892,40882,63707,25386,42559,28530,42607,87726,45564,31160,99483,28190,18621,40189,36953,11269,19156,46704,45279,86014,97954,69707,97504,75803,90407,82035,49013,54964,49409,47014,42191,56897,64659,29406,49348,89914,33494,31898,16968,64635,43552,56314,73489,75532,74103,60340,36719,15973,18444,15459,64500,22645,30735,39998,64422,74163,72540,68577,30516,35126,43478,32605,57219,55660,72429,95988,20610,12355,16094,25254,27786,37033,48111,74108,33405,62854,26625,92865,58620,38464,15617,55795,17493,76004,64006,36890,13575,74699,31629,29345,97896,75001,23612,84852,35225,79222,93839,20462,16674,41941,63531,70395,83591,19612,83112,46109,44184,14856,12438,45671,61468,52103,84763,13794,47632,18030,77086,47247,45860,85781,25217,23612,94444,71982,22167,55789,45158,64020,66865,17221,64823,42438,42402,66931,24613,96632,62501,30769,10627,47841,54503,45427,83007,45860,92936,25654,10553,90649,99366,90972,97288,87055,39320,26132,61012,65569,12554,73737,44025,32762,40094,55857,37876,69805,85489,86623,23042,61480,89998,46037,14871,64668,51666,98802,38987,39201,62563,24604,48176,53321,42134,11526,71523,59988,32565,27209,61568,58631,49164,79220,73237,73227,69207,32828,64856,44181,11811,43217,87935,68232,97063,49033,65767,58048,14679,17711,30080,86975,36944,98708,50397,29273,81811,96284,19166,60653,61201,26130,11190,63372,50227,57749,89885,89350,69478,74108,14588,54141,68325,81324,37186,43764,95107,12745,12197,44400,25975,46359,71681,74500,56535,12812,35448,63829,22724,80858,97326,89976,53224,60987,27776,99949,23202,87688,53775,69771,40288,10755,31482,57029,63720,61945,41421,65275,69085,79402,56315,25415,45952,93527,77325,31640,91349,39342,43771,46179,70644,38885,86895,14831,36752,85946,46988,29293,54685,42650,83317,94185,64125,30742,41644,53781,97581,31325,90549,75651,17091,46943,29441,33524,61855,70615,84653,58626,21544,35022,62087,83813,96965,88391,17284,67933,93087,81343,53721,67261,22348,70640,42771,76755,30683,69525,20705,58246,18037,40391,53275,85917,75705,57872,73158,34402,83060,96498,68889,33514,92842,56090,30850,50918,76248,46817,47882,95060,61534,91764,92017,97046,73297,22468,80429,18595,58204,61417,64373,80352,54042,57627,68807,69031,96620,27666,78640,87550,40817,77042,66971,51422,27690,99780,42768,89936,15480,25480,98743,58016,54274,12532,61718,89440,67571,22871,30090,34537,77625,33784,83005,47522,54257,77608,47682,23477,45909,62130,57019,34315,50322,33188,37497,43052,15726,16980,15877,22105,60444,29341,29357,42645,39568,66028,71911,38375,76303,78453,81532,82909,42168,93367,39618,54700,23151,51556,62763,32435,63023,20478,50802,98719,40333,46169,57184,62755,71180,70678,25339,41203,61861,61525,64771,85779,28390,80299,98411,90252,53598,74885,71867,38742,78011,91220,85000,35906,74526,45409,74607,58289,25070,14486,55403,47411,50339,58755,81881,15364,33799,22060,73728,16365,39398,74758,54576,28273,27617,86918,35951,62539,91765,68317,29391,22853,45586,72070,17656,81119,55141,42137,68131,93278,78208,72126,23955,15424,85309,44632,18742,20026,68992,31803,46136,19271,26425,93260,31072,63150,63088,20516,37793,37664,46638,74079,58788,48574,70067,33134,57404,73835,45239,90671,12103,62644,13339,10141,90819,68916,16157,96418,97308,93016,63459,68170,54884,31179,82985,49168,39806,92681,75278,49267,99150,99674,91741,63968,71942,82460,53611,31861,91869,95218,74208,31121,10327,42675,57231,20798,14800,57200,61802,94449,98458,24137,56997,39930,23332,19085,88276,53496,34028,36397,76289,96153,78216,34084,20599,92154,33034,87536,72070,75583,48865,50113,72261,89618,81973,77853,73226,86460,73990,86991,55996,64712,54505,86999,65505,41508,20544,17870,83346,37259,23803,97299,19258,52942,38446,28374,42496,32272,60958,70502,94462,32416,66483,52301,21275,53741,83418,58241,69666,40645,44939,85817,42099,71538,86378,52089,91414,28521,48046,92814,28995,81678,14516,67653,38695,97910,90721,21503,80197,62865,42263,31301,71019,71847,86427,11734,27843,57374,69224,97997,71236,22763,61808,25360,89597,33441,28035,48745,86209,61125,72623,22565,21037,13404,74107,99726,47766,93919,48151,48812,75967,50319,34444,41685,70150,38275,52173,39634,12249,65908,72782,65522,24668,12993,59302,30696,76509,83409,31237,25505,50925,94328,22214,30048,64580,44582,53731,19623,45458,63426,80895,54028,33606,59785,44345,27537,49656,32263,40849,78885,14768,64004,60898,34773,45157,11855,99465,47840,23119,82699,94538,97567,85338,80393,34415,95794,33220,94227,62182,32232,10602,26994,62225,95477,81346,27172,21120,62392,92553,66785,43040,56797,68564,58846,30002,18744,87453,62139,75368,72557,85650,11273,53034,29408,44625,34746,36335,80875,75647,81188,41351,66743,84706,10760,16342,73110,71411,36392,86999,74603,82321,14225,30571,53941,14606,62731,60488,18370,93595,82111,80425,73480,11783,97340,18996,63037,63496,59305,16792,41637,22927,27354,99236,93491,45973,15547,79762,81179,12581,57932,30473,38765,79566,56049,17930,87453,84881,43898,80896,14543,62565,78616,90915,72893,54641,78411,25674,66110,71946,74710,67747,91366,47875,76133,41383,68222,89633,53757,37597,85412,47981,92183,99546,79325,18755,40115,50632,25073,60350,51004,27237,61366,29573,73579,17119,12263,13581,16143,60193,22715,74089,54617,38482,23629,31128,32503,32889,56387,97936,72509,73943,10178,19445,56680,73641,93086,36468,14011,23069,76056,99314,37008,24687,78360,86933,72249,70187,21149,46765,88395,99700,70463,52341,24740,67845,69151,46806,48699,30525,58056,13620,43057,55517,15134,93424,87287,86141,89329,47613,91113,40255,75667,87340,85750,75256,87990,71945,75944,11232,26147,19892,97844,98871,33197,48015,50030,87434,61371,87891,23905,75371,43922,16826,43433,47028,43546,38483,46289,43605,73926,65789,65375,46598,10561,74268,35942,91224,69160,71158,31543,67880,61626,77930,26329,70467,81964,94556,68127,20891,77044,41845,93791,54416,35641,64569,35502,60176,69908,94482,91461,67278,82201,65855,73474,74880,10073,28442,58911,20262,12497,25622,12153,13824,12679,98955,47956,35204,70633,60539,36783,97170,41706,19705,52395,65519,24990,95821,68953,64268,91304,29782,88091,82861,72359,76944,85577,99474,61344,87325,11944,83884,93075,57526,54239,14573,70941,44846,75277,54273,95720,17212,69221,11010,12731,19440,78351,31495,60545,10342,60120,85855,40776,57759,67277,78829,34020,38703,72848,77040,57555,55720,14013,85342,71043,66570,69936,48949,75448,25757,68854,54683,99774,60808,53318,60144,52877,50556,59964,75035,38835,23686,59245,44071,19707,64673,72847,24101,26159,82839,51693,97374,47492,72720,12747,17562,51909,42338,87563,56017,93861,64648,40795,81506,73247,94055,28191,76608,70866,87908,57004,59610,25396,73160,32933,93840,47128,30339,26924,16771,98412,90366,84827,82319,18889,48177,90235,69531,55224,20889,51421,72796,68735,36390,30176,70124,79729,62330,76542,27950,49733,57237,57831,37463,49066,78138,14297,93756,87057,73426,40221,22715,32259,81371,55611,51280,80299,25627,49574,57053,18869,19055,57639,80867,49772,10834,67041,45388,46486,82151,73221,30254,53836,35010,35713,51992,63543,85822,85628,96747,95649,36901,68308,20663,71823,53671,69646,59695,36569,54940,39796,91601,52809,33692,10736,69036,14175,69257,43726,37656,82580,55816,45284,52501,42751,33300,89596,23230,97430,94012,10279,34602,58157,35240,74958,66784,44769,37471,73233,42923,53211,33421,86688,49404,66012,98706,35529,96041,57265,66208,19934,97338,53498,93946,56672,64317,27103,11286,52284,36175,23478,28031,69307,94757,50076,96345,90637,99406,23518,26750,98339,59917,19066,97042,77505,57226,81627,51915,60431,90999,17600,38146,89182,72617,20058,95004,42340,10317,10946,94851,61507,33307,88995,86019,88986,74241,64506,88877,25682,10526,51417,56878,84389,39715,35076,86970,91476,61188,15608,93970,43791,90127,31300,52229,70208,95845,10029,57218,56586,68719,78450,22043,11589,22078,74474,93058,56977,93630,52899,12027,81157,67550,20121,64918,45840,30659,24456,56649,80909,42560,76138,50962,15592,89848,18115,65494,48343,29403,56565,61589,79142,11688,91011,70135,38812,54488,62555,89169,26879,63695,28746,42092,10595,41385,31684,63114,15589,82161,58033,84663,98555,43880,71391,40354,10104,10475,76997,98989,90155,89424,92845,90698,93677,74464,63113,43784,85637,66314,29032,33504,46660,28655,98845,23416,68734,40377,16872,98031,11636,76451,61327,83568,70989,48782,71687,28556,37348,43018,46335,79341,84625,82548,45834,95408,59127,61948,72210,59308,87389,46808,23674,41827,29518,13813,73868,90710,87388,13122,75077,82734,94919,65541,52240,75314,56204,36066,34232,90735,97397,75198,20284,42488,53224,46944,42232,24511,28785,69825,74182,91550,61800,91613,19370,90072,52475,22826,39668,73534,54827,73255,19176,53686,99849,69567,87167,64347,94220,68901,26070,36808,77617,17049,27052,18323,33569,66904,61757,86090,59707,78178,28140,32579,44933,40736,37586,85046,87310,94912,85931,23404,69277,80759,51363,38760,35634,12214,84857,68935,74715,48837,70408,73145,29699,78960,50298,60156,52327,98830,96204,32541,66294,60841,74950,20554,24385,64682,21913,47937,96196,86564,59864,82986,21369,49061,16434,36681,57358,70530,80475,72747,84096,46457,29411,29147,78818,96225,23722,70034,22990,44660,97019,72482,69210,55757,98576,27193,26627,35089,67491,12912,57462,31440,74429,28038,21145,15534,55423,45683,46737,68461,22334,94816,82331,53192,44918,16700,40427,82705,69769,68477,21117,77504,33019,70912,29825,87381,82599,47907,53159,36172,49014,15523,45621,11676,40748,49079,17553,57225,19041,75956,84441,87000,50237,82640,99322,33159,24847,95734,57345,36591,66414,92503,13792,95075,86304,41318,19982,90052,88722,10915,54277,70764,37941,36068,88617,63149,21937,82677,44912,82809,19728,72581,32143,21124,51297,81810,70331,32971,48007,79132,70098,71904,52776,39148,75212,16458,64110,48165,23832,95046,16683,63014,73022,14414,59733,51965,11773,58063,67849,10511,19398,31010,37516,89398,78782,39621,38056,27833,61207,34666,69395,99080,38378,96461,79631,16344,51353,42548,16480,51178,37703,16708,84119,35334,89177,62354,56080,61022,95470,82589,20767,67554,58720,40436,89099,80739,22807,15168,39246,53662,63441,50476,67533,62315,72186,36450,24830,90737,51889,19172,64749,86292,48569,97819,62072,78758,86751,76174,15614,70897,59148,14667,35015,55007,90412,52571,78172,71131,25611,61006,19459,15703,35800,14472,93725,97399,75971,26931,46826,20849,57627,24414,59497,69144,41758,85158,75947,52011,14055,83238,46496,65204,83374,75146,73404,78598,46753,29287,83053,90251,88239,49529,62106,13309,31811,76103,78688,33831,98099,96662,10584,75260,22053,78553,20577,44980,10477,33522,73156,24538,73759,99106,81093,28723,63480,45272,30436,41739,23821,19561,35005,45679,93463,16782,48917,61346,78261,29473,98484,36405,62717,71717,13621,48225,30374,62828,81957,25808,96374,79544,53854,98013,88220,33065,96897,32791,22013,61043,42457,23108,27178,19426,26957,37362,45040,57533,85413,10124,96182,48951,57253,52020,14854,55299,29112,21730,69860,84099,75471,62876,97374,77697,87964,28719,28383,34446,40361,62475,27046,86319,27014,24015,59641,83736,77764,52951,89053,28746,21307,43913,29383,96447,90334,92338,45709,68818,73465,89530,51758,39753,11118,86819,91619,35705,60452,72961,54830,82971,75848,56588,58197,37142,60072,50705,33586,42133,97164,43604,18632,73021,47358,50237,90873,41594,26965,16661,80497,23315,37286,12985,32811,84728,32973,88995,39674,48393,43318,85891,62018,54884,37818,38290,52363,94042,60892,90820,99663,64899,96636,64792,79763,70047,64934,45521,97309,25197,71776,69217,98867,34982,83507,43822,70022,12333,84930,18184,99759,95254,37740,33502,15025,88671,25098,57326,73675,45501,62191,56163,60536,84538,97568,84031,75580,29767,47994,14670,24708,79974,18569,73406,14941,89385,12744,63754,75580,93327,92818,23547,59602,35618,86186,54559,73871,58736,59570,87129,76214,19292,33464,96048,67527,56530,24852,51129,89712,59831,63535,69855,55057,51201,39531,27020,86440,99088,96397,33882,63777,33720,21039,89502,38894,34876,69684,32277,24059,26667,49311,16796,34316,45893,61721,61577,26679,42678,81101,51001,95371,66399,35105,85445,70258,47329,87998,75659,38237,78668,16103,83754,83947,71940,92895,55718,38812,90749,99853,40110,94227,40929,68210,11370,35493,15841,52546,58806,82303,47049,42039,31269,39932,84712,17877,37534,28599,86652,55116,99298,79780,24117,53959,57791,18971,79351,59000,82318,57504,46458,96345,94944,22867,19249,30148,86920,12964,19726,69837,14825,62951,72373,26201,88197,43599,89536,19779,36428,48041,46271,27241,90750,63372,40018,82873,30074,82070,99104,57983,14220,30892,68494,69420,16477,39089,73990,86559,51745,84721,37234,79832,31225,37617,67777,62971,74961,62900,24898,20316,33513,93694,93233,82745,14160,90416,67142,13720,54803,82302,54345,74610,22263,74047,14318,90829,87699,40097,65841,82972,79257,47716,12976,60450,54630,16118,25258,67631,36312,47009,44397,21821,14071,11397,55881,62645,49752,14820,52356,77085,91868,22467,50028,31104,82234,56483,46490,38996,21346,37397,32651,40237,51465,32051,77294,55756,15296,31513,62075,10786,92541,21646,80248,40817,58801,94009,86383,29685,80141,94346,84519,75255,11472,54731,51153,43746,86138,16433,94417,31106,19524,62763,27783,53366,43850,51956,53101,57773,57787,79206,43621,19406,14809,99210,41797,84107,73733,25941,45610,41819,11444,95464,81612,38644,49709,95424,45250,76897,30016,90665,81565,34566,33165,24891,41549,80459,44523,20958,72127,75604,71646,29428,52501,55243,82326,65724,35423,39150,97435,45925,43298,97331,92014,10951,31674,59804,46175,57819,75844,19244,50922,56737,78179,70760,30021,91016,30317,88216,56966,64268,94374,44901,94556,82602,31009,17070,35010,24135,19096,83730,18173,97871,37586,88279,40246,55065,31829,88489,47975,32393,23040,80750,62772,57348,25928,32575,30018,42395,57252,88893,45098,86988,82407,94204,16819,27835,42857,69722,20467,34935,36612,27866,65908,78328,73281,99884,89738,38487,67412,69364,48627,60267,56250,78078,47784,62912,83757,25553,13089,10300,55969,60645,70670,67894,83312,30255,47449,88333,17210,41091,85678,86325,25627,78930,77877,16506,10891,15023,65540,12056,94980,82283,77443,13433,54286,62280,54776,77535,16479,55499,69832,72308,38005,32316,72457,46245,54357,24939,97461,37911,72400,27660,53942,90710,80373,82911,15294,13926,21848,57065,56746,34462,55229,49499,49121,41552,12698,48691,15708,31171,85757,26204,70950,12907,11213,40914,26241,19026,49144,90382,21320,83644,52436,47800,69981,27240,99058,52024,19458,88661,77907,82479,67583,51930,58501,27536,43942,19900,47120,74084,41247,72731,62644,96452,41666,25019,40067,91640,67721,13242,13500,55518,27450,67748,21160,70827,77941,17584,99291,68764,26961,42550,91974,40820,83148,29257,63487,45820,73067,67192,75590,17636,91601,85420,29057,33778,91214,15965,40818,34555,37242,69576,29817,27099,60641,88586,44489,95181,65776,64595,98042,29409,60438,41244,35690,13368,12248,87373,28068,11670,85625,71224,14530,19813,43201,36409,23732,48956,61903,19903,99087,53611,51853,10363,48380,59436,45539,68115,77215,17923,54989,54745,66507,35758,60925,88055,34040,55603,95132,67850,91296,92271,57921,34221,25934,96827,57648,54494,80939,96711,57098,21536,80618,87589,93678,52547,35395,86687,77269,10763,95456,49812,34649,10247,61176,44178,40062,41952,66462,31408,33298,27697,28182,22929,73930,77493,45061,48598,89688,30849,54424,11180,18800,36429,79426,24031,37145,10751,91125,92937,33680,88475,53459,36994,92369,39862,98271,83069,95884,71080,19402,37824,93806,44752,79723,92212,35325,16492,42229,95520,97519,71261,79271,36708,37498,58902,60767,23964,20162,54820,66250,92156,49913,76042,31275,49557,88543,96965,58790,79240,10366,95281,98994,11256,25027,33190,34440,10369,75202,42152,98307,46126,34353,74217,93898,53263,93184,19048,64341,44130,78948,39887,19150,72800,18121,41636,38265,53941,29918,24501,82595,34383,71001,37915,62508,61970,62780,41299,53552,91352,38943,12250,72369,86037,19920,69002,88930,82653,36915,97152,12650,74960,99460,45552,58672,35638,30720,21293,90031,95610,77946,77469,38062,41628,48620,47687,64977,39705,67937,85871,29287,71700,71522,52433,25322,41121,12519,96239,97427,15725,79375,52555,94694,36329,14482,43593,34806,72279,10142,97745,46526,71153,47405,49192,79245,88897,26171,87919,98317,27947,44425,53753,44745,46043,71855,56781,23383,18929,87832,36481,65681,24878,64017,98292,76603,20297,92496,97088,59852,62450,76778,40870,86272,26444,27136,50600,77211,13323,32980,45306,86520,40909,11391,72449,80638,28666,28381,23377,60424,23891,41055,42348,41081,73647,78136,70203,83877,60241,18901,79280,94834,59567,11341,21171,42070,86034,76802,25884,43762,74459,37701,49846,33374,95087,45035,77535,14526,56573,63063,40384,57413,90235,55826,31430,14065,85334,12858,13557,82703,75818,80885,76911,88185,16400,34590,84598,95489,65742,28152,18756,53024,40860,55255,93268,40334,38687,21092,46788,55908,34298,58949,20815,94186,84986,35828,72484,34877,94683,37631,55399,36156,24843,82395,62395,85550,10551,65245,57096,42244,49393,23097,56817,79780,28544,16927,34657,67349,91421,12699,73251,69766,62871,16097,59741,92289,13905,35176,20971,49833,35762,71749,45948,22669,71725,75132,72148,11351,92566,10386,61165,82387,89251,46158,38530,82534,34462,36156,17430,62864,39840,35163,57380,96584,73311,95712,36655,84574,96919,44472,42060,17848,93983,28245,29572,33906,32189,48886,98745,34293,16141,32439,18934,41693,70877,91613,61876,63342,74745,82813,98954,25143,76922,85409,77178,25103,79988,10422,18869,61546,23718,77609,44337,97204,34435,13482,33981,44022,87828,42432,21182,68885,86887,71413,92751,72277,71681,90747,52238,78128,22839,85120,55874,17281,35369,28580,17566,65422,35795,99520,31982,46196,40519,76114,79385,32562,88620,21654,28021,51998,87245,32369,65643,60811,69758,69559,39082,84380,19022,97157,58540,73989,13269,77328,11965,82191,75636,54799,13171,42057,95660,17390,29406,75313,38915,97531,94465,44292,29298,81563,94334,10576,95243,20836,85739,90843,58314,65692,65161,78038,29134,97371,87552,74494,37109,10179,17652,55493,61564,96712,16520,91471,53248,58691,76080,12040,38653,10175,13222,21368,67373,81433,59790,68556,41786,68419,98911,47409,58638,68897,32882,83977,25214,86671,45250,84893,98958,38373,63439,72592,47514,73240,79562,62620,57080,63541,61514,91086,43324,65404,72004,45769,13986,94855,32727,83311,27616,64103,15382,18756,21484,18096,48376,84804,46974,25407,27505,62372,45122,62510,62501,20444,11160,51021,81098,56706,66210,99916,82870,40146,11267,45564,52944,17774,46936,17913,91202,93469,35543,29462,12560,14279,36528,42536,75824,35275,94426,38525,15488,40962,81447,89279,43482,37484,39562,75583,99939,20505,31489,83882,23784,62489,92126,61781,57237,29171,58888,21062,42666,39308,52387,63635,92191,53673,26299,33953,39347,54914,51108,45536,31972,58372,96526,74115,91592,84232,24514,64109,27427,17958,38410,55244,92109,22466,66572,58183,47744,38848,44276,26343,49544,78309,34399,19927,34768,91090,89921,47008,78309,54625,71977,41112,32912,35256,43260,11019,29724,17224,71668,80485,25264,10595,57330,70505,33159,67166,31357,52234,13743,83331,12678,84083,57045,44808,56362,83676,12251,63807,82499,94092,67511,49489,77553,44895,51019,75708,50229,85192,32514,49435,23295,27306,88919,29276,79510,98345,52648,49822,53777,35944,96676,44334,86164,56137,74130,65926,68098,19655,41134,66918,29485,40013,52411,78689,20580,58773,22715,12566,23083,31706,67604,79461,58596,47751,15249,14008,38605,79454,37973,90772,35753,53861,33516,76424,99220,30551,10176,53508,96379,19941,10667,80712,51393,92575,24762,58835,47521,32592,44760,34625,43224,43213,50755,73018,13136,13437,39371,87846,17745,52640,56514,20902,29434,13613,97394,62230,78283,97905,31772,24270,36915,75414,42976,30062,65301,54342,47435,97830,72504,34356,91580,36739,58498,77389,96995,40047,88933,20925,32046,93619,19369,71537,74711,36702,93459,70158,90013,52083,89171,68595,61367,38226,86262,10422,86400,93006,75114,56610,69482,13553,38237,52592,66889,16653,58028,52779,95934,80563,63912,52840,51524,38275,21978,24956,78746,69089,23131,99549,18280,67743,93328,39477,12798,79244,29793,19703,17517,85188,10380,10038,48599,34100,46220,69431,51438,69678,91693,49661,73478,24818,83630,85826,22261,64469,11019,35464,56801,51064,34270,63414,31701,17536,70885,36027,40464,98203,11934,40501,78776,25033,65462,52705,33483,43566,94411,23713,51219,30444,76606,61370,86963,21024,91446,33571,63204,93506,44550,91120,32456,43982,40479,82515,18396,94138,68175,63307,17292,31081,85469,70866,55101,88466,80359,16865,67467,83506,59040,29299,26393,99414,48713,72097,74622,74017,80049,91236,24763,94928,28355,14146,46895,66001,42428,88744,16895,60328,47359,55906,92965,89055,98515,54783,42237,25464,16297,10457,35294,53756,77296,80603,80438,18434,69094,55365,62403,91946,92861,20295,61581,91081,17771,84919,72833,93957,92611,44498,98678,38835,64150,62358,91567,33180,96152,36291,97918,30319,60740,37024,52076,96772,92133,63355,60260,22489,80488,32949,76067,27682,93340,85215,63784,54063,16313,43394,75976,74671,22932,65537,89052,41506,34369,12926,23298,84793,58473,27255,32930,30589,18377,85885,66833,79478,66920,64870,67404,31817,75006,69711,29690,50247,69439,88849,45980,61696,61834,94815,45203,75860,91088,60572,67140,21884,63017,12605,91352,14825,42503,56063,72664,32918,20436,73330,66390,16195,86166,46754,41737,10389,50730,66076,60459,95651,42920,92443,82956,94418,20683,65442,83502,92828,83355,44487,45552,78877,45788,82401,13973,46069,81174,39905,64145,97098,43837,40406,73292,10961,34793,61533,73898,81230,90116,53313,27771,94537,77045,92974,19769,94743,95315,43295,39043,56205,96454,32809,83367,14203,92014,54587,42153,39181,65224,81361,87043,99036,94964,71321,36357,80771,91655,82382,37477,85250,13246,19265,65429,82959,83732,22610,53826,94824,20617,86869,93112,64896,87772,70313,86082,79422,38154,26553,74728,92850,48033,56519,94212,90354,46017,17153,84061,98785,67525,41394,96586,89928,65442,85260,68216,19738,14411,64183,45702,77819,84854,96195,80978,44777,72166,32244,70353,42320,28247,77742,76879,38439,27247,56810,14190,51608,90590,99465,33548,40893,65183,23011,26273,52285,86072,30236,26575,92138,55799,40034,13103,69373,40989,19920,45569,39496,45439,96724,52253,78988,66434,77128,63317,42093,94209,20480,17792,12686,79395,77696,73177,10905,87520,41616,40786,34139,64392,70516,33452,80044,40887,47415,87413,34958,56660,87707,88603,84456,31649,23735,66624,51446,91243,42343,29889,92812,95939,54845,76712,42776,55076,23934,74353,37138,67910,59288,53993,24352,73069,67313,97243,80424,49999,60527,74382,96824,95297,44613,41132,62913,96351,80401,20967,37831,39168,98032,14292,66359,48054,20036,15175,54978,76176,90966,76469,97520,13811,95248,91549,46815,76733,85901,81727,66421,43627,61847,60420,89077,75899,94071,66074,95749,57740,39474,67677,21151,87315,37616,94859,98779,10062,56114,87318,75776,38174,79113,50605,15444,60437,27730,21586,92740,22865,10667,54976,88795,12247,80486,72079,18460,97925,79848,58129,20833,98777,36393,29008,52426,84322,37080,13564,79303,81814,52472,16454,33442,91233,50097,86934,94847,18331,77245,24671,18619,73791,86621,69442,12990,53898,73926,48490,69192,11007,76516,36258,43561,85568,14637,48762,89563,17999,67131,36557,54923,80027,88475,98614,23254,24810,12674,30282,56127,29940,30213,46864,52512,57777,18349,44338,79999,99741,90497,15430,41891,13926,10738,22001,42883,84502,86140,85814,22961,43537,71775,82714,41765,96123,13203,82366,73896,71794,56219,38807,64263,79578,84156,13407,60473,11121,76791,30065,67020,17728,92974,21186,12036,65830,38203,77688,42811,94564,47020,46722,84812,37088,68825,58742,25618,51579,35172,33514,22949,71563,22516,41533,66006,94034,70141,44237,26333,37410,84654,79349,25643,50592,29288,36268,97118,54564,61272,80264,17229,31698,76985,99074,22269,20587,24480,52217,23254,38256,93290,16796,48660,53383,48415,61614,62217,71408,52790,57456,29558,91143,23309,92907,43283,58982,55165,16696,92438,13427,21713,23967,49934,64048,16305,89229,62701,62699,14106,97219,70707,60956,84662,11354,95780,48542,70593,67769,15000,41406,63758,43699,59931,92504,98208,43442,58778,76130,11970,14861,33728,51896,43279,71550,64859,53151,32595,68689,21286,37875,85323,45826,68554,49461,44813,29817,81631,18492,52746,66816,56543,89362,45526,92937,61263,81919,31364,71586,24337,20476,53216,51232,55282,79274,32895,27942,25146,73311,46737,91378,13716,54746,37584,55931,46729,50092,55804,23088,14420,45098,92433,98899,80316,76136,90733,42475,25717,78283,50851,33868,45607,70836,95751,93535,52927,15113,57516,15425,77771,73068,72373,14122,64736,42585,75486,67705,15366,78872,40799,42508,74231,19700,87068,45033,49966,65002,36770,50237,89196,46224,82826,66178,57053,65676,66553,50171,56960,78154,45617,68733,37068,66583,33350,56106,62050,54362,41037,29759,29560,93352,16876,52334,21317,49326,46658,37773,44333,72442,32314,19174,95269,83437,68820,54290,99397,74319,45693,63547,58648,19773,73929,41986,59550,17060,28277,31509,86824,15183,13431,32707,79404,94783,45131,22952,48917,88390,76377,88747,71746,46920,22505,69183,21977,15404,49637,62530,31126,25174,73939,83966,57444,19480,62943,57084,29234,21928,18254,45930,17424,52245,83172,43961,10441,29924,48887,93344,91213,92135,68929,85046,23798,19447,55535,35225,91736,87415,80494,81732,97148,99624,98884,91999,20339,98607,23523,68667,72457,86647,81749,38944,21892,11923,34844,69959,59755,64660,46001,18814,82844,73704,35795,30194,32103,24140,48803,95080,60967,30608,67191,60537,39611,81640,42843,25076,35494,79400,68550,10342,55347,40041,75590,78888,18087,67092,82787,24731,34999,73175,52719,35848,44889,53804,62768,62761,38383,88919,51951,14595,59013,42840,27717,63688,22503,54699,78730,40422,88350,72702,83121,16632,29672,23502,46925,13357,75880,19251,90605,29765,27796,64162,69290,51021,17535,94082,88830,12351,85284,34018,41247,97180,45850,30914,83619,94596,96044,95805,95977,84032,72595,14974,63175,13893,88489,89099,32129,30845,58776,94257,13521,54136,99725,96247,85691,81831,63475,35324,16673,22378,52370,16019,48808,76165,14586,30114,41954,49429,77370,12795,85892,95978,40298,35447,78108,73963,56339,28894,29918,55455,29412,72573,36749,40813,17251,19313,21383,52435,10925,56072,59262,20075,33496,35281,62314,48027,50054,56072,66372,99434,52495,21963,94255,65345,90318,45848,55426,74863,49474,29105,75133,85748,12244,61874,59211,10071,41905,12828,37929,76282,21360,47443,43627,38359,41867,29232,48434,25311,53776,60304,68893,17261,76814,19906,50831,48732,55273,43027,86917,85200,60986,17032,48118,32864,74699,25398,15275,79303,64766,10763,84827,60503,84314,18483,45651,49984,94126,44045,24229,87101,89193,70360,68433,62582,32007,14358,15245,60185,22912,13455,37563,52896,95101,70587,61149,84740,72316,52744,27942,74294,37739,17485,57427,43194,61403,37546,16813,79039,65922,83497,91106,87565,66837,46498,76960,93677,39487,35413,72035,27885,28111,68710,63970,29514,85810,20021,70675,73748,67352,90307,90644,98543,16582,58761,89547,73471,98250,41586,64589,83426,90958,92148,75111,98899,56668,47697,50230,88611,18299,38833,70486,29044,66252,77478,93113,94877,19176,92666,88433,44908,37684,29109,39533,93059,63582,45149,26864,55565,63606,13744,63157,98493,61629,87269,34158,41298,51154,58628,10474,60664,84340,47964,41276,25658,32395,72587,68302,65883,64713,54111,48492,95673,64009,91621,78310,51290,20199,47074,18755,47072,31679,72988,95580,46434,14248,76485,31644,36942,66863,80611,48361,45784,42787,30129,99859,21433,30249,44498,34027,27808,10326,92379,83893,17783,70603,13785,32318,32272,25463,52142,35340,56441,84563,78437,72010,58015,28628,75986,88596,71170,49270,75797,61737,62508,31131,30470,24604,72377,95934,57509,24014,72347,47521,50919,14444,62140,92694,86145,18225,29757,36486,46863,87346,16468,11741,69864,13600,99977,38630,21449,82343,11956,45537,58895,10799,60680,53529,85333,13019,70448,92606,35174,52832,11288,20972,95595,58771,91866,24643,58098,83407,16765,90729,66688,80824,34953,70130,48252,86183,28170,75865,31970,84669,94903,14140,62434,68556,17378,69649,30601,21654,76337,21641,52059,97163,10198,76857,41763,77648,22905,79014,76041,60223,91582,15994,50284,47890,40052,88693,44686,67232,53851,49581,22910,16885,57847,38846,22652,90367,61614,52976,25406,54408,39758,82680,94265,93000,34712,12185,64650,48038,55438,92721,89396,88997,93673,49540,89392,44489,98748,41271,93665,66156,28216,38245,80013,32747,49684,39393,80943,87886,11185,47599,20585,29299,78083,97261,17595,57009,26586,13496,49901,81865,44349,30292,46044,84665,64487,49501,42001,10800,68697,70650,36898,92525,25855,81097,21317,23112,99707,55853,28138,35348,52926,88362,25299,96416,96411,14583,69870,94042,81498,46888,39635,20044,13323,29933,14412,16596,35268,43395,26573,29675,90236,77229,44585,59725,68249,47427,78055,62193,24704,10575,42507,99619,32073,53257,35754,64458,14726,62549,89215,18318,86421,10695,25185,66226,74883,10275,26355,76353,20056,87761,41780,25054,24452,44226,51532,67987,68775,91784,77736,62679,38287,68605,32722,20652,15221,19180,99695,99250,53833,47019,27929,27861,95525,98185,31324,69010,38763,49238,88914,55472,66181,18628,22830,10301,58771,47225,53109,77023,32452,12263,41407,28640,16120,91366,31067,83401,76366,10089,45223,79966,40718,52910,31528,33188,23572,98312,53828,55480,79301,58119,81675,32545,34421,20747,38533,75683,49228,80311,22287,89002,65239,54796,96915,12565,15900,95460,96091,77966,58211,74538,77610,48857,42289,61614,91941,48098,40872,67289,24906,68602,29877,22305,33330,98640,56874,22679,56982,30322,63186,49772,51946,65515,52042,27908,67155,91487,34098,27751,33599,79245,57405,70559,90032,24705,84064,58560,81939,90918,18741,16613,10586,96702,35647,59755,47995,30340,42235,95051,43902,33287,16958,46332,99523,89069,61595,35808,14887,47787,72348,80947,46029,30316,13767,90561,34457,51078,75149,87944,83666,13178,76589,89098,95356,95931,94956,51062,30178,91429,91826,51106,66398,37642,49414,24734,56777,56538,33279,89913,85226,22615,82649,97999,42980,51256,73064,16677,56618,87360,56651,58999,88481,35226,63888,60317,99090,17743,96318,71605,92671,30355,89582,67006,47235,19654,38286,90168,99391,94418,44012,85955,85945,53694,82361,23873,67156,77599,50049,80519,54619,52517,60134,64790,75787,33878,38463,52221,78632,52160,93493,77520,61300,86789,21817,63206,49171,49337,18475,27517,58818,94424,82603,38256,52537,21440,46141,60585,66037,34413,37395,62308,23867,52649,11860,31891,48986,53354,92912,22956,76764,33336,13173,53011,75456,79906,37388,92530,45722,75628,96103,43815,91560,15321,76175,94549,34952,47339,73863,87344,30005,31542,35415,93203,55674,37733,80837,97409,29604,32771,59722,32502,20086,37163,21448,23767,97027,35327,54108,53728,23338,47040,73482,48146,94614,70564,40627,67871,13416,22268,32191,89294,59710,19362,39642,49284,70541,44453,59116,93250,49345,74799,84894,17105,61627,93832,14984,33927,82404,21598,62650,80127,60178,73164,20839,18173,93872,85132,18830,19357,40925,79188,60710,56014,39014,13911,40085,47059,98189,14546,61621,82542,18735,80363,53956,90353,94424,97404,52335,33219,97903,28872,87394,95468,32644,94970,85619,18701,56493,56633,87082,15633,42746,79503,94075,25007,50654,52071,92239,51584,10074,25041,81858,53357,17340,80771,87111,92883,51979,73881,71286,53139,24643,44315,31307,86185,75352,55671,33140,57832,25777,39098,67511,66639,50476,58046,33759,92050,25929,68989,66463,68569,24153,27068,69638,78851,47040,22687,75213,26672,76646,10352,81225,49999,66488,45729,77893,62305,29798,52755,29750,78891,53166,36218,68841,68283,32217,34827,18147,65650,49155,69872,36895,86752,80470,96587,66483,32775,32819,87092,18467,90963,88122,22855,55374,91877,45866,97119,37477,21399,83728,58819,10571,70385,92615,63261,80669,96120,59126,49328,21365,73898,78260,31701,88349,80617,91165,68480,99085,16480,26201,30216,48319,67325,58054,25001,16327,57502,58967,68078,95904,38867,55892,96189,99015,98088,76258,10278,56854,99869,95383,50117,79283,39267,50124,62512,90102,88568,48490,33188,43102,77664,98319,65019,72104,31808,42385,76859,76529,16881,25109,31901,93249,16105,49089,14866,65159,95620,58701,62228,94621,74935,36757,43545,66100,18833,50148,93073,65741,26597,84232,14690,67837,46834,47436,96997,17993,59749,28302,75575,69067,21817,89248,53035,31850,26736,51283,98355,51750,54952,93519,21174,84963,16632,43919,35761,53212,65534,33388,82341,63535,35473,16231,18698,72101,84580,24356,83400,58323,73306,99895,85029,40751,53918,25377,50444,53797,34973,38687,21574,98382,86748,34259,34809,77498,77507,47783,84779,32531,89576,96776,76984,98409,73053,91384,20721,82201,75329,88357,75987,55427,43895,32530,27831,70122,83701,33656,72435,21208,35978,22035,70798,89061,32349,58154,77298,10173,12889,62358,51982,65731,94977,63860,62098,82647,12328,89747,12474,89334,69364,63216,34002,92861,80063,10252,98855,80197,68588,92085,17304,10352,58879,97282,45086,49632,83691,95021,65316,60890,22016,77785,45331,78848,94571,59042,73023,45452,47525,33445,56480,43229,48106,75757,43913,89381,52753,59903,36437,18206,95467,55205,76255,77718,70303,46229,65505,44301,73953,55762,14194,73070,26761,93783,42802,34473,24970,39064,43828,30557,78027,75226,83908,75506,27848,74520,38152,62508,20788,73271,33293,88903,57762,36025,46152,28068,79197,44070,55739,58885,58967,98834,14209,24205,38337,93060,65640,10848,69295,95450,80221,57324,23667,32478,17901,65476,87567,13121,82633,28423,10069,95136,22543,47026,74219,32457,99593,13415,39215,16204,65477,51121,46490,54926,33024,21739,47452,90078,57915,92069,80034,30418,68025,32127,55660,73059,68267,15072,43271,17380,95533,87182,98666,67062,81362,29693,35886,55011,34105,52784,26157,21875,46718,48304,48401,90161,48849,13313,51305,24755,37013,58988,15134,53011,33687,27349,33632,54877,98239,34644,12009,57882,51145,51861,95658,78638,83885,11069,94698,44299,24983,59232,93668,96630,99805,82765,79064,77145,64769,97863,45149,13756,57718,41912,78018,97344,85418,54585,63561,65204,77692,33908,44649,68306,32133,60136,50676,37702,67025,23821,96712,49300,33748,39754,56434,37108,83762,58872,69790,74481,22980,68167,67407,63600,33306,36582,17358,26608,71341,63210,77256,67097,27292,20316,34211,94894,62916,20308,27271,67781,94066,88307,19767,90431,24878,56636,76195,44485,61963,40859,17033,22695,72494,17836,10618,11594,77446,43960,39757,72224,82466,48264,55263,84959,57393,63251,72457,34645,78391,57377,44969,59075,78977,20753,54565,81068,45102,69630,13447,91274,59227,13187,47056,74997,22068,84187,78906,84217,46740,64821,50456,10026,44020,60914,45053,68684,95899,22638,52113,25333,44368,91373,61606,47917,82068,10812,77663,21263,38248,73593,72147,60094,37974,55931,35719,31217,29824,23482,45974,63202,14621,78725,46281,95438,56320,89625,93223,10588,92839,45259,35978,92273,34819,86827,60061,43976,62885,85921,92517,44209,15438,44268,95877,27331,74844,87972,99995,73480,80350,40696,52312,58932,51438,96474,95772,93611,84188,24666,75953,92985,26633,88700,64425,23614,21364,26003,53475,95617,88028,45722,11046,58218,27368,43929,32353,30607,56417,14935,15184,51153,14338,20812,26801,95618,12479,56906,78716,16409,96330,17956,60601,98452,93553,61487,65660,17701,48924,78429,53246,75855,65786,47530,39277,34734,76499,58268,29522,28531,94149,43510,56796,27567,39128,51895,62952,26405,50902,43001,65350,27508,93539,69949,65168,49159,29283,66242,18194,72448,64814,80896,94371,13459,24187,84166,49176,30028,81996,44675,30310,69729,31811,29963,34980,86785,13477,87080,49462,45277,38827,88134,75923,29357,61041,61019,63775,21249,72565,83176,44316,58566,20013,63728,80217,66775,95066,30178,58123,38927,31433,38041,58089,70657,37825,18109,30956,90402,22467,93803,51957,56562,36257,64929,45551,31272,91803,24809,61228,51190,40040,56483,42248,60220,23207,64809,42777,82643,51629,23298,52140,66284,86469,36641,22985,55727,12026,87790,92016,38499,72998,96282,96518,46679,12547,90993,60081,59342,73394,11747,70493,82500,30490,68935,68768,79819,50795,84261,76689,24150,54184,90868,23040,99790,55399,97699,11540,28878,27822,89528,39741,99565,54191,82381,48724,44061,20048,81919,36435,20496,78161,94699,11605,69730,90639,66817,63249,96553,74930,42700,83395,36641,37533,74547,98353,98757,19554,19704,23421,57568,47509,96747,75928,94949,57589,67995,65662,39156,26101,32472,34642,31443,46125,36764,41667,85443,85922,26155,89093,15395,50324,83294,61558,80217,70953,75240,23358,21895,25637,93213,37753,11766,17666,45419,45781,71571,59145,42801,73075,90061,29601,95195,76436,83806,71971,54447,30723,41328,39002,43837,56459,13637,90269,41143,28421,76110,71108,12736,28200,93030,49500,35606,66692,60462,42813,86478,55745,59120,68429,80800,52631,16479,13241,65846,46315,68043,67441,50342,25161,96486,93396,81816,40031,12792,10270,32168,64049,65482,34739,71016,98352,39605,22545,99695,41405,72164,51315,22750,70854,26920,80913,68035,99472,26675,88588,72838,49074,98409,17945,92377,87597,34612,67131,53996,32433,59496,86615,60297,72859,86369,90551,57644,60495,65149,98884,45101,79908,63900,97886,66753,23984,34456,83330,53880,82181,79958,30512,43787,53786,81632,70662,27896,78214,21349,59284,32105,86420,62625,31170,28117,35757,24013,80991,68079,32599,29728,53650,82267,58859,39873,80175,88642,22609,56236,68760,24506,80741,28774,78943,16120,35595,46532,57850,23417,19612,32253,42385,90139,94503,75976,67125,63214,10673,35440,92879,11058,88822,72110,49290,99139,34038,75535,95184,59826,99306,65143,79344,74268,31869,77364,72420,70879,41709,16042,83912,17512,45902,84471,54346,13231,44514,10773,80260,61786,40594,58557,91059,44058,12258,36399,63679,90396,95248,67274,43134,76091,34934,61711,32157,30676,78995,81592,20604,80589,28186,54032,18760,63480,96478,91016,79955,35780,51044,78591,48507,88642,10413,27031,56141,37541,80104,59709,12365,65639,16881,64967,60720,93462,14007,63755,37134,22776,93847,56420,97879,75089,22526,20527,81374,45202,98473,38406,98784,11888,86202,48044,95954,35254,29526,58341,65537,54494,76866,50325,90659,68306,30375,60429,73373,95608,40375,18684,96302,25891,82350,74754,21050,30148,57486,45895,45907,14044,78736,56601,93398,10907,88492,57861,15657,80146,80927,21850,76962,62666,79646,42533,95002,78071,28631,89063,76975,97554,74376,69622,17883,30265,24629,10751,69599,84368,66044,61958,92694,64728,20302,66857,90523,15556,20063,93284,74313,41946,99260,92921,39710,79938,91175,95584,97795,46646,35666,25217,87992,57684,83587,38734,94401,11938,26125,87608,87681,51879,15980,62133,87278,94437,74496,45801,49102,73197,17060,68968,41855,56854,80301,64139,12782,90299,74758,42406,34274,10072,12116,84024,44098,41150,31688,20027,25627,67150,73451,56865,41301,76019,50823,65636,62861,49951,82291,37339,95402,96252,19181,43025,47574,10233,50457,35150,20544,79605,46553,73739,21812,79713,71716,33963,43914,60574,78076,76635,36685,48527,13569,82083,81332,38700,19795,94295,81051,33239,95542,92020,34599,84694,15566,99077,32446,69151,97824,13660,71340,60994,48259,18685,84811,13155,84485,54050,79753,97042,56948,22682,66059,48718,35279,51086,31848,96851,62068,96140,64976,94418,92316,71115,31342,60197,99362,52241,69413,30633,30950,27140,45782,95392,87501,66915,75486,26333,21393,74337,39969,19626,87144,11907,92312,68233,75757,94388,26354,47507,53829,80113,12068,44302,77894,33575,21131,50503,86970,66083,83167,69714,51212,94803,19272,46514,89855,57936,12701,13679,34344,56315,17762,50120,69091,73456,38074,74892,50157,15492,69074,40944,32986,77260,76594,36987,40151,18412,65866,68127,41617,61017,21736,75080,11956,72921,72627,12128,88480,77289,34338,67729,95226,56587,18777,19549,93264,34697,19905,36737,15267,71000,31789,96819,83728,43049,93962,32590,94390,83783,58312,54603,84086,47710,94480,26201,33523,75398,39037,67699,82496,77241,37041,82695,96909,24555,28931,60397,80452,31508,68548,24406,16734,45251,83811,85476,44936,67800,59177,81408,71665,96297,38167,81632,85727,94541,92483,21576,66265,65104,19923,56132,96360,75413,12446,17653,99193,10741,58413,41047,98338,79450,71434,82769,51116,79584,76927,69315,89304,56693,10066,85826,25918,23976,35255,90476,45424,69364,90867,48610,41281,32551,89826,97050,86252,82380,41661,93060,53667,68205,78376,18860,31532,80739,19342,37973,86523,74569,18165,17559,28683,81490,61224,24583,16543,93259,46769,99465,16873,32850,75581,66033,38757,47226,26926,48293,25314,63159,51638,56259,20411,53457,67562,47975,37561,34422,66673,91617,78826,21124,55038,40447,69625,67762,23100,17354,27684,87094,92947,39299,90162,86209,97854,70567,49341,20348,63235,22073,21817,73926,44274,27347,25601,41710,38961,39362,16873,54184,83018,82300,34265,57181,97136,83446,75338,66340,80638,27602,64367,31100,97567,73477,35410,85537,52481,33944,55401,45593,52556,46352,52396,98199,92515,30561,93051,89039,82476,57428,86733,40578,34069,60691,10284,56830,71722,34544,16638,59164,91350,39931,57154,74569,26556,81947,25933,31370,46637,39742,95295,50646,48100,55546,19054,33401,57406,26414,80605,39554,30383,39193,57066,55914,79626,43390,98472,88324,41108,33747,83713,33407,98291,14235,63486,57431,20939,27431,16114,67758,33278,71008,64214,98056,50313,22411,24100,69546,28601,51573,37013,86121,19353,35195,46856,98131,34480,35548,85446,41651,14611,39905,16266,51844,57346,66430,10168,57083,86793,75502,34499,63207,88560,60823,29256,95773,84335,63140,90113,63947,67961,55699,16684,86770,58820,55816,71947,15352,20281,79591,64703,88586,51638,80771,69662,88076,88904,31999,47025,34029,53770,54085,42808,50487,44128,79143,59329,70194,85367,30760,31286,64458,16016,39241,37330,78927,80044,53163,59753,43471,16642,18362,84121,34656,61945,51691,93169,49808,47301,48083,22615,45843,95641,29361,26925,25096,22508,15326,85940,54854,75257,44351,25928,68115,23336,42210,26217,12549,96260,67141,96389,61261,51304,62798,28137,79991,66157,25612,72933,79131,35662,51780,22501,18252,50644,19829,18206,46511,47830,86319,65887,34423,18100,96167,65930,26040,74795,47900,87527,94180,76274,85745,56408,95837,29089,99468,95695,32920,66363,25377,23357,16037,24399,47767,92761,54236,69936,54861,11284,97958,15750,97362,35076,34473,52410,51498,30925,85457,88739,85808,71560,19941,87762,83394,14956,48352,70111,74890,37581,66555,34160,62984,31736,76406,40895,19302,39875,68330,80832,44513,88659,38083,28934,42531,56128,61948,33968,85883,56077,81946,49533,38017,15769,78469,51651,34408,38973,91723,26387,29762,73006,93623,23041,79572,14004,41445,94873,24186,59223,23942,36156,95254,27718,50762,70898,40990,27288,78761,19524,51654,68991,32867,16141,33165,61309,49116,14450,20443,48505,28091,73243,69389,49773,33693,65873,16642,70368,42878,74010,30593,19491,94709,50565,91029,86966,83496,78709,35495,51087,85466,98652,16434,28061,11919,66020,47141,35945,20655,75357,67267,29232,84429,95316,41008,26818,83811,83644,91030,17816,90062,88366,98751,22732,12805,78288,42861,36181,36212,85123,53713,27688,98660,52372,64874,28849,87032,97143,23461,69889,42236,74045,86570,75255,19560,96321,72290,46376,79380,27872,12793,48722,18384,45997,35031,51799,11555,78511,14478,96958,81629,79087,81907,76007,16197,21294,59480,53362,91174,80559,25824,31735,67846,94941,45444,80956,40212,26358,92911,64716,56007,99829,44284,73882,81320,37791,17748,54546,10225,74857,59541,50491,17413,48589,60614,85310,41073,37765,41410,62177,89705,46880,15768,84997,29097,44117,45546,26935,94506,59467,15983,12618,33510,30380,13937,42810,78905,93995,70245,62172,69926,98208,65440,24720,13720,65840,23846,28805,66251,34280,18967,10610,85725,74849,83661,95305,22588,26837,76513,55413,84085,39026,74088,28312,80995,33594,21107,84718,26365,26260,28450,88808,80488,35555,44230,76406,72037,17106,57390,93832,31108,91559,96499,40489,36276,61627,78166,52574,54663,44602,51052,64422,56011,22900,74419,36226,50092,84446,17315,61393,16986,14857,20316,63873,92653,20886,45596,84889,60806,43157,72353,11253,27777,32521,55217,67992,28515,77338,73368,98954,70742,30131,49658,89251,21954,82070,25432,66050,37741,19653,48887,58018,10373,82079,89928,56723,99359,25684,67435,92179,67748,39041,23916,97375,87140,23178,37316,92288,62542,83942,46864,34539,79826,78877,83559,78808,36278,73730,87963,83230,13707,63846,83386,30667,55060,94714,43061,99323,62400,79822,80208,82160,34047,51775,21385,74670,59724,98537,97663,48118,48484,88434,25068,79624,99265,79229,52192,12974,54359,36975,10964,31569,31747,39820,19970,28109,64126,59197,48657,53604,22500,36870,15630,94671,33649,72716,54884,91691,56487,36897,60992,87656,97060,76597,26331,59500,71486,88169,93649,87848,12175,42306,70493,69893,84815,35124,89722,21836,27859,88226,77959,68528,24867,31702,15394,67140,24583,85532,46761,43104,15934,86802,54083,41122,93165,91938,13583,67629,60728,30853,46528,99936,30306,64362,45319,15109,97325,81446,70429,31641,29304,75755,86711,76279,22665,45294,30254,45561,91368,52099,38298,97109,51355,94101,91203,69837,53881,74581,34645,60352,95362,78095,67614,81603,51170,94077,19038,60081,88692,84917,28811,53198,76291,27002,36320,35985,18837,11750,66941,79444,66523,61234,91235,40257,60738,67457,27315,85972,15738,43410,23735,66489,28623,44658,92771,69817,32869,43302,86109,31458,47978,72253,88710,53572,87134,56895,49461,51919,39143,44868,18887,95143,93580,31926,93123,45168,76682,33332,68681,44132,53606,57967,19748,90815,56814,84461,22952,41850,88979,12198,59949,95371,23075,76292,84050,73837,49045,26079,45862,58699,77829,61376,99338,79149,92245,34914,59527,10048,70649,41022,67396,34882,38930,20157,41690,56242,38401,79824,45584,65442,90724,46915,28760,40095,79166,15520,96305,72107,30461,36865,83915,55219,83790,55583,25657,86942,99718,96481,94098,76616,26986,88412,10852,47915,59126,88674,87505,87246,78817,36889,27982,29268,34594,15155,86882,31589,35516,91854,35022,25044,89323,82568,31346,86651,30002,25011,65603,89308,94376,94082,12120,36365,75615,55618,81344,83475,58775,57369,74268,69910,19267,85667,35900,26729,14372,99662,52578,20016,62444,37926,84836,83115,34076,46129,46879,54102,36336,56059,56351,33730,39645,14355,35510,54362,64068,49597,71601,87803,34629,73494,15500,90289,78395,96341,13690,22889,97425,34970,35924,63125,10303,92585,58749,84613,61931,61099,73303,13280,30819,83079,72787,34283,30087,49416,17375,60767,45856,67947,74725,75156,74958,50919,39498,65472,21041,21657,37794,61400,94875,68372,75950,37750,52720,15582,52336,39545,50718,82592,52003,33721,24696,27501,87029,67852,19131,97701,97894,62164,20291,29821,75858,70487,82564,24120,51133,83029,26244,68067,44249,87222,54839,76002,94372,76135,54736,68322,99858,63444,42565,60385,61554,33056,71902,27063,94558,55361,18757,13489,19229,55269,61302,41075,70594,70771,23924,36467,68861,13692,95623,22362,62217,93256,59284,39229,70426,27533,75665,47869,61855,25699,30481,98346,20220,99600,99749,91039,68333,72528,61047,11872,60393,53888,41487,35374,62055,55819,56615,47088,61485,84890,45445,89666,32415,53146,26523,86045,32386,97600,70271,32920,93490,66619,48007,10486,80372,74185,39707,78625,78389,84244,86864,26331,95745,79672,19788,43414,29742,34387,32124,14432,96258,99904,60226,26389,48640,74705,43529,24934,86243,88724,47095,53500,90138,51483,87312,25023,47236,50601,37755,52137,70845,61157,45246,99785,71662,38024,12567,58408,54803,42041,57872,80731,43372,60104,79269,47829,74223,56154,22989,73858,31721,44098,27600,78970,30731,93447,33217,84383,49929,91219,11579,99646,38183,67282,79319,66383,81329,63542,47502,36874,88591,94555,24560,68079,12086,63142,77610,42585,48453,91505,16889,97838,31198,99978,10437,70873,96781,21641,40274,13832,16781,74387,38699,22700,89189,10270,14986,73866,46610,34971,73134,34341,15006,46198,75401,26682,21311,75205,61787,64597,68666,90506,69831,67890,89449,99824,63323,61818,93573,10840,33829,78746,13611,57344,70927,45395,41196,34039,38565,64944,38437,98884,96587,57167,70114,90538,40494,94024,55244,57372,57613,90182,78051,13664,72100,54390,99770,37132,71134,21431,49543,44477,57422,17150,92632,34907,38663,34887,89575,57483,92942,86144,22885,69117,57902,80586,94766,99145,63226,15684,85577,36870,43187,86808,26271,31566,69774,64513,10946,96052,48762,91099,30339,39451,24488,58253,29016,19266,12834,25878,88130,15431,48135,64533,52074,37096,55024,51845,68876,94102,73875,79278,95741,32127,97143,72570,62011,79899,96843,10088,23300,17461,64844,10611,14107,24637,14470,95989,20493,65735,42078,36434,63215,34447,99428,17117,23429,12449,26157,65334,96030,59151,87221,13034,86354,89903,49296,72472,88954,72085,48626,88802,80363,60238,64702,47842,33807,79040,43151,32381,30462,12860,97819,17478,43156,82831,73189,89258,21513,44011,95231,36309,20644,71714,17629,58408,13148,32999,97141,59657,99552,44048,51911,75609,80620,76346,93771,46716,26735,64619,67742,82009,35436,83781,41387,83579,16683,87735,80356,51326,62938,33299,42206,52572,45865,47423,55689,49675,25409,28363,45797,70913,83175,25272,55676,18910,83640,68046,37736,30021,62166,93417,27124,83358,33878,27115,31433,91547,37045,75389,56944,41638,71315,17613,15379,68440,61147,67781,93772,75703,72371,46423,13133,88758,47888,47399,58933,57165,84852,64451,75160,20702,92571,70601,86107,97479,78011,31566,43123,62700,68055,62476,63004,23420,97714,35000,97399,44279,12272,26802,12152,89345,96832,24153,55158,80059,62481,70909,41484,14094,75627,99044,41860,18206,57862,34599,50973,71132,62028,27988,77759,91494,10173,64947,96865,37944,49085,16490,81970,66218,49783,63318,55858,15336,33355,46142,56277,10752,37392,47521,36826,34302,86745,18180,95633,84861,14668,44274,76385,89073,22450,26772,67284,47117,26134,10553,18570,57696,28848,58457,24041,88799,90590,24311,60085,39147,96370,47251,18451,68756,13210,82792,95215,39028,98863,64107,50358,77023,97046,53771,51384,37940,82762,42378,47135,43210,52485,10147,53731,10152,90991,56489,43004,69855,53648,82272,87687,29030,21241,72294,11974,21561,92554,85887,44440,10437,45438,47079,38638,43850,19548,32365,17226,28008,85233,90987,79967,70157,48043,64737,86090,82240,48598,47536,70273,17921,26365,28884,15622,92044,34894,65976,13862,93158,10059,89945,53296,10092,87706,74258,49758,74254,44185,62345,89300,52479,81625,29625,84916,36307,94398,33790,87662,68521,54027,36277,79302,28250,29662,29683,79841,35366,99846,15095,76261,76554,98321,59936,83353,74791,96317,25060,85829,53406,76567,14591,53376,36773,90584,30990,34244,24206,37590,69202,59170,64735,31774,70663,13356,76037,17032,86949,14232,28713,17414,17163,84407,79200,23649,64946,75067,37995,24818,82419,97800,76634,38145,86201,99466,76489,24518,64623,23964,15648,87883,22131,89378,91500,14839,41394,83771,65962,33296,59189,74823,61978,94599,43839,30907,15679,83304,45443,29647,43433,42033,73796,73789,29742,59894,88876,42995,39611,73148,41337,43763,49948,67252,74077,26473,51720,50007,55323,37420,42112,68939,13520,47890,71781,65770,81059,91191,57084,93795,76524,94883,70113,32636,95206,33258,93482,32987,31831,90882,64960,34670,32355,48693,14269,79194,75135,88273,16455,11794,48880,96387,22879,98789,69478,66898,56204,16139,70418,54970,47881,23895,51235,21601,22137,50809,49435,99698,58976,34650,18282,78928,26913,67556,96212,23168,38366,94007,79084,16054,96997,54005,58866,24968,77345,60801,88003,72424,89334,22783,37276,87958,38835,67398,88142,67558,68891,89743,45745,12813,17086,17326,42077,44524,13881,70050,75030,28714,67501,16426,49228,92188,25575,17292,88973,86968,99155,25584,95209,32094,77799,84548,98618,72530,77406,23625,53835,32808,17669,82542,52158,83072,20039,34327,92126,47896,11279,62904,48672,76957,32379,30853,52436,79469,37623,50067,75134,55655,36951,68152,73430,10221,94019,49491,87529,57342,28149,78656,19438,87292,36190,33961,38607,46472,76807,80804,79245,12236,23058,55260,10775,90298,39742,98045,38483,23025,43533,29592,32577,45141,64783,14821,67563,74848,42097,33190,85215,83946,32728,48561,91290,59272,62095,24435,53535,28441,94426,28347,59024,52899,76786,15361,41844,36820,22964,56104,38062,90544,81779,97646,74590,84941,67218,47046,61735,84870,61588,96696,27297,37365,22436,43297,22722,33953,61703,31186,66266,78224,69560,97604,65260,83853,74040,88763,10437,38485,26092,13136,88924,48526,60087,78217,10571,85593,78115,18037,18353,88007,39769,69457,61977,12980,66810,74874,73827,95868,86818,75635,89453,74048,66845,27347,78557,44197,57199,74013,49562,62373,61940,69734,12344,90433,44972,72605,57052,66235,59267,45649,57132,61233,58994,77019,77695,50255,31897,23766,49277,97350,10464,24375,12032,46346,97460,72610,42745,54896,65958,23547,67842,40390,18311,16333,42342,27190,43935,95773,23112,75033,57331,32443,49750,95676,27893,25004,19114,28774,26055,92959,54578,60242,11105,88409,76402,15012,44384,95684,52814,44754,90818,80219,28860,34453,49951,43503,98821,41723,31383,32968,89924,28764,97995,16188,98979,58320,93962,57918,56344,54026,25447,97719,41572,34041,73981,27978,68556,14172,50349,14240,58429,46632,44549,72297,59063,98155,91265,19091,53705,91323,95444,43754,43856,69180,38031,60302,32154,68453,82929,90282,77449,51319,21529,29911,76266,59218,40301,42373,73014,64594,38489,39990,89316,60685,67268,60264,26130,42824,86597,97261,64955,48374,84114,13692,73773,72647,50775,74580,69272,64102,93831,68109,35784,48488,72618,60148,20105,27724,57189,34464,79652,59565,18973,29131,13084,44298,33240,44756,90983,86892,46470,74183,27910,27064,21823,20270,36538,24996,19718,57643,48848,85448,40237,17062,37946,31179,46818,97673,91317,13365,36061,47636,26369,71069,25765,51683,91920,26846,91544,54135,30181,94201,74135,90356,89395,46026,35862,94451,82968,11519,90499,58402,12869,30648,61364,84975,52968,61511,89196,37648,14894,12578,50483,19272,56030,89247,21680,25624,40851,81923,95817,15550,97961,78415,82096,83491,93705,46663,76646,35797,59201,37805,19069,70230,44781,21666,77508,95793,89878,44758,51888,52264,18370,31581,35583,15792,49809,13967,92026,22128,71595,19998,89845,90279,75253,62088,66021,19417,29431,15227,81268,33508,99566,49546,53841,89688,50020,55878,29043,29620,15756,76513,26112,30368,72931,56157,27391,98510,78890,52763,91050,87498,36634,42768,90823,82385,94730,44056,54685,74721,80559,66162,47262,92997,63326,24194,49955,73610,87931,95934,62307,49769,81840,59042,69995,42338,42409,79794,56016,55458,16460,94308,51719,11452,27331,95496,86264,48375,52704,79610,39675,23169,20932,42190,56824,91141,48215,10726,94692,73643,91833,30800,24332,95944,72204,45085,84515,43360,94672,98657,90046,64649,71796,47629,87770,66719,13686,90643,40095,32312,41510,26378,64691,92124,11659,92282,35602,32463,56909,61211,61589,28217,35264,83284,82988,71289,86010,92358,92280,92405,52195,59377,39456,20666,82237,72486,91304,50824,67167,99501,57115,37436,16361,37960,73125,18051,55030,48177,49987,20671,53238,86648,70947,48027,72932,87490,86766,22673,20143,84667,82043,22639,68203,43265,78146,85403,23485,75197,29931,68854,27570,87112,58795,33479,18781,26422,28990,45428,73331,90756,93574,19735,87077,17926,53375,22732,81854,80652,32807,58467,30927,93592,37785,45482,98061,87449,74029,26570,30678,75044,70116,94274,43311,71345,64895,91530,84853,94298,55934,50622,98755,20470,61534,12177,22523,55663,68916,72506,17774,94759,53170,12232,12747,74099,42678,20106,90524,87749,30853,59620,36425,47348,34042,87245,68098,44647,49892,66002,11176,41059,88800,82873,70494,34746,47100,21630,30472,23058,47401,97694,88125,55932,18599,28689,82182,24775,95246,16480,55229,96452,19266,94800,94377,95377,46939,53583,37125,70470,42255,38859,67980,83557,76502,90919,87399,46493,65144,13541,35968,91205,46677,42423,54400,17759,91495,81855,77399,16857,35193,10535,12197,62682,83152,36098,72752,14170,15355,39951,74694,11055,31698,32729,23877,44436,64530,12719,68292,36761,70402,17248,72399,21515,57318,75326,14563,64712,15905,44440,53331,90168,65419,86253,95822,96639,66618,88987,37603,94096,52725,81376,97290,54730,67050,60798,83025,87777,71242,69575,23803,62344,11354,55063,34988,74053,21885,10720,28202,12510,47387,11054,93188,46563,91605,73132,14516,90847,75718,43917,39718,18870,15765,96371,44521,49571,56894,37744,20852,37476,83397,75768,23095,46100,37686,97298,41294,11106,23879,71775,58941,75997,74269,48119,36430,69797,14370,14376,76807,65804,91902,51407,39540,78272,35111,41743,75854,25683,94796,97207,42661,31686,96510,79812,80163,12845,74916,62227,95667,60453,92937,25413,27611,85136,31167,76795,27950,11688,57985,64364,60524,51719,75802,36599,26876,36755,79617,55166,52739,93458,60694,20476,18929,73113,68517,54087,36589,85189,37816,42963,89446,33874,90599,57550,91508,13204,67630,16086,88956,87854,49214,31335,59967,92440,26823,72870,16379,26011,22466,34837,84890,25615,24406,95824,15785,58687,80911,71960,10148,48415,84056,45844,65362,54018,57306,62392,64317,36483,48151,27722,59537,88996,31261,83588,74443,94180,68168,58882,34721,33916,28189,21335,22222,94908,73363,46733,25854,62305,68495,96479,26090,74015,82366,94698,63638,56100,11416,51518,74007,89888,60349,89323,63375,15232,90201,69968,25751,77188,81012,36466,42682,96190,74668,65745,69090,41259,48439,33884,48296,59267,33334,14400,80655,26927,22347,85164,59832,28957,19914,22435,50501,78322,46582,79208,34199,48540,89865,83272,24170,57842,38280,55522,91397,21296,66520,40648,34701,42704,82792,55466,70514,39118,13942,82564,83064,89077,95910,29680,86780,35867,35586,94096,55279,61931,46694,11120,75665,74922,36439,27680,60349,90790,54554,11908,36077,89425,50504,69267,73529,20016,43734,36048,27674,22172,25133,67009,90501,25386,58099,27668,96602,57597,50905,17770,24972,14701,58889,64684,57119,20220,53521,24395,46512,82244,57342,35981,51896,60297,31313,34985,36084,93437,72509,33674,66728,11162,32098,26567,18077,69985,23479,29842,54688,13992,26672,12582,64892,97877,49617,90382,46253,99408,79981,49088,85238,19622,32786,94488,42050,29663,39364,47012,2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62,32665,54414,22414,16127,74969,31634,21970,25119,73815,47971,93759,71555,65660,23992,89865,57708,89708,98779,22949,49166,75340,64928,28691,61919,53521,67972,93840,34028,75105,49324,45071,67532,46274,50157,31188,62671,40772,43919,89454,50807,47794,61096,43243,76003,64064,15008,58301,27738,89081,63398,41444,14363,61006,42308,99723,64516,45232,13040,66009,56199,17892,76381,18909,54465,33487,58907,13104,29968,67502,27170,55445,79337,55277,71204,33330,62714,45742,94307,93335,49667,85528,37641,19538,76068,53056,46609,43197,58148,39705,81500,98737,65801,96939,20141,59717,84613,81717,83733,24847,95933,56171,15736,69199,41348,76080,78303,81641,80708,63175,47176,62118,74244,19216,33139,57445,78648,51996,89068,72022,18212,26221,33981,66879,94879,22468,17579,97792,81788,23307,65178,96846,46474,14059,59859,78339,51482,84825,31888,35579,41129,36596,70206,74515,23766,75161,45395,32969,39765,54943,73693,18799,26562,81795,51438,12642,21516,72813,68753,53270,68471,18298,50043,49689,99137,20010,98179,72698,99531,99870,20894,16845,24335,57998,97131,46876,35058,68640,31718,96853,61592,55713,94167,77924,43602,96305,61505,40489,74246,64023,20147,91008,38003,29347,68979,12674,32470,89125,60230,60312,22824,18748,31223,33126,30250,65010,67361,44672,57130,81874,24099,50553,32583,94543,17305,86547,17023,86073,96693,27730,71340,34212,19368,40242,16775,18628,25537,84554,93049,40286,42049,36143,88626,29571,32331,75789,32876,93638,58008,88463,28420,38078,21905,76865,51157,17295,56325,53588,21768,71990,39400,50656,40112,58438,66242,61932,67005,11221,87529,36291,13511,24167,70699,17979,96674,12079,43553,16927,93888,87188,19311,12184,83988,58521,29109,38298,73303,45818,37753,46403,35050,43617,59450,13491,14137,27238,55850,19619,70341,81195,36526,38472,28717,91040,75997,37294,59265,60731,57512,73241,19447,46292,44244,49630,42702,88314,91423,21653,62976,88804,65069,22385,78968,83719,70074,47217,64179,33422,22438,82485,55754,30817,48706,69668,46702,71976,20117,50464,40814,36175,45158,82067,39382,35307,96548,63230,39813,82531,83160,16455,63132,20137,67393,47022,12270,48524,35378,64731,13186,87259,11134,35979,99628,33922,58788,69276,34394,26048,46974,44199,19275,50073,94491,48496,13024,67203,58627,77011,55183,95985,38647,96269,11352,59869,78192,62956,64000,73775,10262,61881,39547,13293,96789,50691,47337,50891,20202,39907,83763,96322,44788,90568,71006,67372,83204,56629,36067,14695,84854,86354,30953,54518,65605,36157,84880,66611,57416,23863,32341,14042,60653,53429,16517,46207,32145,43154,13047,15767,11989,20246,29863,61451,80355,61121,19354,29418,95908,54036,65408,59981,29907,66695,70141,11530,35103,17315,82027,48490,73477,83913,52552,91905,40843,86078,16360,45814,53759,71323,60032,77331,81161,79268,31323,88372,21778,88770,80011,66310,53293,53860,60118,87729,80461,16872,42634,96127,66772,83855,66638,77291,12983,58964,67565,40739,22743,68283,47798,78908,18155,75723,41975,13322,18053,95607,89129,77150,47445,46868,33015,17668,24810,36360,41489,89189,23307,89844,68888,18955,87426,77554,96223,93371,51779,36324,47965,53111,90310,81802,66917,79189,77159,55791,71137,40121,96380,64993,11381,15679,91693,32276,43543,75414,59362,87977,59403,26260,70694,99008,24003,63643,67759,75018,83571,58901,82606,56588,56263,67617,53659,94249,66252,38189,73833,27121,72349,52252,72745,63828,58111,15005,34824,18940,32573,94128,40899,82236,81541,18738,51661,75286,48337,88076,78287,17704,15094,83416,49413,97679,91772,98997,13603,83236,29782,32266,57698,66763,91019,38049,76079,20455,34501,35523,55950,57440,59663,28757,40831,83188,19977,58835,17720,20397,73161,56868,27992,91917,42775,75315,53373,47623,11779,63421,55030,51015,73508,66983,32952,44027,33182,72358,37562,58909,96595,53327,79439,76265,65934,25388,17963,93420,66891,80345,28838,16034,25494,52334,98429,19971,14651,19753,35022,17476,60455,32148,20991,33566,55607,73297,69570,40773,70153,24696,73379,15805,61745,46356,56978,60361,88131,91465,74876,18869,75651,51706,16173,33490,76619,84048,77613,25857,70092,15708,39304,11425,64854,66523,51245,82285,28109,50246,83904,72581,54763,61291,33493,38069,66941,16576,29143,87565,77013,98370,83621,61742,44103,91044,88415,47909,85517,85365,64749,43416,48095,49878,35246,89796,56914,65242,51872,65288,94949,48758,73833,23720,44410,12139,71938,42312,44973,51160,92469,36957,32324,38465,31798,51261,87603,38198,62919,56717,66526,37350,27891,10651,27942,67747,14885,49555,49597,17071,67986,95318,21586,72817,91395,71391,37721,70310,13593,16317,57317,80473,84491,74904,76200,47474,31100,89209,37209,79029,79362,78707,48611,17144,34706,72500,29430,22134,61258,77300,26082,35836,33134,84045,10547,68787,46170,73263,84340,59785,21321,51086,44868,40596,85209,47756,32103,35023,45896,53451,16959,25122,21556,28964,48650,63124,73792,95081,85605,38028,43139,46191,39532,45805,20109,10218,29099,70034,75902,53073,22241,47004,26878,67867,62820,64464,58770,77715,80987,45533,59618,78268,53479,97041,52766,87090,71816,27814,56766,69686,11465,82328,38516,71838,65962,55615,21892,94887,23878,82407,49215,62881,85045,16393,67430,79773,63335,49038,82155,49025,17782,22562,13839,46013,53914,28414,93688,31856,24835,73110,92438,70523,66549,57914,92470,19528,56576,38322,24244,25397,82280,78842,56100,51888,58729,37688,54036,54446,17273,29711,53910,64138,95507,51885,73642,63905,82348,80986,58513,60204,10196,54362,94666,54495,38086,44015,63061,39023,68270,79367,40553,68810,51847,92713,32866,40550,54912,28425,89204,82528,24198,53563,87303,13788,67292,32586,76548,32983,27163,22445,40104,31892,56108,67916,79262,25917,28501,70308,88271,83528,36789,93366,92688,99392,25292,89105,72142,98228,71852,13629,84948,94148,29643,19075,80563,77624,98734,81018,32543,80411,61964,94422,59455,42543,48833,68216,77327,85219,15263,66096,52799,84181,28679,84095,94918,66098,31011,12251,88737,54361,12426,47955,90845,17970,96420,58042,63954,15320,42448,83076,44560,76408,44860,58660,93085,76303,92579,32312,94135,26018,71335,83587,17894,69658,35267,10824,34132,40067,19772,23812,28072,29516,81978,21924,36183,90094,40736,33357,51966,66578,90630,43849,95542,50619,66153,14467,82776,77205,11903,88501,23296,52832,58690,14682,70472,35414,34632,10214,15156,56383,53247,90799,59193,73989,44503,96370,72218,33368,67174,92478,36697,59643,57581,82242,46723,64494,29613,47348,89980,46786,47848,20116,14043,59188,60813,36751,74055,49006,22121,31131,86266,40803,43258,41136,96716,95613,44898,15320,69149,55991,20178,46049,35581,94060,34525,71155,76452,27232,55934,61300,85203,36456,52290,83776,52759,77202,60525,63207,53280,75803,66742,73847,51776,63884,18372,24288,87609,53923,48447,31729,77509,25967,87561,88240,28448,50929,75413,34101,12907,10713,62790,98497,38856,36023,31154,77169,71679,28572,72258,89070,77893,75481,54203,93641,46493,47005,59686,79905,56401,37605,36678,88209,84049,27052,96949,99971,25515,54760,52703,95932,13084,41813,21373,35606,27507,36539,10323,12228,16896,95394,14980,38503,31613,12736,57170,72121,57845,56244,32009,87221,16821,56179,75121,21408,88863,98616,48211,44218,95434,58058,25600,22036,71328,31791,98511,30489,66520,53929,38153,81788,24923,26293,85097,47760,91836,95525,22771,47816,13158,54677,55801,77384,73434,85153,66357,83704,57281,19622,78163,45517,26224,35399,89162,87418,89007,17430,12761,58061,13902,94110,93731,29969,54592,99395,37147,98530,49046,43891,23008,55877,25582,57396,92064,41663,84103,21198,25421,84905,32568,26432,56384,18627,74207,72363,57624,44747,10875,15387,50065,94842,52470,51755,12542,16759,30618,60886,91820,89395,36112,91137,74013,79428,92603,94645,30056,44163,62569,64606,31216,65350,41008,80645,16693,50284,30131,97566,95075,24530,39752,57003,50193,67688,21673,98859,19540,70997,71993,86997,68028,81285,36027,74763,13306,58984,45609,70053,49459,42685,32389,78937,18920,16947,98032,61139,11693,30422,65297,37282,69053,91043,16422,98873,31109,87358,62510,60246,39981,13119,99976,21750,10288,96755,94217,11699,94785,24039,79778,22953,42206,85488,35924,75220,56622,63842,78529,52124,21883,46173,20883,40254,61661,62791,52313,24156,81211,88737,93332,24418,24269,10132,35591,34961,29640,73147,77201,94430,16071,79700,56805,17173,76358,39896,39658,33639,16049,25677,80326,91722,44715,53971,31490,59348,81508,29859,33851,31054,26839,53753,80551,13609,51341,87409,87075,31386,17679,38695,25121,88895,76705,72341,63441,77444,74015,61390,32101,72030,84116,58767,33086,26790,37682,40628,55781,40846,54932,95170,13713,59441,38354,52949,89407,33063,37086,88495,48603,23368,59079,26679,75585,55723,20644,45961,58747,73972,64951,67818,19061,99836,20374,61919,85584,98662,68535,52454,32742,89369,20462,17952,48528,57406,99175,12083,48689,11406,14321,15061,99156,29509,68795,30283,16454,43933,35491,89321,18948,39603,17517,37572,85755,62707,77627,97027,89302,97920,43875,29149,53124,93296,10599,33055,30220,73943,88874,44322,40159,63711,24207,32822,76706,40798,74648,11843,30636,91939,79977,91782,38241,68072,12251,48239,29912,91219,45672,38204,94934,48761,28022,74637,57514,59596,24874,83933,63449,86825,86363,69218,56113,72209,54355,44018,28286,96127,96842,63905,99623,73190,92212,22261,31924,97510,39759,32450,76432,45661,63445,42819,13375,38483,43832,37566,88593,69134,85547,82869,30671,73853,28933,24932,85137,97074,30988,76524,21594,77578,81939,21897,55141,50740,71081,88613,94084,63208,89272,54972,45306,21200,31825,51793,99669,79658,32810,43841,74825,80435,25137,65123,28834,13057,94976,95813,58465,25359,55881,18215,15087,23209,86661,49705,56946,59829,37120,94703,25422,15087,35725,65325,68809,83748,92590,13639,53209,11084,92347,36760,91765,72797,13324,77494,86893,96797,88758,42408,10225,13563,88444,39443,97584,21191,28946,76866,84846,24855,35123,10096,89486,84833,76186,98632,18115,69099,33760,68571,93532,57481,71977,17998,78965,40675,61408,62593,80260,89437,97807,40267,98101,18273,97666,83762,90522,40091,17143,27317,31370,86605,40535,10144,83681,39745,76042,91624,28248,96910,17808,25467,77690,35941,19387,62576,49394,87453,43493,85450,99163,20133,73168,61594,35654,80048,53566,40164,67979,66798,25893,21016,88775,81059,27199,14817,81347,12837,21724,18483,19349,99000,10463,59846,17884,52089,60227,50267,71852,84235,55189,98115,90752,12914,69545,75024,80931,84768,76906,44218,55377,24056,65767,75068,24536,55139,51282,19769,58887,81081,66688,90796,92728,65291,46759,65571,15743,72441,90933,79700,93793,56604,89544,49539,45781,65946,46240,50674,45827,90408,62861,95429,74528,75671,97738,34911,89672,86170,28694,20035,63798,84549,63622,19972,74695,19361,28936,70398,60172,72850,11707,99069,39784,92513,48487,97476,73453,19576,91334,79808,37195,64860,29650,59668,10036,94716,61278,41762,22751,36232,29894,47396,84551,49888,20797,94153,52292,61321,14635,31207,35720,53405,67061,49760,66025,71887,31241,59970,40413,60215,39122,19279,52113,92382,85254,16534,67988,10024,95568,16842,30576,67245,88847,98075,28321,81125,11601,21080,16446,78055,22237,30654,78444,68401,77380,72540,99542,74202,20211,59599,15967,97783,20418,47067,98090,61359,84034,68904,59227,19944,69343,47119,48495,59356,69713,80032,81412,78099,17485,28621,46628,19341,43955,77391,32538,33008,94480,27785,76949,89962,30339,54827,68335,86682,19860,57326,83043,29169,72607,55416,65292,76262,72884,90573,13110,12148,47935,65344,78320,51850,97499,15356,59817,40867,49898,40740,99651,26781,88319,34796,22534,34066,92295,42223,15585,65852,47162,41855,98704,80977,91137,85630,60180,58430,52779,43964,10813,55388,10872,12818,71452,40624,42740,30524,65250,66127,56733,71791,50732,30721,54660,81184,27059,87811,94608,77561,40391,15320,37731,92000,34249,47935,15948,42807,32506,14114,61564,11963,18021,60080,26236,97696,68789,37529,64273,99346,51713,10913,49000,50596,70285,32153,53815,48450,26488,26427,13176,86191,54412,59645,48778,28565,92426,81598,61634,67762,59821,83398,18851,18316,55387,58101,43490,96510,17164,54466,80415,82592,34192,86268,66836,96693,58702,43174,76354,86999,72341,38367,90834,66031,50747,11825,59824,24061,66660,20772,88389,89948,91725,54087,27640,77306,24944,38251,33050,57431,99398,27489,80300,44199,90501,81380,65457,47502,85815,19983,90305,94464,80508,94159,28064,64173,51830,48791,83163,16894,68478,52177,12872,69535,66638,28562,99266,21413,83089,45977,91005,24252,80899,96547,43748,71371,25365,86358,53127,43699,79266,66403,61202,16909,71040,57278,77024,58290,86726,99524,41865,78675,45500,19410,29636,83434,90821,26066,26670,83413,51678,71441,21570,37875,25820,24817,96649,75816,11304,77354,20171,36118,33378,94264,23664,85127,76216,59198,37988,32845,92061,99770,45623,23715,93171,59179,14118,96620,51333,17709,86780,97358,89834,22856,50074,52374,78832,98184,92647,95552,66783,27667,47475,79237,86581,95928,52377,18768,57823,50320,41913,78776,71252,95782,48872,72771,73138,69996,81009,49129,18195,63881,90984,63645,30525,52314,65993,42188,69563,72708,89150,73715,28211,14555,14521,20889,68362,13398,79648,60981,75748,39185,68880,91626,74489,45614,83914,39456,66427,26188,10408,54401,89130,46057,55045,35732,45012,54016,37338,96456,98067,58294,21082,11485,76071,87059,41981,83244,49880,72072,76958,12775,85898,51620,73508,17959,87426,29606,50906,98781,67745,28599,66507,30485,61660,71097,75005,92185,94513,87995,44499,91586,79889,99202,98718,35284,82090,88061,68056,33021,17997,38581,82240,71523,44160,32053,78874,91143,56268,93744,50541,76143,85873,95639,34465,11303,26748,46545,41715,54447,62085,83530,50501,53570,95307,54979,46052,19150,18162,12792,92086,91432,13211,95546,31028,75512,93431,66531,85638,29340,26308,48942,24284,86596,42182,72297,87862,42585,85185,96360,72598,39525,89691,28848,18251,54124,12695,76498,81987,72668,78307,35808,74944,58314,24842,75754,19025,35310,79364,61829,56458,85579,67683,26165,62011,62717,66517,88681,67984,11445,69212,77837,32274,41694,13469,15664,17294,51209,94844,99215,69070,10258,53216,73337,20587,52527,82472,72446,46667,83703,25768,65051,18805,12216,25053,19642,28104,16313,81110,82261,49056,42163,73112,45788,54311,17971,92790,49086,11844,94280,55394,87377,91858,19259,32641,77166,58558,41983,59089,46450,36620,25121,27640,44987,14375,57531,59046,98710,58166,42008,31664,30849,31515,38725,46778,20112,44180,16575,32338,84665,32164,19562,34101,27676,99845,58409,47156,79450,30855,67599,11272,10949,20261,53384,26573,65232,38026,36072,69611,99134,18590,19667,83350,56950,36774,23895,18685,24613,15688,49792,68935,50677,52639,71331,52839,19474,93702,21762,45381,87690,23702,25898,85441,50180,68749,39942,82086,46340,98861,94553,50246,24394,33543,85224,64045,19991,70886,93004,25081,62646,12695,57453,90823,27671,72575,59076,16553,66440,25581,90182,62238,31384,81740,75501,14369,25688,30883,49479,84421,34504,97477,21763,84282,80138,88703,91611,51842,55065,85029,61053,42424,72372,77680,52404,83834,37628,88241,76303,97138,86080,92418,89699,39363,93128,88814,25794,83155,99136,66679,85769,64854,10774,87156,59831,22130,56331,47672,84933,51818,35486,17658,47311,89609,66286,48024,79053,30703,18702,40235,90065,60454,92443,77785,88250,59022,19617,63954,46819,72157,16764,58197,64616,57801,19825,42670,67663,17723,63248,28938,61482,53573,33793,61320,63332,43352,98108,58736,55454,99834,58476,10256,91911,97951,94835,46626,90961,41571,25202,78017,24814,66269,70266,21715,47358,96093,28181,82155,27267,70716,69780,24373,49700,40789,68513,39715,61908,89545,29227,18479,26706,34216,31961,65577,23729,29628,17764,57354,47635,55338,74861,33950,46260,56166,57738,56942,84524,52111,82865,26037,89131,50045,20008,46170,95971,93169,35531,82721,73316,65926,98654,39282,82525,30035,74667,88006,20933,47614,13250,91887,76324,84238,44027,57680,22057,50305,40032,10814,32759,94085,99274,13767,29555,28353,22141,67782,49518,17249,50356,76721,43030,16827,24453,33689,38737,56320,19293,39789,70398,15203,94801,78153,10771,52271,54458,12610,60189,34734,19220,69685,54758,57785,52675,38797,45380,55273,27997,85927,94787,46172,72865,54803,16214,78982,89963,39870,24255,22785,33409,83941,31196,40256,97093,48614,20026,84429,69033,43884,91430,71354,93414,81298,42446,57115,29087,45584,80071,72053,98445,53528,20341,51227,90313,50502,12637,90105,84095,18532,68530,91899,90504,96619,23939,94487,26395,86311,52446,42835,22251,54745,59890,71995,40181,85565,30559,32551,33653,89120,72982,98792,25827,78975,45960,29625,26181,62561,69468,16134,38727,24653,68413,12828,36380,68510,12118,55535,82953,31694,57967,90636,95677,43639,25135,40965,85912,16055,36774,44587,87608,17155,36907,85957,84148,36513,13998,36614,75601,26438,73327,82206,87203,67383,70798,34427,97672,50303,67886,36840,56988,15599,27114,21223,90764,71440,67522,59914,41503,92811,53744,11197,12665,14838,42266,24614,47054,76568,39775,12711,93197,47464,56144,44749,99812,78248,82739,14399,81122,97786,64322,61668,89726,37936,14289,85075,58122,64867,15272,72516,51532,21237,12375,60884,70987,42682,33058,40140,90481,24919,79605,84752,96144,20000,61226,84081,98989,67018,27801,85112,32527,47234,94421,83754,68071,88144,48382,99134,10981,61636,12507,93943,13233,48151,36765,18462,15347,91896,28665,99869,29995,50560,95990,13994,54675,12770,13050,76604,26585,88718,84652,94030,54687,67800,40509,22806,17039,49829,94547,54072,71805,72292,42739,53902,69882,75342,80669,37763,36491,80162,11653,36875,70445,33875,85418,99262,10274,69738,15533,76829,27079,91189,48670,24700,55380,58060,36540,92734,70722,50908,76989,99201,57729,38156,35578,88923,78107,29610,59564,86101,39118,64789,99981,97175,32200,99456,15260,44508,69422,43454,60551,31645,43779,77363,44662,80226,74313,83246,85321,93617,31879,63602,10530,36601,28840,80099,60133,14808,88805,36062,28236,98956,31285,51243,48252,84206,52094,26347,72345,78871,42666,77630,40660,49873,35461,48015,77902,12412,14053,62475,14998,41305,53115,68943,70362,61972,67810,29389,85018,49552,70848,35498,55613,19900,46871,60984,96457,79062,99544,71611,44492,19330,18490,43032,51928,92665,72688,45988,99018,46202,64855,13776,26806,88171,61158,30873,15657,43492,86892,30645,13759,18210,29083,63582,79547,54143,29904,19540,52317,89682,39456,33458,98783,87803,38606,64314,88817,81454,73683,11305,20932,70184,44342,70436,47907,32872,94278,64498,94453,28862,40202,18805,88384,64035,65718,42475,78958,10607,14570,64545,66751,45874,97941,81432,56594,41146,83798,61729,99203,12921,45185,22901,25704,34438,19219,12361,14801,59636,35416,87561,81703,40030,52746,64227,78213,63688,15909,38030,68678,84421,81834,43909,57894,42308,36594,29392,42529,72904,39916,10898,92736,46561,20215,31970,27636,61261,21750,94996,65772,86097,63059,57009,81821,47474,82275,44217,38317,25360,71046,89469,86866,72945,90730,84017,87222,58330,38579,12375,24794,64612,33810,53210,44344,80449,80018,17443,74619,39130,27131,36059,86434,24916,40923,75950,63077,31473,27179,21530,89361,47536,66482,97980,58988,55464,51722,41341,20546,57936,19357,62126,70617,14791,37632,23604,37557,96955,75451,38342,35519,79605,14285,15478,54060,53432,91764,29684,92931,89017,70065,46400,80763,73681,71725,14907,99588,85822,59852,34708,15217,38357,10177,97437,53688,84274,67571,14065,30098,15317,79976,86591,30446,21970,66814,95721,47958,89779,58045,25310,20961,96980,77411,45043,98670,68065,57926,47546,54853,12951,49496,10186,75292,31189,71286,81250,13040,79826,53207,12636,86823,22768,92733,48872,30300,62328,76699,42188,33525,63121,38194,75872,39915,25025,69625,89547,29097,42701,39017,74987,21434,95496,19668,98637,17896,63723,69351,28891,74442,74422,79460,72196,57655,99438,53853,61057,60805,15335,30654,50065,86335,70175,15848,92230,37681,44782,28647,20343,98635,25794,95811,18283,81527,53184,35087,20870,75977,73376,34902,33917,21163,93391,92646,49269,61962,29426,26270,32806,78982,14593,15411,92341,62648,45580,85475,25729,47634,68774,74627,53967,63315,97137,12559,41734,84114,42278,37621,10383,47934,63625,65970,95081,50150,48078,98339,79673,95628,18568,71238,42461,86604,17224,32458,78123,47904,21045,24297,48102,19464,45972,91683,10474,95509,46905,67371,54010,40950,18184,65072,63737,54741,80414,50609,26694,58380,76630,11034,97650,54885,92749,19553,16644,88630,84902,63544,53024,84499,28691,31206,93211,83842,35475,95487,79392,49953,53031,38938,63773,12365,67102,54772,58103,88096,65527,36175,90955,51114,46370,86669,71733,59106,18234,65119,15500,38609,54740,19497,94963,31146,71112,13849,28643,64461,82354,45518,13846,78002,38357,15470,74763,40064,56211,92181,32612,20572,60236,41358,65030,46348,68704,38948,95479,69100,42147,46504,58859,81978,43041,80273,12500,90849,22571,11413,31080,71079,27413,66526,31063,61886,58093,72635,57342,17316,27326,28389,28769,43666,47995,67444,93401,94588,44192,32291,29704,14435,55220,61480,31860,11696,85347,31970,86357,89572,84746,49827,63731,63577,96703,71604,44672,61523,81467,49577,77727,14487,23725,26058,47496,60886,20888,17551,46522,27168,18309,63069,57639,38576,42618,69074,68007,34424,35824,71426,18712,60171,95229,41227,35820,21221,91251,13828,92658,83063,60511,50417,12214,98672,20144,33051,56108,40265,87927,18323,86577,71760,55234,38200,52911,76025,96658,30434,57218,93781,66944,82515,12100,42419,11720,50186,64000,24580,47794,20859,98551,77892,22056,55680,42873,91481,28508,19113,97193,58780,89227,69035,84946,76484,68113,62879,57454,95060,92839,69338,75538,97065,62179,44892,78159,15694,62395,76060,46493,18565,15269,58975,35984,83390,90666,16611,71782,91724,84495,15420,71410,31022,32097,25587,91376,79372,19552,85821,51757,86696,84101,78735,71722,16963,52931,24051,32082,20802,67056,68979,52635,36273,69175,71981,54198,48026,29036,86863,40727,14322,65505,48306,48120,21866,68697,71272,76574,34981,47929,86905,84824,65097,78100,95569,25662,74161,30205,15546,97806,62935,40015,24210,53175,46680,45823,23891,75503,49512,83196,81384,57585,33114,18384,24707,83468,60975,41518,83653,68802,62585,52918,92000,76786,98952,65630,31877,30325,25520,54110,46540,81023,18491,56591,86376,92337,70716,98273,85161,10729,67748,29696,37568,68129,97623,83595,65770,79694,62883,15585,45333,95885,84879,31215,33881,71806,30547,57371,17942,69978,28340,74126,56176,48520,11544,84702,58246,20696,97729,50395,94311,58276,59473,57664,74207,31242,56304,86380,16336,54445,92390,45551,40010,99126,82414,49552,31884,96647,42906,49073,94870,94454,57194,49264,97277,40304,28299,60128,60726,51662,79156,27277,65581,89979,25845,22291,61799,77662,98907,93098,69169,66015,35338,72426,57731,43184,35284,75148,90925,15162,36328,94018,43160,77249,61682,31923,60446,16423,20605,63539,28410,61806,51329,25244,58181,25438,70611,93458,37439,49695,52828,82460,22294,74646,45149,14632,72332,13832,25453,35857,23084,31140,80888,64231,73289,61525,29099,79262,25968,11162,65762,53716,88640,79934,61990,58227,23213,63855,59307,31658,63589,68190,85873,95920,77902,25882,95368,94952,79745,12935,39510,43958,94276,41486,27675,17548,33957,35158,17170,18404,47660,94955,43353,47841,97515,16271,46487,10470,92850,15754,70635,70247,41930,53140,59928,65094,80494,89951,84622,82943,41462,59519,42807,33071,69004,14098,13584,94296,16217,21378,83374,57146,32566,19186,30349,94565,74589,42395,85963,83139,30951,21915,77697,84211,35805,99131,23866,94361,80412,44739,76288,71687,51221,93992,70449,30452,82132,63366,74391,60139,71661,12288,86045,20666,37561,57674,83919,18302,11464,74204,52331,48627,71357,68248,57820,51112,49126,30915,10873,97930,70509,77852,61828,10649,79146,95582,97699,91578,98413,75461,83244,93734,32162,86549,56587,61355,20838,59616,23737,58748,27977,61072,76967,88326,40030,61982,72972,86352,97701,97741,36991,92199,59902,94172,58024,77101,46266,40657,52406,15899,33921,61551,82656,75915,37341,31868,78633,26342,75805,59034,14002,89439,39326,51523,24987,50868,34409,35791,21436,48322,51807,54982,38002,57786,68215,49428,30472,93079,64116,54802,81916,28879,35491,82694,44577,99733,70319,96510,80015,40783,91608,11967,99282,33949,10920,97909,69758,80265,29224,82662,80854,18129,46623,66815,93295,63661,47505,63467,98383,65972,56516,39916,78063,74104,35904,39478,44987,38946,18851,44266,68243,89609,42569,33585,43689,97463,21076,17891,80207,73862,44403,64167,78154,82695,73471,13126,64021,68254,39821,45612,79686,24405,15978,58298,69528,70130,38620,19096,73479,34082,74132,61610,89300,87627,82980,34842,37548,76703,69268,26141,98750,83519,43684,10171,67426,20893,83987,77448,55589,42822,62039,71875,20504,93595,16973,54755,21050,52292,32918,56414,21785,79188,54490,94361,81139,44490,10399,42052,21054,69143,89105,68421,44267,71194,98846,31555,53892,93752,62981,34242,21720,45298,59748,45041,88940,88990,29329,63436,40305,39692,48750,59206,18250,20613,28433,56503,45628,58101,26843,62417,52659,34414,28636,84524,24513,29039,15081,45795,26015,29476,34018,39651,37468,79585,16870,24340,81543,70017,84198,30285,49645,47608,82611,49826,78421,43322,97106,30332,41511,23570,20444,97392,38238,62084,90712,54109,77369,62222,43830,43359,33303,64978,45061,65833,50484,11463,54990,80715,79580,55386,95028,13798,29882,17620,83521,15384,83190,52026,67234,79395,48458,84167,69958,46452,51028,59349,10987,57392,39270,62515,70401,55455,93524,49533,38823,85835,21500,83720,93933,77892,89807,13471,34682,48127,26292,84076,83535,53617,52884,76803,82892,19518,91863,67544,30242,33670,70118,32348,84327,72020,88178,27048,58585,84013,15467,88132,13980,52911,43120,96678,11777,68970,39285,26064,90925,14106,64593,84856,73810,79145,88928,47549,24114,95316,96384,58159,43265,66495,20579,89983,75372,18610,74891,16934,71061,59757,91985,58198,82956,31928,14733,92039,79625,37471,82525,55724,58871,52791,12146,23961,55313,90235,13218,91270,29782,43187,71588,58703,29436,86953,88442,60046,10477,70671,93735,69820,75063,23397,31679,58169,69888,93269,56665,81744,31840,52072,23028,77909,70260,52876,34609,49256,29360,29805,46359,85570,82468,75363,15686,32707,69397,11547,54753,34067,18472,55937,23433,36013,13313,14123,87370,28644,57999,97995,73975,44840,63471,60540,10317,66946,16902,16371,94256,50473,73525,74404,19375,16763,24337,53298,24451,46991,61353,10928,95407,55509,25622,71468,43421,19189,90297,26455,97282,68824,84508,35217,76636,95625,46074,68418,37675,84794,94640,99580,64415,57111,13569,79333,43327,29105,11232,35733,61818,47269,39548,17802,21235,61172,70626,90719,66856,13417,57207,35993,83387,70924,22281,50619,13689,60145,72599,90113,86709,94111,78416,49170,52657,61398,44499,57328,21550,98546,78420,36181,43686,87225,83634,30296,27659,28369,40136,78027,62822,50422,25292,20545,22880,95134,94780,50384,55118,79445,67331,20992,31829,59301,20429,58188,89723,86368,30862,54715,24704,88471,80682,42691,59464,58758,69695,91206,29731,80560,10288,10126,63966,72355,69621,76733,88016,46856,69142,65333,51801,72441,32726,74527,73192,72211,67292,32257,35188,50741,65946,72639,94881,22804,70266,29939,68735,42841,17601,95275,77765,28988,53289,13596,16739,25833,75871,38576,87505,81151,60625,42076,33605,73353,39059,76422,74925,46206,44978,85611,86498,89370,80175,71176,54664,56809,67049,11500,69871,85439,77911,98782,85462,90719,98221,65539,80534,33848,57925,34085,57322,91842,28523,52779,75316,21560,33180,55604,74657,22895,49209,63288,35635,34490,89697,22314,25066,13066,80633,91318,57561,63817,23603,13646,29404,86980,89127,72446,91637,98202,20900,11429,17024,53136,77183,39420,57653,85495,23958,75204,56353,81680,74879,40580,45757,51278,54341,66239,77900,11591,90221,69917,79881,23307,89241,22845,27122,86316,80600,88086,46891,39635,94432,36146,17955,55107,93702,84958,99591,83642,75276,52042,87092,47931,27556,48471,53861,70402,58666,56714,64141,30604,67676,21510,47240,57801,69779,79104,97834,86409,54588,11113,44577,36933,98992,88246,81900,79384,50916,40532,14309,88016,86418,41295,33506,11823,50322,40932,50512,94393,74863,56455,23044,12010,64591,10800,35141,58762,45028,62895,60742,17029,82988,37471,55425,43708,82274,98079,33710,12995,50413,61797,37658,89209,21899,50995,22735,85396,55422,79312,93945,57023,68234,77721,64659,69062,87337,66060,60599,74156,16052,38188,52450,62804,97094,94772,37730,54780,16931,69795,29595,10465,40472,51000,81048,66356,34774,34698,37139,13130,78156,34227,10773,22336,61134,35330,20659,12903,96570,49462,68504,37222,70614,77887,89277,25558,36046,95566,81164,21639,35350,75133,37395,23621,33018,77594,13729,68153,70637,84146,87151,87212,83849,63146,64781,19695,73822,65421,94505,90900,80717,10542,62020,88254,28229,86453,29308,48675,19465,89595,45418,44827,90468,62948,56755,36299,34258,49859,12950,35686,83243,30375,46260,46104,33230,14053,72173,79250,16780,70683,82571,68558,59289,36788,77955,48024,31798,72457,97639,98960,11256,86929,53380,34068,56082,96223,44044,17083,33647,31813,40744,40555,23125,74087,74063,43038,36421,26327,16267,36014,64946,44743,35381,86456,82707,83040,80652,42039,29095,62470,26313,36243,99464,52611,51183,69362,51485,55469,62513,55374,15851,92941,81873,24073,81673,95586,23785,37439,55341,53816,69812,51681,32111,68754,23576,76548,37365,58721,88970,47269,88234,18964,36693,76674,38315,77795,99808,86634,22959,75501,16263,24557,63191,74265,22929,44051,83379,68242,95304,61167,67760,35445,45849,87661,15408,68608,71973,45019,67915,12104,14204,57498,60242,14906,22699,49586,53816,32424,84645,99034,59921,26609,98238,18155,19129,71607,54166,66814,53194,62422,67171,34045,70655,76602,52182,75328,32129,31135,13286,70594,39121,30866,78398,25095,22010,79295,70094,43323,74589,45943,43838,40356,59151,69593,77399,15084,95490,75246,86691,48814,81789,76468,96222,76729,12830,54789,80275,66402,15234,95225,12091,52395,78969,49230,87621,21563,46675,74094,20254,21699,37551,69935,11806,11477,26628,81498,24256,25236,31878,94245,28573,56015,22749,74834,48576,31575,44994,25216,80798,89060,67226,43078,45796,68326,21307,23846,68506,66225,98275,20636,50684,23342,17383,46651,84763,48446,80663,12616,99883,33243,35512,68271,37902,76399,26083,75590,77763,62882,58973,73592,49077,24796,47516,72541,31923,60889,10399,71979,79179,89844,62450,15435,96783,28031,60156,32833,58787,98082,14420,28804,90734,20243,49270,14323,90628,43509,15016,10114,51277,49961,56128,48213,86282,62052,25316,56742,85491,24034,54365,48744,87371,87304,48451,85977,33432,86699,64066,37315,13447,67650,56069,61714,17984,79542,53686,55952,85451,47385,90858,55788,66480,19209,84308,28365,15273,70157,77122,59123,84999,70151,14368,65110,18922,67285,45691,97978,10569,66551,49007,56940,32655,12012,69660,33107,52614,58702,49138,20688,31974,12911,39163,96082,57961,35847,86541,41575,97050,40086,91766,48234,24633,39806,33993,15875,84530,24386,29437,80813,19971,63088,98374,86659,82845,46338,76438,54860,69792,56451,86468,88271,74273,36569,93985,57053,14375,26224,94484,14401,99137,10001,81144,89174,33872,14244,18058,43120,35305,21806,47680,28130,70617,22378,36238,43504,29083,39427,68495,50680,67463,66697,38000,51420,87687,66740,43140,85132,10890,68000,34177,43806,61174,75887,32374,32943,20461,55758,69334,12384,48718,69369,74841,50447,76549,77169,61140,27606,38485,60650,66546,15824,14053,45633,55868,65246,53274,29552,41001,24759,25936,53378,65266,88236,71228,18015,94129,63531,52692,99844,70452,93289,39947,37304,46925,42591,79341,29197,74421,59285,18519,71145,42934,88889,48790,12525,82496,64855,69497,66813,42084,96346,38068,42585,70114,44828,12682,77225,96798,22874,61824,78946,84181,73840,97157,52415,73139,16200,18788,97842,45139,53495,69283,45319,37610,90141,84314,68611,20624,78104,63801,74698,89663,76916,89781,83572,13797,37572,49784,79829,33342,87459,10780,70748,43150,25128,20841,81445,41708,30961,28101,96594,78292,59702,72239,24182,52619,43839,14672,65764,57399,19894,15182,20706,75573,71184,24799,17955,40360,31471,42953,55082,54107,37333,69930,69703,40120,89626,61188,27094,81871,49872,91412,73459,98383,22094,96253,67470,73940,84743,15800,42815,32343,73602,86583,33964,87922,22091,85937,90740,31250,45107,84939,74389,34807,42062,82512,16920,75254,39197,98338,25258,48895,91349,76983,50888,34169,24878,56121,53687,90490,18683,31330,79731,65946,77889,24831,50487,93671,47158,19246,77076,96282,51453,13717,93632,31647,70910,19549,12029,87747,96967,37567,94883,51135,57448,14535,73391,95411,61314,78758,94285,33283,96295,13585,21913,88781,44746,61478,76743,88151,17991,30185,48116,83123,43050,57884,90320,71588,11531,54795,60696,85714,66335,35017,44797,39731,21231,53393,49868,53942,82934,65303,80888,97257,69570,70315,11082,44842,77793,43654,21785,46396,60416,11626,22208,83492,16587,37440,55180,89161,38703,10102,80847,42013,10207,44316,54079,27685,18587,97136,89917,39429,70309,33859,60274,71952,24488,50678,98962,29890,82444,51545,79722,11754,80534,89960,54769,23672,20505,97329,78933,39826,97492,38832,65445,35818,65804,58589,25325,71213,20723,98036,45980,55699,77284,37255,66557,42749,33518,44409,42891,76679,69042,58857,66693,40706,57793,66430,16352,33074,82465,61342,96982,17217,74988,36030,45464,69346,46085,13996,49304,36147,55944,64471,76551,49815,37230,12705,76914,83447,18752,26323,44181,44723,27302,99468,29320,36687,44055,68526,31433,92614,25511,19668,64674,10655,64369,93551,14647,95206,16760,74359,82303,71138,43249,22410,74106,85004,19339,59050,16339,59573,61668,99070,54814,36883,30549,36994,73552,79888,73147,87147,81319,87535,16066,39199,16381,60393,59670,31516,25101,18251,73535,49888,94961,60700,19831,17213,58395,43832,75982,25074,82521,72957,30220,30823,42743,79941,83954,86064,96540,12788,89292,22115,91793,57503,30436,49449,83148,31521,43623,15267,25085,20658,80789,56115,92904,79148,91135,76968,59618,75473,73014,18151,50008,73849,98020,19100,45396,95176,90271,38143,81084,82033,27570,64185,80414,75079,25836,10791,81755,60145,65077,97897,84531,60346,36894,93873,48654,47305,22134,15152,20722,85496,51677,83955,21425,61237,45704,92452,14431,66408,58067,39677,22383,98519,23304,53162,59736,16063,27542,90209,64359,86901,68931,23194,93559,57480,79241,25865,33031,44407,92859,77135,11758,20238,75443,67784,85057,21094,31050,42107,53543,81253,64277,73850,29683,91602,26778,20727,54797,52090,84397,31681,54629,12832,84039,70132,81786,98493,14828,95677,13097,53488,98217,14243,93009,99073,93941,69356,39724,13706,40451,82378,26915,98680,84058,64136,96836,97999,50009,71146,69752,29883,45772,62547,32329,26172,85405,92525,49256,18104,32767,77499,28830,64592,63872,42436,52527,15587,62727,41248,21769,83726,91142,87166,19661,98335,48068,78969,19505,35070,31124,87226,45736,24784,19188,60102,60885,47179,97212,84645,48857,26278,47731,86486,89374,30324,30453,21706,87474,55013,62110,59277,85705,87480,53201,89598,65037,76803,46990,94632,70001,41000,72011,29068,40238,23132,90808,48450,14337,44582,99930,19152,44281,43391,82374,89826,71100,81120,75009,16542,18664,94927,80063,31224,40551,40393,54519,33542,93008,44481,59622,81925,56325,17473,51998,92572,39006,36387,91710,23486,84316,68394,62899,32488,98266,80178,44213,98175,28071,28971,83322,52137,26671,96235,45680,65378,50726,58790,17465,55464,19048,67107,34071,70584,70384,63752,20410,88454,17779,18669,75407,11323,66831,10053,73045,60850,59399,97550,62436,42567,33394,73414,97100,43927,51166,54888,50762,99985,50040,55741,87431,54385,41869,13787,45727,32701,64566,47659,97441,28113,14297,27769,89069,16225,66985,13039,43651,48849,82112,66194,75421,65970,66079,10717,59650,47744,61281,10456,89481,87641,26980,47329,30403,70969,47280,27022,71337,48222,72004,29771,53929,28561,93738,65489,36671,19257,19518,42324,68481,14648,65611,10389,13796,56415,87959,79912,13952,14625,55369,64956,40692,54719,33313,63215,61799,73397,54003,67138,86689,88890,66618,54961,69062,65197,16618,39862,33310,50595,83481,17045,56036,72472,21790,55270,32814,18124,66952,19983,46956,60393,47865,20469,97279,95460,57949,26946,35766,54796,91956,62784,20064,63173,60574,41365,34455,75428,82120,92544,69241,32930,56073,60009,31734,70572,42917,14259,62227,87773,78122,63033,69541,41084,38665,91950,73328,19071,79414,33646,91831,17895,90851,77395,49197,31392,99542,20799,95995,25623,51323,44497,41205,11962,59898,55175,87378,26804,31488,10310,98738,23654,45043,92702,97315,94958,82992,38373,15555,59521,58249,32651,44889,33819,55868,87291,10734,56783,71670,44138,80202,65683,65170,43288,88021,75151,40763,46523,63279,57337,11634,78111,73205,39259,51632,93504,76120,78720,60409,17190,18285,41914,87180,24732,94984,10697,82923,77660,31381,38053,23844,25119,86160,81264,24963,56795,22431,70802,10812,72770,48369,92309,50899,53910,99434,48472,37130,67369,73738,71615,33409,12121,39157,16983,32458,63521,77957,82844,15795,98877,38378,34359,22266,90909,91690,36852,69754,33811,66490,32109,26522,85284,93402,44751,23027,45802,58184,54385,13850,17258,45814,94837,81977,63314,65800,93084,90251,98139,50225,75002,70452,61857,73439,29169,60433,61069,59116,11810,44478,39011,67922,13781,17869,73858,24106,91697,60141,50653,12108,47439,77792,16387,36063,67457,67717,99446,85224,74727,35156,88742,55566,67993,75343,37437,18012,93942,31546,64994,49035,57102,42008,33507,70693,11215,34913,30855,79186,89959,94151,37024,13081,51817,11334,82471,81592,89514,52499,83760,81308,29801,60697,17550,33381,85076,76025,76248,87283,47417,96182,24643,66675,33994,91469,31292,75007,38813,67366,91639,47439,97570,23078,52157,69422,98408,28114,42833,65028,24422,38778,55031,38626,29897,35727,51756,17906,44632,29037,13792,50016,50800,83795,42786,93366,16998,16014,90161,16380,90899,89971,81363,96873,49311,98605,35769,80532,47860,65718,24268,68745,59916,42657,43923,18043,84382,45458,18032,78929,65670,99511,77456,80214,12287,80803,67138,43267,56436,59545,62705,89047,97966,91058,22095,94207,22569,62112,58427,28196,38014,85077,83947,65625,45748,82380,21031,78074,84520,77537,81049,86671,69093,51690,15059,47652,52982,86881,42528,63769,83350,21086,95742,95853,75791,37389,16768,54284,72076,82109,64060,76690,20177,51194,24754,54183,91944,30612,89235,15814,92876,93492,33576,46054,53077,29954,72465,11356,80494,22405,53059,40962,71235,16879,56956,41398,85419,59675,64827,35669,80210,31757,41409,95631,46415,48400,81039,36713,33499,29778,50756,65555,41556,37262,41148,36332,10606,61249,28741,82634,97454,61654,80590,48702,74822,15776,33874,38536,77176,80343,10042,17582,27332,74023,80092,22692,66332,86890,73021,33266,22325,79605,64996,64181,46520,35522,25419,87337,31988,75570,21779,92837,78931,66518,41873,45467,77112,95251,86515,50943,79723,39377,63006,91052,69653,39264,36903,12606,98348,99243,11590,75691,22311,46362,96020,75653,91461,26831,81246,75281,36894,57667,48663,87963,96278,79759,23840,89615,13107,86023,52125,72475,64851,23723,95801,95630,69638,78535,93528,74168,13479,26893,39753,98827,79583,18624,73324,59217,12483,14438,34015,77428,82540,87517,90550,87756,41396,48224,97688,52252,30978,20231,17040,54766,93091,33607,58159,22258,18623,92450,41436,68908,36882,43243,73806,86856,37403,83263,20282,88124,79573,67861,64991,13225,94023,73208,28279,26694,75116,82936,91083,68048,86190,50726,91858,17359,88212,68066,40362,96163,22464,88848,79885,18271,34387,76544,15843,84287,97744,81966,55331,54452,55413,54871,16293,72726,45321,98706,59319,31300,76275,95603,34403,66786,15984,14002,82131,14514,83570,64676,86504,99370,23334,78052,13427,59431,23485,94436,52093,57901,29325,12940,28000,18232,89311,39225,45102,46484,17576,51549,58855,84908,95463,47125,30310,93990,20630,82006,32519,47564,92624,16106,79001,33844,52784,27426,59972,39014,20833,44755,88207,42660,31432,79756,81567,58761,35579,67394,11699,13641,92155,46215,25868,32524,60601,72100,79549,22428,43356,88361,31542,77354,53190,12573,68329,78225,41073,88327,39994,77857,35075,65797,10946,60301,71338,17596,82697,80051,53566,34901,69477,83894,75915,75984,87341,48028,57265,59783,18268,25092,15486,20588,49079,63714,34256,75224,70982,17938,49313,29553,70841,34227,49327,30367,82333,69314,23690,51432,32364,65006,19312,91079,35454,76473,76522,85175,96654,52275,87514,82614,65185,27260,82582,98878,36209,88929,35704,31491,23100,47138,81490,10308,17191,17767,39229,67945,35395,91464,75911,49483,49212,63170,36282,89700,12169,36774,64971,18855,41017,96710,65820,55690,69307,77419,25579,59667,79588,41777,76040,20549,23653,28022,24357,18994,12976,29964,29935,49524,29150,33135,63740,74144,77251,13438,82451,25563,37035,75834,49523,14203,89763,58856,91776,90914,55200,55081,22265,36319,39338,96980,70361,71334,52969,45174,76383,37270,11702,11361,48900,61495,55153,52408,59391,69778,30495,45454,98524,35581,18392,99799,79672,13436,29209,38116,54073,62757,15546,51442,30435,22007,75950,26191,41576,79702,19112,19732,41318,41585,57675,32789,57831,71763,44642,39830,67377,12833,11496,57963,35153,55132,28747,19222,50758,30071,41625,62328,22692,28986,99528,28906,30890,41357,28492,74740,50697,63468,19655,54596,48272,55490,99096,98394,20042,13394,94292,75247,77653,60389,86811,47915,79302,30173,39069,17654,44096,99612,32916,80300,81269,29379,46342,97481,95858,94578,37618,39195,35458,21809,69788,16437,99720,80074,54265,80599,83318,66566,52135,57183,11432,47300,91115,66190,85032,68066,11889,83966,34931,47210,48697,71274,82083,69324,96564,27332,91132,83740,10729,50063,49479,56163,99616,38109,21445,51888,27499,51332,88226,38086,49027,19092,10200,60566,50835,10058,98591,39634,31107,84644,62801,77465,33701,90177,20206,60805,45598,12213,79326,73086,72660,47737,49814,68074,55225,44016,14295,90045,64803,45248,82183,37578,65247,44864,38938,48401,26685,64584,29069,76160,24184,71929,42098,69480,96576,41972,70979,90607,41103,76121,30409,72930,79676,68809,33409,55167,33843,98557,48400,71616,57048,47269,12215,92071,86947,93037,95883,11032,16853,98643,52241,68251,55809,31753,24209,40532,57246,63568,69956,18290,49532,38982,93371,86542,44001,86475,40302,28577,39918,18171,78674,72438,39047,21530,34857,11683,65769,93743,34324,84557,91032,61340,64110,49716,62713,72745,27322,48240,29653,29955,58645,16782,38930,18002,46598,49614,96105,57635,50829,55751,60826,17574,65937,71893,33553,30085,75159,93068,75425,94827,21177,74088,80942,93262,66337,44234,83342,95205,27351,63673,16234,23788,89687,88670,97166,57201,74710,97331,75331,70862,81748,93873,45450,33061,18930,33976,64715,79575,34502,69373,75376,57064,53362,90768,37960,43947,65881,63678,42530,37469,84820,75958,98221,89725,26817,39406,67970,35719,88170,66482,97542,52976,37762,40915,58254,65563,35306,14091,28896,98286,10521,65670,12270,52224,44854,68415,58679,49715,27840,14337,75806,90760,65357,16244,24196,49006,71392,28724,10410,79016,85076,80189,47786,86974,62355,25776,94512,33788,75236,55844,40151,77853,50544,61046,72798,92217,11032,19281,84910,11192,94324,69570,48991,57781,10694,17237,68851,32930,57131,87567,45460,35764,18478,13773,10145,23961,72861,76772,89339,17511,65357,45760,21990,96469,71836,69323,48716,95213,84556,23191,62658,76246,64801,60721,25101,48668,41821,33209,53758,49073,35409,87290,15567,51165,34529,11421,42302,56611,91062,38334,29053,31839,32188,39611,45952,73533,31131,39559,11846,12207,83069,10517,40507,83321,56642,91558,39499,86794,27530,86411,56491,96923,40031,50905,24399,73960,91463,70315,80116,77449,78700,67715,87372,79285,31822,93465,81587,87326,28386,93413,91413,79246,49432,49450,42752,31092,88707,57448,47745,49686,52070,59929,12488,43305,67845,93669,41391,40582,74256,76304,57642,86411,52050,81138,86565,97760,39207,85371,72772,36969,70475,46025,67807,65190,24195,83955,95892,40849,40249,48041,16166,90462,37101,21274,24653,95598,29546,70911,25708,98565,84263,11834,27854,87875,25080,70250,37141,14490,81694,42277,17036,56741,92759,83464,17378,48107,56566,90886,32674,47780,84231,42819,28526,66678,99976,40015,79503,87644,93426,27730,13311,47004,29026,41347,82832,59991,65341,17862,88399,26442,47709,53499,44649,22199,80027,97653,84008,97128,86867,72927,17992,53398,52681,88458,61297,54959,26332,94764,16982,56240,30879,44434,99648,90946,96775,53298,65596,71340,47797,81965,80226,65800,26910,52711,87216,37536,98007,22650,83550,10368,89872,47514,29442,48043,21584,70372,31114,17953,87777,90282,31272,88087,41979,49767,16503,92807,67136,86419,47198,25578,89488,14030,46123,41968,42786,56253,20550,52337,60733,77751,53785,81884,34132,71271,27951,51184,18039,45228,72203,80186,21783,27799,95780,37281,76345,71695,39768,89563,60069,42838,94102,25823,55009,51639,11504,12053,76499,20044,47252,62766,90847,19666,19997,92021,41098,87276,40083,83363,84642,37285,44381,35599,76846,72195,81973,44131,97418,71197,37361,74697,65610,55491,56112,52991,78661,46736,50396,13962,89619,33295,41784,94301,90257,43420,21669,59016,67390,99413,90302,98776,52509,37706,85056,16831,80971,21182,59095,26645,30974,39677,37702,23029,22394,68079,38526,31569,63066,79932,74120,67583,27174,48807,25435,51998,96564,23357,84829,48703,31606,30518,30812,50333,27158,46949,96279,40130,83350,99262,75927,94604,45652,19623,49488,56124,15996,59212,31579,43360,80398,78035,99001,94118,37635,75272,24360,40993,86320,45048,77263,61078,46464,99742,68543,33261,61016,51318,35870,22862,49895,76383,51138,48866,40502,32393,88639,68214,75499,36406,53914,17359,41823,63913,27636,58484,34322,86691,58205,84046,82582,57318,38332,97767,87793,80328,76433,92693,64296,85394,90976,28489,43390,57741,34054,95928,91784,70873,51780,75099,56934,53539,86637,72677,82224,49284,48589,77033,35220,78591,31176,16291,70868,30610,97721,46162,17869,81500,75010,83149,63912,61829,94766,99109,37209,36601,28906,62929,93784,38595,70205,71845,42308,24215,38108,94897,20605,36426,15232,73900,40107,50797,67726,50442,94217,46979,18214,10605,17323,33924,64083,75688,40909,96262,81798,72520,81135,96894,65520,88289,37751,39806,72205,85210,17136,52895,98698,27908,47828,58363,31004,56001,67804,86731,65985,93410,91000,15769,79688,62959,93855,30480,99438,99491,57281,77412,21960,79282,33797,64480,66935,54204,78772,48848,31080,62945,38642,74397,62387,70056,54095,12330,56539,32541,95088,89593,32099,18776,84418,38660,34167,23528,14715,81695,80643,79814,48470,10422,21081,17847,69283,66626,22447,51207,40032,88759,30254,63228,97603,79068,66676,86460,25885,69304,53020,41701,50368,28887,15026,99687,25123,45338,33451,66222,38759,93142,96773,19220,64911,94728,81810,77271,86066,22347,50836,70491,25925,89664,82171,64776,11480,20945,41801,70047,59900,85117,76159,51484,88765,18960,98847,12409,25945,52963,53918,28685,71359,33799,46450,40439,76178,38517,77677,14595,76642,50227,41772,41243,12593,10246,31220,17918,51313,65809,44257,26852,39696,68458,67983,17758,96972,20955,51130,84315,88541,71410,10905,94772,47189,94532,36087,24280,36924,48337,64387,27591,65047,62485,43378,97334,80723,44915,71048,17239,34086,61484,22277,65843,53315,74733,68533,16170,60818,33133,78263,69779,22385,79616,93596,59142,18576,16327,42047,42257,20610,49563,17343,27135,34918,73859,13403,26506,54752,89599,80697,96630,47097,28220,69509,55594,11098,23277,17454,22496,69953,29323,35031,56775,48866,36453,77155,43169,11828,84378,36399,62939,29882,42201,11237,61181,55580,15936,44746,59928,36634,63559,61517,52809,14147,92368,56790,14118,59888,96019,43042,58078,73551,59601,61620,87754,98045,13671,37340,34074,31316,94879,22802,95607,55478,85609,13986,67654,77532,73052,64756,28151,10875,62997,45557,35619,66332,69947,42800,41904,85915,54806,75710,53036,88726,89182,86143,51912,68565,49078,35266,36356,19918,66827,69334,20493,63934,64183,84396,15926,53288,51640,28800,79058,82524,95449,72415,60264,14751,68144,89056,60463,19058,41665,37344,13160,51585,70460,71908,60938,30601,51347,89841,23449,85911,24016,58786,45353,37049,34289,59150,66594,80222,29297,53481,39587,90432,31648,78064,90102,52491,63576,48089,54727,46064,72626,17789,23996,46201,18181,30195,59237,71848,59132,83350,72344,65215,64055,70659,63146,39838,94386,63256,96384,19030,46218,59596,20344,36208,12372,20092,45682,33395,61528,32416,38083,25827,31920,39785,62191,52680,57909,38199,89372,56369,89783,66222,30469,38649,87280,91473,80469,50999,80675,14377,16290,94668,65150,33854,28732,16695,14575,63718,42622,26740,98097,86807,86091,78355,36419,29808,10731,78126,27855,73781,63021,16134,33169,33475,83807,66516,48758,59552,15960,85113,96030,96818,17478,30550,33769,41519,15370,78837,57145,61585,28971,27098,34351,64690,88451,92277,23976,24166,77705,26585,13516,27474,13337,92958,57629,41603,72210,93932,62855,62369,20112,90336,78023,58078,72900,89547,97307,39400,13747,60529,71875,88860,97920,39521,53255,95956,64925,45016,87094,75634,41871,59204,61558,73070,37474,36583,64368,97925,12403,34872,65860,78478,25648,87915,13131,89401,78439,99231,29643,30064,89330,51090,46298,22429,31384,34021,66005,83368,55134,54056,69968,22683,64332,39212,15637,12155,15430,52340,54653,10912,40533,32078,79085,58552,56852,29563,67541,46702,60507,17141,69101,84173,86950,14392,56599,25025,42592,68169,98696,75854,74020,44482,93376,31784,33247,63345,88206,59013,90394,53079,56125,75049,52500,42524,42474,55668,51057,20682,30687,45377,87628,20462,45056,14585,77790,84682,47054,18494,30117,67306,52738,40596,74934,26953,79905,33449,73136,94463,66244,24033,91439,35000,23006,50305,23928,68144,63091,33072,21864,78475,91527,94168,39790,77689,63739,73933,53334,92408,94413,32507,56094,38256,57364,66731,18174,79422,88841,51924,36288,37400,80101,86737,59128,18754,54252,24293,92777,22231,38779,83376,42804,72544,53647,65151,62504,95970,31944,66457,91719,30707,29868,47379,82584,28308,40801,34927,56978,84568,19168,59795,10049,39948,60132,35083,79659,95887,72659,72478,82730,31326,35898,40413,51391,51803,59457,50205,40841,45486,32923,46155,54614,92797,36689,77804,58081,52747,66230,41330,62564,65611,87745,36375,21776,20893,84062,10615,48722,22498,27714,28594,10362,22582,10947,43481,54405,27532,36337,36730,98699,60358,35970,85560,14952,39231,70951,49436,55847,49990,68606,36006,53151,10203,74980,67833,50274,13549,66682,41709,84725,64945,12354,62018,40173,17070,50865,28489,55278,79232,54619,34775,95651,81671,64204,96553,94837,42542,49786,74992,27852,51936,31746,95080,22871,98852,24001,89387,79389,18251,94826,54424,91140,41555,48887,30242,90066,31972,74327,93888,56792,88203,23610,69055,29058,98232,60517,12904,46211,67414,38793,51899,94574,86810,95327,94562,44237,31155,26330,66047,99549,82935,88756,33556,92448,69351,14550,36831,33883,40218,29218,25584,77372,65646,62992,33123,61340,39842,73615,27455,29546,16467,71831,11590,40316,24404,29027,84557,74512,89607,73548,32208,90539,93907,71351,18478,57287,26984,49669,27983,46962,70251,77981,92617,97187,55462,65034,67247,12850,35776,31637,79049,96952,27017,66534,87871,38459,39704,78042,68515,90580,56410,29057,30981,91462,18714,32587,83120,90935,46159,95934,39158,72901,42125,88035,14964,22100,53373,91028,95976,94402,66342,76987,22737,35293,23740,67142,92028,99564,42706,22439,98707,40332,36166,89199,17382,61757,12770,12567,67849,92432,46771,60698,81475,83889,42719,60229,16579,51726,40548,42858,56043,15118,80548,65250,14104,69105,23001,15450,73744,15492,99416,67364,47746,58422,57416,21909,54920,26350,60403,83997,46264,53662,47382,56006,37524,12103,35533,96855,24137,31574,48210,70437,72812,61633,86278,35935,28998,34079,18665,68335,13811,72937,44039,72927,28331,49234,21716,80832,34102,65794,34872,60779,66699,76210,17968,10645,41181,57150,42545,81662,79516,62643,74489,69827,64306,93500,15676,77098,55364,21949,73510,13777,48435,73547,70970,40965,46921,57569,68771,56552,27490,83969,51318,80224,11945,30195,42041,53089,25182,88989,72237,93204,91099,81434,35599,31126,11538,39779,40583,55929,36590,69474,80618,31721,18896,70030,67498,63371,68833,71938,68335,36448,86516,36721,21221,29742,38872,89294,26892,70622,77319,78218,78556,31773,43159,75429,25389,77544,32705,85805,66815,66826,45058,99723,72285,77502,26035,78472,65432,94336,58702,61061,94587,67633,66870,17256,95568,56342,10675,94027,45576,27330,64298,22146,34493,64435,34067,98601,33756,68014,45550,31200,51011,78732,91316,26416,40183,30767,97778,68208,66082,68515,98861,90067,95203,40692,51692,64185,37253,34504,90107,70557,94064,11732,28643,91586,23876,48278,30209,52119,69998,53946,34657,29955,83722,47582,60917,63113,78717,33006,28298,93298,73038,56734,24389,45647,17911,21309,98687,36752,88328,65801,24855,84281,68432,18659,46377,78435,67616,43116,50758,36827,94979,48746,62989,39268,73868,94235,58608,71172,21935,51190,18183,75321,70087,26093,71085,25097,33776,73188,94957,30674,87052,33039,32680,49631,23678,40655,84467,57985,99880,60752,22253,76081,33595,13354,45922,43042,38154,74803,94214,51125,12082,15089,14675,19005,51230,34619,90464,83665,44282,13345,99543,12919,13003,25668,94834,99083,87745,25302,23946,31463,67977,65341,90517,14327,68392,49958,36544,87087,21983,24489,28775,56868,27159,13911,38442,21794,58186,71384,62545,61282,99047,61196,70316,15390,75749,91272,53703,22700,51864,13198,89223,69318,27481,57767,42080,80939,46067,59115,16665,11781,35566,77148,79666,10551,49163,35514,20053,74959,59412,82827,22351,46310,89737,68114,92654,25852,90035,47038,40297,68886,78026,70711,19916,88118,27138,49549,35650,61552,30602,63341,58584,78628,30946,84992,73562,23091,23961,38311,28263,31181,78474,35838,66204,36745,50524,59676,24336,60769,55574,78582,96955,77842,81741,83053,14279,20756,31225,88126,53811,60444,27374,26623,45194,81645,62352,85479,12233,99958,33329,71530,16478,49481,75034,42479,95737,32740,11654,86927,80547,54846,87250,35021,75197,60813,75577,49581,93512,61839,56292,56073,19830,20283,24009,85555,42126,63883,87785,17343,62619,69543,60032,72888,75799,84802,69595,31926,45454,54708,61462,65874,90675,79486,66786,51155,41015,58657,62863,40103,44585,95305,44850,61798,52451,99762,87759,71265,50622,29793,16750,90326,13892,14812,40322,57627,66120,10169,83592,18428,23873,26190,60439,11841,20197,27978,70351,74194,27147,41468,13131,43819,54852,76989,37461,66101,61676,83495,48741,74849,49788,58930,55974,15555,74228,56306,51340,30113,99425,98597,66406,49568,87471,10097,10198,81894,53824,39308,97552,22972,33746,46405,93659,38943,21694,87046,22097,23306,51540,65860,25547,82543,14301,25129,77422,19720,74076,41976,24933,23156,77568,56643,32402,39861,12401,53358,86275,84817,26660,57146,36062,72086,91066,44873,81984,39720,69184,27247,98074,13132,41865,58501,76999,70594,38797,48349,24384,90006,61539,52510,32738,50189,33862,81828,65097,53478,31296,60105,45454,58031,64224,94135,14395,19602,27079,88090,89539,50166,37241,32322,68203,67952,44399,76042,56713,61923,63836,84493,79732,96542,14737,28761,37493,99162,86806,91286,72415,83054,65541,37879,54126,53553,49988,30399,25184,36922,74804,22423,66646,32872,90598,92597,71386,83656,93917,30604,36589,87417,89415,98491,66851,88427,14780,65204,82743,72608,27471,43179,61979,26589,89708,68886,15696,34872,18552,61414,80432,83329,54577,58873,35832,70776,69436,15256,44078,31175,54038,66565,46559,34164,12036,77386,37627,82887,23723,23728,35111,73169,76422,98980,28675,77322,77428,93519,87441,50842,48276,70319,33666,35559,42411,49991,68582,78830,99114,22016,91791,35508,55636,40608,96656,42360,21647,71142,91934,46627,69801,72117,90506,86671,58451,49383,99792,81596,61625,34707,16207,11794,14873,85980,21306,19105,29595,99334,38945,61664,15044,56640,83368,61714,50761,33319,14562,52159,13866,98773,95875,11027,23116,57159,71160,64254,27098,51491,14723,97819,45281,37080,47796,34757,77045,38763,26408,20696,70501,26443,46498,65455,14226,81869,50415,77331,25421,50292,15195,91037,20905,65261,44975,10679,14111,83183,39508,46619,78344,90770,34904,85842,82433,38639,98558,77747,48665,54929,71862,19695,58331,23115,95462,38174,66095,46121,29183,24099,55530,55492,57927,17005,58186,57803,34522,93313,97465,38351,42250,66041,73377,77406,67918,50738,38781,27458,67937,97374,71508,38568,43953,13919,70074,44257,56972,96010,60079,83544,23388,17016,84688,61278,61852,72983,16607,46814,92792,11148,80722,32353,51935,36464,60979,98697,55739,96347,32177,63502,81795,56847,82882,34023,28868,24015,69122,72104,96323,21854,91223,20509,84810,91418,26804,39105,65678,10082,90392,58737,38357,94857,53893,39156,56582,13042,72209,41147,89314,14957,83684,17748,88578,57635,34531,61643,68612,51493,26114,13842,40325,39163,10749,98819,54759,23753,24941,12563,70615,15490,52428,87919,61844,10574,88842,51600,87776,55146,73896,21076,29802,63415,30800,20334,15299,18743,96411,16096,72691,32479,16701,54842,62491,98151,69527,37926,66112,86785,77825,99502,60237,64575,30498,22302,48405,92576,59108,11791,13557,53687,60178,59819,42938,94710,55284,50049,25326,65427,54375,64844,23409,78146,35704,80988,58310,51918,83556,75364,15388,63326,92595,56234,65296,35569,39205,34639,84915,43635,87426,62229,61085,32580,83591,14132,41231,92202,24438,70146,74358,73533,54169,36998,25515,43465,39526,99584,45020,74483,29976,15466,19971,69484,85815,53184,86370,44871,20885,16153,71354,83854,16271,43873,34029,16636,40375,65785,15945,29250,26652,25726,41996,74098,15592,33701,75969,76066,99859,58515,78824,39906,83984,54739,62046,33669,69334,10578,62910,74683,74892,84317,49779,18300,86616,76466,71819,81762,91300,60382,75701,99958,60850,79839,46789,67221,66487,53220,98656,33080,34256,79341,61073,32918,95757,20045,82537,88619,94713,15145,10816,73762,41238,64599,54647,95512,10980,32399,28179,40378,65402,46005,89974,59817,42048,10798,87057,54154,12356,59871,56460,48040,86320,86717,75062,57548,30342,97139,26108,63129,53240,30999,24857,36974,83213,12856,21836,49183,54264,77683,35171,52891,24431,96167,81340,89599,63982,41466,27602,77169,45321,93597,51676,13938,31696,34201,98934,85153,32022,35559,54131,70181,23492,53452,55039,11402,59630,53976,26130,51220,65158,52415,84422,43872,41150,76610,44034,53182,43727,27569,51856,45868,97990,42373,94229,86467,81341,92172,74696,60683,18640,57858,24295,47949,36473,93885,79029,72164,43645,52649,39160,80898,24364,55649,21908,15510,72003,21502,60485,20946,31217,65678,21325,17003,56048,18126,51615,31071,73396,55032,80650,92130,68869,40342,39390,71136,42252,38276,60516,82995,60848,76498,68120,41933,40469,56968,91117,13388,43802,71449,31670,22634,48236,77284,73093,14568,13443,83276,73111,54348,24321,43062,40571,67286,18012,89311,18667,10333,79764,26700,32988,86282,55997,99506,26847,15377,66183,87033,43813,24430,61109,59023,37738,69773,23687,35148,84713,54240,45038,66328,65924,58667,99752,10516,28328,51197,65542,70182,16192,13568,32154,21583,41984,70812,62977,19250,69056,20371,63806,56917,30749,13363,16977,55291,54401,67861,43737,38551,86554,25965,70089,66159,77826,64874,30026,40212,24862,80395,33446,48215,18059,17548,19320,11418,39172,80972,74924,89831,34252,90836,61525,21782,37465,67897,41024,75282,21580,83278,50417,20100,64426,37873,55831,37791,90483,91493,33463,31005,91888,48894,97550,78504,44524,89316,44326,25889,93135,52893,65867,15690,35732,16216,76936,39301,96590,32171,34812,85541,78894,71178,27298,77514,30872,63548,34046,32679,45814,57738,36843,28841,47695,51617,60350,47846,91131,17725,27539,86250,95779,17697,60122,65226,37125,27715,96126,30183,36258,76503,99179,47941,89742,99661,11950,88884,23046,42443,24321,71910,90609,58758,71017,65379,51162,34535,59063,23094,48547,44748,56649,37858,48915,12213,91809,37684,91019,11878,72134,72543,69590,34925,14395,78707,31444,40717,96590,80610,91169,54815,88230,87327,75590,53161,35455,52321,87466,25690,34410,76740,84100,72749,64127,34572,13917,65209,85009,85389,47013,34169,56230,32651,78479,29086,65845,11802,33119,31751,28318,51790,94344,61754,44100,37692,71216,61472,64531,89512,37516,81459,16475,11816,76036,96580,51536,51089,45779,93050,75832,82432,65885,97620,82083,21641,23184,10369,76520,45901,14371,72625,56287,68998,55618,83445,40431,31367,96285,30602,19218,69161,21639,69328,59295,86280,58787,88410,69512,29553,69820,33629,30832,73084,55381,35869,39355,29176,98503,59773,57669,85387,97243,58498,96601,15414,94167,64587,93688,20947,62360,30073,68412,74658,33161,86218,59542,72990,23062,66372,35335,96240,50337,85540,14156,91395,95358,92295,51515,19192,17508,12006,33803,20681,12601,20507,83803,10316,32021,69888,77311,71203,43228,79052,71019,49474,43124,69542,38664,66263,70168,31780,97128,20077,38388,83810,25156,34547,74042,99438,35780,53680,59751,81274,72874,51723,83276,53429,79772,97122,56875,66954,82598,62025,14583,21008,35654,53080,48673,88937,91962,45300,11443,58770,85115,43270,14411,76236,46614,43727,41288,37728,12513,44538,56401,47265,94702,93564,50904,26971,39038,97052,36645,25320,30519,88417,64804,72020,14002,13907,97361,84765,72790,60667,57794,40506,28431,65673,70065,21798,85911,74417,79534,99365,20461,65237,46259,93209,54900,36984,73917,23697,20856,85381,57578,20232,44166,61278,12645,47944,64887,23012,99036,53605,76597,24410,26425,14941,24694,39537,67839,88597,50705,70844,34791,20219,20993,60361,82593,35378,17862,80774,64213,23138,79496,44197,18331,26078,23475,75067,91740,24212,96449,66704,29724,98200,19163,46687,16559,41622,85411,74096,62369,92320,19904,68137,57417,31414,85932,80150,39707,96533,18388,68188,82763,40171,83938,77469,66219,19576,23037,92625,21803,73831,73467,89135,61115,68886,71870,49743,18448,83740,56944,93986,73330,40221,46466,49579,50741,44536,56259,24323,12346,21048,28218,64107,57342,41681,73646,94657,55395,53300,45412,42458,60041,59391,48119,80955,62197,63448,37868,29573,98931,32106,36932,62492,96231,24332,84729,56715,24863,59004,82632,92064,86680,72280,65989,54422,65231,55710,15171,97102,87143,55575,71001,81088,30884,53370,25610,48762,45718,47648,27709,64717,48379,44768,34518,58156,61093,21251,12096,17620,19800,79710,74650,42013,61538,18569,91990,59024,84265,26448,45453,93432,25024,56870,74000,58521,28166,41331,33496,86243,12686,97459,35691,37072,16550,92519,94423,47775,30610,68060,64229,24710,88753,24235,52305,59026,94450,26836,59143,99911,30634,41179,94914,93547,12731,95020,73602,61386,66523,62133,45091,38437,82144,63307,51776,36515,29459,77269,90639,87029,92858,83141,87776,95021,15025,72478,22949,35342,69167,38549,65037,14120,38582,77355,78921,75884,29334,80534,85301,18269,54193,49693,13970,22108,92071,30884,92468,61276,69494,75993,72677,37902,53178,36003,75269,52739,64831,15335,74800,78718,96866,96787,63012,88521,15300,31705,49456,34759,10367,50229,88615,51190,78745,75222,76423,38924,74148,50836,47779,63206,37770,14681,48877,34660,16263,18759,33449,58571,96480,30951,11483,55613,67159,31936,53287,47288,22532,76376,38360,59644,26667,14907,63365,58735,67916,96207,44995,29417,16566,44557,53811,94212,66488,43495,67745,26352,51986,58229,38370,83472,40290,38082,11846,21760,96103,97663,98055,68865,35795,54816,42597,43416,58528,25511,99977,24582,93118,87459,69369,56477,59971,35083,18364,61315,25640,96761,25712,58910,31015,46094,13474,28137,62156,36635,73575,86275,47347,31313,90817,29183,47734,55676,37048,31546,92255,61286,78998,99665,44958,77992,40802,15280,93595,45429,87297,36750,41484,29967,11983,32773,87288,88156,58125,21472,62119,66709,16436,82355,96309,69981,53195,98274,23562,87058,66357,42166,83147,73117,62342,26043,31541,67595,24837,38563,92729,41425,28518,66992,12007,18257,76150,94073,81630,77443,13893,10300,62862,33579,14060,51799,56825,98807,69503,26808,33206,89843,58298,18462,10366,22802,34205,73258,95145,49107,49140,87375,20642,60661,66824,67655,12003,80949,35687,90394,15774,54473,88177,33945,21700,37581,99451,50770,92017,79119,87246,32503,18647,54464,67989,83588,65067,17681,10381,73832,46445,91757,79721,59853,92641,94519,30461,17313,40103,39407,82628,46649,19651,57769,92095,11974,27531,41526,45450,72078,44591,74642,70787,40947,96787,31847,23075,28888,72018,73859,79206,56274,51139,35466,44396,62597,97240,66997,13645,28475,93873,99799,48190,95110,43693,72161,74084,22636,56378,20102,53142,84081,76127,47885,86595,15442,76481,68515,55689,56615,43950,16788,61452,64307,36602,13350,91844,27391,66322,30382,34418,45815,18370,69263,66378,51645,19216,60197,57739,99728,76386,87017,29657,71732,42948,33117,76308,10963,44094,33408,91385,48963,67452,38722,99737,96239,49340,58331,17144,98995,14865,23565,29034,85575,20325,43518,47905,47689,19159,50662,54404,43370,68808,68036,83934,55663,64796,32772,75275,30429,85152,75783,38503,70891,70522,74837,51605,17033,93345,20010,76700,87318,70955,22934,45689,71281,47365,75688,48547,23358,75560,53965,34753,17524,66039,65857,27291,30628,70578,39169,79845,79929,91673,66412,69570,57467,33284,18102,73889,19728,56227,34311,88457,66488,32394,83150,96475,18495,28501,33335,43141,51967,64153,64997,48199,10426,28796,33822,55363,50526,65754,77099,52328,45558,68510,98500,86263,52805,99446,73737,69816,53002,52217,47539,80300,37291,14123,76264,99678,56405,69270,35008,61982,73441,37036,73654,82864,17494,48482,34783,30291,29744,19424,35442,55149,10699,74273,24931,86127,36575,49534,20947,13196,89884,10108,16269,96260,63188,60296,62758,15618,27802,74203,15627,94757,21159,37361,49669,78857,80752,90837,66616,21557,72219,32857,80106,16863,20089,49419,39832,53760,66661,83336,45954,65761,55996,83588,42622,23830,49365,99377,72771,63484,56133,22055,22522,80941,10766,77488,84577,57908,61788,90885,96432,49441,86003,10671,99234,95696,93332,18946,56675,78618,63019,90915,84002,92797,31164,55324,63079,19377,63884,37769,58876,68680,91889,28243,69433,47811,65632,46187,11109,11531,69346,70540,78588,21272,52952,33972,72179,76922,82440,28890,71022,63707,90013,96703,98950,94100,32811,64189,42368,56677,74869,92785,67890,51568,14774,36266,39529,21690,66537,16474,96205,71937,63918,55279,42739,12056,47745,20309,63516,92038,86452,45097,80574,82742,92269,84969,24466,45540,29992,99407,33523,18919,13875,93012,29842,20840,82896,96976,73833,10509,62597,15455,11013,98262,60029,69071,88099,63050,50726,39520,88542,66861,86395,70584,17722,66617,28148,48122,82139,45937,14139,33315,22879,81060,37056,71248,62405,65719,45214,93298,15377,83539,34512,14997,55907,91885,38312,11042,82817,91891,65456,34242,10561,62044,59240,66177,35473,99471,28544,62299,94092,12681,50992,10709,91099,10975,57133,19866,39616,43013,63185,62328,32716,32245,72593,92016,11473,93174,79282,50481,54466,20901,33105,70016,62762,43065,59102,79321,34552,33412,10695,33028,85097,25114,84319,44506,24540,31095,76362,56993,74891,52463,75442,26563,81566,19216,47836,55355,42574,25200,51652,16473,22358,97611,32748,54530,20464,49918,84303,36266,43874,64642,91669,77922,10483,88925,60376,96273,59118,59474,32100,26251,75989,45453,83016,21456,91963,96550,87123,70595,49827,32110,85054,41679,51134,31133,38596,39397,64334,73685,61235,39206,67821,87352,43414,53686,28910,36146,46771,50204,50739,93711,77017,36309,63150,43604,56691,68389,61916,61555,41351,59634,73095,80542,22814,49148,13440,58209,83339,79309,52818,74327,62670,44645,91350,40880,44576,20540,33366,71775,98192,23057,48136,27009,54813,11358,16845,71369,45942,79584,72365,11458,23540,71829,33657,44334,45711,68271,77887,27861,60241,87828,62886,76585,91136,26460,64246,20388,27928,58433,27338,41509,42797,33187,75609,53438,81835,84131,73706,99556,29188,11919,85816,77562,27018,26729,15966,51490,29661,48848,78524,92714,92407,84655,87000,95474,50159,86441,59539,15002,64572,42332,46097,96947,56556,52397,28124,46814,18087,12605,40258,76742,13367,83062,85488,64656,25105,75434,43167,10714,33764,59199,91157,73386,95961,82464,36287,72066,22241,18881,10979,67706,60912,81666,69292,84259,49971,31355,79194,59471,12187,32919,13272,16658,59313,26382,59375,17458,93520,84280,66542,98308,59638,10872,78714,65433,78578,33156,54914,26212,99741,10450,54290,93090,40290,96932,59683,42369,92164,64185,95102,25625,57004,58439,20153,22125,59545,96243,36239,11834,52766,50517,82449,26492,19517,14977,42004,78000,46023,32472,16735,31352,26148,97568,37250,39621,29263,87319,46969,59166,63130,70710,75270,41267,30384,22705,42971,36581,54749,12203,65216,16586,49613,75363,85413,31018,30572,45871,29539,38023,38019,74197,30753,32204,22959,17594,41082,44287,10290,14027,63464,63113,49233,30480,51489,43842,74406,61608,68079,69792,98135,35076,84186,24354,82927,35127,70076,89432,97271,42212,23056,62160,51380,38930,76601,89772,83283,38844,67932,44060,32029,45228,78271,22031,43611,33637,48821,33584,23213,44590,40631,18865,64382,64734,65465,35758,27142,98678,34210,19869,31476,94510,72931,23628,91368,66542,83382,81075,23277,10406,54010,25254,83230,39302,34580,80028,36541,63167,67065,62925,55780,16328,21305,89704,63598,48916,92213,76306,26873,93719,47051,15118,92806,51896,49009,84725,49629,93011,91214,68258,15475,90721,71859,48931,10904,23845,74990,36443,94835,91168,59943,22731,34750,38672,73203,65322,24824,31602,85246,61435,36772,90372,39927,14149,74402,80700,88865,80621,77096,93985,39322,61659,66668,91965,14043,16489,97453,98289,16079,45629,94336,22888,86099,47996,67436,10962,33355,38328,53583,36207,15396,20062,51100,93910,57798,65221,98855,99654,37430,92839,36316,25149,38152,25883,72899,25857,14155,51556,30047,58727,38259,10403,28218,95585,69126,55101,76287,74205,52557,99500,27398,54532,52761,88015,20354,79553,27950,92434,45297,91143,70877,61208,57766,14887,58962,62339,68934,70571,76228,36328,79334,58915,41239,18756,47118,47842,30314,16263,38538,86883,81854,39240,65250,50874,98193,88077,87495,46333,53490,28726,39345,60907,76506,65365,58475,76519,40221,47259,82967,95718,11029,24495,51115,66606,16542,73402,89600,93448,27648,71235,18669,25857,47500,42798,73103,96598,97932,36253,50207,69678,84333,69371,86225,62418,73926,44065,56687,11491,85951,90794,48779,69475,50961,36466,99906,24524,42213,76409,89980,83281,93323,93115,33402,76024,66067,44831,18810,65618,54932,90530,35313,59357,38743,17958,56470,81184,93703,41590,42006,72856,22716,78352,25234,93409,79383,15217,32828,97721,96327,99247,43406,73914,49354,33738,93275,17845,74349,95193,43202,22568,95564,15456,47820,63753,45918,43500,90373,31735,43196,64109,14075,69743,27463,58076,36368,31487,16602,60743,97648,19968,44669,30276,13315,60836,31617,61062,31013,54417,13840,57376,79795,92433,95962,67809,45243,15121,33447,76800,53719,43504,68285,92070,28386,56589,58645,62369,81833,18600,14187,91593,29588,25530,70379,82590,35254,59226,99933,91885,61575,20839,36736,23107,57905,70047,96472,45937,47272,18184,37289,62738,62842,53214,65178,31858,10620,45962,62167,57881,10070,94388,39191,37234,11296,66045,23669,75176,75289,37832,27047,74068,38782,71268,18028,50820,78870,37234,66872,86960,58338,45775,36895,31942,84311,79730,12618,16368,50973,78054,67393,99139,20807,61582,19748,96835,46189,22615,97946,51265,90212,57973,62022,64257,94986,44948,76556,31569,45199,55575,60047,17874,52014,20192,23922,45484,74469,46565,90105,96810,62434,12912,51651,16650,85122,71637,40913,34538,71023,20707,74881,43810,24917,66450,36436,13671,31796,15463,65621,21489,87350,39125,32078,10446,13919,71217,64015,51242,56214,24316,28205,37975,80404,91082,27441,32430,27432,23927,48323,10488,56589,97486,75904,89090,28217,42665,54243,48956,44715,11561,14111,88254,47317,20968,52169,95286,84984,69631,75149,28655,14724,30923,82304,24193,82445,90484,14493,41347,88940,67922,96323,79035,20584,18929,74471,42508,42915,15786,96078,67758,76910,41330,55742,15643,13173,78088,48399,19394,52613,92235,83518,95237,87988,95397,29879,45235,43351,25347,98686,57520,46287,14964,57671,43438,40737,19321,22748,72945,37842,58610,14496,21134,14665,63065,25010,90170,24887,49353,84568,59828,51254,48535,28851,93725,24842,98282,14393,56293,83735,21426,29420,32404,84968,59827,40534,68532,84866,55216,53032,99267,13525,81257,42814,36963,74439,52144,70378,35920,47577,78059,62434,32553,94069,58896,69691,37383,98217,93649,80872,26358,36051,41287,36633,34114,59347,41049,65443,64690,28315,56894,36775,59593,67454,85000,18629,37010,36223,48534,81014,28194,98213,97201,96108,18327,53269,17042,32840,87089,37116,80342,37810,91334,81468,31601,93402,43922,92459,78262,62830,47388,38498,68031,86656,12079,78863,76304,93311,12415,63552,92424,28618,57571,55400,24330,37558,86672,89439,58856,17098,69891,95567,21829,84266,95934,42166,35801,72501,90380,48851,78944,97351,69001,59840,10196,43686,84734,77332,93740,34158,44810,67134,97797,93221,18983,25033,62846,59366,35116,36736,10951,23675,75966,42760,32819,17819,46969,93926,59404,75577,98772,53022,21472,17699,98809,25371,35395,31263,51343,42919,22469,47575,29172,56104,79375,32726,46829,71825,73235,57491,55257,98474,30373,16266,82560,67598,61380,23415,20841,69852,32998,69972,23175,19423,33106,82382,39763,27044,67009,83375,89351,81015,17641,43897,93273,85035,92286,14470,59454,22472,37333,44249,24142,86259,92255,65421,97847,37627,12768,24224,20202,11909,82599,99888,13750,70523,10566,17384,14200,63164,37657,45696,47858,50007,92201,13228,98373,32171,58515,38410,52014,84538,70542,55555,13915,95889,10465,35960,50934,47935,20097,29968,29867,16220,58785,48557,68200,59577,43081,18366,88052,30637,72859,94639,22313,54810,22932,79869,44271,37683,73465,17131,24156,37424,14185,13599,64153,78360,93002,90834,32851,93776,26782,15017,52773,82191,70673,58356,13336,21510,41013,35416,23499,55596,44440,19274,99395,46304,93392,39628,13900,61912,57547,60367,24234,89934,24975,44441,15260,67234,18739,28134,49720,66375,83493,10625,28314,83764,86042,15869,59330,65916,43329,57708,48005,82482,96749,56097,32673,83590,94282,28397,69834,42863,49956,54286,45152,30835,41859,25039,49252,50036,34635,70647,99942,25361,93229,18748,19089,78579,45335,88469,16915,90808,35311,29958,94254,96651,31616,19239,14057,95397,83293,94711,32255,42399,35026,79400,61409,45800,75425,87261,79428,27814,30457,15806,65783,97869,30042,54624,49744,24806,81129,17961,10101,71865,21154,97767,65324,11071,45411,61298,50372,52098,25201,34948,76810,34973,50962,69571,27423,19922,56054,23961,81474,44450,10500,23976,13928,13726,86459,95323,84360,83249,53810,97056,89134,29017,40228,56072,51725,71095,55070,99567,93801,44775,66355,84888,20403,23303,80276,29170,99984,31244,37138,19833,70326,28779,65033,92431,40492,13550,77322,44737,84542,58658,80110,19262,25241,52564,87193,30291,99417,90105,55370,69233,34469,83760,42997,43754,70496,21324,83688,64312,64388,67713,83122,36038,93300,96894,57159,86503,34464,39202,37251,82433,42846,86869,39959,56671,98213,95817,24704,70901,15336,76237,82723,12038,97029,30502,86534,61772,27921,98270,28912,74160,22395,81318,82226,41843,49913,89409,70350,48264,25991,11722,32557,34225,93042,56271,96240,32489,43328,84550,31944,98046,12172,69983,23810,47756,46949,50701,14876,17125,23064,71503,58531,66306,95258,75769,16841,13820,56022,86901,39981,27436,68118,72876,14589,92103,21571,51980,32945,69803,35673,91510,31704,67225,65726,39803,11750,35503,64504,95772,99506,17550,49619,64809,32094,39114,72784,22997,92015,99648,89143,68662,49049,35697,81419,66989,59252,48854,60023,37053,30570,82621,98981,67005,90223,66003,72868,31818,89500,72759,32542,99139,33105,66784,89238,49690,54089,30698,78874,72383,50056,76189,57395,21390,14682,78679,55269,53527,93189,57082,53346,34719,87082,85014,29041,54506,95033,56600,98954,90229,81031,17679,93926,30335,50028,53100,42970,58225,47741,54472,13955,84409,39194,69129,78075,37843,54376,86139,13435,72807,30371,95415,62256,75873,22352,53731,33569,43908,81962,73304,92466,28281,88198,96475,84065,61215,95777,49639,99383,88904,70617,40434,13270,24395,55891,68911,45844,27886,27346,89050,81399,86686,88660,30577,92579,93640,69001,56549,89590,16029,39489,46901,78548,35026,22344,59909,74984,96953,84537,54937,98581,57478,78794,59780,55424,13530,64663,34271,76420,68455,50657,19267,55037,50562,43794,84259,27574,58234,80944,86445,98544,97700,61619,51825,37935,12614,75074,40481,31026,92468,73994,54960,37284,35038,45004,17340,79459,52214,48344,92842,38321,28310,61832,14523,26924,40688,23295,86637,76778,55731,84340,18131,98688,63166,44280,83899,87450,53168,71554,53039,67171,24469,60921,17277,67456,60271,81956,39614,21001,68049,90934,84483,84312,75979,54948,14387,57483,22388,52127,10400,72284,67277,52488,43428,30886,58939,36318,32280,81080,84274,62855,18403,93216,85128,23258,64083,48962,50709,35614,72446,14203,68252,84696,54591,94198,34807,58243,54108,12673,40623,93584,28161,55376,42690,41956,48580,90231,93668,57349,85458,92273,94828,88628,67282,24652,54336,77968,25748,31866,58164,99175,84875,38622,29242,61190,44994,28078,19621,17715,62297,92206,23676,75516,67505,13495,89164,21345,78452,47647,75103,70751,91606,41234,88754,52964,62311,88458,44919,56679,25760,32398,37824,15539,83938,80662,30828,44056,20560,55281,32219,69873,72964,40012,73834,29124,29993,35332,32127,87523,75232,70906,32027,18304,79222,64358,21199,27264,12636,22253,81600,80643,65244,21825,71316,64058,39307,67962,82783,70604,90452,11703,73045,79624,72862,74963,24499,53160,72251,60276,31188,82126,68282,69062,37834,81346,53139,96329,30748,66166,92012,30048,82940,33776,45224,51214,32701,25686,35201,69000,92690,50222,51969,99386,40833,90030,98324,58873,27839,56206,28484,24099,15076,45355,67128,40407,91908,94545,89107,40399,34160,69406,71630,28660,65581,22915,64966,36085,66966,17025,69617,82441,75668,42497,63232,67927,26353,85214,57551,10032,78590,89129,37909,91262,90915,72785,26267,58684,66816,43673,69625,25995,32771,37811,92131,93879,31545,15584,60425,67507,31220,69169,82716,26395,63677,20719,35882,27139,72406,18208,38445,21565,62603,55207,45834,56133,87748,17830,46403,52584,96815,23731,20476,39345,26350,72395,94260,26799,26555,74911,89871,64621,46456,39408,51969,96790,56723,26499,22484,64284,62957,46986,37909,30464,94751,51483,10545,41553,69923,33992,16242,94513,30938,51260,64052,27615,70634,97129,62318,64121,56045,63601,21096,88813,63460,89631,30050,44028,53643,46654,50865,74813,29879,65681,88948,51615,21789,76510,41849,10917,45516,98621,12823,12327,99984,28410,91013,60896,16360,40337,76658,55137,97279,79991,83040,74776,67672,89724,28580,19877,11745,18479,60028,26838,78755,45654,25236,74811,96685,54773,99556,14701,30244,87683,31115,14147,86117,73005,57229,19301,65776,82886,51403,58028,97173,58998,36194,72605,33746,60827,48201,76908,85018,12835,65907,99062,93192,10249,32548,79615,84491,54896,62383,65634,12296,44290,59155,51918,67897,73021,32096,27859,95813,37821,25209,78444,46252,53066,24670,60984,27825,36399,53601,33885,73568,12268,67946,51727,87127,91276,53484,88732,89148,36406,94834,98941,76873,55545,66409,94446,72299,58374,13430,71983,60827,49087,83433,71111,97619,91342,68369,53788,72868,44799,53363,31451,56235,98834,74831,92633,43565,61030,29443,70771,23185,73514,67008,67345,76821,19229,94332,38678,72289,68451,49716,41813,25324,64573,14169,33459,53284,68778,87645,50510,14173,31840,60669,10159,75725,27062,29885,56207,21032,42756,93919,25619,17509,87144,32021,56183,19842,24813,27572,75855,57761,85212,33987,39149,12513,13485,71897,16813,38137,42626,15268,59600,14438,82959,42933,97265,19845,90121,27055,76504,48286,17295,84542,68304,19596,77896,54069,26833,33539,17814,97854,33967,14314,93949,38495,76665,89682,37039,20200,48550,33298,43851,84225,53371,47150,37152,53941,24559,75556,15947,93865,92218,77830,54553,22485,67082,54506,39420,67236,25092,88151,40454,20201,80751,45077,73301,99512,23030,74609,18779,33089,77194,19428,32659,78420,30813,10099,78499,74708,78030,90433,36920,68508,49040,76061,33981,85454,92024,32607,95643,83766,88362,45563,62793,96356,55447,30594,97319,57332,34848,87412,62684,54144,59992,48558,91049,96506,65388,82133,58341,77862,17899,86955,25843,34095,20445,42349,79765,22955,99382,35112,40889,30864,10716,50503,31048,40356,32241,94893,20822,24680,65234,71428,15095,23798,12874,78123,25434,45292,29490,22429,17961,89844,84649,32611,45456,85614,39619,63769,14119,44546,35642,34251,95256,83946,81264,54801,74259,16904,44483,97123,52410,81674,39676,79855,78859,11761,47043,54980,92293,80039,30351,59151,20708,12637,63590,75322,93327,91797,52447,69472,41606,82946,71036,29008,53238,58958,49540,86010,11707,45319,37036,83000,82815,21558,81981,36838,62222,10533,90338,19513,84954,12050,50713,78541,53647,84020,82216,92796,36657,16814,69079,23556,96419,93233,42120,42169,78489,40720,74137,67353,92330,79649,65693,38333,87151,20860,40958,64060,36550,99171,58955,82543,24187,15534,15460,42472,47904,54958,91685,68938,68669,17138,40113,59851,19535,57009,25152,86060,48236,11285,37036,68545,90568,61400,34538,20893,92803,39595,53456,60616,30806,40480,11708,86376,89166,43403,77284,77562,66669,61798,70537,75238,60802,60874,49366,36373,43099,85441,46294,66111,29400,83174,76151,92603,76698,60078,84202,31722,94698,11620,75922,47159,78020,60478,68621,93193,53657,76797,17598,71317,82627,82749,76736,41260,11052,50938,63453,26893,57632,61656,24609,20428,41069,17145,99419,21481,67859,49474,48900,92930,31685,81020,72372,87118,81727,74617,27700,59058,45153,45399,28535,32244,88883,23526,14431,78561,17601,44123,73966,87181,56137,64731,69012,48664,23827,43464,62731,35591,80306,42464,59300,71467,67423,18563,22319,26538,61841,54670,60608,80487,33592,98667,11659,31040,44276,38248,64921,72188,68116,53189,38239,46925,36230,66090,78194,62079,40417,76009,67234,39559,94547,47943,76784,97798,98886,39797,65809,29541,57059,70251,17452,39341,66943,46851,68600,23623,72378,87812,67233,77707,96968,26525,82638,88747,95446,71943,15561,54232,47059,24130,66973,68852,56733,97959,66884,47864,21149,11034,67125,21458,55633,33675,92769,66816,78223,74484,55019,79764,79633,99484,64488,18187,64620,88704,14170,82291,18309,30843,78212,79255,41962,87878,75932,66953,31682,21112,98952,13333,96282,59987,63180,91727,72283,68893,42420,41890,95333,55289,62030,67468,38804,17030,25660,94586,34481,82240,88217,98491,55216,22713,43693,22189,73659,10042,40083,68420,72824,10024,84540,23626,87791,98526,34012,85648,47456,90972,47364,48395,89110,39258,96871,81010,16115,42433,56821,71864,42013,47992,83971,93269,82024,36834,54456,95543,37486,62703,75456,13026,13624,92835,17271,45304,60182,54148,22661,33795,70617,51084,98967,87595,86578,90536,34386,54190,21768,28434,10488,53263,99814,31281,62081,12822,65268,30232,93190,77359,86118,86305,17094,17638,54206,77222,33446,77028,31550,82490,16145,86154,30346,21300,63202,28836,63837,76124,96615,52950,25116,29773,14730,41859,42840,57823,57209,94781,24859,74075,76350,14285,73124,82551,85219,69487,75927,47961,24467,72229,58130,57275,67094,33062,17286,37953,16961,68202,67426,50554,72679,25621,14580,78054,18108,63191,45479,72025,96961,17131,28764,28266,33335,68074,15366,19525,32828,60797,86336,50926,98483,17395,19258,35911,53283,43858,17470,71048,33457,34502,68623,80583,67200,76953,94928,22204,85463,15269,22801,94015,64465,82671,15728,31045,66576,88120,63845,85205,47293,18078,74897,15738,61729,11346,46286,47972,82780,29848,81641,30159,90462,51633,13549,13379,99883,47424,10518,31610,10250,63137,73839,44221,41245,69097,92814,37925,40917,70739,66075,16710,34569,25348,12557,52743,23080,29836,56260,49616,26734,14849,38591,18450,78237,63725,30846,78543,53944,25821,48803,32018,41187,89091,82859,32391,30378,43423,55367,18287,10572,13745,89239,67555,79270,65032,29775,91381,92794,35256,37243,64900,70665,82952,42345,92892,50212,10017,20034,62373,65434,27985,39448,52010,84873,82075,20652,36799,54638,80492,59793,68891,34296,42265,43459,13197,52198,54878,89543,70192,52782,26291,13099,90957,44297,71809,35801,36608,29949,84915,72149,58424,74239,11398,90441,42900,51687,84335,91826,44291,52404,30598,20369,60853,55336,27556,48795,89804,76859,18381,17797,54284,42759,95509,82062,60287,58524,52035,48899,27826,15981,96556,13143,57412,56904,43883,93357,26309,22097,68659,76121,99500,35019,64496,37310,48815,58141,35393,50666,33725,14565,12259,89719,11173,33227,87648,60799,37756,87305,87611,20767,89309,97930,51049,35684,37001,56511,83559,72500,29801,80985,17141,35645,70921,89206,11947,10706,97266,51145,80998,36739,36518,89262,12553,38612,60136,69402,42714,85600,60838,38466,37529,71835,75379,45877,80258,63587,60478,34133,16219,93020,25050,41062,45017,80073,20714,65753,47205,98080,58967,81533,60109,36844,51151,79318,89984,33584,79059,80960,47046,67651,67973,56272,85702,63837,72359,48784,63947,30563,12310,62239,73010,34082,99009,61559,91036,97216,72465,47660,75565,54976,89920,10233,60583,14395,19132,66093,55186,57628,54530,37937,98269,90203,82487,88676,70880,68407,49111,88707,18989,58443,93039,15748,37807,58404,37245,27947,57524,97810,27747,87717,89672,13594,82838,74792,67951,76033,79452,54978,50614,70602,11080,91710,41181,26561,94111,99806,28165,89007,76999,29110,32842,68701,41298,50061,10006,83389,79539,49212,81512,42493,13028,57405,14982,73315,14975,21503,98764,65724,91003,74618,72993,25908,68997,90048,88554,86949,48065,40338,23984,56364,91455,32965,53586,77671,68286,11912,80230,51546,28666,18514,51888,27108,84234,30768,73925,45751,35288,97402,65222,94928,93858,98087,12358,83754,84333,73773,94720,86029,74232,11064,36127,36544,14141,80218,80162,85112,64272,60910,78152,48839,21631,64233,12401,37924,31750,85422,15534,86464,62040,51388,23029,73564,57329,28525,24433,84114,95280,64219,98077,81493,98960,51544,81309,91297,94706,89466,24659,64527,55605,98612,84696,32808,51474,37894,87910,30193,25553,25059,90509,88500,92410,62598,83352,58446,11012,47127,79078,70983,91839,33029,59951,89104,81228,44401,28944,97362,55436,36235,84869,43029,48500,80644,57783,31337,25732,94205,27900,16441,49993,68852,18656,27836,22011,29901,66067,75657,80268,47597,98178,49380,90405,88779,91408,18420,71213,72272,96832,63021,61308,51589,54891,54855,61858,68521,78977,89978,90986,99770,22482,99821,70409,51405,47547,47723,84615,32291,30734,87887,15498,28264,75934,46348,57860,60580,95336,86894,18319,95734,77820,74429,21385,54286,78514,80806,95841,22982,27826,87583,26630,69853,38959,46749,78987,60564,71608,68454,23746,72283,19128,25009,85358,32819,33536,34942,42071,15288,31961,83494,28304,38740,16695,23888,58660,25265,75611,76252,98114,35310,90948,41005,43548,61183,43908,56194,82158,23254,88984,28979,71795,10003,65563,32774,61994,42188,30682,52589,24451,41937,64018,71952,61368,68261,81798,66471,61456,57779,54310,86817,15417,87269,59865,77458,69184,71366,95440,13252,42656,65365,31348,64564,41500,87117,69886,70864,26950,25752,29365,46790,54105,42357,40141,58152,75966,81148,71121,63105,33088,18163,73190,41163,61005,39612,84974,80338,77543,53168,47251,20523,47994,34215,44309,77292,69890,53404,37416,46266,52014,57814,13311,98868,82076,79780,31396,42026,84182,90012,47616,73258,12813,88397,51034,62586,73841,36927,95378,42959,58393,64496,35811,58288,60668,15067,79979,85584,48944,65471,20472,61849,14744,90668,82961,35973,67268,55951,28566,68104,43753,95371,54578,22370,72871,55550,53319,98506,18623,67410,54013,96839,51338,93984,73639,79220,42156,40853,81193,99629,67719,16865,82184,51492,38384,31579,90291,79385,31293,78093,98355,19798,50835,29874,26709,97579,85287,66805,86101,77267,77859,21247,59486,79546,22150,26708,41599,55476,11875,32725,60047,66952,77840,18416,43462,64951,31448,52986,66369,42635,89527,93593,78479,40444,28253,23867,85123,51921,30834,28773,59036,41273,54481,62454,58282,75264,64802,85855,76015,36791,14339,66099,70605,71576,63385,61918,28041,86596,56791,26333,60746,67477,25972,40951,13158,26305,19826,79427,78159,51122,90253,57764,92454,47337,52145,15279,46083,60004,88178,39351,31080,91552,64640,55176,21766,17482,53944,79368,16355,47678,67018,74481,47898,51835,57341,61530,60933,60834,12693,38692,85001,23767,77377,93748,35368,73184,97873,26307,74428,26130,62713,84490,95252,67714,19245,50398,11052,55970,32788,19142,60095,99014,26164,48433,79224,22499,92677,78451,42752,34059,97031,45501,69929,42463,70772,78923,10807,75564,87071,10160,40846,43788,11998,73245,15391,71425,39346,54683,64697,69199,27221,77664,46671,68422,48914,95039,33049,14276,65855,19788,29232,39525,95323,70732,74317,35699,24243,48310,25017,59996,80923,82639,79290,91120,15988,55983,21797,91053,72269,31151,13994,71192,84236,23403,73720,46583,40947,45921,59192,23783,81203,89322,52698,53687,77517,33048,72294,34765,75763,54529,97256,21846,56885,69840,79291,89189,60091,55520,45457,17680,12803,60381,45897,89914,45218,58255,61478,66801,82725,19614,57736,99525,78038,20011,30766,52003,32962,91972,51089,90519,79526,84356,89532,47218,54280,38332,20962,28900,73671,54519,10311,73701,11418,71979,72889,47483,38554,33649,85812,55157,66833,46841,94460,42519,99761,85760,91851,13483,16061,49367,11074,95268,93919,85918,29422,14689,32280,16263,39202,90472,34751,10442,61891,57966,97713,35611,54337,63842,50517,39810,35257,70768,91805,39697,26971,58682,99194,41367,89558,33275,75293,89480,42943,91530,17653,98529,13546,78464,59297,64025,55749,18468,73697,85000,73374,30517,12413,64966,14753,83499,37857,79544,17355,68171,53030,23166,30167,57272,91002,52760,35412,78319,44273,64051,69259,65218,97536,65527,79951,43443,35768,20938,89743,55731,62286,19097,11035,85773,73701,53524,61891,60299,76938,68413,88972,39956,69026,71373,88421,57876,52924,62131,72081,67704,11286,84243,50326,54841,70706,39754,37110,55016,62901,21446,12451,30183,64988,70530,86593,38697,25469,97554,79607,40130,92556,32041,93146,64435,83386,31181,21329,26093,50013,72597,31668,86900,50278,32324,93259,65181,70187,12547,85627,44435,30879,54567,43877,97775,44695,42195,44969,31846,21717,44489,45597,29689,16999,61095,93622,23184,94577,48488,29515,16521,74838,64093,33267,91817,10788,26013,68546,41984,86703,27016,33816,93547,81976,29924,65937,89137,87336,68011,85853,89764,84629,27524,44253,22661,49829,52777,41688,58433,18920,84701,13131,63066,79732,38215,63235,33706,80152,64857,79354,77404,26388,69918,43179,93134,14113,54308,43482,33707,81680,58759,37330,17930,25836,24311,67312,57160,83322,76768,61182,56587,13111,92484,96966,44777,10516,61126,44884,10015,62787,15327,59332,50175,92919,38963,46000,77128,74185,61995,36812,10372,55392,45578,73138,20764,79067,77529,23699,40286,82676,44005,73174,32768,36746,49348,56696,29288,64354,89218,58897,45683,89676,68263,54831,10458,49973,48115,74402,56666,83238,29824,29087,78806,88444,18813,43479,67388,55306,61663,60530,19290,74848,18769,71011,56675,45844,40066,18882,66494,75608,91385,47141,21898,67036,20895,38618,20922,74746,82689,18166,62768,34139,74703,70139,43064,52398,79437,14370,27252,24447,43752,50769,92462,79727,11372,47874,40146,38129,32341,62242,41897,82982,12261,96214,76300,74645,84732,90967,18498,51495,81291,61150,13523,28487,48695,62487,79966,71196,56555,38756,50912,10360,85929,86118,86636,80719,28771,98529,46954,54756,37066,39780,10581,64694,82103,12679,58924,22230,42496,73144,22753,80978,95563,19101,35514,78292,41944,71095,60076,59177,88243,86698,62265,67078,53589,35529,17628,60812,64689,94308,20193,49504,30818,15559,50781,49792,13010,45596,25130,98624,25975,24725,57997,85041,88340,57689,33294,85957,69849,32201,96515,61681,39974,34644,27527,43058,80687,47625,56216,21746,94877,70290,65739,83775,13077,58504,33301,24693,26162,29192,73587,37238,20825,46022,25934,58665,39254,23149,10186,59012,43675,55701,75088,16486,70666,92275,19185,93795,95843,18660,58936,30387,21843,79817,59069,56956,88159,83400,59645,71449,94640,81430,18589,66426,79274,27949,76982,37124,13157,40484,35356,92233,33096,21996,92183,12471,75894,42022,87525,88417,27863,23001,19315,23326,69519,13004,21935,85379,40772,31016,58558,85927,81743,13064,99558,39634,63016,60095,78216,78403,53601,65478,24708,92390,51350,95972,19930,71131,85554,29780,81793,13042,63843,80264,14867,53111,67932,25985,93710,81230,35446,64851,19407,41293,56576,81304,26694,15521,57960,61388,29293,63951,53253,99619,49744,73897,51780,88098,63564,82336,37253,57149,57799,21596,70674,14930,71410,78578,56726,23870,95645,34718,87025,36370,42602,77061,72230,47328,94449,77332,58127,51597,67013,43252,65550,54894,36615,46804,85921,30553,99308,61620,40934,26706,68199,65271,51733,41375,94845,18861,60806,72577,36191,16221,87868,40311,55505,36797,11244,53265,87859,43988,14255,20757,64765,20216,43359,11126,69738,73735,14001,42049,26558,95737,24096,23881,12818,52591,73245,73190,18537,75419,65684,87419,37655,61992,19973,84656,59688,32788,99548,37303,19545,60698,27703,57377,83262,65050,82687,53471,48356,67680,53507,83496,63265,85780,57890,26052,30474,11711,72528,96987,22930,97472,87546,67255,59808,41288,19514,52788,67031,89622,91439,72667,78486,43394,72071,69918,94884,50193,71667,33540,91770,98070,52334,88508,11769,37953,61873,55200,31036,29958,24734,16725,32176,16310,16791,45875,71593,59588,77370,21389,20838,18691,92928,28621,41174,48130,69987,90053,84226,14820,80478,41014,12288,90138,55618,72312,12301,95127,60658,62807,78904,30669,48294,96648,97791,82748,66275,36975,52524,90139,89194,10028,70642,67583,74114,88302,36619,15383,59772,71118,65461,52139,74687,95975,90218,80963,48121,62836,92842,76769,96030,92667,12090,77303,59992,14844,50714,75058,21409,48223,65685,12399,93225,12193,87073,73170,50688,20069,55224,62827,63680,16158,55772,30863,56921,46134,30295,87637,10719,18121,58693,52874,64263,90833,79007,96311,10582,23603,75653,41102,52946,73554,59376,77877,26475,11112,36550,90128,20058,16486,71860,22991,11628,67985,92537,90281,75470,70169,69870,68815,42132,46996,35631,80677,67894,26432,71583,28556,17347,76036,78474,61727,54406,90684,11199,30938,26709,12164,48378,89485,62844,41023,86666,99517,67163,21206,20159,30806,74717,40888,90587,58664,43281,81779,37193,11137,91498,48740,16946,55278,17503,37946,69149,31903,36336,40202,34402,88561,67058,24153,61725,41187,99317,58455,59698,35546,28296,41423,32076,82051,33966,48748,14466,28294,99326,41397,17640,64980,36945,56495,81797,56632,36462,91061,97352,97235,29681,44132,44965,52668,90669,29066,91631,85538,56691,43222,61224,29036,74553,65059,60858,47672,30283,42318,52592,69410,38992,29876,70748,68891,62354,91752,56383,20598,81038,28900,82286,87113,75406,57332,74241,94371,97172,69978,72177,85531,30735,57661,83975,39212,49839,46828,99709,66946,75169,17612,48505,48079,87636,67608,54065,96041,87427,81594,66595,65683,67471,78763,73904,95061,52093,90878,77845,62008,46836,72586,34435,23460,10123,87835,32115,34486,69344,19511,74246,46601,12273,29026,84995,96399,63312,85724,27022,99473,87320,30602,38180,17584,96530,39222,40533,44416,57674,28080,76444,48319,65576,92756,20325,71820,31949,84210,65279,96069,99437,38397,90951,95373,63449,68008,92233,11035,62079,48275,20410,49556,70207,69244,83730,98183,87447,39656,57304,43005,90935,72844,11815,38822,22811,90168,93234,94560,77401,54780,55510,98432,14007,63307,64931,98279,57486,45151,56291,14541,26361,39065,81586,94718,63392,73376,80958,75356,84295,54224,34542,89464,38022,37813,87906,79549,28006,77970,20153,54349,10486,11114,46115,17327,18542,86637,43174,35702,71284,76767,79114,37683,61840,23254,50138,31918,86454,85787,56703,35802,93589,93288,34934,55953,68209,42685,75006,33107,72945,20634,32904,20388,22222,60622,24686,47440,32905,47820,84727,63377,13798,52939,61638,40338,71926,49096,99257,57446,77338,93069,46166,89314,55699,72438,29342,69067,83165,31921,20978,83805,50582,37317,16515,77174,25218,63178,78331,49997,63281,99605,45753,82452,31517,90314,42789,60819,83789,80215,13935,88370,47268,38132,84673,32770,13043,32271,13833,15503,37419,70960,15797,69881,25831,95902,69994,46871,85697,65508,11536,18176,33289,62304,87823,57085,13058,71346,29912,23591,84536,11475,62966,81609,62292,33059,81855,51052,74581,18874,82159,93394,37507,68750,30985,92209,86680,61670,86179,11692,80704,71063,13303,24850,38008,13337,61337,38819,70899,47252,11905,46020,93509,27603,41905,27525,30926,51964,90525,28449,37355,43187,72468,66204,75561,68079,29825,90634,53038,81633,83745,54647,40211,14236,88759,15171,64682,98338,66993,64022,61060,38437,79762,43453,72155,59939,18153,70319,95424,22352,59849,28624,21092,87440,72421,23604,41127,56742,90737,70602,68020,38415,95310,21840,98739,95512,92616,75316,25230,26587,42329,33013,81929,35465,36352,89448,65597,10369,93324,16686,65981,45325,12414,27096,98527,72420,58305,93512,92173,43227,78939,82300,53923,27727,69912,54660,24971,92563,52417,22652,88866,49727,18265,53689,17404,62885,95830,72494,20396,46538,93291,11764,39841,97216,54821,57945,36757,44820,83580,66026,67250,36910,22756,40738,62865,95339,32335,94282,27753,21165,33249,32798,88155,92961,29728,80735,94806,81164,11429,65658,80656,77988,98942,45750,47718,70427,96894,11411,73199,56722,23178,31843,74622,74167,49100,81071,39300,15906,36053,35656,81699,11637,67957,61167,17551,94153,84285,52188,45980,85979,18497,37119,64638,29722,49252,76683,87354,15349,80159,54741,73145,25416,15692,76291,22125,69353,57370,98998,27921,97530,16192,11672,50034,93848,25019,33586,25783,62398,36300,40251,55864,85679,35794,91019,57680,65612,76853,77617,82089,40066,88397,97280,28659,82703,37731,97198,92330,72509,27415,26891,59368,38537,78725,25115,14607,31086,94913,79889,87708,10798,69790,70016,22999,33776,54742,75572,73193,15006,54016,14572,24867,94065,62078,23078,63557,82562,52667,91181,59426,60689,56388,60251,71464,86697,39261,20138,29566,17980,67642,72665,33875,10712,84682,84975,77989,45932,18096,18269,24624,15951,26066,40371,41039,80255,22203,10491,87908,87650,78176,38023,38509,99616,19247,26264,95541,88696,27616,18526,66198,68115,29342,59308,77876,73300,94285,39504,92146,35871,76097,24961,72504,15575,93065,79177,87017,59933,73369,76054,43229,19750,58201,74709,54799,23570,38357,61448,94592,36720,48280,21700,78648,92178,52033,86008,36638,45961,55752,88203,83467,17373,59041,52312,98644,65346,98193,22717,63194,80265,40672,99258,38030,38272,68727,33941,96094,63165,65857,33420,78262,56229,75095,92702,78962,55816,58145,28099,76346,79674,20028,61218,21838,11737,51815,67624,56010,57736,71031,71830,96443,76072,77697,96663,23816,70256,27881,80884,61426,42950,56678,38455,14189,97419,36350,61985,38224,53437,12646,20381,65790,16478,54572,60272,52000,26066,22989,67925,52043,50321,42726,58752,19753,95971,70117,55620,27114,28954,91223,71660,55917,70613,69014,30614,45121,70678,17607,96657,61309,86251,57209,47461,74695,43694,50615,51333,55777,88259,21996,23476,61766,98408,37592,69728,18027,93852,58994,76216,82580,24691,90378,93252,27500,86883,29908,63760,53613,81362,97813,82618,78153,66081,85667,60207,32559,39228,38623,12771,35857,58276,99322,89336,62684,81537,83444,11270,94160,99715,38716,97846,59655,89683,39487,60861,41408,54506,32807,79604,80565,13176,56927,27023,73985,68437,81165,12301,56333,55334,63966,43222,30208,86847,61345,18677,71480,13103,29152,53838,82359,59501,77304,46241,54665,37660,79791,78225,41186,77304,46983,73845,93442,14085,19702,49297,45423,97291,99261,49119,70215,32947,51382,26689,18276,85183,89762,93386,67045,90716,22726,84643,61381,82054,63848,41327,33073,57607,77246,64315,11886,26068,66747,13939,68375,56743,42617,74081,60350,64344,75586,72446,52824,23360,70695,38057,72913,58895,24716,87464,30319,99243,34295,16787,37557,25764,37742,19527,20539,86153,98167,86705,25480,29644,12994,10326,68486,21625,48541,85612,57411,40614,86976,62207,72677,22272,21801,19050,32663,15367,85113,76327,56509,22138,32157,91781,45211,18602,98335,78120,17563,20424,30828,75241,38803,56994,86146,50134,51321,10229,43828,72489,32111,86356,39537,52602,74820,76171,14347,72816,44057,38395,62775,14108,37289,59272,49821,31636,75785,49435,21618,72931,15252,71672,16953,63623,16274,24449,38435,32128,21443,32655,22716,63036,16627,86472,32987,66406,13527,92846,19453,49879,63166,77284,55664,69892,30563,92457,52888,95379,81888,35451,98604,23967,50304,69961,13543,38974,51207,50882,89754,24118,79441,81498,82413,80425,83813,78634,66448,65392,12813,40288,62338,15226,43253,86258,45270,17441,86327,14668,15543,29711,15595,30310,88034,62710,51081,44981,23665,16471,77729,37544,82776,22660,14820,55993,37522,70403,58686,22472,66369,51910,49009,89166,15159,24986,56610,66858,46133,63631,47575,73583,22000,86232,56523,95011,57227,86337,35230,86798,80432,75058,97426,71956,29137,11514,51615,78417,56271,36673,33409,45007,50411,61201,87983,22330,76665,55142,87070,29303,96062,84495,56022,92506,68426,74839,54002,59760,17638,55238,36337,93882,69614,19997,89209,56224,45539,76633,42990,81154,12715,31010,78477,60383,46990,82177,54670,28827,16542,64151,60377,43035,74671,73089,74563,81044,70490,55526,93535,60516,58982,20858,66623,87566,18708,21287,71925,40889,34520,11478,34987,86637,90223,70470,89265,44782,93178,44426,30767,12119,82919,88710,19104,88371,68689,50263,98936,58155,48499,23516,66499,77309,44414,24162,76379,79064,58111,12521,84157,23810,52182,73722,48394,36024,36317,68904,61374,24254,69848,30905,34893,48319,97101,49182,93102,48807,68003,64538,16951,48600,52151,45118,79353,35296,75400,82768,43839,48903,12397,44655,51989,28182,84179,27069,89679,60547,90572,50634,10543,73285,23334,53123,13430,25959,88988,30092,41222,74922,29475,81142,26102,11626,75373,97507,72952,66205,76078,64690,16226,25606,49678,98590,62663,53751,76706,99596,42777,75503,99004,28677,16090,44966,17085,86122,19425,80304,54092,46620,10961,25960,23866,15823,12991,10809,35347,92038,83219,76531,74342,68088,39412,51252,93879,73460,99767,84326,48286,41870,60618,49737,33924,21249,84298,86843,76762,96147,53744,53784,66255,52679,11371,70662,81067,40466,88198,27209,56588,12364,47740,80813,22534,49674,43954,75566,82568,68146,41139,59900,20484,54462,62061,34028,93808,33056,73173,63751,38908,26144,97232,68623,19521,17764,97179,13827,58466,71608,64831,31490,57239,78310,74795,98560,89286,70507,14220,46237,44675,14157,15403,71049,91605,64257,33181,47861,54950,81167,74160,83155,34318,74107,30492,15920,58131,58504,90606,52037,64160,76764,73356,85343,76727,95009,85609,85966,54756,92078,20838,40394,92578,95791,77821,42152,37632,80853,97444,12667,26837,93947,15740,41680,13179,33790,46907,62244,32714,12779,72169,17705,36132,56239,68983,18658,14184,40382,55405,67693,95446,79701,11893,25394,78995,63309,75754,49257,11297,90269,68877,88015,42887,10046,53328,56722,35509,73241,45036,48767,19186,44746,92173,21176,73821,53716,37525,77688,85564,57882,28568,61516,91099,73034,30967,36677,90342,60033,81643,66301,34351,38681,78327,45651,67963,91251,16560,94742,85295,11820,84603,54319,96956,23176,55014,77216,56178,23312,47021,37066,91569,98138,75449,31487,60142,75524,85216,21706,27058,87115,25167,58254,62255,68748,10722,43921,62763,85963,25457,75244,77063,47120,94119,37972,15332,90051,25845,67628,40460,58502,98830,34691,14743,85806,79124,73137,85872,97033,74930,22209,80101,84150,79376,47398,69243,58007,10346,49371,18431,34611,90777,71241,58774,39518,82541,91052,64344,17118,42989,29672,54517,36991,27776,88181,95807,32795,85274,22867,91430,29535,84991,97288,72958,11596,34589,52146,72542,83323,39172,59831,75324,70515,24491,46966,62374,73439,82436,58370,87404,59772,94175,49091,88446,23717,15084,43454,54944,87419,49890,72697,34094,30508,76252,67512,48451,14573,33328,59639,11340,66338,55892,83729,23258,61650,93309,63415,72961,82013,34299,74412,62260,55833,57810,65603,16676,27664,81029,80925,81964,48972,93022,94306,39786,17358,23470,17382,60792,92397,67125,68621,47127,91947,14552,31202,93256,56439,76617,83108,24889,79806,31933,31237,72104,95445,26604,74363,22429,98762,68600,21557,73638,21791,47309,37303,19683,62621,68017,17123,49340,63512,30164,25228,67989,57429,85195,19482,21614,95894,43993,61857,29154,71041,77283,62634,97562,81241,83128,14420,53841,33746,85399,31918,91630,53558,48520,83434,51197,48674,50216,98483,23986,16708,61351,20390,22094,69432,31222,92959,55269,64458,30274,89588,93767,56127,78848,99971,45906,24640,77058,60463,23984,62613,96445,55657,94313,59542,60019,83669,42009,93267,65734,30542,74251,36869,68124,24905,36657,25139,14196,95110,60538,34625,94386,89626,74711,68012,75118,92988,43781,43036,85533,26194,63970,67078,25403,10629,19576,56304,26413,73529,23982,84440,93827,72018,20206,42636,60894,47093,95077,75540,83133,71168,26722,87641,80648,49810,76180,49467,20867,52338,50159,77247,12033,12175,35233,47211,43577,97642,66885,41652,89481,72364,94988,52650,18919,54242,85891,95170,50411,76076,18243,79348,10055,49442,62450,45659,45070,59911,20199,95195,55161,27743,20366,78309,12081,61236,35189,76928,39552,21570,49989,37861,61782,61658,47680,91629,70028,11162,93660,47609,55725,96816,90958,59473,96313,60558,59757,68172,69851,27451,28705,29749,52375,22370,72764,53466,16286,10908,28861,50220,37170,23704,34440,57372,66545,43908,94168,88707,70630,80232,91621,66830,16560,27844,83949,80409,64396,92585,94537,22938,52715,30748,99620,71655,52819,38715,66660,48175,74555,28252,34867,71007,47496,11895,34768,46399,11691,66555,14761,62947,75377,33036,54581,43441,48936,71238,28063,57447,31530,61906,44397,34637,22545,66461,10612,99348,76943,14565,62965,78709,44027,67425,64250,25686,14221,62632,51698,46060,65742,37230,98566,77405,27581,36675,45176,60166,48329,93339,82951,22287,94334,25851,28639,76835,41963,37378,27668,97506,87350,21954,93095,57840,71483,75006,85713,52799,44072,52877,47904,96405,46517,14897,13151,65631,84472,49912,28406,18416,74719,94513,87714,79256,63275,90781,76477,40352,58887,37720,55342,23605,10187,79045,15975,78390,73310,50772,45146,43284,36085,72993,21124,34429,51839,74816,97163,89132,54207,61963,52319,43908,26739,98907,25743,30949,58335,65926,55829,77239,23263,96648,10770,46169,51888,50150,50664,89573,68155,41062,44051,78338,92598,52776,61040,19869,89262,89855,22149,26157,52960,48374,82190,62857,62854,64935,15582,64656,25068,74992,77194,32094,43826,13508,30498,13458,77869,99153,90336,73190,56254,57558,49097,69328,90133,92324,16865,87650,66709,37778,63705,24953,81865,81729,16477,43975,59211,44244,29214,78525,15321,64388,50874,49480,82613,72599,69111,17750,14364,93584,19419,22265,12773,47526,70857,59131,49886,35474,26256,15129,70820,92336,76748,85467,29943,85953,32808,97646,80155,19520,70745,75768,54321,20023,29775,13219,80581,22712,53300,97693,69636,90737,44214,10217,90973,53986,81923,32128,39553,10328,58382,12624,14848,10124,63361,15385,89682,51794,63185,34839,84600,89137,71135,79976,96048,27778,38168,45540,10554,60276,53707,89993,65091,14655,47331,85156,96150,10547,23511,12971,48043,50312,75252,96447,47774,76690,27730,71677,76658,91781,95469,88091,15863,60891,72283,85605,78011,41172,57921,73481,21449,68728,50424,17623,32259,21294,16282,63672,12133,85360,75373,85611,54954,19773,41580,23353,86468,32770,90432,23829,36182,55663,84004,80032,58756,34390,61396,52287,53680,14606,93107,35911,12222,19713,63187,94340,16449,92788,63846,72327,10518,91010,46079,69736,37872,84058,60996,33062,48940,53303,77781,40324,23713,43942,22347,87918,95593,93187,55582,72241,13048,11893,93432,34605,35623,45100,81610,60976,72273,84898,24493,79084,20196,35733,79789,39360,54371,84796,78655,62372,11300,23834,46600,30835,71497,90876,34499,69744,33759,35391,93517,59396,70558,21587,92853,31464,12006,51299,87197,36760,67443,39122,84473,34731,53903,37570,18095,52201,17865,64587,23695,94907,14360,67326,47207,21318,51484,16421,82632,95050,88254,99660,91649,54581,47625,67640,44617,99333,44023,47172,69146,63183,65270,98045,81529,84138,85323,81402,48622,27667,83672,13532,63130,57595,62089,71102,25574,49828,78953,38367,97214,28213,38954,41167,77114,41974,64497,11105,63244,17243,66862,96456,19750,20746,45452,11727,73063,52685,99894,45614,53054,45918,87576,63228,33529,82050,20732,84306,71842,59794,21842,10249,93939,81380,33619,53393,90685,99548,90234,74600,10137,79881,72735,86629,98229,23265,79878,46751,88301,46158,51339,30973,52407,72847,13749,47950,35739,25882,62861,19899,19636,95584,38907,52726,43218,72638,36917,97592,48759,73523,21825,49695,16601,56722,38023,77450,13525,65747,62469,97635,14481,81390,15650,49392,78037,42529,73563,43860,11706,65530,44496,72556,18685,16313,92150,87003,26738,69178,78213,43797,79873,15115,11142,38746,31318,32123,12139,24453,34812,28965,52794,70552,87074,61375,68787,23313,39674,74501,65641,82540,41147,11206,58320,77095,44944,41609,64523,57217,70905,37370,17124,10249,80056,23610,46495,45241,76530,99621,10713,63427,55004,66952,59799,87212,16879,73375,87886,29750,56455,15401,92028,10002,23091,12407,71588,46544,81001,74993,30164,37305,28292,94446,72847,81859,14853,86301,77713,29894,83952,65838,52971,21188,31817,32490,55691,63937,63663,17303,89206,75796,53300,87053,63914,69471,46389,42724,83356,61154,75085,16832,10296,89143,81365,99212,17851,77349,14235,46516,76404,85710,51678,74740,36308,75885,57772,92107,38755,68751,25628,13404,79195,17021,17621,69011,66557,29335,46522,79590,66444,58363,89750,55731,66006,29583,14207,88878,39888,20928,32474,10612,49529,79748,54296,81336,89898,37991,47081,99903,95873,31493,97270,81705,83335,89066,45832,36945,62238,56652,69126,84864,32360,62195,57101,69785,91820,93492,10479,76586,59735,58912,56462,79240,76616,82028,52803,19910,42862,81189,55052,63790,71760,16760,23173,50541,66106,91000,43405,78007,23582,58673,42900,17581,90298,71645,60935,97681,35720,52722,75093,35569,19005,45458,71919,94191,95135,93876,40224,26448,47015,50634,91706,96425,50792,22843,99965,39357,17252,33580,41437,16408,15226,11683,72981,69051,38836,33371,68795,24737,94108,36334,39462,37587,33202,42973,85511,12816,25305,22235,80505,19079,40040,94788,76607,23328,66548,24773,23357,89587,51666,80600,94428,97700,44456,29597,58858,22218,49384,27136,55103,72271,18438,91960,47394,69105,25154,29367,60118,27427,81089,36488,47233,72338,35083,96405,99149,10269,76323,13106,18583,85309,90823,96704,58055,73277,35263,46511,10953,58323,19805,98454,58970,11654,91476,17342,77424,31468,40550,71753,97981,96479,84956,55885,86784,21396,58871,81530,70465,55381,25503,37122,62673,29706,58226,47259,71002,39121,41341,95404,19107,88654,16254,53376,46497,36033,96467,79352,48082,54280,19270,86098,35387,21178,82488,57272,32423,66336,56226,93433,37122,25428,71858,29728,45507,93039,60567,85478,14063,51528,50000,93869,60090,58758,19600,13080,60714,34275,99995,12473,86131,45525,42610,44299,43502,10990,53211,64830,56235,60803,36508,55316,77870,39818,90712,68222,67745,12783,39208,48721,24131,76189,69408,15174,24656,97257,15619,45037,65919,66122,63229,68436,89004,89542,15986,36613,76943,54845,53337,68774,33177,37103,99078,50081,66273,71117,88471,60384,59534,57494,95859,32063,32129,14399,39461,11762,29741,15260,75374,40762,22676,61564,68606,95843,70375,46328,95975,27233,36728,66245,69742,34006,31434,85609,53375,34109,85987,98888,32517,58377,48502,57661,86734,76461,77800,19304,58927,34319,98739,78033,24562,61375,88500,55418,85055,20542,29735,17344,81588,11247,31559,40634,31678,81273,44011,92890,88281,26605,84599,81672,15058,37507,25035,59752,92544,41632,46494,26527,49705,98730,14720,97099,91482,62745,37364,19717,66675,34759,69748,47333,78596,75730,50673,74901,33365,31695,77725,71981,49209,96447,16290,37104,61869,34233,63669,52138,63388,95884,20893,53218,16675,38733,11064,71686,41668,47071,21572,52893,45148,41116,96438,45000,53371,53984,31278,67664,71986,29332,29054,68822,73542,99195,32742,31672,98793,39773,32271,27455,93862,81742,16898,82735,28868,40571,66211,21922,79344,57677,43856,45178,54405,17961,90639,98490,38500,27090,54784,12976,72374,92923,28580,21481,41596,59812,72863,35278,27276,61591,60287,46857,42581,62873,49660,37306,27421,31324,23852,72908,41884,92367,10028,11396,51664,91718,33319,15464,39832,76168,99213,98392,25721,73220,15816,95069,78203,10791,34031,74997,87050,96238,21341,43419,63564,38772,94801,65402,65002,64650,81695,62350,62498,89816,44251,63862,11835,91747,93900,70327,27406,65555,28239,15693,16457,14724,70340,70102,45708,32304,95623,37934,94566,27106,30411,82404,80172,64673,44611,30966,53916,80327,96229,24578,95196,19769,63495,35812,78490,62348,17886,16567,57497,69322,98446,20277,14699,32251,35384,42709,36722,74866,77665,37817,94675,14475,73903,47745,52788,51044,96062,73433,99581,21101,82127,17689,64836,69300,57091,74827,26984,20243,31001,74783,71439,95075,72848,22490,76115,44696,74261,51403,94808,81914,14613,79789,97529,20972,47897,94820,13759,60799,99695,56663,60201,68097,24015,10057,80669,52712,18388,82009,34189,75287,43531,94009,70741,79025,58858,10476,46696,51547,55180,74838,76350,57672,53846,79649,95252,24617,56703,53503,99002,24108,83357,26967,28516,21461,51844,85088,89761,91307,64679,21917,66210,86087,77468,25909,27040,52824,23392,66637,92225,53092,62343,72499,48819,70026,46543,85187,17061,85663,18364,61422,16661,25820,94952,26344,54948,86458,35493,83056,96216,61026,62993,44678,55713,27293,63291,14708,98860,12676,10839,68870,31283,75330,32862,33667,53015,52044,34370,31664,76728,15656,73798,58468,23509,10082,58634,32739,24925,19826,26273,15641,96652,18648,84172,58658,88019,71772,65526,62570,85490,62854,81157,27548,93886,90713,23438,45366,38277,38220,58807,48827,51472,26740,68446,58530,59541,10651,10409,96994,73429,55595,54221,16987,90769,42335,81776,18235,61845,40708,39060,17162,16633,38193,89416,98541,23270,84692,20001,66041,81114,81215,20942,39928,56810,13779,91537,12157,73688,60328,36704,29383,43338,95150,61590,36544,13292,99617,66934,83264,22838,88467,10839,10621,96791,89043,33109,28855,85002,74657,65647,12446,10854,91984,75034,86862,49729,41534,60259,71384,85444,17136,25572,73382,74743,91338,93629,23819,44396,54070,54176,65077,72563,99047,97371,32762,88971,89690,20707,43625,32393,97750,88685,68242,51574,23360,27843,20670,82291,37609,97126,25846,62272,49384,84388,97055,60011,67286,51090,82256,34011,29389,62399,14210,70060,33717,67692,17831,24826,84371,85282,73701,55142,75726,73147,91665,29419,57319,62286,18539,49502,19590,62041,70790,38527,15712,17349,21588,44136,96426,91145,82008,48180,65920,48839,28400,12182,73065,18764,27743,32152,67150,83829,65308,83655,69345,72348,95556,31703,10265,75030,98312,50268,29146,95082,71178,60721,24578,71077,76910,30838,33356,70068,94908,20088,88407,11700,88521,67831,71063,95430,54286,46355,12251,21470,86718,24729,62629,63694,46505,38040,15273,49168,12084,73767,70018,11121,16877,48990,53363,21271,94928,22719,12550,73469,25781,79784,47388,40264,21631,66653,96039,83640,71821,45442,17626,33355,54576,31192,85964,79366,77748,60875,22936,64774,81766,47191,75087,98156,37228,91916,83192,61968,93395,16048,22240,79820,97591,56401,68954,50784,68081,44815,24930,57682,31765,59156,19402,48020,61326,30789,75798,68280,92515,14451,52930,12911,55042,27199,34009,15428,43129,43208,79690,44326,61936,33590,42695,84656,71343,61599,50676,38821,76831,30617,38395,60901,95854,15177,23300,29188,98506,73330,81866,47536,64737,95344,37601,10911,17896,79887,73264,31701,85293,99439,72208,89831,80948,34166,73893,71363,38408,66425,29147,36928,80808,48228,13344,63090,35120,84936,29017,88466,74655,64256,91907,65499,25069,13748,33064,61544,11535,64653,59371,22561,57592,41017,82407,62730,83445,69327,32393,84994,30337,71506,47513,98983,88630,71114,41078,31158,63290,88664,20159,35598,48053,54457,21839,79712,59294,96142,49822,30111,91983,77529,77098,67366,26676,75515,78325,97762,36457,81752,15868,86983,57097,33626,91005,51405,27733,79746,48439,38274,83868,97789,12611,33581,46255,53221,51214,54229,25815,79976,67551,35985,77981,61180,69753,33600,43294,91733,38767,21964,35328,35365,49313,85351,24001,21965,64133,29537,97742,38064,29165,88810,30012,48694,83645,58190,76091,85694,99066,48869,81282,35268,74148,56484,49804,15112,56324,25601,94250,49140,38581,77573,47680,57386,34433,31786,62759,27617,33724,74875,12083,44885,78075,39304,84357,36245,59832,16841,25847,56127,29328,83740,15570,55311,59685,21593,42975,84420,94636,15753,26576,45383,50572,60980,48056,59830,81825,59116,85389,92044,30713,88546,17790,41644,65782,16557,50157,53067,14532,59952,51114,43974,13704,65608,17365,28737,50043,72574,90655,73063,77009,59125,14144,13706,80084,78142,19368,25115,43277,95742,60770,68472,28313,59683,17461,99399,71821,66712,69284,48184,83826,17111,48450,92465,55537,98614,21781,25286,50032,98663,17300,89412,81467,73256,20905,81154,72374,72906,21608,54055,15460,73899,33652,65156,36654,69613,91649,43485,61431,78476,40443,77513,46012,70756,72041,72105,48016,95216,35046,85135,96097,61062,69474,76377,51285,16515,51655,86707,51106,11472,75100,80761,54740,53687,51354,91030,37465,50305,49384,78513,61902,36036,81486,76334,33512,79492,64573,27346,70983,39109,65071,38798,30069,54529,73285,25559,18609,63504,44680,16680,43509,91598,37997,67132,57363,88064,91452,32813,22263,59818,60800,65615,98334,43531,16935,50876,79225,39306,40835,76531,48266,79141,64639,43683,20076,73564,85764,28337,77471,58314,23174,43564,76122,54797,68217,94429,99479,41060,72255,50004,35938,30592,49449,92576,73110,21012,22928,74131,89018,18866,45326,38517,20170,57786,92281,30420,77908,78058,68449,23563,86685,73095,41704,73163,74520,69224,55651,49954,96286,35801,57172,43758,24101,86947,74691,42004,49177,23930,75765,42297,31006,41862,27049,68956,26104,40286,44187,47904,65691,73327,42566,47522,31062,45155,22902,56419,61356,34481,80786,18969,22406,93513,40632,92834,58389,21856,64683,91606,42800,81905,51478,92312,50375,46225,11938,51625,96035,81921,15104,77999,51794,13399,57092,32204,33441,83527,39598,61928,80729,22729,44117,35272,91614,97926,64864,78472,91839,64181,64030,63929,99536,38140,36696,74401,20160,62488,58499,41754,40768,95171,59129,33237,21586,89233,19468,74422,18968,37138,44476,36894,24539,59285,43370,28137,61236,80811,69508,50956,11502,94742,47341,14113,77359,20832,16681,88439,20013,87994,69291,47441,95328,80210,55042,54616,56882,50650,53564,73350,80635,42325,69618,44137,77911,40840,55264,87405,27504,56021,24974,46330,88614,64976,42061,76676,70204,42793,81226,57460,87327,31409,18171,42600,33676,31533,18302,77901,29310,57999,60143,28225,40638,36650,78618,59337,15666,47902,81517,20940,58147,80240,26107,32152,20400,19413,81808,37658,30591,23946,56176,26687,17428,65703,11086,93357,11456,87063,25551,45538,69279,39814,70988,46767,92303,57275,92590,90236,47062,45782,50366,19478,51878,26054,36397,13508,15936,94711,71993,20367,22036,51568,95929,41761,15037,79499,78378,42494,90472,71731,98557,73378,97235,67757,49888,57874,23485,20654,59317,87838,47825,40409,64019,90723,72175,33268,34842,90247,64419,48171,78501,87586,98162,19417,65634,95739,70741,58333,93836,71006,29057,67852,75567,42549,44280,51813,30233,13476,49824,48518,66259,64560,17740,68107,53649,94850,37530,81845,49610,42990,83150,51836,16686,28108,25108,91781,48172,17044,14697,59232,88865,72364,74422,62132,13693,66433,14997,69166,27966,86590,55249,82472,98071,90269,60168,28512,27605,64115,53429,92364,38169,22942,32593,85578,53941,18291,83816,12710,68864,17111,39025,73742,41375,62265,82664,29201,79637,63114,56999,80696,70028,54384,60650,53699,20783,76377,45875,84194,85554,50249,60846,50951,49608,69480,23931,69887,31052,30390,67557,12280,11129,29132,75890,25902,45782,37323,50043,11836,76069,21141,17228,76605,88873,57742,20233,27085,51663,44229,50832,59180,44769,41876,23937,48238,49544,88018,81668,71926,68960,99781,49112,98529,62872,81949,27371,91495,81555,17010,35584,38932,32837,70305,74975,56099,91597,26668,52623,67890,77739,86978,47406,20034,56981,66526,42915,62901,89501,30135,12977,80896,21092,37807,29082,77397,22400,91724,43642,38541,40913,42323,50101,35803,97768,98536,40086,79434,38745,28596,66734,15713,23106,42585,19761,89639,41773,26696,68626,91800,75463,70794,65569,49267,13810,31227,45324,45298,44443,49367,50599,45234,29083,83919,97862,43943,35994,38850,73993,11139,78879,88103,65354,34760,99818,39118,95510,79714,68014,93083,39650,42052,20236,23946,73760,39393,60187,79265,79625,75445,69534,75051,97984,17100,99481,39123,97937,51279,86461,20017,27056,85041,63421,38336,30483,73599,26767,38063,80271,23426,60200,55800,43311,76089,63236,37550,34411,33964,58390,34282,74868,25143,40324,77248,41375,86600,36774,85017,69191,45460,44512,20691,57708,51050,90776,16964,17996,81423,75916,22272,30110,69849,16603,25486,77718,85792,82556,21578,64029,41823,29121,93279,31320,64816,86376,99060,24646,24030,43455,37913,76689,78183,24374,20049,48749,38828,37162,29491,23373,73649,40860,28716,64539,29063,70720,62417,99690,14820,90195,38498,44549,94204,21044,14569,22540,42245,93031,70740,24349,13882,97333,90017,52350,60966,35515,34250,94755,40489,40865,12313,29939,56216,50026,55455,57360,32349,95010,65081,56077,41621,88822,80381,21749,20682,87463,37659,19313,88597,22126,22408,98858,11879,71520,64239,63397,98049,70983,73658,55030,63503,52524,82564,65322,59134,51270,53561,63771,10998,72977,70336,90856,98815,72040,88591,32883,97036,68950,10405,11375,47766,29184,10465,96384,85409,75752,69297,15860,51285,39469,15039,75189,35522,74515,71935,54121,43134,17080,26129,40472,42442,81470,53011,46771,77517,95244,35006,26476,90433,43157,66808,29230,60927,78363,90925,92818,93381,18274,26595,85811,43475,60932,55783,85343,56145,51631,70182,22865,41081,20615,62843,11259,97075,74755,20489,75857,24349,10356,18093,62060,52348,49625,81765,82120,21850,46819,14651,89156,59888,21082,46690,29249,33888,79426,13897,64305,41233,36530,66380,15286,43103,86496,83054,75507,88332,90880,90643,36278,92533,70855,59506,12811,66446,80595,72796,93742,52838,61935,91048,42339,88131,65457,58718,76400,72227,43579,79272,78600,29554,96377,11411,94264,44937,55970,49624,90149,51165,77288,53169,22181,51591,25801,28047,88700,39719,51395,68222,49493,50540,32555,97630,15114,58388,97576,14813,66886,32650,87590,53100,86867,72920,85496,93154,56804,27250,89219,26974,10638,56599,50867,33093,15307,31161,22019,13652,54944,60514,27492,15758,82133,62185,35143,24320,41560,74330,68573,88350,29059,16029,42593,54143,91916,60138,95369,97570,92157,46640,87817,65496,17239,16264,70738,28356,59256,38894,79089,35789,98807,75559,42979,12229,97244,74965,93134,80980,83324,37447,57694,51982,43300,10498,57827,92523,11870,89142,54216,45860,93409,51780,94766,61255,74751,88174,73973,19231,67630,75320,45830,14333,71376,80201,85274,48745,99313,51896,23024,44800,57445,17775,66313,36963,52105,74827,84058,85693,33849,85216,69531,94180,97146,79656,30743,19394,15421,39518,42722,19184,48490,40855,72709,78632,52979,58772,69750,92055,80162,94159,27079,49750,59783,20053,54283,63599,28307,86703,50476,80518,33797,60914,29976,58846,32613,25748,55367,42220,26793,80258,63859,57553,80022,97743,45283,25359,13887,49637,32691,27123,62131,15360,11907,25747,99117,63328,75245,39819,22365,12371,97460,52301,42522,38837,28518,89235,76871,49411,67516,36695,14438,26515,98775,47825,33544,75246,78701,90085,73302,40533,76051,15408,90152,97723,42643,57799,35466,22649,10776,38276,96301,94765,27608,14909,22862,61780,23168,49398,35327,60691,95370,48023,13433,99530,36722,65759,54624,36659,73884,88259,89361,64629,94891,79621,61884,10362,55233,85365,98070,23128,49029,97650,64879,22065,21098,73989,18378,84609,23523,86884,75288,47666,98768,35303,43080,51243,60722,84644,78435,79633,80615,35450,30904,68149,32642,19669,92650,85197,19569,70331,13612,32305,88540,93019,75792,13420,46382,22728,47349,61038,21303,94063,32932,54324,80375,74159,95223,14211,13409,26815,21804,11512,71963,61727,32324,53190,66315,26436,52562,29429,76761,33112,21968,56060,82488,46347,22345,64721,32537,25459,27173,61804,81508,57433,60856,76205,80896,13422,68763,55005,56321,52796,21668,98960,33894,86083,54664,80226,17302,92425,27589,38841,28823,16642,11419,74094,57521,19596,90680,11510,79862,43103,36104,37622,78266,91844,39323,42610,68088,46650,97161,45746,48486,10015,61782,12741,57192,67602,76617,43727,25751,34448,94295,49582,37731,90589,25063,66328,47403,49693,31114,84403,46520,82248,11747,23539,61732,10413,89600,50789,82568,56531,11490,19126,92180,51586,72416,44571,13363,77358,15921,14077,19258,43150,46150,21599,67531,76143,58563,11941,25068,94054,43706,69087,46230,88517,40938,40677,46238,45879,68761,89589,38009,62726,58726,98778,24681,26007,36264,75813,73989,82929,78160,74939,71222,38215,37715,75003,44870,75053,62958,10701,39529,74745,50765,86019,70503,66999,53272,19070,97878,87502,14037,24631,50179,92335,45932,28514,36621,16873,97646,94847,95837,95398,47115,33536,83741,51408,71572,33953,99371,59834,80839,48334,83448,32787,30098,70766,52841,96997,94978,16604,67967,56745,71842,42912,97461,12136,56750,94516,56175,28343,51495,32875,44631,66645,47753,49627,55998,29613,94313,25661,59523,32434,51582,25615,68913,44323,26833,63052,70908,11449,34947,18560,24557,92909,96417,64855,60173,68853,79213,47608,36112,78004,95027,60209,47567,84584,10355,84917,10025,90203,76601,72751,50089,88294,55087,21464,27020,91160,52108,68512,33032,90909,81964,29194,60241,82150,41303,33769,39215,10998,90929,17368,17718,83844,69132,21023,37448,55611,52585,23982,54634,68326,53894,16080,99673,98195,79902,60869,27683,81294,93226,82417,20244,63380,97166,38026,36769,56755,26316,92312,30886,40141,11082,94971,79933,49299,51577,11591,40462,71979,32497,53683,32691,20539,66343,46078,92176,79673,22993,82755,85239,85767,44780,80955,90252,57107,95198,92130,82226,21025,95735,56937,20822,64918,89199,55864,57499,60898,18443,18619,11161,63412,96412,54429,64472,45949,48633,48052,63356,43883,67444,90588,44818,85864,52087,75218,23615,71364,99994,39348,66819,47206,68299,91669,93012,42953,48476,74043,28186,34564,16275,28142,54810,17041,72604,44252,97808,30506,60868,16510,16791,52973,51526,60496,27468,90961,27578,64912,46144,11415,73764,66729,72229,26342,14060,81653,19937,90990,61671,81456,20984,47825,72725,84718,49578,11598,63328,71743,66586,94112,99813,53180,79446,36642,74655,13121,31784,99392,55914,57284,85275,14433,20114,34745,80162,19131,50143,64624,34296,49988,12082,82296,19700,45363,39797,50456,93716,87685,87370,37528,75933,81227,75691,85974,17604,40492,68776,29748,11379,28181,45387,30416,54459,99641,80278,94813,39013,97962,47010,84712,89048,12100,66987,65342,61464,95979,36553,81069,73635,50462,63480,84040,26848,86960,89304,49053,30389,86882,92767,92205,14600,16453,44359,94402,81728,32243,14881,51818,99314,86461,36400,77638,45665,54705,76708,10372,78667,96540,51130,64796,87416,10410,81976,53110,73585,44698,92133,15611,69353,71802,46261,95800,12215,95985,42253,79060,76832,54950,65083,11271,21653,78930,13274,93467,21867,49696,30968,54158,65600,88439,16010,43017,35064,99319,93353,36246,38732,22111,62001,70865,57337,76429,18219,55463,17777,52816,66849,59695,63495,41909,46175,88819,21127,31962,21087,39545,31170,63157,39597,87921,15571,28057,85905,31526,34136,60347,39702,81245,40658,45700,97234,99315,31364,40891,59539,46441,46898,70002,36638,90766,93260,38309,43590,22788,25966,89236,68486,57753,14339,91081,58821,29799,48372,49737,27744,13518,40605,48553,52283,80290,52025,10095,64549,52358,42078,45546,33763,11928,53887,57190,68250,28010,81362,48075,59791,21422,67043,90417,82127,70332,20781,34432,15375,61974,28056,83744,10332,31849,11932,29740,59160,19253,87707,36906,48090,99783,55851,35294,35092,48847,71650,86257,65035,75665,63255,59461,13130,49517,72868,32054,20200,60480,76707,83020,17800,52187,13944,79639,29200,31163,87694,57455,66453,20906,52064,95359,64570,56086,75375,79109,39006,37143,14734,42854,26417,42198,28890,60161,29173,44286,10951,25784,48948,63037,38269,13489,93815,33535,38812,85894,85170,91951,83366,62941,37306,71105,80142,37761,58879,59244,88614,99070,23923,90493,91006,69911,68584,64752,58453,36666,79036,13901,78541,38410,55677,96437,31196,15598,32539,17931,53634,21359,84675,23068,12031,67377,16018,63191,53936,81327,85558,69289,19466,46665,87636,39160,49056,10332,35004,15561,22401,88032,54839,55400,46097,52157,54106,17061,75640,85859,31984,66001,56265,81295,56032,22704,48870,64946,99650,25313,80575,96216,50185,88359,35176,94482,88201,71953,27784,24140,49139,79395,86879,75705,47705,57894,24373,57217,70071,10062,32977,25226,15620,65613,79363,72054,10593,63256,49272,35045,51621,48249,66786,69681,16477,71381,89743,20668,10714,90898,80247,86145,92353,61452,36746,82323,39172,64484,55736,56760,79497,33951,12771,40743,21653,61261,18238,73447,28442,44336,30672,54160,63979,47108,79199,57972,80850,97460,12128,76983,26488,99193,87249,30201,12147,75141,58628,30556,54236,25069,45347,25070,63943,97655,28941,33925,85792,61027,66796,69544,50165,79134,88083,97724,61357,36226,44281,24900,35481,74923,48127,58732,34524,11760,54430,62499,71919,69731,61051,54304,17803,23208,80079,42286,23709,90080,66197,15158,13534,48773,64325,67939,88163,35864,72930,64244,53556,59613,53745,13387,21283,82004,91809,62159,54167,20401,63334,13659,33045,51719,58680,42577,90140,20664,28170,71358,46726,10798,23755,70840,99740,36601,16186,95662,99043,47498,91091,56641,72449,46322,24157,70281,75708,58180,63958,54692,51162,68335,99561,79274,80621,64884,32821,93731,16528,23106,95437,18138,60069,42718,82152,69595,20781,37127,82029,23361,46728,23696,73297,74496,92443,92377,40784,36056,93741,74048,10340,96376,67821,10824,55731,58421,96609,89196,63631,82977,99925,27632,82307,65983,25042,42236,37615,69061,87413,43574,45968,44945,36056,58193,46348,22931,10484,76147,14655,37894,15264,69981,87659,12396,87499,22219,23940,98397,85064,30741,31741,23574,28092,96723,75280,57306,55538,43182,41001,50733,17386,32636,75695,49442,86054,62767,35389,56242,60623,94624,92686,45437,12751,82499,23187,63592,99494,64360,32891,80252,83151,62214,20369,85782,39405,86957,38992,15490,81155,38865,51485,75486,85108,51166,73860,63369,70589,50034,99438,25307,91397,63035,83144,97317,32255,81695,78680,99341,56122,55138,12259,73011,10033,33593,47463,65687,60244,32246,85898,74243,11646,25670,73338,24738,58963,72315,64546,94876,62993,73042,97166,97906,75014,45073,65624,37368,75376,31279,62141,46659,85934,65964,30000,91264,74350,37410,21338,37007,42321,67307,29673,68713,59824,58939,77049,48846,95718,89340,67949,24224,83654,74544,79736,36976,93152,10250,50339,60699,46715,61988,47826,91128,31309,29950,98939,29721,11997,69596,50956,75247,83945,48280,64778,36838,19358,55989,41578,99181,27476,39710,15901,86696,77700,42245,78897,67864,23525,77074,26380,17044,75109,98139,69007,38393,17561,44605,68268,29879,69533,45266,50059,14118,69095,25810,69969,92141,14394,17271,20953,66081,15619,65055,33160,95098,24204,34119,43249,96684,95081,67809,13499,56958,92306,49362,43810,48047,92558,82870,95516,13530,19562,18379,76779,74591,94144,58573,55290,28288,23475,54252,69581,78413,91208,87561,47470,44152,56462,29791,12287,84270,35300,80976,29690,72832,87096,16437,49976,90308,56312,45553,60863,21215,86187,59029,34956,33804,98406,80202,15581,47360,64988,20765,93443,58326,95426,53849,91873,46670,54740,13063,22087,74976,82049,23754,97250,49959,35353,67704,95573,86789,63515,35553,90085,14769,55808,26092,67752,77540,18785,44235,11698,82529,89460,95947,50093,35718,25334,32974,93104,49228,46225,55408,81493,51449,64538,94827,14904,45432,62508,90148,47383,80121,56420,91621,20945,10007,57960,66107,26264,92067,65077,41026,66572,91117,60867,90021,51637,94418,63041,33220,79775,27287,22185,63502,17698,93004,56641,72513,54733,23140,16079,18901,20393,23705,67953,58444,49840,85043,67961,98774,10585,64839,74536,58371,52841,75365,82931,37118,77757,81605,14929,78464,12678,58288,27159,56703,15801,41401,62419,33754,53980,46543,98846,73433,30440,51241,67363,95189,17370,96704,52582,88293,28622,95930,14188,67359,85505,67206,22978,72990,50024,10968,22726,64544,54300,96858,32439,13916,33320,13241,36850,25316,44331,60937,27002,23838,32914,74112,19304,57908,89767,78835,73171,31662,50731,24051,38793,20161,75315,10385,98587,86110,64263,16882,59885,12466,20537,55959,36919,45698,95638,92117,86563,83553,39646,82167,99013,92556,51045,49602,53233,22456,59130,60801,31730,52945,31229,15648,91483,90838,87233,21691,65011,99851,51405,91625,88506,14120,37255,20970,62343,10318,96059,88654,42450,56460,52798,79900,47753,66946,70655,78481,43351,32324,47881,89017,53206,83050,50528,76084,96110,70268,50540,97918,39235,21729,90570,41407,88096,50096,47535,12768,38237,13884,69267,15671,61409,97856,50188,66879,99683,44604,21017,94917,74647,16708,92377,26525,44924,56372,78111,54363,31899,40757,97054,76171,64016,74073,78182,16036,74793,40843,11663,34902,91004,30611,99174,63548,43780,45391,51134,93833,77379,85420,35015,96645,95392,45779,53936,53975,18846,44333,25549,35021,49359,62703,82145,99104,42171,25779,38417,88731,62272,46161,53501,19927,99968,10335,72242,14583,27152,96122,14531,48100,19713,71985,34154,13709,41403,64227,33036,22613,40118,81347,79762,39945,79057,48630,44539,72625,73909,18549,59608,10262,19485,28478,89183,41467,48320,99307,37783,14781,14904,59047,39620,80672,72783,94507,68364,77135,42512,18808,74182,45638,94946,46766,49899,45865,39609,30453,45650,99363,57874,61250,98836,12618,59651,13888,64829,97661,70639,97191,43591,63341,89505,68396,41533,58607,79803,25228,89756,40087,64979,52326,87894,93049,11581,71091,77030,41215,83327,70869,59794,64268,60048,60118,26260,70626,22304,15066,72539,51731,81851,30668,84447,75879,42669,27290,44452,43373,60111,22072,95753,14077,44368,81953,76711,27053,25055,16986,44464,13882,94779,28158,76910,19519,54843,36035,47392,97459,62033,62533,12867,32743,43172,22294,28414,39451,62791,84810,70718,87491,74941,84429,21703,21583,50439,36480,17343,98422,58199,95218,36912,85456,89915,25906,13566,59563,46163,63454,39208,92430,82863,60995,44271,15106,28376,87893,79938,65910,45958,98491,31810,16135,59821,39182,65592,99383,59359,44420,32211,99603,61335,15973,67398,11600,29707,49794,54330,77604,84488,67105,67205,80414,13954,83712,57827,87251,75442,12922,44744,33176,96047,17133,92494,48320,30071,52637,71901,32127,86921,23083,62212,61157,79813,34496,55799,99054,15563,76902,55362,80266,51588,97008,16441,12650,10635,12217,38597,29741,15903,54267,77064,22477,17646,64304,34212,28457,46200,53905,75984,24622,42256,88019,54216,27358,45423,78084,39738,66165,13931,85164,59078,25524,31255,87866,90201,56421,60408,86825,53310,25927,74418,58719,51264,43265,86229,93080,86244,49437,94982,15997,35542,76500,89984,16958,29675,94500,94129,67775,96486,90968,65162,95691,83609,86147,13018,18071,72705,64487,30697,48511,99963,73037,29972,24689,79738,81599,80843,17987,10000,52586,97665,84158,65336,94900,93406,38075,23281,90446,60624,54910,82583,59927,21423,49102,94692,48595,10122,23584,10198,69976,84545,96823,28458,46830,55082,40641,70161,17965,24041,71214,62573,64494,52439,67868,79469,43601,47556,92761,55908,24737,37080,96659,87273,30194,58896,83371,36223,62217,74017,69109,87200,89261,62111,23960,42495,55720,42038,84182,25745,19001,67058,47507,61261,63546,62020,94250,97324,10740,92443,15750,40869,97907,86726,57980,29215,58466,80325,22417,26948,85662,63933,73896,86974,35543,73990,33101,57933,62672,88740,20366,29439,49309,69658,20446,11505,24981,84792,24311,44981,21436,95657,92504,35946,17313,16024,46283,98245,51587,76473,33147,23605,65643,97936,43253,21583,37089,69528,25276,10991,21934,98772,93860,13645,36278,20091,90821,82028,78730,80829,63295,84790,81747,91232,16658,22789,30722,65210,82803,17171,18381,58411,97764,96340,63983,79528,15277,92264,24997,15401,97004,53260,92320,71637,36053,81886,97148,56895,51115,28868,92229,42891,57113,22571,48299,37618,41597,85580,73326,78506,78588,49136,65583,87228,34363,19097,19566,46251,42676,44676,81256,16464,91579,41542,15943,27933,34856,28947,32894,57213,87410,11239,47448,25318,41175,13984,24195,80467,30492,63387,63509,98216,94816,15630,92543,16143,76424,21175,43294,70763,79596,69646,47575,48002,84655,33747,65388,35008,15402,80525,21790,67968,38286,96939,60414,22485,18457,76089,74846,93288,96698,34898,85423,44330,67151,25926,71874,90961,69202,78505,99909,24168,72046,26092,40608,17115,71561,97455,80728,37613,43591,67538,33127,76238,88430,71482,74278,73481,91840,13647,26827,96413,54558,90125,90521,44220,45205,52762,16060,40317,89281,37994,64408,35522,26515,39826,88387,63666,23526,50480,77499,10331,57196,76676,15044,47903,35390,80125,61739,59624,69834,78270,72233,70049,89474,90896,82200,50532,84292,11398,44003,28712,91614,86613,18866,10242,66595,67181,41280,53649,47275,44111,82663,32550,60885,67199,19727,89778,68147,59664,12249,14721,83307,65755,34911,52366,74420,12984,35534,76499,70944,75729,46202,20885,23073,43835,24493,36134,90581,79897,53207,42547,39866,41671,80911,56339,68178,59707,29199,68010,73920,77031,38297,74424,98431,87062,37897,55529,60049,75739,72405,75461,92873,85778,68094,96399,82584,37774,15317,32769,37062,45739,86531,68489,26903,26735,88456,32597,43649,82015,89236,64059,16308,97420,39452,37347,82823,21285,31373,81007,65885,81946,32766,70013,77786,96315,51412,63397,17838,59683,30541,40652,61812,71774,93328,23353,32996,13559,49692,28916,73092,96666,17387,60167,76790,87272,44379,26742,13612,73770,29880,20065,28139,93518,71249,31650,26615,13911,96165,57324,60508,63202,35214,68306,32494,92037,14933,52633,23536,96899,51906,54131,44963,63576,60238,97539,38165,81390,92360,25953,83898,84416,85296,52232,89024,17087,34203,96359,65937,11369,40120,39950,20745,69489,98920,63125,44246,39258,80790,62862,64732,39225,85261,22942,30573,82175,97211,71076,62828,77013,89074,85342,99521,19348,76316,79164,31174,20368,31759,45130,83138,37848,74714,65651,41024,19997,61884,57472,79910,78825,46491,88951,32347,27835,94166,95851,81104,67971,83668,54511,26597,94108,62651,72698,75781,61823,45667,90068,71052,91771,35020,59799,93055,55446,67516,73747,40818,61081,53090,70147,35143,75657,84563,43685,32675,26465,47675,47181,62574,69253,27638,14694,25869,30138,44218,12373,59934,22525,51599,20004,53232,23423,40879,40428,17495,67762,10655,55367,36707,23422,16938,84326,27816,38048,81355,45985,20405,23274,35849,11782,81311,49360,98092,97758,54751,52447,48690,63389,10984,58569,58715,56957,95780,85175,29326,68274,34646,61382,96456,43184,48316,14242,50856,15770,44221,12883,97469,61521,86660,78007,20744,87585,32289,33654,81082,87567,97534,58338,28614,69549,15519,22756,80792,47167,10971,24748,52280,93415,10068,10239,64923,66768,86414,58493,65824,20673,36535,55719,34454,28591,16484,66709,81119,77805,93627,56674,59889,48614,80314,96613,54021,60103,67734,33283,77814,96369,85800,82358,92660,27832,74733,68194,18337,89415,27356,57269,32276,92993,66901,65204,76833,61487,88174,50169,29796,81252,76871,49221,91338,13919,12955,16448,49045,37947,19080,51660,31411,70069,23817,81234,13748,31617,39644,63418,32571,74405,62958,25146,32109,99208,58097,47548,49108,49464,17019,65560,22163,14455,22699,47326,35446,79358,49063,27197,48300,51030,71156,19214,49583,43103,90873,29693,49627,24797,92888,75683,39354,91995,11455,23754,80663,87746,27975,21100,52774,23228,82276,68732,14240,75528,63140,21927,91991,14878,68123,91523,22811,14828,51701,16170,55151,84124,54772,72628,51428,28244,68335,80650,16131,97775,57889,23831,92809,45656,70235,54850,67074,30285,25681,60725,86234,35925,51969,51564,66129,62590,35155,35703,43554,83282,84006,26778,99126,38886,51643,40031,15238,34144,88612,58821,50448,51311,74546,53455,87938,67711,65258,31783,83106,55016,47054,49413,56052,47651,93155,93683,40051,77991,10497,72324,23634,90710,28096,68792,52420,95596,19980,98538,78687,67291,87338,99564,77270,29694,36964,56389,65538,65719,96007,77277,62302,26694,20535,26445,98394,86332,79914,38561,44632,90037,60677,28153,76385,93360,44534,92876,61481,97579,35227,48962,13364,85375,31353,80792,82061,46064,59446,77182,81477,97400,53020,28383,85004,27163,94275,48800,51997,66952,31496,38535,52565,56938,96883,58628,28128,31484,75676,17214,44351,83936,97919,76523,46727,24293,77609,85744,35925,78770,56221,44368,94215,29308,26796,72687,25306,63729,20541,74581,35956,74403,43830,61308,88418,60186,99015,38011,72602,52482,89786,39017,92128,46790,28146,24993,68763,15043,50061,18967,69009,20775,24158,24728,76369,48954,11056,77095,70071,77275,81484,18644,88492,32060,88067,92032,17663,43308,31625,40363,89724,59314,17110,15939,56027,41743,12323,53335,43865,64515,31080,45019,73835,80791,88251,12274,28250,24761,86561,81368,13600,10205,56806,43055,16711,54656,48596,26654,23955,37614,86599,77709,25665,55457,69978,20350,57559,75274,60614,43297,17639,81896,24026,79407,17717,49944,45932,13431,25808,41610,87969,45236,93528,79659,93983,95077,29112,35080,66793,83165,28894,98984,22691,97407,85218,53708,82873,99904,57023,48865,52549,85265,21271,44958,91812,71258,78783,43033,35631,81878,14991,47501,37027,99008,20175,20344,82849,39099,34957,26357,37462,25152,40061,60866,27125,74949,58813,75164,15019,25091,60605,58480,96831,18775,29306,75899,79729,92205,95685,10031,95029,55071,26590,84108,38433,76362,54376,14879,83160,97081,15822,44040,43060,49514,32954,48501,32753,36794,46890,76100,38736,13289,90768,64270,63432,11392,19201,21901,25684,12885,34387,96439,19876,59570,65671,18203,77225,43032,12795,47226,14681,50938,80433,48264,90822,88277,51528,28525,28579,69158,76335,24907,86851,98787,13629,45200,77009,76096,65469,60552,95743,12810,39929,67414,89254,64599,77524,30994,41847,84273,77729,49952,22036,74204,42304,73458,29881,95993,17019,63845,21815,78665,90328,80143,14978,37489,73278,33123,85696,95066,66139,72382,37630,91355,86655,69588,53055,42786,75471,18508,86121,76083,70929,57963,23919,87763,78121,98293,70546,48933,54058,49975,46732,31007,12921,27825,98145,19134,56308,12482,68299,42930,99463,97908,23010,17915,69022,34559,66840,91312,15760,63136,82638,45232,20349,85375,23504,70022,77887,90596,63604,96337,52193,58564,85579,94028,49543,12567,29452,77385,45403,92375,92795,53940,81599,60812,22856,31866,52754,98864,24598,64351,58210,46974,31942,22670,40570,64224,68828,12269,81820,78852,49378,68364,82617,14580,39174,94480,29440,31128,95894,48527,62137,73053,98190,79130,88579,21526,58298,47817,50160,15653,65978,49663,65651,90135,20424,39155,70189,13273,39332,91695,71124,23194,12033,73497,20400,26065,41143,48131,38101,25258,12339,53449,55779,19115,62179,39931,27660,49479,22101,16697,20592,60278,47280,35686,86956,23815,64281,36671,72391,56589,47894,47228,29618,58019,98894,96128,34964,38625,44371,20988,78000,39626,39319,37371,13825,82163,37088,15864,53537,93397,60888,64257,90529,19262,53725,92644,30507,91761,38267,30918,79709,54169,48583,26307,46089,16196,57234,94137,93145,99188,59205,92944,20397,41263,93399,79340,34884,34488,28886,46118,42151,94617,55973,80256,65247,18195,59559,74021,19535,15143,58387,14956,82682,41604,61175,39339,71670,47683,46887,19723,63422,88049,87234,17635,12323,63236,94487,49325,94176,26745,88488,85993,65523,19366,81620,78807,76592,71231,17273,41363,12380,30444,29822,43693,98795,73959,48058,54781,54994,91045,20543,88335,49319,72816,72512,20782,78609,46028,27149,69745,12785,71915,91773,84789,29236,88039,22326,67894,54666,53045,36714,38746,82553,61290,45314,17979,87673,83329,60289,86310,54856,88213,56553,99511,98819,32379,22441,59276,70099,77976,12131,24679,61169,34841,85423,38198,66549,86800,52375,88865,38450,68395,51508,15972,36495,84375,34562,75600,83961,25661,34957,84213,41306,63444,80738,80004,54511,87857,69028,37558,57628,11201,36067,26888,73535,41643,63717,63845,77717,90659,17870,52517,59326,43093,45803,53143,19263,29549,26458,63541,35106,56222,19732,72947,14801,22868,42189,10232,27695,84628,19576,42155,14499,32672,28043,65859,49318,73444,25830,96366,63101,24552,35016,79436,19822,93860,91255,81656,41407,51724,14372,33967,37367,95479,78277,42721,84529,64541,47277,56994,44811,43033,57170,16620,34680,29969,83127,84912,45697,90035,26620,64193,94104,65707,61635,52889,54860,70299,89322,97343,36422,88186,35950,46327,30053,57226,90947,64413,49262,94750,30041,23691,24849,51150,87934,68906,88190,99336,18863,43329,46821,63546,66943,52268,85573,71897,70943,77487,88618,53789,52277,25849,49034,45820,44882,19001,95943,30128,31243,57719,23431,55767,75420,66248,68021,99666,55550,86053,93836,24587,62330,96200,22881,48556,86488,94301,29487,33338,61116,26774,46335,48049,33189,81094,33316,64751,48790,76922,33876,18886,46396,19091,31784,39619,23084,18649,89880,26098,21696,77755,19618,18453,88397,31730,14457,62247,92681,80129,63454,75057,80464,53269,35084,97121,18673,58447,33282,25671,39961,95427,30411,22537,53110,20069,54770,40542,68577,42337,37232,98632,63220,85998,76079,27668,39181,45202,50816,63320,61528,32449,73353,33644,29250,67293,87938,48610,83575,79698,22672,72556,21606,74346,65805,86411,11723,50320,36274,27512,22978,27808,20113,73968,79399,94501,31513,39450,92393,85906,70446,35218,12447,75085,28418,54561,90082,89965,56702,90528,22485,18097,96891,61845,22267,64071,66851,62001,50912,77988,70106,80395,39097,65552,12852,70045,73074,44795,40412,70692,92695,73358,79708,95363,66929,14785,85601,54468,26779,79209,39931,49031,11713,67510,34977,80881,78406,47566,58747,12658,92284,22100,57418,46357,95124,26544,69969,18599,25107,62001,99348,22934,43633,36721,88702,47809,11808,34401,37868,67136,51587,66299,48271,25004,29339,54263,64945,98758,11774,29433,34640,39507,30607,28104,54857,53281,44980,51246,80619,13933,79121,26496,13028,33200,79295,81176,44204,93284,95275,59478,33327,27585,29361,70058,59118,98206,20821,17937,42561,44946,46038,72688,26641,59993,93537,68412,98630,34484,94802,31041,52304,34896,96247,78120,66543,33007,44221,65323,22673,60166,63326,78839,36011,73289,55676,14793,16650,33397,98481,45567,49778,51492,31666,82860,30138,52048,72171,48220,92398,57356,72486,37524,93597,88509,13383,73803,68684,81558,98585,25505,67106,76597,38204,87932,39702,10134,34567,16536,20904,60552,81157,58422,15864,35188,73107,57359,64554,26786,43286,85936,99876,73396,75590,65733,51667,91282,60556,61858,89533,84492,32570,16147,11944,84590,16350,99070,46290,16371,84745,53917,34818,69848,21250,80349,31509,23451,58932,35435,13386,54111,94391,11879,44352,90417,90496,94527,21074,57014,26288,80843,17532,91996,57818,51202,61854,26263,63670,39163,89345,34214,59773,31442,69378,35299,45807,66819,97832,33872,89940,86969,43242,46858,37829,71159,14923,76020,18321,80322,83786,59487,40977,71494,91227,69544,24539,83743,73721,23162,41285,22945,46787,58898,68445,36952,95452,44605,57554,60770,54217,27502,52451,82464,57551,93625,12616,54263,17271,79939,45829,89516,26781,47348,52357,84229,49475,36875,75019,73314,69569,67331,52281,26908,83966,42358,16868,19802,36398,39769,77138,71388,40658,99481,20363,85548,48060,66517,19787,47496,62603,90639,55201,97004,14628,37491,16179,71513,72312,71208,56823,47137,83125,58541,18896,42233,85556,94411,15857,16169,54756,67235,95482,77508,86011,24924,22845,24446,39651,48414,76809,90764,46090,53698,38158,97553,63542,85434,79785,77190,17286,99540,85119,81595,92060,39817,14508,21088,79145,96967,44660,40315,71744,36468,79122,20916,78070,49115,13441,39625,87463,85929,51185,94771,38160,93524,18587,14060,62832,85970,82471,54748,23492,35192,29600,34786,59596,10794,86899,75362,29058,50066,74448,74206,50173,47050,86647,87266,23919,92623,27336,68482,19962,81440,67856,80416,14800,37167,21955,80454,89442,68263,21306,21233,36971,90380,43839,27827,75209,95329,80438,97561,92496,24918,88808,78880,58879,44354,21329,24641,27408,74201,68016,80284,33576,31742,76190,46367,25005,81498,40003,53082,19524,81302,43598,76412,75646,88732,29840,36576,91202,73939,69164,25946,57352,21646,15419,43603,59124,69790,80383,46671,57838,92096,49219,50946,10114,16131,77217,56279,38225,70569,46959,80475,73545,40135,21533,57068,73444,82061,65966,92803,64340,96658,34805,70206,48494,85389,12611,22270,36586,61268,73517,86741,43450,84460,34486,84578,84233,92874,98248,45426,75931,65306,35599,39004,76878,35754,35028,15118,39833,95379,84814,29882,34984,61395,48590,37479,32791,69850,30499,20611,54275,90170,58486,33094,50456,85974,69429,35863,54014,30158,79819,87813,93179,45031,80343,33851,82731,25224,52861,25469,66573,16993,26007,82248,13154,47907,95323,82612,10808,53456,21284,85233,13291,32577,32902,79249,57837,70931,84046,69316,26770,93410,19004,32300,10536,44045,72853,65534,98623,66677,25251,27790,72055,32398,88050,98318,70694,58217,74320,13467,22689,15333,79238,43471,64901,64945,97128,15268,77435,38505,99908,29143,33413,24293,83046,16456,90180,26527,98549,83047,45487,47355,54790,33006,37518,98966,43902,86634,80390,79007,38518,72535,47936,40441,46526,21945,57067,65958,80327,75059,10217,68626,60230,77453,35119,40494,36215,19684,62248,50696,70946,40004,71105,33272,63490,99110,99397,64157,10574,15744,68405,80707,45579,91293,99915,76349,75953,88281,90249,15799,79237,79062,84003,79483,35926,58905,19271,71234,49699,55904,21688,92379,84569,86965,61791,54445,58245,15184,46672,46683,98675,73633,41678,30594,10383,81677,74893,58719,34295,69577,90208,12985,13196,11785,69942,64575,21095,80614,24351,65466,96431,47133,86362,70659,12106,73751,71879,61205,85519,41622,34266,50210,75089,57672,55192,98379,68622,87354,53578,88829,78203,67356,26136,50130,82522,86962,40754,13690,90399,73031,30705,57500,78735,10545,67987,58594,79813,77760,47058,93670,51856,32486,19228,67880,90045,23014,46838,87044,70716,60314,10210,39579,59462,19183,74974,35867,19105,29364,66310,69231,74027,85976,17879,76404,86804,80616,30570,26274,10088,16689,70669,79812,93530,45119,38576,18683,19010,57544,38054,18105,38934,84692,81841,84539,52558,37001,22615,40578,81044,57276,73798,19248,19957,36644,86305,61630,80603,12117,80888,35194,13611,47507,34634,93712,12612,97158,13388,23640,67564,73649,88107,45451,98759,56994,16956,33044,68544,18192,10444,53421,18905,64483,60509,88416,17256,54941,16407,80773,95271,41770,60015,70618,12567,56041,42463,25625,70431,71519,27584,36430,40534,86920,53032,54389,16073,95072,17071,28857,72796,24897,50989,96954,29547,88130,96144,34599,39224,88782,46322,82343,65411,90865,92450,66070,60123,97562,74888,11386,73370,88372,64013,73859,23851,20430,55631,47697,80915,28289,73944,64061,84202,63632,27229,38074,51975,90182,21343,42252,36325,18253,54791,60124,57537,46250,42872,22734,73543,50830,36470,13398,44842,95972,24888,27837,40513,62692,65605,38405,12589,42236,10088,24537,47512,44574,16004,39538,36353,99662,58583,22084,69626,93751,47900,63653,40995,88395,46161,14056,74279,22264,69344,93348,27112,86242,59836,90284,30332,29245,50160,22332,83137,83351,66615,53623,81226,85149,47092,49965,63889,97753,78327,99392,39367,24283,51723,21120,96665,81207,26590,58547,17139,88332,18067,26171,26763,43620,49661,66588,78534,67352,91977,95376,66502,34658,65172,89689,10075,65810,88599,60257,67820,77138,51785,46563,84996,86561,31308,92802,86092,22217,42248,14013,97357,66828,36505,63811,32450,75164,81834,77988,87993,79673,16903,78380,66972,54609,24947,53371,89218,89716,69792,49174,18229,87840,17338,72441,99273,97643,85917,33041,20848,15482,52343,44931,40037,33869,19235,67024,22494,48054,60321,67474,77881,93857,90731,36968,59736,63968,12440,75963,38964,81243,97953,61405,64000,68421,45302,21716,69600,39627,87149,74813,45009,48608,41963,37606,26812,74865,80101,66180,60122,75441,46204,26479,33908,56202,16076,76305,13864,55093,68442,20712,12779,59104,70404,73314,56286,26163,60274,69186,24437,90485,39576,25120,53101,79147,92914,37762,92259,25830,13185,44113,95557,46854,29478,24427,82595,69819,26470,55341,58179,92861,15469,40221,56498,90752,83956,90350,64318,83558,79580,47164,23992,15894,62109,11441,47903,58808,66663,78236,31033,79023,14459,18277,31346,38041,77710,55774,94604,46308,66258,11608,96338,46894,20086,20649,79967,30188,55142,22676,74994,58734,72119,77101,14155,97066,85838,73444,90788,86829,88869,32269,42679,30999,83882,74635,94694,31390,39754,28746,77480,81888,60138,37843,86339,89326,93143,83570,90656,10669,11397,50201,31940,52302,88648,55403,88982,16055,44680,36637,85276,74260,71861,45099,57228,22444,17697,46397,33644,86254,69986,83153,58457,76878,62514,56779,39029,66043,58689,22525,44194,92929,61941,47482,11380,38956,23394,40409,24295,32400,19332,11365,91839,49764,47462,69657,83926,27622,32711,96773,33916,94642,17491,20388,48771,20228,53294,58894,83183,12149,41484,68532,74056,40899,73129,41008,46435,86053,85427,89315,67252,71994,78708,47286,45556,67323,58247,56565,26052,93257,33097,28280,96080,55561,29802,29173,75180,70005,43320,45754,20119,86266,43272,25442,91064,15396,16881,43476,12249,91646,93729,32498,72939,38413,62236,90961,60145,48369,24120,56106,71556,57769,14061,56902,62625,12741,79204,36126,31939,95103,46290,24590,10674,73789,57229,90352,24629,98521,82170,97655,67434,72661,35337,98870,30127,37434,21094,82105,27512,25088,62546,90299,51679,36561,46985,50921,13041,73162,28243,93451,95922,52627,66285,39252,45391,42590,35686,25477,44699,82408,20342,13015,27608,46662,52369,38928,66767,92556,83378,96954,74072,65571,94480,24672,31594,67592,52265,27896,88271,63441,20351,40258,82107,63468,54434,40282,24582,98425,52644,67559,75167,34334,68278,59046,69233,85679,47762,95525,91219,56819,17389,11125,43649,47001,27297,28122,34901,41882,99421,23932,95108,53877,29477,81514,73242,91041,64520,46476,29260,97512,17807,14145,67043,53514,36658,41025,23340,10348,47330,40831,43385,98803,63413,68731,40344,50126,16577,15270,40420,84960,73743,95107,20087,49131,59828,12335,42038,77744,70305,91984,34527,68632,33145,90714,54363,72847,71393,29257,20714,19020,64819,21600,12218,71261,50047,51012,67440,63671,56204,51055,80806,70697,59499,43895,45600,17594,38467,27057,15144,57198,90235,28856,86182,31639,79559,70721,88550,30215,65220,17930,69639,30150,45128,78397,14996,48328,93488,10375,32595,30138,27854,46925,93680,47107,85772,68685,62881,85690,56787,95508,64918,17538,99945,82699,57942,87635,61092,89971,17642,50359,12989,14916,32317,48820,31109,80626,22627,42831,77153,19886,56452,67362,23236,26014,59008,68017,96403,14720,70398,89557,82663,25304,11802,41574,86724,58122,96986,10163,21151,61001,20443,23484,62165,46074,64828,35871,33857,89882,44315,91298,97241,81506,30970,86864,90810,74857,89456,24503,95568,48693,95173,19088,75969,26769,92704,98032,50991,84462,91924,33706,31449,18746,48158,19584,61377,12895,90026,56828,65327,30778,62654,30949,80542,57399,21250,27726,66144,30958,89237,16626,69873,47717,70905,20844,13170,76899,51712,66992,73884,59179,85776,14689,90562,23904,12445,29747,31644,70392,11925,84384,73368,75163,68040,98659,94665,78136,98708,48787,98487,72195,55730,71569,66870,79356,77326,77566,92370,24953,94330,27963,24657,32400,30938,39445,45695,28655,81172,37378,48556,56697,39848,90551,16098,79587,40049,71275,25689,64025,21592,49885,76185,66742,81515,54758,45838,92747,86737,91415,57984,69677,25716,37049,48002,87433,13216,82460,29748,57335,42237,53439,47041,26453,62145,39074,83941,83656,62081,17963,59883,97924,94453,32455,23735,66337,35121,17545,65308,76625,33214,53357,21118,84386,98988,86045,17550,30992,35299,72917,13456,25134,60350,75173,10670,26098,99545,34159,33108,18789,89032,45830,77123,31742,89131,68566,69945,28913,27267,23352,50271,99830,64257,24673,67770,45365,32889,86903,52788,54750,50724,90363,82395,56097,70920,32248,64311,68535,25431,20808,81292,87904,80521,66868,94806,90517,25404,41160,23237,50263,93428,13068,19838,75278,85248,96397,19872,19711,95124,39548,10952,36602,62661,76804,40256,84952,55789,58194,13434,95983,40348,79710,27443,16706,11314,39181,81737,10405,70355,30584,88189,36959,81126,72219,69342,82421,91112,41702,52419,53412,98420,21422,68735,47917,92853,47875,31759,97804,17233,72700,72903,93165,66058,77941,67077,93457,65251,10610,81540,47208,29677,80514,26705,25787,51617,21525,14316,32658,20668,14277,24213,36121,35069,58278,77324,18656,73808,29560,85463,87678,46294,59022,95024,38944,22652,11783,44970,59662,55265,40031,26880,99972,46848,71355,62039,72559,75042,43692,45374,15382,34806,33992,41802,64795,34874,75922,93719,21971,56407,47056,55829,65860,48199,58449,78788,16505,33207,91607,29330,41829,69087,14297,94035,82257,55863,36476,55134,63222,85099,72015,30854,80642,52263,75452,43721,57884,35021,90161,71610,26837,19028,90467,18799,23583,99351,40171,15468,21292,99704,85184,14505,99896,97756,78070,21138,59653,50355,38870,17553,37708,69883,91328,56894,97671,43808,98508,31747,91559,30899,17893,80280,66716,41197,15431,97883,62928,60406,87998,38812,75023,62098,86323,79546,49665,55544,77504,77484,88436,13753,78900,95275,40913,44895,45707,79820,10541,23728,86633,57740,36413,10454,15375,40084,94608,22058,73502,17091,36231,68341,75329,63362,37475,52150,74700,95378,81092,24108,53625,24970,32702,12204,47926,40828,65244,58047,76211,64966,27452,93335,35621,64287,37703,74069,57880,81117,59670,63179,92216,65183,32332,20060,19621,76163,59752,80871,87799,39650,44311,44060,47254,12856,62036,61757,87636,55948,67580,39218,57292,12061,79955,84907,13284,60349,76741,76151,90578,55591,33064,31830,31744,61884,94306,38831,40677,38217,34363,25095,88994,98486,76811,10071,87431,34805,59901,25862,69405,41274,23536,43455,25650,42487,22516,38146,32176,30391,23015,57971,24563,56339,73768,85616,96429,92203,27949,84545,25477,66638,82304,52938,47851,45888,53463,88865,88291,98799,40911,18451,48839,36000,78458,69746,12368,76739,35591,43763,53162,57383,63761,25187,30534,14136,63114,48117,53656,85142,90438,60942,48164,89155,45069,57210,22354,74642,49195,52587,49237,29479,79843,35045,34687,24348,16094,44505,46780,41543,56890,65956,67037,18511,75287,91854,61949,30168,22530,47066,17406,78996,38214,11482,25094,40882,88677,14019,59544,62748,37825,49247,97373,29440,14462,14177,84211,24856,78468,10273,24867,82711,29552,76252,30368,67998,63938,31719,46876,10914,75375,72050,17589,74801,84367,66579,85173,87892,45599,15072,71012,79764,54445,61606,95193,37993,67122,62043,12883,76740,85935,77489,31406,85740,64004,44700,60877,96515,68572,45276,35079,41122,82295,75058,89935,73317,96160,13705,18432,28896,28945,26734,45109,13188,21763,24623,75369,60393,48263,49825,34036,88060,62801,12870,93692,80893,75199,23237,12217,77246,96562,59217,67866,33929,93077,62537,33800,85322,29246,68901,40652,75985,93145,58065,33996,64165,50675,85514,64739,87794,51361,90395,64295,94500,56703,69589,50794,70783,16362,37374,59119,21346,99684,84477,68129,15252,31785,90990,60497,10447,26553,18806,46219,26011,45934,90042,61011,91874,40493,25727,61145,30653,19821,71527,50422,40924,84328,75373,61668,98923,27179,20587,58622,69727,36523,62627,88380,60579,16703,30461,91103,66178,89843,50578,19462,95853,87514,83749,26040,71424,39988,12957,78924,49856,46372,28067,46192,80657,92809,31418,20691,47175,67983,53648,87559,27866,96933,56606,38610,82496,17023,75237,55720,37640,61052,97096,32524,62242,15763,29520,21830,12605,41562,29120,12912,22822,46659,32378,85733,25292,18752,85517,87815,24318,83642,79790,28470,43385,19437,13673,55694,44670,95500,48424,51375,71761,33822,31775,52456,64198,90315,19835,79126,12505,91248,75396,99177,26684,32687,76967,91991,99278,89957,13057,58399,19904,12715,62893,66056,47401,13759,69749,90479,53180,83701,56781,28737,55828,92725,67022,87029,57719,73891,53495,49184,89513,94270,33810,17756,58797,86050,39596,35291,99755,16436,71471,81053,11060,54421,79647,65054,62569,26132,26440,51303,78627,11990,96405,80594,11442,32432,16575,71641,22643,84285,10606,41108,71010,69414,69235,81779,35012,41562,60958,59658,40612,59638,22149,59644,92993,26954,53068,44372,41424,36444,48797,17906,97404,37081,95031,23993,33370,76165,56758,90177,32459,71331,15872,85082,76450,50298,77819,26273,83458,17145,17148,89829,38024,64363,61560,87512,60734,79407,99644,40814,53073,87645,19296,91114,38097,80143,33174,24715,98218,45634,62379,28406,44071,50384,54326,55955,15708,79189,41926,29040,25628,91095,90686,25468,85384,43434,19186,63525,71065,60301,69568,47181,23090,35452,71435,93039,28340,30485,32047,18145,88637,27110,95880,28813,63971,76328,68145,53343,10354,45125,60308,21902,60292,75750,28227,10035,34001,35405,53026,54148,64294,89109,61526,24849,22462,16034,92740,64938,32452,77435,93825,83347,41431,40299,26233,98223,48042,60909,24525,43030,11880,78973,23768,71867,68327,36100,68522,75166,32417,57268,33615,71712,51704,45776,45174,40211,71638,10928,73990,57405,70901,79223,62671,69487,94027,91213,29169,22426,86268,40950,71794,80713,80038,88696,66101,52385,88352,30081,28548,67791,59339,34024,46785,68853,60948,70788,42673,52163,49501,24849,80161,55484,25160,30816,44263,27555,55631,58780,20855,48862,64258,17696,60438,31764,85137,73742,65941,95077,36664,24997,27508,48823,79299,62967,69062,65173,43334,97443,74168,80996,50106,97622,42185,14953,89715,76677,56742,15017,55519,80749,44348,69606,72652,42301,79673,60754,30849,17439,25434,87523,82302,24740,89587,37049,26980,51520,92986,88322,46810,35121,49306,63159,26855,46754,52068,24000,86538,48426,23726,56846,67362,83900,54624,21847,70313,66355,52511,55703,99359,13130,41054,99091,44393,65231,73081,35511,12382,25439,92604,27124,33580,64725,94198,33305,43725,92190,20456,74392,86900,84445,69661,80860,43768,69252,30961,66026,89878,76959,71592,58276,38162,19154,33118,28569,81621,63630,23308,99895,70559,60985,72216,71404,70213,83329,75080,81694,74109,77894,36748,56420,67479,27518,68716,81601,12372,18442,13748,60458,29481,97916,65472,40842,63944,22819,58254,55289,74833,92279,25433,73015,55080,41263,72754,42683,24597,92541,83110,94861,90342,76914,97979,16293,50795,84487,59928,35160,32440,95485,10303,68122,59076,82758,93276,21045,62264,92322,13484,63429,45510,41309,25588,75754,54420,98371,65041,28490,57214,17522,85120,13726,41860,91851,92843,22177,99351,62623,88320,43790,72110,39140,48816,60738,53533,30353,65773,45714,47155,13107,17980,93056,95215,78847,15707,98772,41515,88572,14955,91606,39409,92465,49404,38399,56421,52046,96832,14059,81375,88432,70842,24526,70367,37429,98129,24178,22573,52115,79598,83730,52409,58108,17878,19364,30420,83269,73249,22089,58634,86165,34432,84544,99786,12015,68404,89760,28788,43892,17799,75837,95281,21578,15210,79788,50057,43258,41942,68059,30072,42961,97717,91593,43605,25899,15183,96691,79563,90439,68479,50468,38577,64791,82790,92151,94903,70149,41916,28101,55464,62303,40613,71852,43503,49717,41716,20440,46914,93896,52841,66043,85373,53730,91714,19050,94814,57674,30205,69388,51481,32157,95140,73089,86467,52819,59253,73929,27840,76960,71157,54293,18494,22392,51883,76645,68981,52682,28484,94561,40621,43407,13999,93675,41843,17016,25546,98185,17367,99675,38700,83679,71093,91883,29189,31384,54969,94383,94311,35029,21064,64789,85694,92274,68487,50102,14591,36964,49522,81593,84883,44277,14453,93272,66272,47734,63579,42882,54451,29531,92639,84880,77756,52734,86452,50139,57985,31599,10822,10230,60814,94337,74440,98933,41237,31935,32363,44363,28891,87139,16525,76696,19025,45449,22196,27869,31367,50802,17829,42433,11521,12992,25151,21426,13187,53877,83501,36990,82153,14916,99899,48364,23777,22238,98738,49589,66345,69245,38988,96547,20671,74636,36320,43016,22224,81344,67586,19178,31493,59822,94331,40353,85048,27327,97700,27638,70535,97481,27496,29424,45898,53313,10810,43315,47822,90603,26203,30563,94530,41995,76993,45215,74900,17228,44090,95146,58388,25617,31820,70004,98896,18747,55794,18964,25305,53230,34178,55703,17821,17096,39015,12629,51189,69035,33861,64218,17947,28276,74468,42130,24843,31827,36257,35650,71941,89709,67011,73990,90387,75222,73167,31731,16725,20945,70366,19865,24883,24045,69386,54795,18387,85775,42161,13675,69794,48827,63037,51512,44601,87791,15334,39752,85364,46448,91182,70475,36492,86268,77578,80791,41461,92847,22599,28380,83345,75639,95365,72645,44025,44757,29022,92023,52383,71217,21567,75715,53826,50553,45291,15787,76872,45222,43902,18080,11864,26955,18759,69588,34030,37392,52347,70028,76658,14394,19376,29300,27698,29414,36269,39880,83926,26391,31375,44475,95226,98270,85872,47667,21040,66799,57178,85896,40486,76204,34225,87578,94881,20719,15987,69516,85383,78651,34284,55879,87835,76358,33447,24940,39517,53808,47793,50792,18516,51488,88413,96086,10885,46755,44582,32762,45868,53211,82998,95559,75054,70441,80434,46251,45051,88983,23600,68413,67317,24881,63944,72981,78177,91389,91765,59653,15491,27907,53489,33550,29062,81151,42551,78927,16718,94549,58346,41952,89473,89187,61192,74251,81154,44021,73845,42662,91203,26907,31649,13805,15139,61590,40317,30756,85295,60984,91697,52716,46485,27183,54960,48846,74523,44113,38966,35458,74080,22784,16852,99103,96414,68772,33124,67577,86175,31637,25038,15473,38449,88186,99863,60479,99885,37914,27565,55960,91952,16481,96353,22352,74411,71710,21864,18877,25995,50251,28137,79170,23486,17350,73317,21480,68624,82861,65153,84644,97324,59204,59986,37184,79423,46108,81031,50533,38809,94126,47308,36223,28235,38120,58887,97234,66399,62139,66106,69430,35320,86807,25417,69435,15559,66716,60598,12608,46054,36546,50718,12955,80699,31619,46730,98908,65550,95464,79884,49896,89041,89114,24008,59794,19731,81446,97868,84260,46813,18811,90914,33948,39543,37844,48149,18132,60972,22929,98862,89513,91383,51756,65240,34124,10520,26101,28869,47380,21801,54450,25858,97571,94937,65187,80840,46533,32487,70328,41351,49575,32351,44341,76947,23835,73069,44916,53759,56833,69257,73999,49981,77449,18350,51015,18741,98643,13236,49714,83219,16520,25947,12305,93224,87748,80466,29863,10304,76622,95516,69102,65241,44136,47287,48995,96283,16705,24981,64332,94031,58272,37787,21069,67646,11510,11892,17122,34769,55919,11262,38035,24280,59354,71158,57867,24058,77752,92886,78972,65497,33881,41781,17358,82094,87938,35680,75334,52818,62941,96242,25987,73956,15132,63879,98148,35585,23071,31569,90820,44039,16979,85332,51197,32373,29870,39632,61907,62144,18670,57717,34679,12388,53116,30915,87008,33802,29170,78160,18056,35202,69946,25927,25844,54395,13205,83948,91930,71205,31399,83589,50305,53308,21443,71148,64459,86767,82672,75421,51562,64059,44598,50659,45654,74957,10971,94352,36544,10507,14076,27736,81985,48333,43542,86970,19250,31678,21136,89551,16499,68255,59676,29719,75560,87005,77802,53118,32345,68590,66355,29248,64315,28564,91943,84231,48182,33329,29980,48172,26934,68929,78840,80931,47965,96589,52282,86127,91537,92788,91095,51524,32932,51432,60735,44899,37513,66199,18636,17087,94792,10042,62540,82570,69969,69931,11797,17539,11043,43332,44074,95458,78555,29862,41360,49817,77521,16005,60604,67080,67117,96358,43246,26729,14426,36316,26090,99039,30088,37864,74091,12405,38897,27354,32546,63865,14670,91125,97596,66047,39412,49080,68877,45449,79815,73477,96986,12012,98721,82187,18908,85660,83314,17660,21583,59937,66959,46036,70387,46738,69309,94303,50415,10249,83262,85760,12512,25910,20432,91830,24966,29996,99200,36520,49328,71047,44780,32644,79654,36032,18860,53669,52204,69273,91350,87738,44119,76693,50858,15665,60089,46043,77764,84669,42832,23105,12481,31158,58829,23694,70347,50298,61758,32220,14080,57894,78478,39234,29395,11503,64912,55609,52515,33010,69133,89824,56938,45739,62667,51711,95011,73804,81687,10564,83615,85352,34595,80703,80162,51161,28261,12234,37870,81299,29135,93917,26321,18447,81801,99988,12217,67474,72098,96582,26463,93666,62980,29747,56303,30834,11015,15112,92206,42622,64305,94742,30698,32566,73014,80863,60926,98192,13802,55626,79334,34940,19879,24902,14314,11776,19327,34597,41484,11668,79952,92107,65423,80022,71013,54503,15994,91302,40114,92837,94290,36863,48568,71463,49469,93006,78343,72657,90747,45658,66392,69494,95766,42447,24259,61880,95545,67294,21448,28446,48038,86183,14439,62150,10191,23915,43461,49067,36882,47963,47807,86896,91882,61538,99466,18334,81028,71507,35304,36937,26126,90778,82136,70932,72712,15677,55406,16766,88759,85974,44389,38316,54332,97566,28875,18790,78034,16240,38987,71889,44967,88681,35548,25526,64483,52794,48131,31763,70595,15132,56360,79097,12332,48866,67028,41544,58707,71539,62472,51008,82469,40357,45614,13361,31413,75252,93610,15478,58891,64623,93050,73807,30716,72615,60623,28405,18612,42765,63424,98860,33063,12797,26303,26535,59776,16925,66883,23447,47589,98448,88668,26157,49172,64840,29800,67336,45151,55477,28217,58307,80038,71464,19838,35674,45587,59368,50140,70069,90866,63071,77138,91613,44470,80315,76108,38913,37866,38584,89258,79868,33754,89395,14602,53546,92384,33483,55245,34956,24188,43818,43089,94345,85305,19523,32796,94900,61651,98099,36912,89149,56976,87956,80037,85184,46355,42199,97572,67955,51226,13787,52497,67187,32221,19008,77264,83729,59689,20125,95629,26351,70819,74084,52377,12256,21225,35149,85326,53561,53541,65445,47417,35837,50085,36359,47469,59240,10330,96597,76232,28355,31935,65939,11633,67548,74540,85698,28819,86322,65121,78173,24362,81772,46369,51393,86515,57383,33212,56318,22199,15769,98147,30544,35213,11307,59703,47299,23735,74011,82760,24927,45855,98718,90403,57597,72968,12601,42935,94610,91222,43123,91260,54063,62133,13241,77417,52240,76284,20691,82169,49685,24525,96113,76471,30551,38138,86004,72714,84142,28620,21113,17074,59052,68151,55586,66952,95482,37952,60514,11254,15308,24641,56389,89537,31550,58660,15193,93801,58593,56192,65690,32780,57822,48791,18904,47441,52773,68371,60532,82177,38145,72231,27488,79919,48208,20928,98909,12372,13043,84744,23416,26414,36682,82974,24464,53051,29128,72582,21319,18070,31515,26528,64808,11519,84148,29781,77675,18229,59242,93402,35594,11561,16506,73086,20106,82897,99931,34778,59788,98444,72879,74575,30010,47596,36391,23945,38128,12115,45513,77535,94150,15924,11593,16451,68903,12432,37640,56482,20462,28035,89997,23306,69962,29916,73571,71278,76469,32926,24677,25533,74984,75084,62567,12384,61947,12815,22083,55300,54319,28283,23927,24761,54800,87753,79833,53351,59122,87350,92609,39505,98409,34540,35058,51062,85925,27689,38286,91426,43877,54806,28701,53329,59216,98042,11673,14802,50174,19560,73054,71787,87366,61684,10765,66970,79069,75698,71530,70366,46680,19203,97264,44886,55522,49334,30753,10961,76246,57027,23600,89175,48245,31856,71603,95123,14434,99549,29427,34108,67760,82209,57456,92068,92048,36481,65270,98869,21813,99240,73959,35761,70280,55331,54747,72886,35798,90100,43314,54153,99550,87122,49090,20318,67902,77661,21811,63350,17833,61125,19029,80088,86320,37425,36775,37071,70963,53808,89539,23298,40005,86195,45154,35289,74196,53179,71839,16271,48982,88228,62509,94215,54282,72750,90461,25926,63413,12094,19614,47951,70625,74246,51001,51889,36192,71691,29257,82483,38528,80721,22142,31308,31695,65886,51356,81377,52314,51410,49689,58073,29645,20928,67647,46790,84497,88590,99956,65873,30105,76927,53050,13928,94137,51725,13529,54597,72379,33273,57845,23174,44047,79166,80784,38396,11374,88424,15383,76663,59193,86252,33813,62704,84405,47573,52604,16625,82233,50924,88839,79280,56596,26694,50512,31960,27356,51950,29724,24858,15864,70586,27681,42825,51205,76639,64838,80657,71344,40147,27207,36925,87406,91428,35522,52109,66244,33699,50098,36533,63977,48187,55945,86623,25927,91395,48306,11999,84100,24142,82659,92047,97585,26584,33208,21997,91351,92662,50805,87973,70129,78943,78412,63429,35949,34466,41539,46451,87968,50978,24020,24641,22326,46597,61914,63304,58574,58783,25439,75593,76693,87095,36212,98297,55463,15701,78975,48207,11526,39122,87953,29150,17900,45671,27285,60183,12202,62699,93109,97771,75462,89768,12883,64990,34364,69261,84577,54646,59368,24323,92196,40145,91379,96787,64120,67066,43945,74064,88856,73517,91775,53344,71917,58838,23808,85228,35684,32077,65556,14626,92841,81771,80603,67868,44368,65382,46000,73050,22121,42517,94245,94039,62064,96556,47197,62590,76032,14143,46670,56356,13924,16924,65153,23728,78736,51619,14398,31283,24152,61314,70465,75914,26227,58313,11555,55713,83208,99672,42707,38191,76296,80817,49523,90250,30156,44297,94979,94567,74832,96833,94194,45619,76612,19618,63819,93657,11433,45413,43323,33907,74365,64160,64080,12248,88609,87527,64242,59841,32000,59849,29833,68606,16119,50558,96835,48320,86278,88561,73429,69644,48995,97606,68080,14937,11742,23964,89812,58318,80609,85603,57517,91012,27557,13856,77636,97393,84203,72556,55920,25322,27113,95194,32959,45105,41835,43564,85619,48892,79073,98292,44069,84029,52664,91268,94635,57229,73792,77330,28897,89942,74810,78417,13377,30109,58442,26445,64361,34121,48810,77505,32681,29266,52636,28434,75416,20220,30830,71333,87710,56465,93728,64491,23098,55547,92716,77962,52276,50981,52798,91372,15485,32507,21465,25111,95278,96265,91099,71118,32434,22286,60509,84896,35142,92731,23395,52903,80663,12597,70666,81673,93867,18845,83091,87403,68079,89581,58300,47348,21271,40198,79244,58138,82212,93518,58778,40766,35937,93601,95657,84318,84008,32276,63021,45088,93971,15577,14069,35398,42054,52470,13347,29306,48105,58566,10340,18590,64346,42237,38627,59737,30740,28622,24465,31704,65921,94998,11568,71725,97546,49087,80836,95917,33169,67264,73097,37818,54308,26847,64823,18823,52931,65345,51128,66927,98182,83685,72368,90761,37173,41556,72816,64944,51747,54738,44685,82833,23165,93589,49860,77436,52839,45799,54848,21968,72745,11052,84744,83333,13311,38424,43592,68119,57046,76734,65472,70499,15102,58439,72734,27095,36129,85198,84782,70972,65044,19454,36833,43652,72866,24412,46976,45880,64560,33040,29791,52860,14103,25453,68227,34561,78813,13295,27459,91113,17363,58445,56490,49427,33939,96894,96157,25567,51781,99906,63475,94738,43429,20139,55213,52435,29889,62173,35278,97639,92202,34458,62114,82306,13048,81509,89420,82062,61304,70973,70251,12425,58967,83328,37376,77111,79152,17897,30436,85046,65205,64356,87653,90536,59666,78302,29107,82961,28604,56085,40469,41127,45675,27922,58325,94425,33553,43148,60450,54592,88406,44070,18496,14550,24806,66586,15929,94241,16280,28776,68618,69658,86494,31615,95181,64705,94982,79348,38419,71459,82333,93468,30477,83295,71570,40777,46339,55427,33975,21991,57849,83515,63847,92101,15016,16625,20226,98524,91595,88706,24679,28449,57729,31382,42969,65750,20231,73924,71326,49346,97897,96287,81702,91680,80892,13453,26933,63964,50932,18482,74153,80152,15715,42940,46645,55597,54990,63256,15105,56001,40408,39698,70388,21103,84934,53399,99555,40973,62239,84773,22747,73863,65025,93365,64401,46805,16014,38844,62834,37600,70482,53634,85030,82607,17056,30909,80450,12929,21630,38008,56965,61150,96302,79034,60067,24524,93261,90535,27624,18241,72128,59297,31024,31064,41407,62518,47926,66374,18448,17614,10531,43286,42508,83339,95742,92376,16444,30563,95804,32532,89109,49726,85048,12817,25954,47576,61697,95471,30234,66766,84925,11795,24800,48880,90845,13366,28744,50837,46907,39995,80155,77168,70825,81843,61183,68480,95150,18319,32053,82968,73455,23865,36023,82104,75268,61606,91831,69268,31018,86532,85430,30190,21543,83719,77866,87537,69570,81255,65632,62611,52588,90855,94359,62547,97291,61586,75404,39981,64647,76461,11105,50878,97490,64126,97327,30798,41177,50215,73639,64954,75258,60948,54790,91613,68647,32744,48568,42350,15541,24028,11511,18861,13035,99089,17242,50260,23356,28706,47068,45613,96519,14470,84741,84790,31548,87264,49977,70909,87913,51569,98600,51633,36757,27895,90700,66216,92431,15134,16677,54519,34327,98898,51811,29823,65471,81249,27486,90670,82497,96389,47445,81877,35898,47180,64738,70193,82183,43712,73902,17784,65584,21961,81771,91714,92406,94386,41544,95997,38430,10471,12255,88459,90985,25922,93646,92354,68669,17706,20257,53166,51557,30701,58665,69054,98248,94809,35311,99319,94314,27674,40156,76116,88757,20096,83793,60333,39456,92997,77756,63780,58835,71218,38312,26785,23159,93454,40979,33822,66486,96442,70876,41874,19598,27371,80505,90760,62041,12074,11035,56917,87987,88172,33527,62978,18258,12824,83701,57904,35975,16066,89619,79419,80284,41311,72434,96273,76672,70510,45039,29771,68935,98412,83087,80469,40860,51251,63651,98744,29172,31685,55457,59365,11685,69594,97138,64296,91286,32219,95033,62363,35480,71732,16484,94362,65238,38776,72681,16675,85283,31026,76236,64188,13783,33501,67495,58892,68378,63185,35024,38968,83395,39135,51855,52058,45385,46290,55411,58680,93531,93915,76655,83155,15074,38852,57808,83006,97795,31718,18423,77569,83659,34374,23139,67202,79913,45197,91837,74149,95997,72438,63345,34219,79378,87910,70714,21932,11808,78020,15503,52403,36477,93141,71338,83127,15456,22604,28308,11646,76811,80549,47315,16750,83437,57817,66701,50189,99420,55521,42723,59611,61763,76275,17135,98327,21832,28765,37528,14117,10501,24736,20204,97812,98632,72356,45198,90564,13284,49956,39330,81356,49164,16427,16826,38956,83452,65813,56567,68693,80760,74571,99547,51980,22546,23832,66210,51047,65420,25308,39324,69173,19527,73224,16804,21517,81261,52485,40582,63239,69778,77981,84009,43594,66939,44302,71447,83564,28915,81845,28092,30677,35633,45157,38270,91409,85914,37851,33291,72656,30015,13338,37998,14595,89907,13991,63998,53863,81739,93024,91072,65917,93600,92189,84901,82705,83176,87130,22847,31933,64681,29653,55307,99281,12030,34039,64464,96669,69980,19344,85865,49572,29178,67070,75124,72450,99411,66595,17492,78715,43187,24646,79842,32666,50779,77711,70329,24469,49579,80696,30481,76924,12524,82102,31891,14267,95615,55985,40758,75860,72000,10134,69332,72752,19176,81233,23629,30688,17720,33953,16071,33940,24815,22728,87440,42146,61166,95402,53175,63904,66481,52014,31263,72538,64214,57863,56174,89452,70425,82298,83888,50994,97378,38053,41506,70099,85028,20057,98990,94370,28423,40783,17176,98387,74823,74602,87953,44709,42001,72585,11680,28927,41340,13048,36232,76688,56729,34808,21906,12703,79717,23898,80924,65994,22542,15646,46347,27264,12216,87604,38885,46776,29947,58714,18594,66470,31511,76218,48842,87969,37847,28748,85762,60064,63638,91699,28730,61710,82590,72998,17199,96619,17385,91059,97203,54208,96985,45245,98593,77037,83559,63821,21759,89756,53035,37932,15582,93355,52831,16269,35371,51156,75323,33028,61348,77926,53093,37360,50127,91535,19260,19243,54393,15567,53873,12013,65741,57697,31969,17487,32246,26566,56518,51299,37802,61735,22094,23462,45196,59724,81522,93647,17917,69802,15386,24709,18397,10743,66944,55663,42725,82292,21687,14866,24526,46681,70334,30024,95699,92637,17588,66173,53926,41878,89987,58695,90399,44417,45401,70042,76906,76577,26003,65880,71790,50805,47419,97452,20383,19622,42287,76433,23896,14982,84693,61364,87684,51747,90728,94825,58212,10764,39421,67923,87871,69411,44245,54254,84061,17072,71271,64239,65430,64152,64372,58656,82092,20231,14530,88554,32083,32052,87750,16979,70952,49700,10387,74684,71733,53642,36392,90832,43031,48807,62219,57918,55724,61333,10579,47766,11432,31095,38177,58376,47424,83970,49411,42397,77921,71464,24465,31383,61386,54902,20737,29734,79646,84262,37488,86425,66952,60719,60687,86494,27593,32681,69284,31196,43464,31869,18297,51824,13496,34741,51640,21814,48532,11425,56062,53577,18603,46645,87258,41557,14640,43729,37224,78914,86782,68408,73494,67464,23516,67630,46491,19521,42165,81260,79869,55153,64416,97512,92521,20053,39447,52920,72249,87708,55303,54291,84192,29318,43241,47779,71175,58478,63882,77390,12929,37403,63766,42246,93244,41028,39820,91680,73346,36299,61745,76545,74886,31670,75024,79873,85632,58527,96379,69499,26526,19426,39367,57507,71418,66002,20463,13313,77494,27737,10976,50845,77786,81744,97310,95689,15467,30809,42360,85934,25867,12807,42823,74447,49381,30361,15859,82851,25354,47271,46204,12070,22801,69655,47038,38597,15602,38803,26829,35695,77896,15985,88825,75160,51892,97648,81762,33845,84852,50481,27385,13350,60261,47697,57024,28030,47746,38819,96165,86430,64729,16490,36169,75849,42902,20846,66363,78692,40210,12570,51657,59459,39614,25617,21956,57374,75556,56881,21150,44277,68265,52197,61315,21072,45428,63458,67547,46187,88322,84169,94073,68709,13026,72726,13776,58336,54028,93324,88823,13311,57617,80427,97186,64087,13395,30075,23288,98737,64916,75391,21277,44648,33999,24078,62969,94814,83537,95722,97939,28958,72770,85421,98957,66362,50178,15366,73646,90070,64679,33353,80948,22436,53111,86867,52943,61380,73340,36340,70897,31771,63637,23659,15752,75321,16063,55651,52663,36785,71520,70283,80960,68892,37044,38467,65397,98005,97199,34518,32268,24605,95468,28045,27248,82199,95419,25362,60175,63992,65027,26877,80331,63732,85510,72115,49830,83394,25644,44917,73100,27318,82844,21100,66364,50174,21081,40594,26895,71877,22255,61810,93163,88805,74472,48660,44361,70999,79395,45384,56662,19512,94566,17582,84560,84379,80378,57705,61976,53678,98251,82271,50187,62556,36669,13958,45384,94169,90372,46713,10697,26986,32696,31933,57347,38010,42706,98545,69654,86875,68209,59695,70441,37641,79110,98640,20267,89402,66806,26153,21618,36233,48431,54899,32083,45808,42520,92120,35755,36574,82135,15908,69081,62132,18331,77972,11049,48380,84669,54043,67478,78131,38271,36408,65677,23362,81925,87291,21907,11562,86086,27806,74096,64544,85708,20822,74869,31526,33323,89871,78941,94575,82402,74314,35676,25876,44622,80517,95184,38463,24549,52142,68344,47723,37854,94663,66730,20953,18008,49008,51505,80444,64555,98813,27787,51532,56181,16910,20759,70116,35150,20515,26774,56894,55053,16385,26768,66098,77780,38626,77098,94363,11850,49320,47486,95646,73347,94199,91734,32510,49437,80675,19938,10777,63651,19100,73690,87183,74405,58871,17555,51471,44854,51266,33370,75858,90876,69382,93414,34126,14479,40885,44859,20528,55470,73571,91851,98168,28968,56553,17970,31260,33759,67144,16270,86724,72751,22839,91395,79827,91330,92925,15991,75412,13511,41128,96538,17690,43780,28461,96057,94156,29946,63115,23063,49679,98149,68497,88297,70797,10757,41901,63038,49640,63573,94503,83895,98079,20489,80021,75483,82566,42995,27325,60834,46521,14020,96199,74364,71230,30897,68347,88745,47035,55538,13313,94836,78840,16974,91302,92776,20656,56143,30392,13167,53475,35959,49878,64515,29522,89320,51166,54753,32835,27582,92785,57734,17844,17948,69427,97344,70358,51354,67749,55154,11773,59095,53331,64895,48601,83431,99709,52837,35785,53868,30999,30917,92842,50476,35065,14952,45739,23613,15115,80519,41199,94980,29288,13345,65734,80733,27476,17353,27324,40356,20300,28251,48483,13976,18146,73811,74105,41303,37998,61562,62506,50227,22635,61250,66968,20592,16436,21766,83779,27034,72921,85143,34714,73739,46914,52326,67557,38038,90452,23977,13565,19504,85076,26780,54807,46552,70754,37669,48588,45107,15380,94865,97768,84049,23913,34451,81883,35075,61062,48674,87288,83896,89461,30459,40187,88446,79131,35338,57595,71334,24500,84735,74625,36802,75953,82734,66345,65375,90957,92201,13631,25097,52428,77404,20189,31871,22576,66938,47439,33862,55619,48955,15493,47439,43061,39177,11738,97263,47725,49549,73578,93387,55471,36400,47819,77358,80377,99595,16212,87436,76989,33985,15694,29851,35766,68120,92562,92318,10580,30440,15382,69021,41857,63612,20237,34929,56882,73793,24941,64702,32676,41278,99621,17781,30345,84470,26666,13047,47651,64149,20943,59877,31339,25481,71049,84649,71126,33173,82087,98219,44551,32948,84599,27658,92566,11327,12833,36852,31349,65896,15281,32177,16310,72576,83561,48702,55078,46396,95002,22848,70607,98618,77784,76455,91875,30932,61861,33038,80842,84925,27500,65362,42599,34583,27082,97440,62068,52122,34072,75626,94219,21516,73761,94615,22230,30582,48693,38363,18801,24330,38556,41861,91028,14064,34423,38378,86437,65622,57324,10712,91692,44532,63661,24751,94365,66448,36760,25116,89845,52098,89147,74931,61636,39824,86337,81780,93065,40456,63127,93586,19093,48723,96969,53139,77161,28467,26242,44044,85323,69377,92335,59887,78292,11077,77632,17806,46846,85369,52745,76817,41777,61791,85448,93716,51818,43593,85249,20310,61988,99508,91862,86735,27239,68709,85655,20839,73571,57392,10905,95293,40988,88310,39301,37089,75368,79917,29495,81661,11212,42242,80026,63213,71095,39307,82097,35124,37503,78411,61940,87726,37625,56058,92571,74167,84704,85321,31286,31923,20676,75986,34495,92361,45667,56048,27926,25771,28751,33521,96645,50483,53936,25954,83840,32259,89927,18622,32887,60851,13100,89932,98110,73993,29248,45668,75351,76076,83593,54386,48186,47375,35466,83935,17313,77684,74008,52705,54114,20836,63367,71649,51850,57266,90078,23692,47723,63831,26415,48092,44615,14508,99727,99795,35162,95796,89161,43999,90598,25430,51064,51658,31508,33483,33451,88109,68129,73600,14881,60769,96859,91402,66601,39038,90814,45167,41965,33648,89876,20382,10753,24585,82604,78682,22350,88863,79587,89659,77167,91250,22375,23309,49700,64993,99329,19344,90522,55640,89266,66694,41479,30562,80774,73193,58907,11692,68278,16461,49806,87954,46893,84329,31093,35678,13030,84952,97685,71069,70738,29983,58217,91246,90341,96669,12993,44484,37106,86426,98528,70356,35033,85605,60571,39246,11709,10557,39961,31616,96630,12268,58340,91981,99804,50014,65199,92137,36104,46783,43553,25466,88706,29027,64338,98178,22067,19962,70180,74917,87363,24551,80700,88614,99415,15215,44835,26103,46969,46811,83779,31798,31551,39504,51582,95227,87478,87474,63117,46824,22163,30576,88295,85425,57052,14520,69226,43233,83254,90547,69952,45156,33706,78617,44976,84793,33085,95629,60106,24645,50122,76067,28705,53460,31516,19325,19390,19216,71568,47336,19232,19600,91163,86205,42068,41493,63879,90110,94376,31387,92418,20972,31837,55613,73589,30939,16212,70568,38773,60197,69339,52534,90481,60344,94175,46981,62930,49348,99801,89346,64714,44968,88306,94986,35124,63341,30281,91637,60738,62275,53306,97220,55360,29033,16708,74164,50042,96177,44562,97121,23849,18560,55329,56150,36714,86091,18000,28395,75334,71612,65831,64860,45250,43278,57577,12435,13771,80603,63290,98262,37317,36783,82849,72170,84932,94714,88286,47924,58743,72312,97720,90858,63301,52111,11064,77967,24861,35656,80792,63703,82184,28481,73811,48789,53653,39552,65276,37176,91515,38249,31511,87953,23611,21131,91475,45285,25554,92028,41181,71505,90965,26927,95935,95760,38290,31313,90749,38586,24422,52152,41411,75560,71733,59835,57150,43543,84316,46516,20416,65517,32689,51615,58142,93332,79104,15362,15442,40700,13880,52659,80408,16397,37183,75451,64614,33250,21920,22952,60029,73450,38379,35317,96661,64520,81294,93787,31327,19228,85789,71992,50194,53158,63865,85070,96827,18700,22669,91987,60702,74075,42876,75842,15802,56564,63414,43355,29172,12310,67817,32036,19375,23141,32502,61705,97324,96067,75697,99195,69861,59600,98051,15462,86888,29256,19580,83794,35847,97040,80527,31240,43413,11605,66043,42219,63990,64223,87320,89887,26588,14681,30704,31464,57101,38366,73028,82806,16860,84906,35438,28530,96886,36726,26464,16857,95902,24680,98224,60046,99705,64159,59860,33739,61360,11197,86662,15720,48423,31377,85986,87334,91877,44808,18640,90114,68542,52696,72255,91757,98268,80490,61026,70939,49779,57089,46976,80861,72121,76811,27524,69633,55978,39330,10385,96025,70289,19292,72061,36403,19883,60176,50113,50142,12842,82457,70729,22446,72616,10536,26985,26715,40312,79228,59057,11587,63465,60461,73636,85778,58683,30283,88210,29118,31904,74303,66068,85320,12353,35260,10651,96724,24380,50063,55182,13958,69841,10333,79881,86638,24291,40454,71698,17642,46737,92791,42779,16118,88768,34365,45145,52078,16376,80299,26781,70407,37920,70914,98203,77169,92416,30671,88113,85269,69615,19444,69941,41655,45713,31932,75101,53121,21991,35976,36656,68806,70602,93550,65509,98978,53382,71441,59418,20321,20541,16544,90264,55250,40381,50113,68908,80732,15115,38343,86255,39128,96073,70245,47411,33227,21178,58994,97616,42262,63865,98308,32246,92756,64432,97301,68576,44399,97945,13698,42863,60562,38142,38084,27021,34720,63341,33072,61635,32409,44296,69520,18862,14670,84228,23997,32744,12718,92535,70331,12399,34089,46110,62991,80991,93063,81932,89174,72621,74068,18614,28589,45061,42751,20415,81883,98669,40743,68012,23331,86162,54248,36997,62993,82232,25594,41108,63074,21874,19450,53900,46977,19503,96727,14280,58365,12120,57884,19466,49669,59968,55058,16160,70736,36711,61903,33093,15983,94700,41941,29386,68123,95519,81343,40027,77160,38316,84149,28842,70753,60725,69587,66351,69568,28065,70544,63848,15490,69652,27436,92489,79182,23408,59714,26689,12185,31825,86630,40529,94609,44699,47188,26222,56409,35560,82603,90254,38128,83847,96315,65196,67907,77852,71383,95018,57957,74943,34297,79242,72943,61131,64225,79518,20543,67536,42504,41235,61082,26170,11402,72301,85392,92180,33027,18707,30680,94926,69109,71879,90988,74665,66653,74098,19566,84199,20804,42170,25198,60704,47847,98944,93452,51999,53554,76929,61901,30864,72375,44125,16959,79831,87671,25386,19861,90682,60427,11431,43801,91819,59533,73343,15810,32788,80262,80834,59502,15525,34351,23469,53288,52390,59352,16819,42175,72770,10032,87552,33378,70159,35474,81396,50989,29108,59579,79506,16411,59962,17064,50034,34908,75078,89063,75505,26029,28550,54281,39236,20682,87885,14719,71261,63551,98664,34343,87322,82010,29683,96258,46170,97647,24791,93501,47549,54079,96200,55973,78883,32040,41556,72415,11367,58258,35188,91227,61439,28974,85376,92651,45459,70708,13108,67631,59749,21152,19101,85797,78338,72693,94574,99638,41016,46049,84386,85953,58880,36696,28114,44006,13092,85271,35079,26871,51607,68347,83475,60592,72040,93646,13166,43249,85856,81790,25487,61155,93577,95439,22554,26392,17096,31407,22284,58113,68824,86944,76579,66860,33925,28819,40492,21177,37582,81512,49699,14760,89936,98896,76995,10543,66236,30452,43343,55176,78093,65860,51097,80410,67738,55232,32943,53681,49260,35523,33384,90327,10682,28742,99682,94769,73937,91174,52433,91247,76350,44425,97178,54694,72152,14905,49587,66846,32603,98186,90948,42485,51431,48548,79302,19328,28184,24160,15716,32692,90492,65596,95468,62343,74410,63819,97759,77569,98871,57574,13257,82515,67991,11288,71422,49139,39835,82180,74633,61105,13839,62564,60328,21739,63499,45312,30364,98477,17393,25462,14281,44408,33376,15056,64413,70290,25179,87080,13952,63290,84445,70712,95637,59053,85632,22111,59916,69870,88855,38941,13026,92333,86890,79133,68019,33533,83058,62239,79665,59139,32450,35094,79004,45742,37562,70781,54901,51767,76646,18604,91852,27986,31489,26123,85416,31936,31637,93830,89232,38860,48480,89065,99177,32106,22099,17808,32109,69687,99848,61756,95227,75905,40415,38419,64579,38807,97194,47836,19868,26688,84580,94207,30884,77437,31376,48404,36667,36178,71799,70144,67243,33546,64917,57686,17929,13757,71568,40761,96086,50186,46885,16635,19604,52404,50967,33797,31867,34310,61656,61834,56534,60906,92585,32474,28461,76768,70616,87043,66600,90563,56596,72802,93476,80062,88856,54153,66626,37637,79286,12358,51486,11148,50676,30741,85298,61752,19891,60045,38004,62531,33659,60887,80967,39466,27652,82449,22062,97552,66200,73431,24659,65360,73418,29811,28253,56579,31408,70083,69034,25016,56730,29730,83450,48536,49243,41221,69972,61143,80999,87284,13240,52477,88910,50704,24489,30967,65540,69845,79617,32449,65045,18953,15465,10706,81350,32145,35322,76063,61817,79274,55872,62361,19019,84648,28579,16353,11772,47901,79229,56785,80407,97416,83124,58178,77312,66683,12099,25448,72718,33505,54202,86941,34573,36973,15540,29898,99679,61521,59304,51936,92350,56590,92180,52880,75537,48719,80099,71432,99607,47008,87455,90628,89789,78961,75306,39714,66454,32319,73321,20109,67734,62683,27374,66308,86447,69692,63166,60758,71201,40556,76372,91179,35064,79412,57841,28943,50784,74069,10743,75760,11511,53667,77415,86320,81561,64805,48287,95228,82533,80107,89257,39624,92728,21440,38567,57421,96686,98588,25460,13690,94254,65404,15751,81961,33035,51011,68673,25155,38603,40201,67934,57347,79963,49772,16321,59304,99438,28127,39759,56183,12207,21321,41460,82998,59067,27552,84084,75723,74102,36129,38389,90079,51644,14568,76061,90090,19088,90721,99789,10577,52036,12939,66400,57623,12811,81944,82360,93107,46234,76800,73685,13840,44732,80087,39807,29259,83123,35333,76558,69875,82769,82946,89371,75859,67049,97794,75971,43840,43295,40986,34198,37214,90385,44329,61946,46804,47532,85259,73238,46429,61790,87670,67797,98673,50789,53287,20619,91409,84038,32104,29988,19645,52460,34522,72993,26492,56765,59229,75679,96278,76114,80573,36602,53245,21847,49217,53671,49997,57342,19290,50003,84755,83822,78844,24056,76481,17072,75577,41995,82286,35885,85801,25623,68171,88564,57788,39552,95607,60147,76667,94452,30982,36159,95129,83572,85265,40687,90421,71693,21201,71492,56259,55908,37300,55080,66595,50554,81678,49962,80167,74884,68571,67158,46464,86939,89602,79903,31517,89076,20327,41881,83218,19960,35574,58987,75895,51308,22676,92125,50343,11726,84691,96973,95819,19350,78758,32833,25194,99793,85548,24398,69880,58131,50655,22421,86722,21381,75713,66806,39595,20369,26570,67959,58639,41225,95928,61950,51103,97242,58665,20634,46462,40947,30190,96801,88125,47269,57074,36647,27251,22732,28394,21030,36766,48911,10671,56871,26059,70399,51466,74639,93084,57671,82205,90743,18044,33957,22248,38421,30991,77760,24446,11868,81804,72490,17317,34569,13296,66320,31175,44412,88276,66717,22048,29298,19953,38002,88827,99460,67137,70652,84764,53050,56112,84882,22500,43622,72381,56529,99038,30481,21698,90286,25828,13578,28507,52714,41307,34079,62971,79192,80676,69459,32476,29452,84804,60167,76240,90101,23286,89637,66691,99115,75740,78454,83809,72113,62684,85429,56944,84394,60072,13369,24051,19988,11426,24395,28213,39758,74642,54618,67655,65034,17527,81715,18037,91597,76471,19143,56886,17722,94100,19180,42797,88005,52358,85482,31792,66804,86011,30232,95085,43880,68211,37518,11437,12164,62965,63767,41985,58751,95054,39039,37324,93783,17587,38719,70311,71997,87931,75981,10139,90341,92849,45677,90223,22343,45100,49059,11889,73682,70147,53128,97304,24562,31068,98167,95638,75609,38169,16348,34144,34197,76428,67650,91247,64313,54914,45611,14588,57699,16907,57627,59182,77262,93341,26085,56984,73656,32344,59980,13071,16416,87289,30959,29896,74210,24079,82649,15249,95422,45228,11883,17320,67770,37349,82773,71425,75340,34027,94138,86922,55087,53711,37440,75076,37836,94879,26503,65316,15651,90206,86018,88401,35050,48025,37371,45424,47152,93171,14977,49196,40443,36053,51596,50925,18641,76060,64350,83281,81681,58836,85611,76249,42280,46612,72352,37881,32028,48790,42269,20984,16583,94482,71658,30182,99646,98002,77269,67173,11705,93487,95046,53194,13748,39154,63340,96272,81947,97532,47158,63879,85603,76741,68330,76566,65146,22785,49911,28944,29713,54198,49870,23595,27336,41867,34338,80412,30198,93705,64304,30281,44596,31683,22611,39704,33505,17429,77677,35862,71327,49927,60877,75983,41130,22618,47370,59520,88230,72332,76775,92821,46149,28021,50044,53913,79209,56492,22045,18634,78740,45841,48936,68197,56109,79770,57988,76524,92643,53712,81364,38342,12722,83700,76247,99191,76326,21712,46142,75981,69947,94916,98340,40461,73599,90316,75180,18989,36087,53967,20354,93809,48713,98743,88624,73801,60295,25415,72083,60824,60844,62140,69057,42099,14744,45203,43085,74273,10952,65436,31400,97062,89936,16128,90409,33207,20268,25993,96697,64082,90172,65890,32896,77663,48486,49296,26709,78860,63015,17309,99175,30733,93891,42500,80312,13573,70473,37497,28973,83005,10675,44322,45448,61766,31118,45080,75657,54723,43057,86719,79659,25722,23737,74461,70656,97010,48987,38236,16773,69419,91419,11248,69036,46979,87524,24393,94138,95547,55866,51503,55853,13498,87320,23103,77499,40781,98344,80014,59689,83114,45453,22258,67278,42323,62150,29028,18792,73749,98880,66595,30037,93838,40928,18405,31056,80684,21701,47855,30221,53870,72872,39665,69673,22446,41507,68920,74331,84673,78036,42233,68558,60236,58472,23109,15014,36353,38363,62760,42558,15023,26396,88814,77039,32613,74849,75672,39675,93949,97362,95618,33794,68888,97000,14927,18959,49784,83589,75670,80738,42481,88441,69567,86982,32549,80460,79589,77704,10266,68660,56932,28899,67893,71459,48455,47758,74319,75447,33946,37828,43263,14335,80625,22412,84007,24103,71443,61199,79114,18724,43052,27022,36184,30045,79364,60478,64674,44620,67062,58752,93578,94976,48930,78764,23804,91832,42899,48984,63330,99459,13704,81468,45220,16221,19496,85327,95068,46837,84764,91581,53076,22291,96236,35307,53572,90697,89778,89822,98424,39277,44001,85535,13787,34154,59432,68983,26241,63988,39274,22002,53431,62815,47254,54748,35798,48206,74653,10588,46948,35314,30480,76647,93423,61694,22449,25615,99528,27930,14952,55393,93995,17811,27979,14619,42374,74430,36053,48957,90213,91304,33912,15679,61219,34163,47742,78732,66201,91061,87334,89456,39489,77420,89684,39437,41865,95366,98452,31282,36047,52039,79818,75372,44257,14646,47017,92320,71794,38636,91915,67801,45345,11838,76980,57188,69493,40373,45615,38333,85325,77307,17779,17886,96458,69697,98873,14686,39688,16600,42923,43288,14091,34784,94274,23386,42038,83552,57464,51544,32732,26584,54375,84454,25937,63585,88347,78366,62503,48582,32750,16339,90852,20943,29662,65188,43236,68002,52879,51434,64810,60955,72591,42494,34183,19570,96197,45851,71004,75024,32123,51315,45616,71020,82159,46082,39446,51646,65646,66969,46736,70845,45126,37363,79329,55765,90672,39273,88755,26267,25066,27027,25502,27701,53588,30250,67112,79997,89636,44467,30583,16862,28492,56342,43677,61874,30460,53349,79066,38334,80276,59286,38630,19310,30409,83057,64283,29605,21584,58022,45963,82890,80486,12106,10729,84113,55523,78432,39784,42778,37018,78397,98775,25540,95178,94483,36341,22838,30390,28855,86002,52107,23004,10026,62836,96143,45568,12062,25660,67751,45553,73760,96663,21263,62587,20077,45336,16016,65008,74475,29850,72219,44940,77072,86124,42717,82883,15450,98485,59813,27462,64650,58536,94500,34643,77046,32693,24281,75167,98959,67894,83473,73785,86478,17869,22560,80191,59949,36288,36107,49896,25679,82115,64012,77618,29288,50068,34389,11916,48374,40641,74440,32457,28453,23525,36044,16072,87152,83484,33673,18772,98844,99316,58219,97515,83717,71913,96158,90261,34586,72558,55035,91758,46947,18225,94116,28368,52000,46155,95364,12500,57215,88220,77558,24766,99930,10289,83037,83071,85669,99399,70106,26027,11419,95072,70739,30084,81407,55895,13691,32832,61547,19166,71374,80157,81092,44595,30078,28148,28337,21801,20135,68798,72598,98998,91242,85013,29299,18391,85302,64846,99648,86301,26673,54540,53406,82824,90375,46870,45296,58373,14474,60168,78062,27202,63252,38955,15935,40150,40054,62742,50347,87825,24403,79430,23607,22037,69146,27939,66639,37317,76610,83861,78178,16764,38120,37035,62890,75173,45329,30012,17959,41899,46506,45757,52621,93496,42655,74958,35579,12833,60216,36665,89735,74711,85044,59565,35497,37901,62029,13995,51980,77586,72262,22447,62920,35661,28579,35259,81902,58440,92512,57896,54474,56893,93694,49181,17820,18631,42842,11176,26734,23310,56417,75748,46472,53399,85332,95935,29995,17312,84779,80685,64879,78525,70600,23356,10954,23297,39430,53269,53397,16156,99657,93669,20601,67122,98678,46333,79574,85083,45571,43261,32780,21369,58117,61624,63415,42558,77409,73931,39571,30008,48978,86367,56814,28780,14837,36863,13966,10264,84225,23821,47226,54059,69225,27883,75408,48212,46455,59380,86220,36670,55839,39941,23863,72461,98858,89745,65579,53122,50219,43883,73902,72957,75198,11790,91397,52298,31488,58787,45591,90317,96671,76125,83923,87239,25000,78378,98555,64512,36532,85977,77598,26081,76982,20248,68015,72527,81238,26322,55455,53316,45348,64219,43563,42556,61923,52290,31098,55929,53109,69802,82257,29422,82635,87459,94809,31004,82608,18608,18074,17101,53340,70413,21696,39493,47257,45209,36755,54571,52534,64430,17512,85144,45552,99111,25016,76938,76635,16592,64835,75014,81609,56365,44889,63576,65494,71847,22260,56179,36486,61377,95252,30626,79940,24052,61761,38605,46621,98616,15582,90993,80672,92025,86579,30104,29129,71663,96571,64890,98923,60149,40088,15404,36710,50650,24850,46282,89353,43888,21726,27478,10410,35331,76205,18222,51061,45916,76446,37671,41352,99140,60017,50562,99252,79780,46316,23242,54055,79569,14088,34049,66021,81141,41289,37195,42707,21202,94193,13366,71574,84035,87920,96163,75387,41690,63571,32771,10194,82677,59848,86751,18395,67926,43976,96378,96102,70519,68385,73537,87643,61307,52039,70592,32995,59568,10956,82917,20878,42520,17948,54107,96422,98253,97490,56884,76668,30960,82720,20921,54509,70975,80004,68268,95601,50621,22114,64964,36016,14639,39428,89055,15379,70330,77008,61933,46737,83375,18380,24084,60143,19989,37552,75734,88047,47211,98074,74047,27949,78089,52423,92466,85372,85246,99610,69378,14747,81499,60877,16478,98121,40865,30258,73555,79416,73588,41280,61086,11562,54500,77019,17787,87256,34320,25802,84531,19570,41859,37001,47176,70580,85037,40723,72977,93966,22959,14988,66190,95262,72315,67413,43614,30363,81804,78515,60961,43477,48089,91000,85828,40476,38239,27903,93497,79264,50106,35096,83916,86600,77858,34759,60156,25313,79576,73840,35143,78206,71083,46196,88656,21823,61631,26236,93056,45224,46053,40086,60630,73796,81248,95840,24467,62064,63248,17307,23672,55125,33985,53189,85412,51035,76176,79568,35557,10009,24327,52124,94095,38378,52960,36236,80852,56224,89889,64228,63077,48996,13999,39238,38217,21213,83746,55364,32946,94447,25949,86474,20283,70213,94988,14329,57880,13513,65364,46983,21101,37521,92829,40613,84651,77551,52098,97706,32885,79255,62501,88940,24572,21652,55692,55170,15775,23228,71104,46244,17206,44806,73920,22126,13688,17042,70068,77654,34277,90943,32424,98889,40138,97053,80809,96617,24262,30723,25486,27853,16967,25023,75561,78071,50780,93557,20866,13192,38065,43604,44707,81371,69207,82249,55482,50617,34970,68382,37545,54742,47035,23573,32223,46498,88830,66211,37302,63585,56158,47969,38234,34076,30734,34969,35522,89432,87358,16303,10090,94294,27608,96389,73804,55935,63229,59401,71253,86187,47201,58368,51011,51084,74661,53674,69120,53069,65312,70545,50062,96792,33291,28322,37901,64658,25064,62385,99212,21297,42768,41193,48207,23614,46386,14804,45603,86579,37660,25678,27718,28895,49424,92252,73146,74864,26858,20682,41027,19021,82978,18481,15473,91326,63254,97208,21209,72284,86977,63920,91287,73815,83779,21169,51438,28641,95005,33230,38513,91235,33655,62314,49698,55706,61854,12356,86153,91455,33560,79023,53550,60774,29565,26779,79418,56861,82024,32167,65180,46435,92716,84800,37695,65633,23800,27601,76891,72580,87322,90501,22687,49010,79702,20883,31889,94862,43111,62514,36096,77102,96393,64643,56787,55650,71851,31161,29564,24657,69321,37259,96180,62923,20145,75581,62328,60778,83609,11668,28002,58223,25240,12097,37608,26427,87951,62989,79534,29264,73266,49609,75502,76024,97284,91678,20958,49246,10496,64012,52821,78435,85174,41751,50892,57270,80215,94509,60817,51936,24952,24843,42884,61120,27664,55634,43408,70130,54309,75647,71090,19335,39476,11490,86877,85956,49777,22221,22025,48923,25933,30197,15852,36089,87102,90971,96183,80446,83260,76111,33440,27873,57130,40489,92942,20719,67177,44780,18392,40400,44226,45051,66118,43319,14720,20686,49892,35500,30343,62294,12282,15101,37635,78109,77911,69807,66748,92620,33790,79600,30166,72648,44193,57706,64556,50857,55648,89618,16489,94947,27818,60881,30523,72180,62702,37692,78956,70802,35324,31589,52349,32668,70208,48763,30012,43369,56385,92658,12037,30024,46512,85119,60219,85408,29976,95425,57206,52779,28744,48022,89323,39159,93901,40024,24320,90813,42134,27034,14882,43135,11835,99930,28743,59977,81690,21442,99423,36089,74648,80498,36262,46628,87844,29619,55788,22640,86425,68024,32534,12940,28964,11737,27033,81334,54297,10156,38239,96459,98602,59295,39300,86566,87163,52800,48764,91470,84561,57531,14998,29392,71266,50216,18711,59936,83708,16873,63027,53911,82213,62263,39705,57647,67687,60102,95717,95291,82870,75249,44509,89764,68085,42560,65569,17489,98534,86456,16966,64388,69820,70326,68231,35260,80045,18173,46865,22099,70490,68191,30628,14348,40406,79264,16244,91427,37337,43010,15349,32917,28236,94139,31950,91152,45088,93477,29241,62110,34419,13247,64637,66273,93659,81040,90815,77422,89603,66627,46108,28658,82068,53305,77262,79387,10259,70581,46930,92575,13443,97499,99607,77179,46008,94403,57721,40240,62052,48223,27483,93229,76221,30524,41651,43136,84390,97851,40410,59914,76055,29005,97808,94605,39499,91555,91742,59612,12821,38004,52178,73086,85778,38082,65623,54525,51951,33023,82933,20647,92643,84583,33235,43499,41779,49616,63914,69072,67057,64809,41246,45704,54969,81627,38101,76319,98910,64438,19581,38526,82288,20656,49502,21189,68826,14204,24584,41705,91340,30472,79156,58047,58825,48464,75107,19239,56905,18811,77236,73365,74998,41766,73233,83075,92915,94894,94529,80116,12055,62510,87333,61865,34350,48835,65109,22878,14838,27058,69616,65034,78792,60000,86570,12381,38055,60761,98667,18621,71935,47861,63478,93274,16970,89564,32274,69116,99652,83038,28253,98760,41308,66002,82404,67511,41159,85584,93737,30917,45001,41161,47785,15437,53327,38032,38514,39577,27651,39175,56193,76216,41727,54182,48173,50010,86886,71526,68256,45010,85784,76443,89973,84419,67180,98513,22268,19643,21923,39702,11490,16186,38550,72917,67281,40161,20591,63938,44043,78384,66506,10312,76379,66891,92763,80806,65955,41049,16557,70091,44222,18964,31143,59776,16329,29845,97795,81873,82987,10418,90132,17291,39170,80777,95193,82223,65966,60204,55928,71281,54644,86810,98079,18678,83143,85344,85686,81479,89191,81468,49918,94939,51701,62373,23378,83097,73278,80646,50092,71171,23363,22632,36446,68659,47789,86726,82037,65041,22107,83983,60798,22108,69635,55803,44608,37102,65447,97770,94547,44931,62214,32558,61775,84890,52959,27987,83825,83116,81481,99290,48348,38619,48210,66293,59068,99113,76058,33839,58468,59528,45044,66766,86846,58363,23409,36992,72129,66586,76763,21213,94025,59442,67991,68021,97927,76022,98083,23215,44790,31193,28660,47556,34241,30116,31028,18987,36914,90025,23991,60303,60987,72688,85684,70610,31421,46591,16991,43492,88869,63027,95065,98147,93227,75502,95116,88275,55824,99555,28044,25091,69291,21092,88767,38475,43277,92142,19537,50678,29486,97435,71429,95644,43813,49478,73310,65296,61860,28678,11332,63508,25473,97738,11691,86084,28241,67115,68544,20303,97081,33909,43236,46268,55899,84139,65946,97073,36351,15400,99511,79073,90300,22297,70258,99709,89259,83039,70434,35320,98320,74191,23333,75885,23891,71581,31492,66945,35931,71855,95034,49342,55565,91973,33874,11997,29355,23477,25078,65079,52041,27360,81991,25439,88163,85496,56029,78260,16152,90181,41126,83755,89920,76523,62877,10890,55521,80070,85526,88992,86071,88406,38145,54033,84778,41625,57024,26652,26107,33487,84392,44600,31136,94729,92995,46720,67174,63392,24362,26364,67658,56059,89311,23926,88517,36316,24537,26091,57273,63361,71222,80758,79353,51273,55036,49856,79709,89570,35862,34346,56265,16682,68578,56197,37612,22241,74855,76720,48516,38055,42466,13318,40998,95176,77403,69769,81420,92916,77451,46242,89569,50175,80291,28292,66296,26608,49790,98301,96669,68188,53901,87740,86178,87580,46153,37786,27540,70949,88273,40593,25747,88150,97130,93600,88002,58189,63393,10753,36613,56633,95346,49529,92336,81013,77969,39317,28904,38282,28590,33779,28243,26936,12074,62317,53376,83397,77055,63620,88739,12905,40562,26352,95159,40707,58979,47235,38770,87387,37800,63384,53947,94869,23902,85985,16582,96887,54853,74051,98571,61886,85331,49893,69305,31735,51385,28466,41104,53695,23281,64614,38680,80998,95951,59144,35150,63813,61684,39947,51809,59252,75296,23344,35552,86567,42668,14332,85201,67322,65070,43284,61515,29755,83958,91838,26674,75746,45949,56212,48331,87428,72663,13353,84891,81423,71457,97897,14509,97706,98215,96699,98588,48405,78973,12627,99831,82494,83712,78711,33997,47989,38986,76661,85944,68609,25203,11828,65614,42552,54735,19004,21910,40653,40792,79076,27233,52300,15383,91018,28370,89171,66301,58668,26500,83082,14449,53253,21022,57699,39906,43399,25744,74867,90908,62820,53153,67134,30907,60161,23622,83807,14506,19532,21002,71168,68642,77408,31186,37361,62141,26569,99126,66351,94952,81704,59291,68984,80621,93938,66362,30822,46480,14214,91151,51129,40889,41916,18148,20975,32729,33258,18902,59058,83035,54441,66943,43655,38803,91450,56186,47738,17122,39335,37448,27462,30941,37445,29115,21869,46278,36407,89856,87587,33469,85155,66432,28730,56430,80161,79917,36575,90556,46969,48306,34467,69119,52896,66713,14320,78418,66481,67310,67628,62378,28990,66521,29720,32933,84804,59366,75419,78721,23106,62599,48337,62352,51089,27197,11239,71575,50220,40608,77703,88046,73112,91946,29196,61552,77767,31073,60295,32115,38192,65231,51525,92326,62464,41794,77911,48141,92281,90303,46748,99459,19095,66686,77539,74432,80357,66692,49613,78077,48109,93005,92538,13896,76852,59410,56911,13083,65245,31825,48459,89249,76541,97126,58245,51596,58386,79597,94186,31837,65880,85261,61488,60544,99417,24688,16149,87873,60570,29973,83142,49792,28103,79962,42171,13121,68809,91162,65715,80801,46148,62236,76103,79470,88028,79230,75168,66392,52034,51903,15640,22389,58465,85183,37452,53437,67824,25187,37350,34450,32695,69701,13198,30879,75836,54257,38333,18605,26606,74508,10845,82179,96439,77250,54154,57376,81119,90624,90543,17010,47112,44589,58157,46189,84870,25144,97127,61627,84815,86595,37400,63932,24061,94579,13814,69409,76674,52561,86995,43780,75773,93312,47883,11093,13058,38671,26585,77767,31312,52108,96062,55292,25625,44009,65031,96116,25077,77318,85360,45455,14510,32442,65433,52318,95352,74293,55206,22030,38202,79873,66873,66890,93569,45910,98645,52846,56599,37483,61657,88014,81976,35121,70748,82053,57190,97482,96079,38316,11605,86291,97283,27248,65848,58169,74077,95412,41579,47356,72298,73469,88798,95115,13025,17935,99273,88993,64136,66237,73016,95840,29360,65245,30511,56913,81672,36809,13928,92353,83409,26468,69439,21813,11320,34238,78775,33340,45131,88613,52859,96748,25727,33816,88579,37607,62384,95902,72541,57739,83481,52028,13899,88525,56977,45156,97123,32892,49933,73135,74149,60263,27368,11179,20024,54199,58231,57468,78029,79123,95259,89528,46416,12014,66902,41829,53419,13603,97677,10589,33319,88776,82424,89351,31208,80879,77820,16242,55515,85201,87578,97446,39117,66049,41590,81576,45808,27528,49648,45465,36841,35870,45220,41154,90473,94990,70131,77656,39714,19349,35201,73480,53793,93134,79518,29719,39670,49934,99269,20117,86911,55070,56441,62452,75460,62975,65003,90124,34732,21149,30715,86338,34713,42242,19324,77044,63578,71879,91058,82038,90309,26157,33047,45561,84010,32114,30982,83852,89979,92922,87555,88265,85394,28546,67114,61488,66763,81136,86702,58561,17778,88916,37341,33812,99630,87540,11514,46128,13120,12094,89998,74135,51720,85852,10678,26541,13680,60176,30076,23930,23950,70669,56775,19847,92931,30678,75464,59452,18376,79429,58812,85478,56590,50401,34213,93688,82452,88150,57477,25981,89655,64919,73649,78028,56358,29700,35783,14346,61910,33257,27923,11901,16599,81952,94687,53338,10318,47448,54352,23906,29039,97732,20699,14395,49887,84943,89673,95515,76691,13611,55012,56110,87360,84751,16149,15880,32819,92147,14196,44482,52540,72858,57443,78205,31605,35086,12089,33502,29714,30915,34804,68135,41794,49013,37026,94946,55403,23963,72786,81293,16227,33772,18943,65315,49314,80916,34554,33244,94389,46318,75221,81509,47697,43245,95010,54579,30642,72902,98276,75369,44906,13180,64206,44710,58963,68978,65345,32560,21036,31027,83620,51128,91336,53284,83465,63692,43284,57783,17032,36785,44124,58848,38755,63773,98811,42983,28991,54180,26647,66539,23710,44342,28782,15930,67721,39201,60135,99496,92896,18660,87535,54554,33100,30654,27402,22409,30510,26030,69636,82382,14289,85405,78060,94599,77269,99294,65203,77984,53113,19319,33922,25569,50086,59696,12173,64571,67660,84046,23315,93957,22495,58070,26716,49193,74573,88062,58327,59335,81918,19373,54491,14176,82542,69093,44436,26609,31258,74102,44906,91606,98182,34503,59376,40563,72803,60997,20693,96391,27698,70865,24321,55656,43818,22073,89429,96877,32982,89056,65936,70001,51202,67477,21949,12408,21957,58929,63747,10641,66419,93667,11310,67472,91858,82980,22166,70887,45108,83756,31094,65992,42527,93760,33179,66299,82859,12293,25810,26198,18909,39732,64628,96105,57318,31324,30558,14501,88480,81041,61581,65650,87429,52687,15145,95021,57568,73669,88028,81656,23686,30538,19261,52103,20010,94340,16176,54218,90515,98872,17219,50572,76022,18938,41124,55982,93932,28247,48866,59854,18304,44567,25942,69421,34452,96210,30076,51023,86754,77288,32620,92014,87702,68892,53662,88293,91410,83769,54956,82262,19977,91423,31964,63155,99108,10192,21786,12742,56810,18470,43651,96240,43147,45211,20405,51580,83060,46903,51354,30086,35406,91424,64943,72201,29148,44366,42353,65058,84466,88063,27470,87027,24875,21385,75719,14632,63597,44420,61583,98070,21461,57000,70717,43694,40532,34260,75319,71561,82995,68309,80060,65106,62248,64626,78454,94178,13053,17343,56456,95556,83251,73528,73034,63001,74937,61839,99353,28176,39571,95430,64194,43984,79060,80617,35596,55738,27059,77345,74306,35232,33424,48901,90050,23606,96219,72796,57290,11575,66771,49793,87760,35348,68298,62497,77021,79963,30898,26611,64203,94988,95960,45759,74943,24812,64467,34819,77533,44563,75844,58774,11453,31735,10746,51984,29421,88467,93570,61523,94913,94328,47038,54835,90453,48743,29075,65698,43904,11102,32307,50192,18191,22714,75253,18311,19813,39830,87833,42282,61130,19478,89221,16101,70188,95276,35681,42889,20700,11817,73126,25693,35221,92539,88407,74407,73437,46405,80535,61216,26111,12950,44872,34720,46554,19348,77778,13397,47110,74419,70076,60906,39014,42569,79018,49562,13719,87472,15542,10986,29160,68071,24941,47453,66974,70837,67071,90532,25124,42319,61941,22929,61257,42821,72548,49607,37390,93703,75903,42428,28941,43535,11732,87199,15815,28620,36022,46100,63212,68326,29227,94379,79525,51667,64977,67084,23964,52365,99952,57419,97275,97529,98852,72212,24099,52664,33406,57623,69099,55741,24187,80991,36299,92118,63006,17524,17225,93228,90975,39283,39668,35253,37930,44962,87396,20076,53691,13201,50682,18866,49158,61427,80537,96194,45775,76150,35785,57591,64705,37669,44310,81021,88103,14893,47909,75147,78085,57240,65248,93680,57359,55681,69706,92857,67510,91741,35146,17967,73492,50535,86004,28708,45440,20734,24015,20090,76702,31058,21479,42141,11146,66516,22515,79821,85668,72949,14959,77283,99543,34256,53392,56415,75018,38441,70866,97831,35093,61122,81032,97698,90095,51010,98962,84502,82444,48563,73320,63949,11014,70743,63187,85317,28766,78137,93791,75000,50085,21185,92691,97161,98349,70924,19876,27984,31286,73532,73224,96947,69587,74181,69336,23881,12530,15112,49876,67047,86960,35640,78215,61619,62238,46019,81820,72496,16012,89392,70025,73487,64467,57073,30371,93850,19422,96463,14082,76118,70381,23803,93161,93060,43362,92416,95105,49519,12564,50883,32983,14491,59502,71142,43442,73496,60250,20067,71663,82075,81418,58257,25724,66944,34894,43028,99909,80242,69066,55279,70812,73982,17854,56162,77130,70829,49341,64166,55920,83761,16638,60076,12788,20293,90799,27334,77300,16940,37951,70679,75767,41017,11289,22338,46270,33201,80708,21604,34947,93688,22998,67822,33588,46982,32758,56467,12165,63803,79523,18022,80263,81871,55040,12149,74191,25224,58942,84421,35590,73459,95957,26781,79715,68812,67068,59624,12082,13460,63131,43052,81134,41959,80339,80431,65194,75970,95225,12736,85580,23503,96400,80433,59566,93574,13772,60726,44455,14394,66669,85278,18512,66278,14510,13405,34211,45456,11231,94280,12308,70351,98939,90549,20103,66103,79384,36565,80369,46028,84568,26435,77058,18273,90492,99567,75687,62961,97323,56728,38439,15912,24090,75629,83603,71202,26021,43696,50497,44799,23858,61359,41582,20478,42782,97047,90888,93839,22618,60565,75592,13520,78995,10265,68108,18844,16316,10225,77417,20276,67370,13042,12573,85384,32214,88201,71198,88153,35475,51570,39018,76201,39184,48477,55531,60551,72511,19506,79580,87531,21666,23834,40975,10040,25857,72936,66121,21362,43269,59474,71547,93785,52665,78668,91993,99002,24539,21555,65718,97243,40049,50391,70607,44175,40975,12050,11564,89618,83356,75114,71526,50403,12088,58421,10093,18203,49007,68113,11131,81352,32702,63301,82357,70017,25399,41390,21245,86559,39299,61921,83943,81297,36347,64392,50270,79683,61337,90874,33916,20562,45567,85587,70847,84514,24687,56657,41188,32404,81264,91074,44484,92624,42010,69911,32924,64256,48270,81004,91314,47335,37622,47084,53980,13661,16453,77238,41271,67946,60467,26572,19316,97739,32009,42455,94022,90260,84470,18620,49254,50505,53084,25280,14393,37020,35936,26995,30657,13715,31570,44084,31037,14913,39213,58336,11577,19574,16753,72762,85524,84497,85171,82276,16563,85318,55173,70590,53692,58938,30305,17832,61083,63912,73092,42392,87738,12585,95261,63178,32109,58459,50820,88470,18079,12554,83213,74797,67177,52229,59630,14236,39265,65625,39992,41619,57334,45318,66802,95904,26264,30660,25146,89246,47520,36579,76614,77053,26223,23671,31012,57841,51334,18359,17826,99078,11086,20020,67484,24494,86231,84865,47813,98651,22634,39452,51905,19740,51117,66933,51260,32626,81477,45363,34009,34976,58840,33407,55229,78239,71317,14982,44928,61243,86332,45696,83615,45178,23897,16547,34111,24818,74841,13370,21619,94162,96456,34532,18336,75741,51830,27738,49130,22139,14745,72927,29720,93112,51671,89994,68603,45013,22550,78141,62315,63465,73669,55823,61776,74634,36025,48293,70840,98442,12270,85109,14463,67481,92407,40393,40327,36522,25626,59149,61775,83495,14465,27607,93108,25798,42865,17062,80669,57202,70268,34157,58915,58179,71909,88386,58078,21424,57034,58577,62815,30116,51762,12957,72588,23302,82185,93547,42746,94371,85197,93960,88227,32886,44251,46713,57845,82397,49095,13596,90647,29282,42573,40854,97494,90176,41167,50787,10921,29238,17806,42940,22106,83534,94854,39473,76906,43660,15379,96989,32349,47250,93544,20714,42269,11734,70245,11402,83019,59294,55775,19393,83022,30263,87612,93718,90335,84922,96591,66495,32331,77092,89889,84894,38087,36101,64770,28395,16169,73336,75499,96924,99009,79237,76171,78176,86690,31307,34045,24586,31137,20801,29525,77553,37439,97128,29031,66365,48044,90685,20522,55712,14193,76772,68080,81842,73280,72056,69306,23659,23801,65516,20118,67433,82039,22859,88967,36600,60377,52049,95150,50734,39414,92702,59941,74853,80258,11364,55057,56613,16816,88756,26184,95351,74382,19440,76589,86177,49993,28895,60906,20820,97088,14441,35427,87545,20227,81742,85792,30055,19217,29760,61860,74231,71132,13452,53069,80916,43876,87315,25017,56765,99583,77082,16829,35132,91687,18378,31328,61689,97058,30739,78916,69623,37593,57862,49339,82197,97213,81777,13122,16227,74540,79340,18155,40047,20606,99073,45467,27907,46372,47836,11207,99975,60740,67492,92426,39450,93579,56678,91916,50682,88358,11598,41321,71581,56679,67481,76535,52367,92037,13403,66373,76613,78528,29261,14702,70005,89267,81251,65684,11755,53506,76097,21080,29875,11932,32175,85710,21168,66648,38013,19730,60343,78350,92469,65495,45008,92614,73645,81851,16682,36519,36565,32328,14714,42283,78840,44568,63170,97857,46679,73213,40135,29338,30852,54429,71842,11781,49505,66011,83414,29512,29364,87817,45988,29274,67633,79416,62732,67231,97683,87559,24991,29620,66554,36054,26385,54899,97537,37586,76730,51106,60985,49394,56242,44105,89973,42701,58690,76617,68659,59436,31199,53233,30769,44786,24158,93657,19717,93850,99480,96073,32085,91201,71802,26236,31736,86013,92338,56129,81564,86985,59464,58914,59962,77382,25077,83354,86042,11693,22632,77279,91536,75925,58026,77195,39066,16363,74516,29159,16873,65500,28861,37626,11223,12545,53499,98331,75291,76980,70279,81375,21987,84429,75544,29243,90172,70533,15944,18845,52504,78538,63252,96554,55762,73045,96211,46345,33368,26545,44307,81028,40478,14086,23885,76075,29162,68275,79149,35045,47631,78541,24299,88162,44985,15810,59144,38942,89736,55142,50736,54692,94647,50465,97639,18544,93270,61791,44858,24694,99668,32045,84545,51903,59709,69218,64287,33939,17877,43076,53575,44214,12500,26138,74187,79983,56490,33853,21407,54310,91284,61182,41728,13628,31932,91766,92326,27413,69752,78933,42367,49556,92317,95362,19508,18691,39209,96724,76276,37743,87396,82361,97099,20700,49027,61628,81894,62863,43657,79280,90024,97546,22570,35857,80577,17779,38424,28867,87132,79622,30040,53189,71861,66387,73596,26979,84936,40756,77269,30806,22329,68440,79577,66277,66254,14793,52361,50934,42549,17995,72026,26050,81785,14703,56876,20961,35331,13340,67884,74360,55369,48664,23750,56404,37745,99381,19716,23578,37174,68704,93605,77802,42997,97324,91118,15968,56487,52249,47548,31489,79470,24741,26890,26727,82288,74363,50076,22653,92959,84241,27936,66522,21744,71580,90927,32879,65960,98670,13270,17172,15552,11220,97299,15292,30654,99232,54674,17621,38072,86578,58671,21451,87964,16798,60672,40502,35605,23006,64871,17923,67712,64371,60640,46916,67163,44302,97069,21420,39190,54188,72299,46382,75397,94195,87532,35707,39030,22232,11926,52017,24049,52856,90637,59500,99045,24168,79619,85640,34994,39727,21487,47599,12430,70777,10414,36484,10962,16209,43848,14336,49642,95679,39350,49563,52240,95037,73719,46390,19795,49564,39671,14932,59081,47477,51200,75933,90770,71725,81645,96542,86388,49213,28677,80321,90046,88315,11260,44617,84749,60216,98754,79818,22295,65143,83322,98548,87423,57199,54110,24840,56340,12706,28142,57489,40186,20921,42086,64428,82072,99318,81330,14194,42756,29724,38836,88539,27238,47440,43591,10175,74659,10185,16508,10889,97709,92117,53660,95075,34799,58129,61005,15843,68388,16605,86179,12905,80572,88333,82974,90407,29094,96324,67993,78018,22703,47831,80866,38665,34224,66008,50454,36787,57186,93828,43910,95151,74087,71699,57283,61433,93217,24020,41051,11421,14057,70000,50069,93751,92204,11158,21607,45726,26684,26057,37036,37542,19812,68463,76498,45671,67417,44951,77551,33914,19167,18180,95704,77216,46000,22269,58648,70055,66718,14939,45335,28530,19278,30220,15211,35552,46090,98677,53954,92752,87181,35268,66266,19582,96837,61355,56474,42082,90391,52275,27567,34062,51715,91418,77204,87147,16148,26459,36274,66297,72369,72377,65184,22540,46568,17352,13435,98868,48354,76857,71403,77928,67207,43471,14305,73586,29311,75390,95616,44252,23537,85631,65807,55267,52955,53360,59811,56909,80499,23749,45398,94536,61798,85389,18654,89568,20553,55646,30566,34212,61454,82668,80346,99527,78557,89097,13328,87144,71284,33885,65231,98364,58275,27365,29370,77912,54287,60343,17439,46249,86079,36873,98445,77274,60547,82679,59453,32086,68170,33564,87985,26096,25245,97332,31692,49877,78016,43455,38315,67919,32547,42827,14126,43250,83370,14314,23205,15124,67139,46411,19005,85018,19387,12956,78758,96140,83861,65999,22694,52404,10172,98461,65132,87508,78850,77724,41658,69473,43870,82997,98844,17592,64167,72939,96828,32405,74489,85132,86085,62822,93272,35087,90543,91645,96544,45210,31272,97297,46457,95803,44016,48127,79887,66103,34577,83139,54762,76374,61966,30873,60364,73524,24899,59504,82962,51712,19548,36349,77018,63541,58979,49752,15706,63597,37372,52914,57233,72456,32980,51790,17866,47717,50112,17357,76709,66539,63831,46466,91134,28027,69490,17421,36596,59763,67050,41570,33214,60880,67427,12125,81814,65840,82286,36042,52899,86126,11416,36597,85854,64564,25150,31471,25246,78852,27213,55930,56353,42454,78284,46822,25185,44580,21114,83841,73717,16970,21947,64648,55645,43391,88710,23823,99044,50416,96559,41480,55395,10762,92560,94450,61368,14784,87290,77646,28656,58973,10867,94831,51278,18965,86330,67347,58174,33448,94106,18754,43253,76452,11420,13017,33516,58416,22915,37426,15690,82514,36119,26821,83703,20856,80730,50045,41106,17998,95801,22566,86701,80483,19500,46849,25328,84334,63942,47728,44483,99554,19052,62476,22725,26269,84898,87424,20090,45608,20927,65270,37997,81081,40025,85803,41698,24861,88772,18756,23635,94234,89791,48135,86257,89614,21612,82441,54632,91349,29555,55981,16882,97420,39341,37195,11336,67338,67075,31752,92550,34525,93716,34519,17057,38537,61603,93255,99355,26136,17711,33343,16272,96975,60900,81029,74181,65280,97735,47266,93026,77787,48056,99838,99478,57053,72127,56290,29270,13161,92305,53253,49263,12268,21570,87054,64672,31895,35174,58406,30762,26381,51917,37367,75698,76924,65078,69536,91213,44006,60682,80813,25345,37908,69284,73078,21510,64286,92426,37538,54150,47194,20205,17199,28331,39678,12378,73882,84819,20585,59504,99052,42385,28890,35237,76233,21206,11516,57050,31855,16097,18919,72107,52082,25211,15490,74278,64792,50263,47282,98597,84242,82561,54293,86962,74196,80727,95778,51199,62195,70492,31575,78430,90939,67312,76126,68262,81338,59793,43124,82475,96055,87125,29079,82801,49493,98607,54384,63251,75723,44477,64082,71260,14639,94513,39440,48948,31038,36673,25489,61908,51169,44620,35722,17956,50921,57656,58978,39662,63424,17110,13422,39904,44088,23195,91785,68696,73318,90731,97140,35004,34089,21323,51911,71840,41811,23639,69018,39760,30187,70772,23180,80494,15849,29706,45765,32082,81666,88158,39451,70740,97002,64384,17525,37919,43850,52281,38202,59449,12517,71427,32707,32386,22404,86159,11787,62790,75245,32601,11173,46516,50416,36988,54870,27821,39049,94684,93602,99498,69690,88208,68109,55334,45628,35109,28543,44126,58236,42256,44131,39051,61206,64036,89589,66888,41042,42510,87757,11543,75024,37275,57937,62377,82814,71656,40803,69902,59901,16347,19597,81553,97688,59423,74219,59135,80467,68448,14935,36180,24614,81470,84987,64107,56720,97827,15553,66512,24633,53942,44777,77139,71641,24527,92885,27231,36621,64623,88857,60327,97512,33777,95643,23448,93264,63670,30210,46970,86986,84294,75571,95439,52407,53878,77560,85915,23968,62603,55327,12636,57527,77159,82065,75272,97263,25636,11031,90943,67910,96341,55220,42558,77985,55295,60625,33856,88123,29820,51990,89060,14956,26324,57795,43816,28548,24109,80808,44528,93606,77376,65604,24861,87108,78106,25069,18364,40424,63478,20378,69637,11595,68916,32378,73858,72108,71958,83725,69453,49500,92945,29870,53116,34862,26597,31594,15992,90557,12270,56427,48688,10811,73194,69932,55475,24801,89067,72039,87604,66976,61394,26021,31813,50799,46330,24742,38776,70184,99604,56883,22649,85565,70882,86896,80628,18092,42040,73175,41656,60339,14959,97006,30910,61872,71728,36043,77247,66586,32757,11294,75889,69211,94719,45040,15152,96928,42203,21690,53265,65899,82441,71717,74446,49569,15945,30254,93200,90696,76165,70702,13854,60606,71785,39134,84444,85785,24511,59775,65008,68619,76304,19193,28294,29962,45886,57244,76710,42630,84743,79128,66689,68205,50273,24297,16509,97749,62334,85158,59172,65785,11200,84624,20595,85866,26633,88123,96962,86541,74689,55278,66255,90769,22713,12292,40338,35580,74807,44261,51162,39426,50334,33120,60693,49251,35896,81686,24492,67027,18104,47933,71021,51494,56345,73464,34142,31620,59302,60519,20232,37764,60982,44055,12274,35285,82422,36992,56865,14822,52179,92773,79900,49820,68196,11966,88943,47787,18790,90238,98483,68204,31520,31772,36182,73356,87291,36141,70675,94496,40008,44709,59487,28446,23899,64803,99795,72884,61115,64140,53686,67374,73984,36710,25739,86948,81521,17742,10126,66029,76164,23773,24608,90375,62323,12950,50351,12125,64859,94756,87462,29359,55394,12001,14930,23010,90341,25059,25674,67155,73612,71817,61978,91662,51440,26127,17789,76332,65297,93953,77663,62269,53302,44427,95465,57661,49212,82515,73918,14719,58769,47274,19541,60002,57368,25841,22978,95759,36257,71099,42537,27201,93088,51422,85308,58251,48340,19893,65709,39466,88685,57190,68616,69665,21407,52639,76496,98272,26471,64499,31811,97075,43507,10770,70198,37298,95713,90986,99586,74034,72443,49380,46432,14861,96299,75474,71623,38190,49672,66024,23588,68785,10611,63736,28997,33060,59453,28628,34255,40839,43572,81822,58101,19958,49925,85968,39836,36557,50498,36860,67349,38659,19281,88037,23677,99073,55637,10279,53945,70797,81479,52738,98877,91815,24582,16645,69916,65764,76950,16623,23851,41129,32921,35321,35349,47303,52348,64777,98878,92109,48177,30108,22965,42849,97503,44703,53757,78384,45413,61708,60201,32532,22153,32005,49774,79510,51936,62986,60327,52264,61242,15733,76468,82842,90415,61618,49580,61459,25808,29352,38388,10755,87028,34892,57704,55274,68411,71888,93238,22498,92862,72834,42267,89568,89610,20837,94714,75402,59344,57771,11840,34645,89434,18111,85374,62755,32393,55432,38632,62309,49374,44019,40819,60475,34600,75668,21079,12463,47072,59228,90910,68260,92862,13861,75961,97524,82569,70697,16549,49194,78377,20344,92333,77337,18375,12407,63404,26913,49143,49013,18651,61023,32284,39520,16359,45838,48844,73731,63692,56647,77805,64009,29632,58846,14211,88561,82743,53551,29349,22917,68853,73672,68996,53074,88987,96229,77008,68922,60645,84715,56477,40556,22680,14725,29088,50017,17400,65743,14430,42708,64520,42901,98886,82290,85581,70226,13968,67232,92928,62183,33060,55611,67811,79621,46975,30107,98332,19763,24503,32145,21891,13086,56305,44537,60594,57428,13565,50000,31289,38598,38488,46872,77108,31983,82054,28129,44536,56964,55174,72814,80717,18031,89008,65528,94438,27565,23702,57602,69433,35003,11741,44435,26746,55022,52723,49982,31743,63595,96817,65175,95837,76788,58072,77648,66938,92372,72353,24394,24346,54032,60543,11295,20189,60861,26888,47945,79987,59254,66921,29069,35510,30226,74990,43441,92754,53163,20717,36678,18870,19356,59038,31153,60480,84417,66873,15812,51835,47464,71577,37075,91060,95553,49047,81153,53323,58710,21473,46312,90951,34884,65487,56757,50346,55450,82511,19407,57780,30567,16215,30895,18805,22271,78359,39759,51009,73719,43089,36757,20972,53811,12937,51989,90483,73226,29866,38842,17260,72397,48642,80181,76560,57337,76528,94147,78514,46564,14599,93397,45494,97291,62093,19865,28957,78293,11874,47552,44782,76197,91714,83196,79857,55546,94032,71334,21281,79112,40723,51040,44847,49666,53461,42092,51787,78374,56347,40138,37901,97390,94010,71120,16743,41751,57462,65708,38219,97741,37441,25314,20023,28068,60169,80641,97020,45009,98237,86792,64791,99595,72515,57804,61040,24483,43910,59484,93193,12301,83612,74702,36808,82370,69388,96116,20738,93695,45719,92052,81379,38314,57755,67824,16967,34272,31432,90102,50282,63858,94470,78770,44615,68502,97793,17927,15737,38074,54128,31494,87291,69020,17852,82571,94422,20317,86584,78226,97793,11107,84683,19562,10457,56733,54925,68063,62475,92623,37197,56858,20482,98471,11074,75145,11411,75812,20162,50383,22165,73044,20222,46615,74094,37582,21302,19557,63434,65189,82326,25289,60908,56810,70616,90323,69551,28370,37099,69998,13156,95621,82359,80069,10831,44415,48879,49424,61987,45811,50457,84534,37847,57448,40434,11644,38549,20580,48855,89664,72717,86539,92305,16607,27384,20927,64865,73983,27647,89314,10188,36756,92323,57319,42308,62601,46501,16070,39465,47795,10863,34271,58946,29366,36084,65843,14309,35767,17521,29174,42218,13065,43408,32111,54632,76449,15277,93496,89299,89933,47512,67156,28358,67400,84850,17541,78618,62967,40717,81810,67829,29581,46290,38626,17110,73365,84908,36727,98301,18785,24263,16350,94105,58362,74589,80771,71488,66002,49228,87479,94259,91925,81321,86434,13837,28822,67648,36863,67388,65805,53954,64823,49879,85147,16723,74854,37637,58849,31858,95798,73345,68789,95688,95499,89502,47557,27246,45404,27819,42325,69044,54604,57055,23669,97704,89100,64086,56991,43129,72621,34372,49609,41246,19059,96137,48866,46864,91508,91749,65199,59367,40700,73885,12825,94948,97100,48743,25506,37433,67284,76603,92744,17660,80157,70554,90643,54332,91351,99706,25409,15550,19105,38459,20834,87298,69795,73334,80577,75248,20365,11032,26529,32854,96342,60774,12677,58059,45863,53168,36954,91047,70612,22461,98825,15553,69838,20954,17455,25254,75477,75933,96918,41659,37945,60778,66580,13448,24781,76305,90573,13306,34673,80664,71256,55115,23195,14540,24305,44296,36908,83584,58766,92778,64237,96533,97694,97697,53785,55984,29346,25859,99507,73250,18946,87459,88906,29593,20718,68746,36746,53680,47436,72235,98565,19480,95332,36194,97030,60155,55529,10833,57355,58068,16799,66355,13454,42693,95241,63377,66408,85487,70704,43722,16767,75406,49653,87765,15296,57306,12221,70394,23976,31979,22638,71295,56715,24336,28795,97522,72471,96182,49226,89735,54439,20632,80097,58243,66883,32454,21147,51855,67950,24430,54722,93976,43781,18465,68271,67305,61750,14606,81412,71113,63600,10660,33235,28258,20744,37804,69424,37017,15810,77936,18542,81316,73283,28569,93670,41379,34491,12285,28608,55991,35135,57141,43566,76174,27666,90780,76235,11891,79260,39641,17076,25814,83189,39250,88955,84624,99558,75555,31890,51711,60593,21031,76679,80154,12511,43626,49889,61307,33502,27666,59039,27671,90423,52720,16031,12371,24005,87468,75103,40012,25294,98080,28362,66417,39719,89487,49014,19114,21647,75818,72770,78933,95727,81232,90609,35772,99209,36744,32071,73303,59065,46153,55414,26754,50004,19817,15123,11981,64189,68457,34860,84349,71647,80878,13544,81283,40750,40445,93763,25634,84073,28249,56751,14031,15669,43833,35328,59420,76424,57875,38468,34074,58238,29166,32753,82003,39248,98517,86963,44782,43519,25013,29241,83363,12889,20233,57528,62987,61319,33401,56774,61165,95229,49708,51597,62262,27702,36192,40958,83654,63907,31167,70958,15679,85265,28547,28182,83670,18928,69366,33409,13471,70693,16712,71851,82420,82331,44061,69414,67158,41265,79490,45009,43498,84718,78633,37006,19384,40150,35404,12744,59622,98389,99200,77474,28248,51573,15129,43587,90895,68137,83199,66289,28733,15948,94442,71966,21580,17310,89798,76342,69695,91940,55400,43265,19936,32968,55032,54121,74036,57491,47904,68124,98577,80046,37010,67399,50364,48103,41924,72391,51056,34409,89571,86334,69369,99896,59079,40390,16192,57378,64874,17355,31173,47274,92651,90656,68684,26884,40525,13148,19724,84534,72724,38124,88276,54917,20638,44131,71654,87243,39535,54093,22383,45808,10089,79782,37011,96498,97930,75718,81440,66475,31526,68775,83784,20145,34196,47599,29322,97012,18961,36038,56379,55486,75204,85414,90547,32608,93705,73146,42825,84843,96681,50214,50523,57918,30376,29169,63948,86460,12821,10438,23191,51187,89924,46823,16044,97450,90239,28242,16917,67067,17177,91020,35439,12902,58210,57439,33481,25027,66193,85660,97664,66356,95742,81417,18259,53920,70002,60226,24949,64804,94620,93596,49207,71015,38251,58569,92165,42192,15278,10507,10479,56678,72015,40943,62389,42950,85509,87602,71748,16262,93468,17008,35219,45201,25028,53953,53782,85923,80205,18638,76050,60146,79032,11057,87988,84824,48933,85570,14342,62316,55726,13419,85925,45845,89185,46783,97630,14397,31844,64983,56174,95364,89826,90180,83144,17829,73150,90220,20869,42868,43465,25468,37563,37319,44389,88916,44339,85486,24341,18867,20737,99662,32053,12240,47258,77961,34178,90264,81074,48750,55640,38837,66437,87216,94609,57993,33464,45664,90394,58786,52315,53898,49063,61130,37695,65441,42270,90147,63405,86282,88641,57733,94998,83361,96704,85107,60447,38545,75613,34559,54887,22458,92023,30580,23781,64590,54650,19642,20725,92724,27016,83675,64381,73446,10771,49547,16088,80012,23596,92676,52293,52985,66741,36316,82263,22431,19222,52200,74117,58860,28411,23735,61484,19454,86461,89494,46061,20795,11566,91624,23910,49777,47792,97473,58166,27395,45499,22784,27961,21380,43921,47182,57959,56880,79008,71293,26841,71059,19676,32223,82414,35269,10260,77513,14792,22775,58473,26774,82446,41669,28200,59094,60142,54974,18576,53687,29074,68999,25391,66645,15908,68592,70722,43745,78455,87765,96158,43626,41993,37624,26098,86741,11340,72604,57293,72825,82019,97673,56285,65400,18033,90707,16597,80184,98260,17411,58416,94438,65409,39243,74210,76316,51667,78139,29246,65394,59973,31721,16938,11804,52284,51935,95271,75629,73750,18286,71639,68636,12093,58973,57131,26506,86645,83823,50931,31655,77798,97625,38951,31833,85834,65676,68715,33938,62032,62196,76044,15782,19054,98655,21909,70620,29925,57042,50176,95711,62700,24194,27208,53425,62939,87896,88978,56429,82394,47634,57009,62868,77261,47695,72590,26839,30420,19448,54491,81540,75797,85302,89573,64734,50159,59664,76842,49089,40076,35740,37860,99382,53444,24592,99066,18290,54383,89855,80028,46140,73069,33861,62883,83690,93868,84668,15321,33297,58339,65413,67491,32139,29208,41711,81119,90975,25693,37754,99600,68022,50928,14821,36106,45038,27584,98361,48791,19377,80867,24805,23717,73709,30612,92383,73235,13803,46964,61672,44727,35222,64735,46106,82359,49711,94333,86648,51400,43331,28387,55486,31345,63444,99925,43666,71214,82723,43256,16937,68872,68498,87181,89359,48050,58998,75430,19799,68992,53672,31170,69663,77902,81952,54919,82468,34783,82290,93978,80465,77272,26993,60081,71396,87411,84530,34325,33985,57119,90513,70273,33189,63729,40964,57160,72246,26250,35674,36139,69289,17396,58326,22176,30456,43940,91389,73835,32725,22592,85732,51476,32681,20487,28908,52543,22627,57042,95465,59781,83408,28700,91870,68714,15628,19273,41133,86345,38518,39677,33779,17637,33439,41410,65284,90588,81580,27902,35328,21313,29181,54485,96710,52632,36707,75131,33439,43923,10196,31185,54520,22379,59594,74410,73361,30082,13178,44091,75480,85720,62971,96115,91790,85801,51936,39924,35520,73272,99683,73319,80535,13416,32200,84354,12018,59426,18960,96288,80049,28901,46663,70942,49011,33740,14073,60111,53266,18239,99733,34949,81906,47896,32549,97110,94058,66103,21122,42820,41459,88694,46064,57839,14332,57295,21105,16029,96614,70307,93361,52725,69923,11663,13344,92365,45029,51802,66085,40878,89978,81483,85956,76957,85401,10719,99820,93251,42324,52346,63298,52149,65212,58546,14182,78089,62134,61716,73522,71064,38945,88439,89610,80834,33750,88498,50415,40253,72757,29806,33699,37267,32205,53466,44959,35343,32170,78419,15248,57729,24276,49857,13300,67176,37179,73071,63022,42925,94555,73778,37449,31283,19791,44083,88054,65743,22584,31497,64511,45127,80661,40419,81283,45440,87147,52808,82202,93382,15129,17812,35073,11024,86049,79348,47981,55485,21689,51716,81866,42886,57208,69993,51661,87195,36422,94504,18800,76843,40150,57196,20711,52080,11840,98937,44229,74301,34294,18857,15025,51720,84081,17068,30235,66538,13801,45452,15515,73713,29867,33641,15763,45817,57462,12021,24611,38451,39559,53842,27475,11207,82325,53801,88790,18608,65861,35630,45136,68764,35752,12245,64052,73981,14324,25326,66538,72262,47014,59708,82742,36083,38370,34655,41891,34940,88629,96292,58963,95183,73399,68210,80023,63858,18934,74402,14550,33271,76329,26370,46940,81621,11123,41155,15327,65896,93714,86509,93385,79656,71746,19876,26476,64498,97550,15284,43730,47176,15447,76208,51640,28369,88648,30551,15628,35221,29741,36487,68097,63608,61900,91994,70956,60633,70612,37734,60639,98106,42919,78650,66004,28548,15365,29349,79001,24130,12265,94452,51472,78263,45700,16810,17154,51673,58339,61179,38331,79751,84445,67142,55714,89643,76445,41015,95826,68493,22223,12559,82911,99946,63523,99081,54787,35692,35001,24987,95486,90201,74603,49436,82152,96934,55297,43187,25916,34421,25135,25215,31836,74985,59616,62556,41319,87301,94145,59257,70391,89890,88612,47198,49824,57468,87242,27990,73099,44227,67692,45013,10275,20426,18319,60435,60624,51354,69350,10738,76753,77321,77216,50812,22728,74229,19847,37643,36345,53672,61439,46226,25846,11140,61004,87995,74784,69773,78982,41318,50619,33180,11136,48069,69012,10484,72891,54344,92888,57728,51941,34834,93848,52538,71220,88491,98850,20996,93031,68323,36034,37496,66947,58985,51608,25331,40070,65549,59087,20707,17455,45753,59802,94978,11006,51847,93232,49853,71975,31415,49949,70150,89760,21562,20700,93944,55181,79941,54845,90597,15484,97768,74023,89787,28783,16423,52069,73117,74463,42394,26489,33815,29646,96816,82275,47186,87195,17121,45480,60720,68762,22995,63374,11371,80648,75478,57067,10933,14703,25531,27338,43545,80116,89844,74726,91466,39547,83372,42505,44458,28920,70358,10124,59629,28364,51477,59537,89896,75074,11678,33331,82981,95138,82311,25839,44822,23763,72921,52190,84319,91107,89385,42556,39036,79199,80920,82168,33109,26095,83928,69894,32137,70158,70075,19141,61329,87855,73563,59341,25449,85668,17197,63805,80906,35123,80424,27680,73605,40737,83402,81553,44682,65163,15953,45722,55663,12550,19657,46023,20405,55113,86840,60657,45460,70018,79826,17172,37647,86510,29419,96921,85342,13946,81635,23574,31894,36527,86637,60453,47961,56070,25906,66117,79481,31715,40686,38849,51819,26072,82857,32523,71472,32553,98816,43023,30237,87133,66292,26009,54817,30335,20627,17775,75270,68813,23281,90271,48296,65300,47033,86288,88313,55782,30855,75637,43305,41164,57985,46557,91636,83465,53932,41787,79474,92657,35447,47797,44108,63455,29338,27666,13443,27122,25608,48460,72803,67117,18703,32518,30424,98907,38820,64413,83552,35382,50233,55178,16247,39714,38856,90550,56355,14981,17047,45092,95321,78446,52283,88236,46196,75665,96361,24060,73792,95741,17286,95727,45325,37634,11403,84101,29167,40882,40224,15008,89575,90384,69709,88579,53522,87595,69212,68143,67030,91117,71847,10151,43349,44372,91808,65840,19575,47336,10244,95624,32890,64538,34851,13234,73158,18962,18339,41141,32122,35113,65043,94268,74593,68796,36566,68227,45558,27198,20441,26611,88248,13612,45586,62249,46244,69244,51391,33713,18863,38869,89281,15215,66747,50192,36704,46402,55223,27340,31550,80325,51032,11933,53862,80100,78499,18637,34068,97601,87208,42352,39982,23032,72291,80854,37329,55000,86557,54322,97189,29140,13272,84111,26226,78536,94876,55683,55132,47477,89584,34493,21371,49431,14474,24438,77426,71967,70271,96739,75839,38221,52859,55898,60662,98940,43842,23007,63848,50899,42020,87124,75661,27446,57218,67035,58084,78996,28869,78951,43420,41615,73853,74084,84832,51291,92904,38430,47536,17208,32494,40527,39648,69608,61563,80268,84877,93406,89402,57392,36911,73133,15277,39485,80840,34883,50830,26825,46764,28819,20415,97267,25090,91554,15727,52062,71320,51093,77907,91973,60040,38118,31991,58676,53348,69305,22730,36053,79729,75146,69110,13970,77891,29692,81219,50133,32152,11936,49957,98697,95042,26564,62680,85037,10081,92270,69694,15575,91098,54101,38722,70912,13797,45725,58384,23000,57917,50670,83663,64473,39653,47359,41264,69872,82167,12800,55171,93402,50206,14227,39948,79699,46496,78690,96368,33665,24428,57491,77129,18961,57414,32698,57830,86138,34907,58500,31185,44535,55587,10733,72091,77993,87729,78980,79734,30624,94340,92986,87722,45633,14817,57006,54199,63501,15746,52459,44804,57391,79309,60066,75024,99167,26808,10400,89910,82669,55340,71322,42215,24660,74348,55935,54391,42322,70543,96030,59564,50511,27177,57954,58492,10502,57342,64228,73941,24166,21601,89039,29289,89155,71477,62007,87170,76104,23857,34814,90439,10287,49525,25404,57693,36287,65657,11425,29259,46736,71418,21188,39952,69767,21602,36005,25980,88060,54996,65851,26934,37220,99674,67020,35377,60989,53175,79944,53251,46313,42980,93975,74013,67908,83772,38334,97975,41590,60799,36916,67941,86404,38083,24571,90581,95484,58587,86454,25750,19063,33897,97139,89860,44098,58183,59307,28432,95919,11612,86913,86890,66652,74022,21224,28783,30824,61064,72104,18038,64799,54390,43323,13744,97336,79717,19182,69535,75546,26764,82391,74024,60978,53283,38512,89422,62019,21674,11124,14148,68933,33139,58929,86206,88255,57281,43690,11836,14580,78817,37509,26055,76609,68242,81428,40718,90342,95662,98398,63962,68850,31134,21926,11593,14693,11558,94678,64012,79146,99670,19675,78021,74394,36766,40322,18801,98933,72467,32514,15499,18310,17948,16203,29664,49157,87423,22083,51144,84004,36082,82956,94905,14842,97622,20946,76306,87813,50202,52600,73418,38444,30838,43790,56553,63085,90184,39932,37573,22964,63597,16014,93792,77118,59799,64998,63674,68152,40554,50896,23020,54137,79766,14340,85937,81756,16182,65597,14788,24653,73062,54042,83177,59132,59686,30385,30871,52099,26898,97215,20984,68462,90355,49431,26722,39517,47145,40352,67691,90122,14978,14933,15770,14937,15082,15475,62256,37771,76633,29074,81291,47365,88795,99454,73810,20879,93849,46703,73621,66405,76264,94574,64217,24176,21328,11353,54579,74807,23382,33798,80063,26976,30152,47914,71943,74014,43550,15681,51059,51619,95192,94569,50759,90393,79535,44881,19331,56957,82847,99075,83347,62042,98161,56292,26529,97354,13341,74394,21144,90716,78792,41618,51870,50885,27503,49297,36645,43313,27893,96488,11003,41224,44264,90555,72289,82953,47420,17717,42496,55710,30460,21570,14705,93409,99055,71394,97912,62737,87186,87066,47195,30582,83269,46839,46172,79123,84867,12132,39766,52611,55237,60384,50346,55704,70150,21449,21169,74152,10174,16315,17741,82394,92266,39622,95860,25524,95664,89274,85857,11957,17822,28999,31563,92742,81531,74088,55708,43475,11556,46898,66411,64836,99627,61979,97666,39848,90686,89477,54500,50654,59034,92447,62244,17288,95903,31440,96976,68923,24932,34625,80259,42460,39765,83425,64639,68648,22981,74826,27618,81338,14591,93966,73307,39904,92880,19017,62252,96749,85755,51562,42970,55499,49376,72081,44572,68164,45215,79870,85954,95452,84153,94429,23984,83362,56685,54276,10516,88442,87039,94327,91555,48660,96625,59108,48016,49013,57260,59738,93968,10586,33914,77314,42148,78642,79556,37359,45680,97221,38225,92253,76539,11414,77464,57220,65672,13169,13815,96486,17643,20366,25475,88383,22551,33169,49855,22227,79750,23959,23728,66404,63540,42226,55657,12851,54359,59073,78229,28197,31876,78841,15047,77148,73061,12051,89895,65835,34057,30297,57836,39680,65009,51367,58757,79023,62760,55518,79679,26042,66441,14815,45997,36358,73823,20389,18888,10374,18821,75678,12421,78468,23992,86151,91588,17421,56786,11910,39164,17186,74615,99001,74244,58043,73472,43717,26431,28221,96100,77924,88879,33275,36552,53219,52749,11393,47952,74446,85345,79650,18977,33507,41683,76142,82117,38246,68011,12514,55984,76398,82696,27239,63165,87635,82943,99061,97990,91448,75811,79480,80155,81727,14637,51178,57801,29448,38319,90442,59461,45891,47892,50869,54608,42937,63643,63328,21381,20151,12116,72989,66325,17285,90187,77536,71861,91349,36241,52211,90598,72928,47378,90601,75726,90273,13067,95115,57569,34592,42634,24925,17297,18504,39969,41231,46995,20221,91109,77883,75756,69318,52954,17708,50339,41078,29175,93055,19224,36850,93064,71916,29322,15139,99138,97257,19809,73821,22320,75513,70516,45894,11241,40324,33763,30017,19458,50981,21397,45796,76302,75181,43442,13443,38086,99539,40620,54387,39537,75716,11945,22204,13805,27724,54995,22532,65614,83706,59859,84717,94038,28729,72086,16756,57899,19101,62977,14885,12789,36909,97800,56574,53291,10812,59077,92711,21008,99857,41659,53788,38699,53174,46613,82540,79809,36210,16848,94539,21526,53752,98008,26343,24726,13182,43902,21869,71551,87738,14819,46868,19046,26193,19560,31548,25600,39546,27455,29061,30477,47015,52139,94967,71107,57867,75565,23234,43421,27248,46728,19522,43706,77663,26005,11379,19423,21053,12790,54124,82661,53490,92270,58307,19045,71985,35862,64905,68638,11594,65674,74233,28558,76301,72732,74127,39337,70631,69511,70057,51828,99262,13184,76388,74699,37516,85189,94115,60458,49103,88557,62325,65038,19905,51294,31511,24073,96983,77209,14322,37026,32563,77993,60326,14353,31683,89891,76201,16458,33338,24073,67574,65107,40001,24934,69630,19641,19719,62135,52773,85820,47685,58688,52269,74728,64903,64083,38596,15832,12069,43326,23268,95976,76736,61836,13860,71813,48720,78541,14420,41505,42254,85740,80092,60711,84124,45250,53715,17156,89536,21555,98644,61810,10483,96198,47548,40740,56204,97568,39983,75994,68434,85882,66896,70930,97229,66424,32153,37327,85681,23779,62291,50914,77205,98039,40980,45860,90209,68887,43572,68404,28180,73023,33288,62147,29565,37528,87519,45808,38763,76662,80210,43452,29248,29297,40719,43227,40443,72277,97746,82176,59586,85563,11658,35152,36739,60829,63808,62264,15428,70850,43591,37700,80718,88941,36909,29622,26843,92547,74041,82774,21415,95625,50160,82563,50254,74478,25753,32333,78566,49193,79746,54261,22786,81707,23463,91039,47422,34926,41028,90595,63741,54752,84045,92071,27967,22689,45865,91890,55973,45303,14420,69549,79329,97899,55591,87153,79315,99120,76828,48138,46499,94188,25707,60370,33964,25262,31580,66144,56446,38566,36544,53716,94897,98851,13404,66977,14785,17127,39549,88797,36899,22029,23192,53292,98030,82786,28128,33382,42737,99330,19040,26431,59754,55697,72113,37588,20939,16612,76656,56406,50921,80478,15006,13449,42232,17817,88267,87491,19775,13772,14153,19283,33747,90658,33870,66731,85630,65552,37439,54686,15442,73171,80717,87650,19680,28355,78459,51953,53906,40748,12977,88628,36340,54125,12652,53421,91255,60542,99787,24272,99821,19886,41713,96712,93415,37722,79336,50187,94423,90911,10724,54086,64778,74437,93133,13658,84534,29467,38312,30095,85897,98583,51389,47851,79636,82603,51308,65249,36898,15891,90331,68934,67952,21206,31179,82251,12308,45159,14179,19555,90861,56356,19819,37792,87950,94861,87375,11938,34977,72500,85215,31439,51811,79346,19660,17955,94276,34864,34970,11763,56657,59510,91597,55535,49067,12192,75592,32103,97378,27828,53708,60950,83729,59810,62935,67544,54496,11137,53185,15445,67695,69279,31651,93089,41629,63203,23546,49378,51963,62645,25629,62235,99063,90494,57205,13915,53433,76460,73654,91688,77068,55418,59381,33817,49575,20303,52040,92324,29648,93925,46651,23239,39006,59492,10339,41128,20166,48449,25980,55286,66411,97926,79613,66999,68807,46441,89690,29892,98455,94756,18970,25971,52862,56363,62150,43394,13489,62937,40064,67372,73240,47824,72736,39995,84180,68804,90621,81286,73599,51408,18522,49878,52567,57736,42294,74493,79884,27783,23024,13376,78002,47940,85078,44593,21520,86075,14157,13057,49073,69920,50375,62084,25492,45916,73626,41808,63322,25143,53448,79569,49547,28057,62389,17676,78833,99754,18539,44617,51948,91643,51036,93509,67409,38763,63210,84585,74673,88467,65583,35467,18041,51694,82033,57147,62083,18650,69326,24417,83743,65094,31979,88474,29878,97998,89307,34579,48017,98967,44528,52550,76247,12789,30550,69406,67832,83669,61193,15256,67259,88811,17991,91767,49595,79238,55329,86964,98388,32410,91186,82838,94429,18613,85639,48294,17120,34720,34993,16119,54465,25511,66467,33909,22585,90093,67451,73281,84621,60686,94570,48535,20070,90271,57807,82199,55967,51193,24417,42255,47157,69393,84867,81754,97394,25368,10032,20021,84792,16454,43850,26475,96329,15315,70246,74526,41757,45528,80047,12371,87680,15793,24036,95091,18251,73311,72006,56421,64264,22050,78178,22255,43372,66024,89310,64543,80061,30833,14227,81209,18793,47136,64160,14698,51341,19336,47477,34938,45360,72268,19179,32693,28163,90054,21157,41411,89026,42806,41819,90374,72319,61014,35757,71930,37311,31680,22069,89066,34648,16719,46492,14028,63804,19486,99748,48742,79905,97479,77081,19257,37049,86199,97816,68898,94993,79720,50021,10389,76172,89548,25443,91950,47223,39269,39871,66196,77620,43663,27103,43433,70229,28995,71442,92186,94323,19100,71231,70892,28930,86772,11925,85188,60012,91594,92616,62300,67610,79964,33217,70970,15517,41397,27549,24439,42995,24727,10548,91698,15106,42419,26379,79365,95783,59557,94224,45932,86408,74285,89754,53087,78762,19253,12372,23774,58796,30945,96227,97056,75115,82441,76309,90582,78188,66081,50122,97803,25686,51984,14867,33191,66621,95574,34599,39476,78373,13857,39422,89195,74057,26680,35399,63631,54801,27736,53380,91176,47474,16470,46937,40270,58476,60063,87677,71108,29881,40444,31533,65218,19115,23517,81640,37029,56774,47195,85678,25015,29053,72941,79595,64009,12528,26696,14690,10485,31444,40881,15949,41246,53469,45457,74893,90217,87244,99875,67223,47334,72581,90700,16688,19601,89739,46504,28028,87810,80366,58134,24960,55357,14352,21934,92187,84528,74494,91731,49131,14773,94324,59045,38026,90189,68258,81414,67898,68453,36552,86479,95001,33058,49308,14811,65903,57251,33713,57844,89653,93486,44141,22264,70631,87161,83091,56450,61778,27059,53723,19853,16158,93804,68235,23790,50178,19016,16599,66887,20952,51002,61827,85651,90219,30986,90689,99834,77681,83932,56383,48204,20807,32387,11408,14842,55956,65271,87570,99650,12760,36781,54027,18077,53919,89508,98275,99154,67218,60711,15339,80461,74226,68416,13247,66881,34882,50563,12351,66100,97468,34414,22366,34194,32235,56398,23248,69282,67060,36073,38769,93034,82754,72722,66319,20163,89014,91642,12672,19249,55944,57543,83872,17241,98993,33851,88488,32581,62545,67967,40817,58116,72995,24178,98721,99690,35508,77119,66763,97728,84550,24398,63773,96054,19111,58871,14688,24797,22193,72162,21191,95814,53062,30098,14843,25554,87852,69645,29359,83318,69942,70978,82234,25210,95533,55292,74792,28894,69950,77767,62606,98423,24363,91879,87716,29000,62624,29882,63432,87007,89078,33400,60354,55926,60558,95351,68491,11129,91186,61254,32798,46858,64030,92168,56523,39847,48430,49597,21938,34518,27069,26661,24210,66871,26993,89260,29881,45231,80596,92123,97202,38833,69951,48033,63401,40863,11568,61615,34959,86428,96213,65482,98099,91913,95061,97490,26536,20687,57107,99485,59038,51462,84826,99422,89102,76345,58815,39092,28509,80746,99616,41984,34739,92851,13698,42508,32356,24189,47367,78402,31882,55477,80607,12221,48471,15407,82269,37208,94775,84039,42321,95307,77222,93638,60705,86056,10650,79088,64932,63519,95549,81579,42916,99012,49995,62793,62345,76476,54611,88755,42238,81067,68465,12677,32792,38027,49966,37579,89335,95726,40967,79622,80541,62945,27790,52298,59760,72934,38578,45577,14585,57199,15949,99711,94212,13588,57859,76413,39697,50848,97747,23976,35235,83012,16752,17454,33065,11782,70946,24261,48300,87232,48454,88247,23678,64509,47671,24041,34571,23355,76965,71184,73036,79806,95424,48491,78106,23068,81887,91304,45216,10337,57745,80013,43928,21413,52954,13411,38536,75911,79730,55530,84078,52055,56207,40648,28906,45755,43310,39059,76708,18417,44936,22532,79710,55806,79251,36574,56367,51166,67159,68923,22970,38459,13638,39408,57945,53875,38016,84218,10914,95972,20010,27276,65409,71625,17621,24477,32222,80901,80949,66226,39290,91053,42817,89859,93382,24268,29229,84026,14034,84883,29510,22609,92150,66227,89068,97907,31826,81733,34908,45324,22101,51215,26693,92778,67104,32257,21141,93460,50147,46488,92158,19419,75314,48368,99586,84183,78550,74155,87541,47659,56111,88859,68417,16075,23448,29100,33005,68532,57969,94369,29803,53177,71401,36824,92639,44271,78387,40324,58628,88140,53589,80601,63286,57083,32788,66136,72412,37427,50221,34330,65868,45790,39847,97379,26036,39040,74060,41355,20427,44127,11706,22005,37393,75590,36173,31174,20635,47752,14054,52093,93472,37908,36786,89776,83529,83124,37944,75551,27658,89071,99263,97435,42065,44514,77647,20130,90847,70945,32964,65729,81704,62912,71039,79300,47560,33314,80117,76372,83184,66481,74640,71797,88519,23397,54988,36462,67001,77758,40212,67993,45371,96099,88165,10468,54000,73619,48549,93178,71314,97492,58041,32471,27679,33852,27418,76351,13278,19582,18303,87547,52684,63689,36263,85719,21855,84600,48182,26716,71251,61651,18605,62556,95484,67993,31951,96032,62147,32917,35790,98381,66023,41976,47580,28611,55906,36302,53657,50557,21629,73017,40318,28128,25247,63555,26266,24305,50058,91322,58689,61570,25528,33407,74121,85824,65580,22269,72206,10680,88737,69523,31012,33125,85650,37158,30713,20304,95431,30118,34476,85694,18544,17681,97700,38956,83977,17360,22409,98184,24860,65623,24770,25136,43136,75851,49351,21127,89113,64699,10817,69219,75267,32808,72647,15169,10880,78162,17963,66350,97879,49378,31415,81843,56083,96065,90361,70434,49570,76755,52759,15589,32035,28175,57504,25036,98725,39173,60317,24516,75405,60602,96975,53355,51265,21341,64858,58662,24403,16866,10824,15218,99163,77665,22758,84896,23500,25789,45349,56018,73329,69638,52923,82160,70173,96853,45900,19233,15946,72050,46055,18040,30146,23042,73596,13016,65727,33589,92212,15907,40081,28166,40931,89031,52485,24339,91869,92924,34646,67067,76046,43242,48426,57252,63191,62871,96125,90776,58953,19872,11725,78713,59812,37896,47258,76269,92927,43673,25748,13438,67194,11072,64746,55174,31475,12899,79536,93699,39612,29879,91841,39737,22468,66870,86980,25650,56059,97557,16650,73256,17037,40689,95413,27594,41745,94048,24251,54983,50416,45847,70190,84147,65090,57858,51776,17432,14176,44719,31497,70785,17576,48029,99602,53004,39250,87504,38880,97514,61689,72468,22082,88285,88189,79815,17970,77741,75817,31876,13704,96630,16549,36871,92461,18529,92301,48642,72900,47719,72218,40260,82571,21107,27879,49574,62424,70989,30283,46330,69863,38382,19132,75505,51311,27755,49611,88581,78548,56676,73591,10229,67327,39517,96939,80862,94536,68564,65567,40556,45958,84536,43713,93899,75103,99413,35559,58711,94485,25549,38864,78520,64478,90042,71418,17900,21223,26718,66819,25920,77137,42124,77672,87223,96848,32956,47760,27689,20724,73301,81725,46133,49565,46653,32415,76968,24056,40517,25213,83279,20243,41923,67305,32631,76416,21309,34824,21146,58188,15156,84293,51580,91342,67485,84780,74136,88403,67987,18038,11497,37464,33994,86619,29591,22320,93591,78161,91759,86778,88314,86592,96266,93759,45341,40253,20170,93983,66998,96685,58911,82792,83394,47869,88246,45849,60030,62017,78004,77534,24262,33321,34655,96039,73570,57577,51031,82912,86240,89690,62525,56534,44359,99447,20880,60992,11218,85881,22830,11373,73719,14674,17858,71179,68509,96213,79451,82908,11026,87409,71293,65172,56290,64177,17993,67833,66295,30352,37931,48736,23547,33048,35362,43854,24306,76984,73308,96566,63087,61175,52076,98004,94499,80360,93388,57028,24592,47047,24983,25931,42610,40956,79362,49914,35752,60462,56316,95402,58876,33661,96412,59739,75533,15089,77245,61999,70279,85807,95181,44900,54295,43447,51089,67808,34412,47010,21762,56816,16223,39344,96640,38651,68573,57068,98884,60552,75284,65165,96023,37704,59693,93443,45287,29117,10392,41647,13289,69870,89088,10940,88666,38854,35108,75463,99941,68858,91538,78627,34135,79520,50032,16476,43674,46659,25696,78848,31189,55945,34344,78712,92163,17954,37484,60419,64631,10227,54369,84877,89924,66822,38409,54812,40030,49440,60690,77443,39992,87787,38989,49461,12809,52349,91959,40076,65737,21159,25618,55323,65697,23589,71516,55657,44971,12575,90886,74790,30674,78922,64215,81443,46495,46556,12493,69538,24023,16436,43481,97097,53612,14296,26161,45060,22668,22664,69964,54406,41112,75647,92372,75144,12557,42527,48233,94844,63213,45395,28137,42888,57372,33823,11470,39417,11812,74319,76475,69274,23934,18219,81544,85871,54735,56536,93698,62371,35747,39647,72349,53470,25702,88120,14679,94091,44551,29195,77522,25549,81246,96646,88793,93555,90582,85075,68492,20290,91485,18314,71204,55304,86057,78439,44141,67190,32793,13508,73018,18512,28786,82196,37381,78301,44994,39418,90070,64319,53248,83962,81620,77723,45555,86900,67348,11924,66177,30902,72287,95339,70994,20314,94902,71759,81946,41175,79975,10501,91415,80235,14273,72969,94863,16940,68148,97094,61910,24635,43174,27740,33102,66565,98609,10779,47329,79731,69893,64836,17858,68020,66959,66616,67785,86127,88580,82645,65526,34212,50730,87341,50167,54928,23457,66514,79389,47797,44734,65117,43198,59600,33104,55022,84693,28402,83870,33221,27868,54098,73870,49653,12971,33301,65023,81013,30915,13901,24400,96277,84111,31184,10884,44772,61216,79260,67774,32086,88341,52350,76715,33050,49533,21483,36505,79066,16415,52780,79355,79316,38629,51000,94386,49094,57488,73287,54125,53498,35800,64532,16047,36751,93935,73591,31280,16967,73090,81109,10751,30217,65449,96420,91569,63701,98700,64639,52503,73003,20723,15852,20986,29105,49205,56141,54362,40884,89028,47732,72419,64894,76965,56800,66211,50618,17664,35695,88948,48305,69026,98045,20707,98425,85903,66492,33682,75709,80624,55302,11625,43402,25182,47112,36129,79266,70508,10154,42132,15415,17635,42679,95995,17506,20222,98544,63776,56718,64782,11488,87214,98044,18534,85137,84987,66319,11925,69310,84376,50174,76455,27156,92766,54327,51520,66509,80981,28220,14274,55844,25596,45381,24595,19190,66908,30621,85484,51290,27126,11836,21987,62851,39671,66093,27516,14763,97931,95818,91419,61160,65578,12784,59619,24713,34703,61087,25090,82516,20521,36940,39666,82792,49998,20479,18540,58323,28523,61363,24030,93789,19922,81827,47207,11527,54662,60602,91402,89121,98825,51675,25657,87321,13983,96455,53608,34400,68593,94290,72249,98216,35524,64168,14986,50628,29955,45071,39674,21936,93552,22698,81276,67056,84345,94625,61300,23878,23586,14343,90040,64837,46863,39110,51365,63782,58361,71583,29266,44877,52036,44785,37514,19081,44223,35319,34768,20793,16182,75654,21339,29999,88991,74284,10815,27883,10088,94789,74059,75683,52627,93321,20239,98515,55135,77751,18384,19251,73881,73350,90678,23271,13203,38854,34496,30267,30692,50810,26494,98741,89726,43508,47820,33526,82285,17651,61184,97219,75148,14213,43215,56321,28470,96430,36793,53994,15829,81789,36571,35847,52423,24520,76553,85403,32289,82315,31951,32407,84909,89408,29138,77269,67182,99560,60795,28958,41937,51618,77105,92073,62800,53708,21732,50431,41505,12563,92240,68668,53021,44135,36972,93010,17616,24837,15915,75692,49735,23963,57875,12753,70827,89741,44693,27692,83751,64910,97304,61870,94726,63922,67232,66083,59015,44758,84976,96499,89202,59153,62393,84453,97811,57703,64781,87386,78842,79989,75937,53463,45195,24760,73478,94253,65014,54582,11230,19911,43328,52253,86139,46795,15875,78388,19919,11081,41161,81898,69175,95631,73969,93733,72236,80068,10727,59197,44667,60069,84291,15715,28561,82078,49234,94560,95072,56486,29026,17999,66655,44714,22004,92133,59185,87150,34502,20494,29933,92652,53961,67646,63191,47458,97764,74836,32875,15190,74123,16713,63920,52943,83666,37645,95629,84310,29467,22035,69496,70023,24616,91049,45421,46380,30067,77572,46665,68719,81971,34091,50655,76835,22028,62991,94007,94441,53218,47373,76623,94356,19795,37149,10671,85577,29000,18201,23692,28125,78429,21956,87936,34429,31342,63848,95386,47707,12462,24558,86123,44545,87050,80643,67909,13719,65238,74017,79834,67561,71874,54851,46530,90830,24620,39716,51870,71609,15276,86408,15102,40580,59994,86725,20512,43001,29028,23301,45937,72310,62666,65132,17163,26215,70607,15898,59282,89787,63851,77300,97214,85140,18449,22444,82739,57999,74537,60689,70521,91329,32002,17437,35616,37194,37799,18993,16414,19806,76045,23873,59038,88439,26451,50896,87243,47751,73284,17825,57208,19395,17318,94229,36246,83588,33894,54177,98116,83910,11787,25995,52787,21337,96613,97164,32181,12484,26021,39396,52957,65037,77692,84350,50384,84311,38554,89880,68120,44953,44410,57764,54324,80450,59229,29331,96785,83042,61236,48948,26070,51253,76738,79541,23303,34933,86008,21030,90622,49390,98361,84300,33005,69017,50222,46180,89700,17530,35715,16533,48934,93404,51556,15939,14218,97941,15504,34697,88075,91255,23882,97187,99226,27243,44743,45213,99840,71649,62595,84154,61142,98641,60997,32408,34340,24950,80431,65974,94178,89595,88226,35136,65788,12354,29100,38323,12654,48412,21106,64655,20609,39834,35883,44929,30558,78785,76475,74916,63842,78037,81807,31132,69990,70265,98927,37571,49482,46774,35871,66019,86109,38201,32875,27665,54864,45047,47704,45072,82700,57966,67059,22146,53648,16967,71227,69524,64032,39763,27102,28528,54362,65284,36851,12337,72445,22798,43101,76131,98645,81458,37536,10746,91165,12218,70505,45920,83131,26442,90013,54192,40737,74519,51997,62009,59161,87579,33743,36553,77801,71993,68589,89527,48456,10833,70143,64909,69137,46830,97860,85479,91666,21624,93678,86142,28349,84108,14116,36633,73477,12936,52165,84673,85364,50021,42648,25322,44629,66856,11708,38724,28665,93948,93933,77239,15234,72765,67135,21042,72052,71685,39374,45522,28903,48748,56793,58798,37610,70812,38790,31266,91057,27216,66825,38241,67411,41831,35581,72217,72248,40787,50379,37045,75102,29438,13276,89197,30051,93052,49302,28772,50185,62702,74376,46364,46023,90869,99433,10549,12906,31811,11154,36358,22400,16367,92839,57054,75570,33961,29191,51169,51995,73496,27167,35771,81461,24657,58130,66308,26051,95905,40809,83965,33580,21576,14930,39444,96680,48690,39652,30378,97474,63620,77455,85500,79146,86693,43514,59439,44673,11234,67476,52769,81538,34914,85902,17356,52420,83880,20325,54256,78185,97697,21980,54927,46567,97207,63249,25252,13337,54923,52913,36800,44490,88624,14430,98998,50747,12277,73442,46324,28816,95799,51501,82068,52505,78244,84276,88007,53386,84259,74664,15203,71398,75585,35792,14971,84865,35753,86563,69836,26378,11826,55976,84840,82256,35009,25981,82674,97817,64086,62156,37875,14428,39179,63045,90759,32543,21888,51997,58415,15771,17564,75164,37656,10713,90040,14627,12901,58898,99408,50265,38000,78607,79789,55507,89220,53592,80702,84038,64600,39854,87082,28793,12904,10172,25544,62004,98770,64902,99311,61076,60795,96547,44080,30330,36563,50133,22263,38583,28503,70416,80785,94836,25385,88793,39616,31635,99203,90730,41982,70391,41336,53117,29127,36316,84155,94415,17077,85714,17996,68824,34255,36165,22912,76879,33813,36372,22266,56447,28882,29284,26389,50225,55837,21352,92950,26760,50858,24832,10223,83073,16477,23517,34291,53238,14079,65188,24263,32503,91541,66968,72908,67933,53124,96709,37688,28440,45852,10008,11260,51693,59474,18741,96605,74646,98164,44673,33727,13039,50832,16039,15640,46858,75215,21497,63459,57270,92343,53135,44180,92622,97739,44603,67613,52648,99541,10174,58757,38521,32261,39013,99079,64825,88061,91259,71565,92744,42001,38457,14490,37435,26563,38151,67228,34680,78965,95217,70184,92341,15780,42820,77965,80263,91325,62034,24214,65244,61597,57289,45242,36303,81474,64392,84756,14839,23640,85754,87462,68208,14945,30455,46217,56550,26635,97218,92269,70376,55240,29217,77741,20961,91471,27750,69949,30720,55030,45299,46639,48211,60656,86501,75680,21347,88605,23895,20328,88262,81183,93993,95737,67563,44410,34100,93546,98759,71519,99656,52175,49513,76543,94642,74248,30757,34800,49193,11210,39727,99125,29410,51589,62637,33152,40813,60213,10940,56711,96485,83062,78106,67679,47755,94379,37562,61796,16943,20429,53753,42123,51193,28238,26372,99761,25606,36020,29629,88482,11180,26597,14323,27865,39124,68793,79671,67519,39058,94216,12965,39513,66026,72463,18368,78639,73538,94733,29942,24187,82439,42541,99802,67655,22748,10688,69735,69061,80757,54956,12229,18316,58548,65003,17220,47582,88838,21344,54555,34413,27826,92872,53869,19249,69662,39693,29612,37107,60314,92374,69070,74147,14184,31063,48837,33337,68348,63859,65839,40169,81306,76816,44060,43286,23735,55247,26997,11054,19037,38441,34626,22022,93928,64332,82910,62788,35622,38136,84313,16797,72792,67608,38369,98893,19152,95396,41269,64021,97258,72713,15973,49456,73225,66415,23509,68796,20753,57407,74543,47038,19435,58666,61370,66011,19476,36237,52094,97414,92331,77128,79000,61534,61309,32553,49419,87076,19609,39185,93422,52761,38846,50580,58852,42905,33465,71054,13996,63227,23913,31888,19039,41560,96291,87336,12294,32146,66508,59491,49049,98838,14200,23305,31776,22592,55867,49761,91776,50130,56579,93876,44692,92391,24773,37488,49282,27348,60725,36060,34841,31259,19204,83743,23160,42839,70238,34990,81243,67309,46594,99481,18164,41817,71011,67892,32292,18527,80267,51232,39602,10140,72666,43416,26382,44595,96339,74988,48717,22850,34881,88142,67113,73368,78511,54114,70081,80362,33620,15148,95568,55009,68447,83757,65828,73734,70050,20685,77389,25741,80429,67256,59563,54529,53867,16906,23277,84019,42094,94000,98258,49113,32962,63727,83084,69276,13797,10765,74053,35408,28838,16656,67632,74096,81027,74173,32145,41815,35470,89247,92523,87307,79564,26950,41816,58783,25048,48247,10319,34530,93389,25076,60526,96369,11410,51221,73027,39591,65753,34890,63864,56784,90625,72563,14613,94413,17123,50040,41901,10175,18608,22497,91555,25777,21138,74021,42943,10429,98431,23583,23583,30765,77025,63955,52985,25519,62241,95077,41718,54148,81029,50972,99546,18542,69429,31215,39108,78648,48510,52818,40707,15334,35680,81238,69492,18115,29121,96825,41518,40782,70848,49855,69918,65604,33789,88832,93947,70815,69154,96330,27408,64389,52828,24040,99977,90420,22665,47135,24867,83000,74624,35836,39062,92025,99977,35730,95763,51252,78896,92810,87649,71766,33555,55471,94187,17221,89542,69362,24514,21362,65791,86923,48726,52007,60740,73899,59425,48649,96105,91929,27338,22212,28031,82532,33796,90728,52184,77341,33352,16553,41861,77779,97456,64368,19738,64207,36476,47079,88246,35281,13142,92685,29078,72419,10791,59554,50987,74393,36954,95259,58540,97473,16269,92820,77513,29526,30651,64711,60291,18977,90546,35924,62608,42086,54723,99728,21627,39258,23829,62050,80175,92925,44612,30068,70990,74767,18419,28853,47202,84892,18538,18531,46505,11773,66122,21530,51752,60881,53762,78324,19476,65852,83677,77814,23526,42033,31322,19297,35457,84380,30969,73979,47579,95676,60487,30411,27289,52083,56073,17096,30132,91646,89605,67523,48996,40197,60901,19698,27596,57937,45013,59608,47029,32343,59863,89761,13561,60685,12199,70209,23108,33478,51802,75644,25746,35408,34896,14556,97495,42627,37377,27643,79112,44085,83428,47544,22451,96325,56497,18483,60201,89169,75783,49976,47339,56644,51849,36501,84084,15493,35959,51721,88769,79781,31575,83370,75956,56160,82305,69203,12591,60200,63700,37930,19182,30139,66911,32197,70245,37890,78036,84999,91064,56414,24366,42413,85772,37580,70432,87004,39747,10187,73291,60352,83707,20119,80608,37727,98723,34043,28805,77088,15377,87530,49491,49630,66124,15656,91908,58787,47702,66646,30055,10788,36489,43508,31802,68932,90693,75782,40749,86085,28836,70448,24768,61550,25889,79594,57881,94103,33573,93033,43742,60580,36891,92759,21420,39832,66110,31569,10632,41738,20519,73436,52402,80038,16649,96089,14912,33642,73056,75716,21384,47607,12178,10628,25955,53619,10644,99315,56355,59304,18408,53261,66255,27250,75591,79345,23953,80360,30391,58625,80661,74832,18823,88080,34132,38870,11269,37272,59453,99695,49658,18166,19968,57099,71890,33538,38470,24574,65438,69706,48504,73127,59112,69515,85458,29830,72458,24244,30639,57493,14854,29977,50325,87469,15517,46724,30289,71152,96012,17609,15502,14427,25638,82671,15010,21647,86048,58177,13038,15760,40006,19165,87648,70905,90174,70447,34113,57561,65995,80172,39044,19829,99679,85352,36252,50555,84654,99089,87780,56639,69307,56688,95007,87426,99485,70335,56276,37026,26003,74594,61557,99782,94688,38017,14247,97906,70463,58817,58422,50204,51512,62142,57156,13144,85425,30255,49587,25479,27587,53521,19104,17203,85523,84373,31652,83890,60088,53698,85562,23848,19571,26493,47171,49926,44631,24964,19914,78128,12540,47455,64384,12020,88047,98521,44079,87890,56473,38572,50617,52880,66123,27605,59911,13721,82907,32691,41777,63973,32744,31778,92350,48368,12956,83585,32082,39017,17841,14550,89230,27000,21051,19118,95685,23587,80301,73739,66138,25342,63787,56904,21383,39163,43217,28708,27025,36808,53941,64620,42674,44060,93264,67214,94632,75557,86929,39412,27742,67128,10359,66764,41304,61370,64740,43737,26209,79387,93714,16985,20598,31308,77454,67905,66899,37642,99713,64203,45647,78524,29028,53568,37193,57287,96102,79471,90200,38734,70631,93734,42291,12061,31697,16165,95209,53103,14263,55347,36196,31636,69202,38295,76046,68148,75444,76855,46092,85734,13551,65608,80545,97669,69990,21812,85246,91826,44649,96683,11764,60306,67127,96342,21510,58220,33067,30331,48375,87031,87568,58769,68970,10791,12888,29743,28368,87070,20586,51537,81768,79182,39354,56449,23898,77332,28449,83389,88588,79092,52864,81039,67369,59744,28952,31448,47291,17379,56863,52365,68354,21860,28716,66973,67966,44285,23218,83318,33817,71274,96532,42618,94104,34201,16870,27716,58379,59726,78640,27165,10209,63947,53777,31075,62149,32167,29272,40829,65870,10898,75546,83300,76050,63346,15286,20709,68033,98151,92260,72512,49813,69222,31605,94745,84542,78328,62806,88306,77067,29339,74295,93055,52789,73679,58006,26051,14570,86130,46355,68479,36589,48894,81877,70394,37471,28092,43130,98323,75881,55100,62592,19997,54734,30787,21971,29491,94823,21404,74989,28542,80736,93626,84750,26041,92374,16666,51501,60571,79440,41480,12496,17347,97060,89690,53136,60888,82000,16440,32679,32074,90391,92286,49431,54340,11408,20733,90288,65617,82792,23630,12739,41312,60520,93354,26484,49278,53134,58839,88912,94743,10015,93452,61997,11345,76105,27105,62069,56653,65297,94368,75785,14656,27310,24316,70806,26146,45283,43082,99560,46809,77842,36035,72745,20266,27045,51371,56233,68515,20647,66542,36526,17921,87224,20565,30666,32051,49545,14193,56931,65668,25892,96464,62961,72391,92470,32627,49592,37306,71361,55263,38556,57804,45868,96774,37427,66035,36771,33760,48619,79688,35260,20970,39461,51667,93941,53434,27534,64815,73878,91520,70382,45856,38164,98538,27490,96152,88429,65492,26758,53257,99044,19751,30663,86829,95690,17113,95080,84976,84785,73343,29200,71885,63657,33784,49773,70131,28314,67903,82305,55484,48464,28410,97309,32186,84077,68028,22046,98801,34928,65263,11950,34060,56327,51158,80101,99404,98058,61720,42187,77028,78110,18880,49231,78883,93148,93901,98167,49209,27190,61529,79589,42069,56502,39063,95195,94808,76832,76536,97885,93122,46296,70658,52704,27539,89649,16814,63754,35924,23277,16373,56671,63736,65375,72115,87114,52606,68490,59644,12464,78271,10482,27176,79418,15027,70911,51681,39901,26334,30982,88474,15462,87283,55358,85144,30362,52089,24806,66268,37490,69246,84349,79473,18747,26556,92553,70457,15758,54630,95838,78477,46479,54326,62148,79269,16970,62611,48289,65827,40838,85040,93006,10980,65425,57353,98946,21329,81788,75053,99743,46819,40128,62184,41815,42332,38903,84160,81011,92347,34106,72440,67205,60005,51843,94033,59282,14781,68115,48482,93656,25677,41251,94988,33784,83152,90758,11651,12015,31201,91536,36728,91262,51024,22519,23911,34947,46843,21770,78909,67964,46741,35725,97984,55820,80070,26521,89506,51815,80732,79594,98898,45313,15745,59667,85035,35192,39578,29307,89029,73484,46872,63625,71730,78619,61540,72694,84817,80142,24820,62676,94045,83891,34790,91391,34470,62111,40859,95413,29918,39313,59312,24273,35320,59209,24876,32310,94128,66575,83797,89885,84536,83968,44011,77425,69083,68768,96400,98483,58610,39511,86489,67300,45067,73677,65519,79142,23823,60511,45303,47389,55777,51968,19883,52430,58601,32904,41195,17294,22732,28190,78116,31530,42035,53630,17441,93338,41358,44930,80867,85731,87214,85427,73131,21256,24176,29189,72693,14041,96817,31371,20803,34807,57116,32026,46552,66327,91285,76733,60143,51468,81278,80020,78576,35729,46356,52947,90476,88008,92129,39797,75370,32180,60512,69305,78671,66867,35174,99139,20266,26870,99245,83342,17129,65684,71004,88779,88391,15294,71300,92617,15247,47436,37151,36153,40937,54340,42917,28833,80818,93769,70130,40720,81546,12868,11349,35217,24221,41313,80332,87011,35457,52784,70782,83405,19591,59787,67656,65196,42091,25478,39807,32265,89197,77562,18057,60503,18319,98051,80335,35791,50783,69605,12130,88724,25999,63523,64011,55759,10272,52375,20283,43911,53522,13402,91681,36462,74313,68782,29898,48814,54756,23716,20587,74897,89298,32863,58594,90152,91953,14598,69981,37407,70503,39015,18245,53476,84863,71592,84204,15062,47149,83932,42736,39035,16486,87953,88540,53875,79721,62916,10715,57053,66742,77744,83043,23069,39509,23904,13890,42027,72499,83273,68272,94779,63667,60941,42730,43327,39497,30666,26316,33681,71052,87286,19421,51495,62258,51735,96957,18216,86074,82519,18797,57714,13803,73834,69607,49462,45738,78880,49683,32947,10547,33865,55273,93618,75389,78839,35996,62922,35567,40468,38928,12523,37038,52184,17968,58511,65865,82031,17106,91173,55024,72055,63308,18792,27577,27280,92213,19302,84849,39639,52811,57312,42559,33175,72156,60648,73738,99261,80870,58110,21010,77242,82736,89054,45336,30106,12330,81566,14997,31071,85237,94538,58066,38645,95709,61849,98630,14580,40908,82902,74901,51705,19886,55674,23164,69823,84822,37916,51047,52970,50501,32608,69953,98223,25434,19547,41172,39310,68139,97203,64885,57697,76700,65164,53344,47574,58657,42989,94950,56914,22435,38589,23607,49648,61657,52916,35506,50422,48355,22204,80170,10396,46795,50640,67694,39126,91794,61680,80132,48591,81329,34457,69958,55420,18643,44733,31015,82804,14580,58123,16281,15496,72173,28539,39155,22669,91699,32282,36847,54663,43416,81332,54729,84272,61196,68727,91187,73435,81532,98331,16997,30008,24853,65986,87227,31521,54024,61236,60183,30985,53672,25502,83049,25327,88294,49383,62084,12783,76658,79571,26995,93842,10378,30381,12031,88441,43924,17020,92353,31944,63603,19356,83676,51498,27163,74895,82393,70878,75274,81110,66121,77485,62400,69995,14980,14169,45866,42550,53716,68402,91344,75500,61579,43665,68272,44033,89447,14888,94843,66186,93693,51268,39100,45105,88754,11152,12367,87674,81324,38135,62252,18461,68301,42320,61181,71565,61103,91803,18867,36187,66844,37196,13361,72673,50472,28200,81381,97980,95994,99530,30585,39813,48415,87595,53753,69837,28012,42794,56215,78074,20802,55213,40527,47745,96981,63462,81073,74868,35469,51715,29034,86778,21117,60939,50041,97037,48001,83979,90564,13156,69582,30956,70074,90896,96518,51628,59368,36456,60144,32053,70447,16960,56412,62080,60995,73431,44122,26395,10795,97591,50461,69198,15826,86405,54751,15098,91796,19423,76257,31014,98744,16853,87150,35525,25396,33828,86453,33502,50193,37389,84106,42056,41669,99253,89668,80024,34494,83374,69349,62468,32085,82884,55343,75012,80483,21028,34282,55729,91417,54235,79795,57772,85660,22259,91982,72292,88284,73578,17637,76829,90432,67625,34195,79921,13997,70834,84682,21511,69689,75465,77131,20063,89752,32229,97035,65322,27751,55096,80011,40660,64830,91498,77307,27632,51519,83232,98887,74648,90075,27762,65656,90796,22963,84417,16853,26633,45969,22354,92946,42852,94234,87639,83273,66075,15710,23754,20568,80793,17754,59772,99063,33587,58949,40870,46752,98103,92919,66496,55244,84179,94783,20764,98188,31418,35988,23858,97386,35304,39954,25297,80974,22074,76951,47306,39198,95925,77454,16422,94628,87058,23999,79460,95070,88017,76233,56458,95339,11485,59296,25987,71551,99557,92453,14196,93483,74284,22762,24096,86016,66759,98455,20543,77163,80251,41965,91549,10725,22546,91551,30012,75142,17323,60629,30782,33318,70960,83465,94185,76084,28156,80488,13096,82023,15025,30422,87073,23318,95522,55303,79293,35846,19308,74901,52459,98782,97056,19854,63038,49070,75112,44414,27664,35492,92315,94478,70333,81905,94381,26372,88031,63160,33245,38677,69611,27986,35585,92459,26893,41810,78165,88127,47504,37915,78059,15376,79856,72573,41632,60494,44015,22992,85396,93651,77770,65646,80005,51472,12514,60651,35039,54598,33856,60471,56549,16097,75295,18452,99328,40982,43515,13698,50165,35082,84744,66580,34547,31138,78654,15528,29302,73178,10091,32197,46262,23972,14702,59891,17523,56687,60965,60617,35794,38087,79797,51395,98439,67568,42752,36073,12550,89716,65208,48928,22776,19782,32940,41321,67185,29792,11715,59284,11402,45895,87396,56701,96518,19995,95838,40395,19160,87194,14075,17033,74489,84847,53540,21094,89545,77736,22314,13496,79429,52314,39486,40561,23858,94120,72423,52933,83941,33874,25944,32048,22041,89446,91481,97970,84108,26072,66337,12939,43001,24149,72931,56940,91861,84818,41532,10091,18890,29811,80577,37444,19303,42347,87363,97424,28478,20961,97899,10859,28741,56631,45818,24463,84044,41053,87459,16672,70330,51183,79349,16084,54687,12300,38560,69431,82345,72092,27514,89308,95031,76975,17237,96925,15899,87298,34515,41702,78483,31236,29774,44917,44188,56940,19251,28002,88237,26083,95886,56251,86563,58401,80757,56571,19067,27585,64476,28905,47603,72857,43325,49150,90750,48019,72377,84459,82181,99270,71347,30179,69963,12934,51820,58491,64199,86694,27026,67336,61467,48192,42772,75129,51046,81027,46050,23165,82651,30399,49800,18795,90226,75312,63419,68679,21538,29888,95214,30993,23702,13641,47586,77016,90787,64338,19333,60656,64958,58381,68871,19746,16987,60436,50020,50273,97926,74547,32306,25082,53036,97886,95280,93335,25998,63900,35442,29692,52581,84937,25483,22720,12527,15404,66719,50752,94614,94854,47584,89863,14026,83408,86397,32693,45720,87455,54615,28516,37869,76199,93399,85137,56265,17443,93591,24909,66508,21943,51227,91567,54110,13909,83545,68788,55113,46649,25663,19246,99107,36453,75994,90134,12456,97653,73047,23955,60019,71702,12256,83589,56546,82343,11552,72015,46077,93978,25396,69411,36939,98952,94701,32356,61186,47732,19317,88995,73820,75919,19999,24166,56526,42886,63065,20992,46908,38862,23814,17284,61139,58090,85433,39983,71112,71556,18576,94491,52757,30718,55518,47820,17520,69927,78918,71894,13175,19081,67077,18449,82362,73155,91036,77922,52766,96199,86894,74011,88682,87063,81615,53373,71121,60784,29656,64963,68558,59869,69666,72862,63295,41879,67950,57739,11724,79550,52672,30938,92371,52916,32781,91297,29231,84891,79609,27733,79150,11926,48592,30564,61024,24688,35381,57180,33858,14731,74305,93123,53739,28144,15102,85414,66888,66554,26304,98896,46288,74380,49286,61300,45598,26769,23603,15222,85011,85668,53651,15366,95727,91749,19841,10630,28704,24464,92656,51983,36322,72062,26136,64529,25758,84852,42570,77899,98272,61695,16357,74018,94579,96812,80785,10565,68265,33552,41735,26486,36298,41663,31663,43257,18274,99884,13735,29432,16570,11772,96829,89691,62998,44328,80449,39659,97482,53532,85555,58125,49646,94588,55954,93289,57695,31032,98819,29080,98779,33947,64487,14424,59709,85822,23046,23797,80296,22296,17309,61861,25402,72844,64935,93689,60751,47749,64279,52012,28280,43527,18552,76305,46592,99675,80811,38269,45008,27502,19921,38816,96575,62825,54043,12971,60563,32138,36385,29275,72333,72171,22576,31298,91444,86180,84407,20314,94621,42461,21758,30573,53939,15680,84355,48191,69469,22344,36385,26659,91307,61334,63367,94741,85115,14880,35346,95975,84521,64186,87516,24744,24032,23204,61686,28259,53416,95189,14244,67456,32342,67121,67189,44195,50443,56185,53258,99043,78851,20676,76581,70909,17038,47792,13527,45331,16516,13693,90774,19002,54344,87894,75330,51317,76922,84775,37956,10397,34287,56045,60995,71924,35906,79082,71135,16864,33785,89108,78152,14204,65711,17837,81652,91021,68140,89500,80621,39393,75570,49753,17523,93740,66372,17322,93241,53533,66938,97589,87353,75691,87677,92154,11510,74169,17804,35036,61957,86513,41526,85668,23070,65726,63038,15762,32450,36108,10246,22168,44483,30444,70234,50769,87095,86275,63533,28131,26460,18387,80917,49538,91196,83151,76475,75915,38452,14012,81068,90895,99555,16219,81306,11308,29940,68484,79134,23256,23294,26389,20680,48202,91460,32910,75711,26768,73737,32720,34484,32713,50071,40931,13333,31994,15089,11717,63482,53340,59312,52961,80677,50158,53537,13689,56304,17159,15259,23425,71979,95312,93822,75790,80388,64068,72664,88302,40919,89923,79089,62074,77237,93590,54031,93507,59914,37209,69516,61949,78550,65079,96102,59855,32720,82587,11667,87301,81476,17684,14301,53620,67998,92308,92573,32052,66302,82004,38057,14386,69870,93376,16120,95098,46282,14768,62129,57464,98731,51889,84508,38901,88491,52868,32862,82316,81820,45120,81405,13656,14430,40174,50386,36124,54362,25343,23706,36564,23709,31247,20097,63103,50011,16855,58466,27960,24572,60128,85644,70363,17758,11071,23490,47993,24282,55112,42166,10341,78968,39639,97602,70575,26833,59108,64783,54940,87248,61128,42295,23364,40738,46146,31914,29726,58235,65495,77738,87120,16371,68808,76174,12144,64715,31125,44362,42577,50882,96200,50722,49367,28649,96954,22676,27547,28046,39183,77541,41737,63261,85158,85723,78264,57389,60974,80023,81933,31237,38336,54247,81408,44045,36028,69430,55068,22492,42823,68584,72009,73512,71906,37207,82612,46645,70399,77874,42371,92587,33016,40726,48671,47089,90747,90925,97819,76398,74588,91112,86247,35262,21111,55268,12997,62295,42851,96785,47955,34008,96156,16901,41429,45355,83947,84626,56526,74897,38510,88770,67376,91932,41729,28243,30626,29351,43457,46407,31180,22107,46847,53626,47513,62888,73386,38430,96779,50017,39075,34490,22405,91796,17698,56150,83554,91416,76928,70822,58287,13209,59934,72344,99224,42117,21373,47338,56720,88551,54004,68804,27154,90723,13190,82848,33040,98096,58431,47599,89523,96566,75337,74633,56161,87904,69210,63056,39233,34834,55230,26808,55025,79095,74755,11488,99009,25927,49941,88463,64911,93058,67890,19125,10884,61671,69757,86811,18093,55234,57758,30633,31880,80383,83573,71579,51184,81695,18562,39920,60797,45460,70565,93658,63433,17400,76459,80950,92412,91738,71316,36385,33145,47164,36260,72903,31472,68838,64940,74225,97620,92304,31290,64573,31545,11076,12618,18691,69176,67410,35027,78880,15514,77234,15806,16753,94421,89076,40864,98967,16411,84590,55736,29120,82081,57733,71537,67960,35154,91803,23812,32322,46360,44535,27480,60331,31491,37088,10709,42158,23330,46661,39340,17259,44774,72348,60209,34958,31369,55364,99555,20147,44862,83763,56443,38575,20883,29288,35586,35446,91452,22998,47550,64638,95485,21531,37604,51063,76163,38675,22633,18656,21665,68080,37209,93616,76942,98392,66649,75873,84304,41601,28181,64840,25359,23739,34047,82371,72776,51592,86102,55206,32622,63524,71257,14198,88119,93795,79070,52127,36435,97815,52758,85404,50715,90503,30366,52908,70555,36756,69155,51585,80749,15460,58278,33711,59025,68744,44088,82409,84433,86008,50655,20382,78325,72288,16699,45239,18210,26920,14081,67912,99333,44514,70908,21872,56511,11027,20794,61744,46640,82301,50347,16352,36752,76138,61948,96184,35037,12295,49545,61120,27826,77453,38826,20554,86369,73921,82669,35337,71925,10842,57823,64902,69380,50062,16769,55581,75243,61719,41219,21214,21541,25619,71065,61570,73686,41328,78463,15039,70983,33830,83638,91011,98671,42148,36917,37249,44410,61789,97785,71570,45947,75876,40320,51860,31498,99532,86828,97942,90561,67321,20315,57999,68470,18540,15502,92386,29876,77456,61671,86684,31841,62892,92058,44377,17647,11297,17021,16791,69706,13463,73681,91118,96025,70120,68728,54863,52068,22839,46491,62821,73036,38236,53364,52407,10292,20008,76077,37468,79821,41994,40085,68474,98785,21798,25924,34742,24727,20721,65228,64914,14605,35277,27695,52538,12192,42242,42911,13024,46066,28480,29401,68043,80420,84544,66045,11638,88669,35425,94500,33228,75640,51954,55858,48769,74218,98557,89042,66069,99747,38062,37386,12026,80999,83387,50949,92325,46157,67130,92643,88297,16815,23433,72181,84039,62412,84920,50812,89613,23821,38135,86169,97417,63180,20687,32168,45675,67953,78682,54798,32636,33767,23478,68491,30761,42601,33539,97465,37595,69623,24692,87048,84410,94949,95813,16792,47665,53359,68166,32520,93051,52556,82380,41009,52617,69933,96138,61871,63699,82491,90894,11240,23513,97674,80489,30479,38462,24179,60354,91432,69081,98135,58142,67515,39248,39812,44455,76936,18434,68345,23856,54958,25524,14794,96000,29756,79435,64961,59361,14048,50458,72939,60613,74206,90761,24949,69525,57294,25882,94870,30945,75700,30285,26233,76988,49786,62433,95756,46503,64090,86201,26239,34997,26836,97710,30287,43739,96297,95318,61116,18475,81120,67208,85953,33149,31004,77121,94554,35292,28714,23515,27270,43214,21762,72453,64283,78072,52797,80443,83173,46424,19980,46867,37556,28614,21049,81870,78427,42830,34090,70491,84921,64952,19795,63757,47682,79794,31563,97802,55117,90484,12055,13427,97706,36752,59957,60961,74328,98171,95527,46405,13276,74517,23724,79452,98663,35609,52849,59349,68471,84666,50543,95689,86951,19930,22924,28011,96545,46165,93084,48673,18065,85348,52555,40190,29020,31052,19083,92861,31723,91314,54166,22523,28630,21309,94186,39592,52701,69514,91449,22673,57499,13553,53641,67479,23454,19845,80266,68725,60555,77456,71782,31138,58435,13728,59787,65649,73008,37785,44517,98324,44628,66543,65888,66665,49672,87512,96345,78856,99892,34720,89112,83031,66781,49472,74946,41754,22501,81360,53033,32920,82049,44799,88636,30420,85512,31986,45693,35209,20047,71104,33740,84269,32290,28307,15590,42530,84872,53139,83054,63918,24257,21694,49600,93937,68064,12432,60847,45759,64434,21313,22427,46115,40451,81600,27705,62475,31858,42570,70488,90760,28183,42924,20809,13111,54948,21816,33594,42664,27093,25988,95989,87631,43238,37815,51081,56798,46629,79356,66846,82692,87294,32185,38334,94944,93861,12326,64491,55946,43602,81408,12267,91074,51903,45012,23073,95918,90248,74756,27012,77488,81007,71713,86015,77126,72722,67714,62521,47046,84708,60741,87875,96426,90495,20633,37996,21327,21824,12049,22257,18393,30288,94064,67512,14425,27722,43358,52690,41988,95234,39170,79765,61057,26255,88850,74307,73548,42790,90155,91582,94459,57899,94146,71110,78505,98888,31675,30596,43385,80377,20053,38206,45692,68216,53097,47969,45244,86472,42705,51453,14323,30733,80038,97646,21308,78006,56909,61416,42159,66594,75374,98314,74099,17286,79664,79015,80394,63164,16841,39932,84762,51721,36286,71186,62423,27281,96240,62221,17528,19304,23376,70170,24902,56920,36858,55184,72101,99572,62507,51876,55187,37915,89453,54292,25505,86832,53251,77606,73846,58096,67819,60296,66113,15038,73725,66057,32677,55275,60325,42866,87380,87631,91458,69833,21372,52910,78208,63396,58135,30253,22552,23717,92275,75070,75159,89316,41060,35023,97483,13662,21354,19101,44293,13354,39999,68223,18687,71606,29426,31405,18935,34487,59582,45501,58519,72821,95259,47643,82989,97050,16088,80928,15805,54097,91734,81863,98300,26886,16089,44309,30203,49968,39305,11115,56775,16675,97038,45662,56887,92064,64436,31850,97454,62313,43560,57966,60342,18834,19525,41127,85115,23905,95419,48631,62508,39459,49366,76032,50458,15181,36402,37237,29341,48432,36211,82131,46209,76170,37290,73584,26278,82357,81883,17954,71062,55167,89705,63282,47403,44104,50958,58936,74088,23550,72612,88351,72736,38005,42057,20901,72625,29854,44798,71020,16673,19472,54267,73370,62931,33294,91491,22209,47773,84554,22434,82953,80822,50458,25244,96538,48826,66830,39461,12955,43919,50544,20091,88687,17571,15187,12409,74860,32126,66782,51994,94356,83446,25021,67632,83610,58505,95729,18036,63367,96641,45809,68042,49277,78050,17389,56919,22092,10724,33034,85730,53633,70803,36175,33852,29653,87334,17051,95710,36052,67274,61503,22821,68540,67210,61813,22657,26917,31013,65843,57575,91721,80089,61857,35838,18114,33393,82092,43635,95000,32906,76772,86415,57886,31967,57967,66108,74021,57952,16213,25383,38268,77984,25343,16583,36442,72468,28434,68673,61566,28064,35037,89771,62354,72724,31182,13081,67634,37183,61104,50319,47792,75723,68208,35418,95965,22496,12460,75577,72135,21346,31610,16282,79417,85096,35303,80543,39768,52058,47720,99571,60900,49057,72757,82618,28044,16164,49257,43395,14365,65599,72526,62944,92871,91617,91340,11623,26802,71961,48340,43463,31925,69084,84012,25141,98695,44744,57680,25238,94147,77150,17519,71938,49575,84370,78723,15240,32255,46513,25953,74128,69111,32557,74625,67667,12857,25832,36426,15714,36400,42388,76673,89096,24236,79738,44333,64134,52857,96952,83855,53217,18535,63925,58252,11769,42466,14983,69507,44488,33883,15622,62402,58888,49008,57741,79484,55975,71077,21039,86357,34788,61835,85911,40854,17775,17347,81825,35287,14437,53835,13306,85342,60996,46936,77358,24776,36418,32444,39659,31832,64253,12141,92145,37538,62577,53008,56807,71675,90689,72931,69402,59797,89635,58158,75183,11255,35069,46261,74658,70295,62164,68369,35573,23659,20216,23261,30691,31829,20286,96465,72704,30568,93856,81324,11907,53469,39293,24395,50518,25976,57209,16576,39175,35606,39129,94872,91684,54707,51528,22112,53159,78607,62705,28061,63679,15579,32383,12645,17333,87811,41911,86362,37580,22419,76878,52816,92352,64987,30876,80496,49207,87032,39230,59837,11269,52982,89926,39765,80068,17432,23316,96700,21703,94983,88151,78431,79421,51087,91348,88544,37267,46838,89167,63193,57737,98799,37054,58697,23835,67971,88631,33231,25638,24714,87629,29214,87669,96311,76596,92932,85637,54019,68051,32683,71432,14411,68586,25554,62546,78792,56157,27708,42352,36590,79104,10955,58307,71303,65513,61704,13215,10952,33938,36001,41096,32563,48962,39649,28984,47748,28809,41287,45325,62341,54366,39922,32806,89226,16912,24175,90419,38999,45218,83106,64972,76721,37030,39048,18481,14667,10289,55465,28180,96855,27674,92254,17670,65612,35447,74519,81245,68531,46316,96656,72121,24198,96022,44050,89589,23265,40260,33214,86786,36046,50226,11969,85468,13301,61289,38552,55430,46856,26536,36087,73609,63405,87990,46150,22563,87338,13777,83457,28223,92910,69992,81841,13051,66522,78627,11941,64613,27012,77571,50518,56692,91707,64269,75497,39992,45219,68356,16246,68416,99934,28830,19190,26508,30386,61958,17665,39215,41482,89382,70068,77750,30648,43943,72896,29910,71931,86294,29752,97115,51628,69776,49529,13615,57609,71691,92495,62821,37024,88868,70062,23101,49962,14167,63852,11671,27351,18586,77284,36976,66247,81139,55951,70066,39781,23516,69311,78824,24730,98226,50276,32079,12938,14979,27181,76165,36390,54109,55827,14440,45073,25695,16622,41763,17941,91338,57813,53668,57811,47966,20975,38222,55242,11666,46779,26936,55996,26488,86241,38937,20918,10520,95136,13888,66800,74167,29805,24593,79196,55426,86703,54861,87225,95560,16271,31085,96952,38129,88606,62276,54098,48074,17351,10901,64191,67049,25920,85126,36319,38841,81991,25322,38073,32811,72510,70138,51635,75619,99743,20260,69450,34757,96083,87858,95712,19991,46670,35514,42102,82851,68358,58085,29942,85907,71385,31238,64685,16774,45361,85124,77765,12631,56975,29760,91449,86784,70331,85238,67524,94541,94066,76325,13138,57772,10380,13944,49535,62617,65564,63394,44033,53932,79172,62889,11004,15787,12197,18765,72427,47940,41879,21462,84313,67810,98425,70910,60105,96228,64827,37035,71198,99308,57292,29210,24744,91455,44645,52004,36750,48982,11129,80652,80746,54039,51689,17446,73889,29782,29700,76852,68091,39243,43993,14587,35372,79472,82301,35171,64453,25022,17295,21336,44947,44312,54943,21706,80973,38419,73894,39862,72855,18015,97665,46441,66212,16528,55219,30636,50286,24378,52046,29935,35847,73838,50351,14982,83940,49628,72726,22041,74602,55516,67679,81714,86827,14189,71017,63901,33054,83575,35940,98469,59867,34209,66712,28810,16711,17230,92480,88474,54611,37877,19691,23021,70132,92445,24014,48724,69504,75260,21291,72434,73073,80914,74142,53237,13415,97257,52628,14871,47245,28067,80218,62814,75815,94728,49484,60994,78267,50845,81415,73896,59005,81202,18694,74490,20496,69527,13383,77692,64781,69364,22726,90568,47755,55867,46795,95566,80414,94003,83091,27674,61521,53253,49052,86365,39041,34357,15319,80100,17255,99687,11694,69813,82993,36201,65484,86570,18100,97369,56274,11005,32672,68203,40171,59993,45309,54714,84165,76850,36901,27621,26175,92267,43306,26846,93885,28116,87561,17229,75027,23743,84765,91220,73326,74011,70626,12850,69447,67226,30983,13764,90674,40996,79052,75102,68525,14318,24882,68660,56153,51021,96857,62323,36529,32103,75170,31850,58786,83157,83016,15960,83627,78771,25638,15067,36345,34129,18568,90015,11398,29997,57618,98639,30024,81093,52516,55969,26903,67505,12093,40232,99236,95074,96622,16544,71040,29548,23554,42141,44312,55151,40517,57251,33512,55620,43408,22845,97371,49986,49211,22876,32766,75543,33148,49093,10451,64832,60472,52870,82049,65622,30808,65171,45676,97260,43068,94761,71921,33138,22678,76381,42949,31278,73178,41932,38711,97600,95451,48427,31815,38342,13698,62944,61560,35986,92648,27661,38699,33722,60422,98534,89125,70323,40294,56355,44130,21754,55548,87002,43673,54396,25658,73458,93211,44240,63572,51962,63569,25277,96923,55799,70220,49746,44705,63174,28034,68592,41885,96363,95662,93617,11677,96614,80540,74611,42804,47416,71636,11089,26735,53600,23384,34081,53352,90689,48659,74189,55770,38489,37704,84087,48910,12216,57959,39361,72267,98226,30501,78372,17059,50146,17673,35020,22266,76885,80155,34860,45874,78187,99761,80039,67292,26611,17824,50942,44531,38600,49033,19985,56415,98970,59545,34992,73143,21513,32234,71192,29381,59040,38233,69634,29565,71197,72438,28191,27440,72098,24655,75750,73380,77378,66670,37465,43547,57333,27088,27207,28705,66426,87360,17318,26974,30890,70076,22595,67439,10909,45471,29585,26203,10399,40942,59826,53252,96004,35153,85844,72008,97896,44442,47881,37316,99831,68711,38974,99974,49448,34903,65854,31454,56157,86651,99284,19267,65815,60750,27216,71304,41580,79853,21817,51156,46236,36394,19008,82556,71678,30536,37016,58628,59294,95813,24261,83940,54624,15075,72903,93588,81125,92852,99635,75738,42022,98862,35047,76220,42821,90842,32630,75244,39913,17772,75518,68923,11779,61237,20909,90365,73266,50917,54492,69478,23569,30045,75962,82244,82236,53836,87703,69694,66229,13291,70454,52325,23492,90868,22388,75130,54530,60325,22262,22038,24295,11720,65243,96378,78688,90993,31858,81490,15570,71356,81109,96147,28067,60829,92719,14811,67065,19893,77268,22452,54782,72598,93833,22119,25895,92659,70475,20737,54812,28514,36381,96693,96762,60084,71749,11831,53792,84923,41207,34258,37640,75885,63184,76890,12637,97369,68045,16661,52731,58025,11455,44077,29558,84039,35009,19699,65615,80500,60168,51575,99074,72849,72962,45203,29479,63474,18814,47278,44163,41105,20979,38361,77148,62633,10755,64762,63148,65720,84853,25688,53902,49897,16220,32242,15023,21566,89871,13472,85697,72829,58184,42710,54397,77868,30530,95695,32508,19505,52396,82138,19023,48186,35018,87721,90432,82823,92061,11547,21039,30807,85546,74464,27260,57175,65617,27357,24695,64154,36398,94068,25567,93046,61938,14620,46216,45653,94284,56766,32282,22516,51827,77739,50798,69660,20253,18336,21567,50251,34168,99664,35346,71362,61107,84014,40154,40924,37474,81277,81342,57007,96314,58868,92826,42002,93551,56199,55913,80391,47605,59994,31368,18680,78734,40661,75024,24236,73138,66221,78198,51470,58687,28022,62609,87490,56275,86316,75353,53692,28119,47685,21091,24567,39387,25735,42102,96186,62602,79987,56025,42720,15142,22800,55439,48689,55582,84420,42995,29469,84687,72450,90322,30287,44570,76578,23967,54324,76940,16132,64575,19366,92637,34439,67086,14121,71974,36563,52504,71950,27639,29684,40273,16920,44689,82075,24971,98912,21669,83979,37685,24377,47262,84334,40387,86481,74595,50105,35553,38517,68407,93324,67203,91637,16273,76224,55287,83642,84973,13726,52388,81007,32832,69732,21049,29253,88758,48825,17903,47871,94030,64714,57260,12968,50898,12176,93756,72659,41664,25279,25176,20753,22197,99137,73488,81625,65464,63709,74809,84154,63401,31448,87487,14656,54075,47275,68789,53238,82602,62026,60036,11458,19913,89754,32110,34034,49026,39260,18707,26176,59566,86124,72499,55771,21812,32669,14099,12917,77170,93411,98368,99423,73820,62197,85098,22109,20611,80391,31432,50679,31643,33613,87585,20131,47398,28961,63789,58703,81955,86724,72581,73287,51891,23931,51731,94724,68649,78144,35591,44674,60736,64877,62629,86469,62025,27411,51671,23711,58117,35983,66539,79391,86470,52492,30453,34909,64861,22081,18193,61201,81118,67929,19633,79956,15844,71065,61570,28922,68340,51726,34359,12862,47418,41114,63497,28519,63015,62075,41434,54287,40788,53515,66978,34559,75394,70034,38542,55380,75764,64475,72958,25234,57438,40619,55143,44328,43115,85740,47627,72966,16890,66087,79786,13118,63359,47621,60113,11813,29156,54594,25611,99089,21804,88790,85991,51778,72877,57924,33282,20097,59373,55663,46502,58212,64075,99664,27882,70541,13732,79131,44297,96723,54324,53783,65371,79760,30415,71967,79569,11070,49689,49301,30577,82394,92628,64004,49486,98162,35361,94912,29875,64312,91716,13536,60183,23129,92880,10183,85066,98246,12453,86795,64669,86823,20709,17267,50637,64426,99069,41937,62496,76050,46659,11718,67469,66259,85940,82124,49194,82528,73167,75482,54880,42113,68660,80915,25282,69715,92382,85856,45807,27049,34034,96385,91927,33917,43005,58117,34423,22613,40242,73980,20848,69025,29482,17557,28306,55684,29077,33996,22730,25045,88391,80862,20951,65072,74792,69447,97642,55248,26653,49088,45196,41873,61289,45906,41977,49351,83358,87064,21008,77225,37504,81067,51376,29941,28380,67506,90786,45701,82198,15297,58896,96187,31881,22124,89859,82849,87536,24510,37726,26457,76628,95197,72137,66606,93625,20884,55090,37689,33414,83331,69330,65044,69092,98534,91303,24213,62620,63565,52570,57359,62487,53484,69005,93023,94709,27798,16605,20985,85739,39919,20237,50477,41327,34170,97365,54839,60910,53997,42412,62991,77976,84836,22387,54589,22186,58339,69299,44087,98679,35647,39133,60157,91790,80242,58474,92376,17074,27337,63781,96130,17607,46505,94289,81768,88226,62176,63620,28622,29169,99215,19295,37038,30330,18638,68390,38941,81481,39663,79695,53526,64027,99129,36296,32459,38297,87116,91625,46318,59277,10527,69010,12695,13838,95654,75715,31418,68168,31608,13894,71441,64238,84851,40183,62255,63794,80034,43350,85491,86162,98541,76259,42856,39765,80007,75743,56643,37684,87746,72814,84415,34232,38929,33244,95897,12817,52388,17876,49514,79073,38922,43239,59895,13656,87715,28028,44992,74498,82753,11886,44111,89039,96402,19313,26246,14377,15994,48191,18388,25555,58306,75870,11348,66973,39034,69673,38575,90747,36860,30539,33257,69227,53282,56608,24839,16826,97960,92454,40474,77553,84483,56587,90214,97448,55025,44432,83490,52090,53506,45431,60412,16579,20335,66298,68888,90726,97302,53914,78218,41467,71872,94795,22075,67291,84662,24457,38740,28478,48887,61473,81563,55196,29596,63279,50248,33127,66989,70469,12983,80941,20494,58974,17973,87112,64793,34426,76433,13891,97755,68855,45422,85750,81092,55405,22671,66974,63332,64141,56851,91075,64894,95624,62061,33570,72472,37259,30981,34984,42065,24942,30532,91820,72669,93710,46392,88058,94695,63810,86098,28343,85780,73378,78911,96472,34802,44266,75750,78299,85114,72432,75427,25815,36291,91065,93759,43760,47816,76204,23086,77754,83498,24682,96934,20737,89322,68599,66047,34032,45736,12940,93274,44542,19636,73368,87646,28706,11078,33892,75009,81861,36891,17651,80230,22331,37039,45151,71404,11879,42439,27805,30522,69676,41245,60515,49120,22924,12865,81550,48054,17704,82961,72866,32408,30361,78429,53254,98334,18789,31623,63264,41791,73858,71728,18615,23382,54439,86443,44677,78836,75313,84513,85094,22937,14096,32649,91831,11861,68552,68095,93164,43292,40304,11015,56502,68121,51132,49929,78749,43125,21440,76255,12492,94534,48499,15983,99204,61077,96166,82727,59551,40453,27093,67013,44560,74534,58093,16154,63734,67436,80832,49192,29553,86706,22051,20267,69773,43109,58353,29571,14834,76685,79391,87887,78817,97861,88722,77017,60798,96187,62481,14830,35579,32038,84899,34683,26037,24429,65395,49744,87285,70812,92580,92243,45550,19836,23641,24608,64829,91816,49575,33872,57104,51697,64036,55479,75910,78798,19632,82143,97517,74097,41753,94978,69658,31995,81720,73619,27074,46084,16781,91125,28531,51978,92615,36818,40860,16407,73409,84292,29589,84002,77024,96242,34627,84339,53761,30125,83990,61794,97523,15820,31402,95715,41676,43990,23992,79615,27936,35146,65738,78008,13661,17217,52433,77742,14340,77461,49612,26698,97208,10568,41925,61395,81135,74540,24364,31644,74961,78424,97389,86106,89230,68463,94393,29922,31363,65423,59187,11229,57399,10384,39305,17745,78654,38006,94461,59591,68103,49920,98645,56888,78872,40005,42425,56058,90002,76265,33426,78318,49007,86927,56549,79672,57975,71982,82247,42587,77309,17550,72001,67076,15003,48352,16193,81786,79248,26167,76435,99167,74492,17132,18266,29387,71216,72297,59108,69177,55697,89606,32265,27015,54366,30094,28738,81449,89845,39521,48651,98840,51369,29599,99696,49440,27339,66638,74435,47085,20388,21401,26632,65274,78040,41367,99972,34400,20589,27507,46386,25093,17353,22975,25319,57113,65876,17570,23909,49549,29754,55325,83248,65405,20625,78332,45404,37871,49278,80740,23532,70021,18430,89257,38148,20577,33455,39553,49864,51624,90897,75230,33202,21561,64302,26840,37460,24206,81568,61252,82549,13168,15430,56806,20540,49086,67682,45849,20347,48644,43134,46087,54443,65753,46490,28038,89160,24338,65695,42698,12660,44058,81352,24997,18919,22224,59327,29010,31877,12294,88145,49311,23408,26329,22064,28217,29498,14625,71052,64449,60254,62941,44322,63358,26248,21853,54920,53877,21898,59387,21100,54592,55247,35731,54593,71823,98735,64897,62728,69497,15845,79353,26260,19369,22057,50018,77133,58927,19073,41748,58556,25030,51232,33166,60924,21830,15285,93043,50498,95122,14794,66415,76178,29716,16608,41353,25196,19879,44548,78448,21582,61065,20955,70370,15653,31441,38587,86347,50242,27599,99000,75567,27894,90108,52875,94405,62149,76430,11624,24830,23773,66876,93727,33280,17000,88537,20536,68675,90685,43237,13481,52695,55596,72024,11204,16318,88820,94795,21460,15252,39142,80324,67324,96762,86673,49645,18868,79534,31050,30616,92683,73515,25124,67388,57058,98948,12516,97564,96247,46384,76392,16615,64688,52473,72783,18407,79680,11469,96382,97838,14444,68812,59500,67514,58375,89777,64361,34250,75558,48893,58581,93840,10192,11548,35594,56185,99594,85909,94040,38056,93895,28861,35120,69277,38390,23064,54815,79567,83213,41258,26693,44134,34963,17757,89923,99910,46561,60852,60476,57167,87038,26361,16030,66023,68703,99117,71265,61917,32921,56817,36939,12040,12125,53412,37890,97149,14730,26454,50084,63581,57240,55660,56769,43327,60703,14389,66911,81213,40702,44026,63228,85894,56986,16573,90131,65008,41315,84865,67182,23443,47497,34767,37358,93346,66980,14914,20384,29041,44515,90034,69790,68548,87394,11394,53948,74925,56396,64438,30667,29925,16193,75098,84190,12719,62205,94197,77621,53864,17116,10742,48577,97183,43031,11522,31156,64828,25924,65855,79710,83267,42359,15513,12795,99161,80015,14137,29036,84998,61232,26745,53046,41383,87303,41858,75548,27735,65877,24515,82560,78243,82107,95620,57471,42178,73752,21845,26116,76063,96376,68047,57982,52560,13163,89806,86990,65988,84545,54765,71595,46702,49632,46671,40517,74062,14436,51612,78874,66200,51360,50159,75400,80035,51898,93366,79722,94203,95277,70029,13799,84300,34389,73919,32125,88187,33440,85662,26660,31105,72429,18883,63867,47150,64463,57512,22535,54319,11848,85430,18392,36364,25871,88329,83893,50254,85811,24137,26466,73198,75567,47381,51946,48744,82697,47002,19523,58125,88017,99839,70798,80917,32885,34636,54204,85038,30919,53438,45323,87950,56691,81222,63126,43331,77364,33367,34699,64445,12158,66022,13237,74524,54004,63447,32854,94322,43153,91105,64988,68961,68754,18890,99757,74148,41613,82062,61451,78949,41506,29362,59644,73663,50981,55364,24649,31014,71224,68968,84180,18577,12025,27412,55445,16210,22883,68911,97702,38315,25354,12352,81728,56386,26004,89365,53872,62989,97956,28903,93004,89937,17242,26657,60740,29548,83434,58707,68017,20220,28941,57534,83146,66010,30981,56973,33905,62047,32790,13959,22907,38033,28592,94264,38854,61389,60256,12729,83223,33774,75914,97738,43806,50477,69785,18983,13372,41768,55432,86533,43540,65521,32196,43265,84670,21882,54270,99891,23093,83062,96874,17160,31267,67161,92118,86939,70016,54745,47022,70467,36404,51688,47102,19812,61329,14360,44935,92543,85299,61248,12833,98619,93715,20963,68051,45145,96101,44277,51129,77085,98511,13420,45569,72683,61471,98951,33288,45062,80452,53189,35950,43694,11948,34141,92874,29471,34275,40570,28976,94934,84202,48813,71998,95145,12260,11202,44556,97356,12799,95674,25767,93474,18013,28701,37655,66096,13360,58362,78172,16164,93522,18573,18511,69747,24173,74630,81962,81471,75431,50798,35672,26253,51464,25099,57160,69807,78889,39610,74332,98076,19774,44383,74070,58254,86594,25034,58139,92065,80618,58705,15359,19756,54285,53317,69065,13913,69204,93518,81393,68976,85795,86728,46750,47570,29465,55803,21654,39284,54347,52662,34825,15956,78297,24185,95486,54232,62034,97972,37639,19031,18787,48898,73477,47111,73965,95854,62302,99611,91310,73194,99832,54933,60677,13418,36161,29749,55987,62358,13285,60301,53011,17816,34823,93454,41486,76645,19685,18872,64786,56344,38990,19162,86568,54738,95672,12713,94196,69007,14849,48039,80421,91046,98123,78870,29131,75009,71383,44820,94085,91367,46457,93754,40545,82381,89527,17305,34914,16876,88787,66973,95874,39973,91304,10488,26853,15875,33198,17848,59108,74202,24978,96640,77338,42068,90094,15750,15962,12881,32200,64770,10306,61366,99084,69215,12383,98183,97845,71342,27206,98166,76018,23859,41394,65772,65619,34268,90277,95038,23064,51378,60077,62854,51131,94644,78161,72398,46321,96919,88852,76124,25093,92255,54649,70211,83066,49001,25774,84129,19148,26352,46938,50875,26090,81999,99306,19604,52840,26795,82230,79070,80177,92524,80341,16403,31674,78787,21994,52138,29966,74633,82479,84856,47622,87233,90348,37666,44513,14204,50453,41384,38357,33802,96275,54852,85336,72417,50450,29400,97189,93257,20220,69640,40401,53556,93738,86519,11668,90598,49566,33162,83974,90775,38101,86221,80304,93206,55631,95008,59888,42496,10654,41532,80032,75809,49707,72746,54078,55849,49623,23663,34991,45287,47922,64261,76728,36392,69550,89646,24703,95385,24144,80187,24392,81141,75809,58812,26925,43586,66036,59674,58651,28092,82694,64393,99528,57297,70549,25572,30713,82942,53578,43737,34747,18439,87030,92555,20121,18002,28934,73689,20380,32094,24522,60952,44225,29535,55995,83830,75800,62878,42404,82366,49441,40774,15959,28271,49505,82310,45906,90180,38651,98077,32795,15425,37636,66360,96880,46371,88933,69066,19585,97084,89147,94138,61638,58960,18953,49780,10022,75495,77948,77796,91699,22727,41717,73227,37529,50194,79392,12171,83483,94032,80017,38228,65983,17642,19540,67334,65190,68798,30764,86439,42562,21425,15217,44388,19545,57609,32811,62241,44986,51679,11417,33776,51482,92861,56338,22647,76467,29012,97667,26870,93828,52102,57752,98971,94272,75945,23882,80840,94183,54147,62275,65283,87028,84118,39067,11969,82959,93624,32531,31171,66113,41370,73067,88176,11691,93427,85129,37804,89830,45287,17494,77878,51005,44078,13976,76963,10295,53481,27341,26062,59327,51265,29917,48695,61833,32268,25714,37581,43265,64154,60154,99772,84709,81529,62778,91051,97202,67509,57272,33790,73202,60181,68967,47383,56472,41714,14712,60417,67624,90989,61707,26990,90862,90857,64530,73684,47238,34923,40487,99818,90594,99518,18733,94958,97902,67908,24939,39777,83828,83598,17428,20632,30365,85688,82043,45303,20466,14316,18780,56296,62854,69333,83774,45221,52353,49105,24041,36993,93864,38189,80595,36551,25072,40910,75585,11320,57886,62769,51073,31977,87464,59230,16316,59453,62941,60351,10270,14817,78605,89553,90459,55954,40560,34783,82398,48228,83777,81711,65948,73222,41549,63741,57391,19361,60630,85545,98896,73924,13363,38993,69257,84548,31217,40960,78771,45402,80776,34337,27408,69119,52232,79405,14167,33810,20489,23448,25782,95648,93768,54239,73000,90920,72122,86248,98999,80292,54557,96345,93150,77156,43188,36064,25888,97074,33304,96522,78815,88615,57199,11401,40371,16188,62873,11392,99511,76784,39484,63118,48852,66514,15410,15510,22234,23138,71692,10295,33207,61853,16212,33548,59200,26774,64658,27218,61731,39754,42447,79189,76114,57587,57791,41550,21591,49833,97383,41038,57998,44554,91399,78217,60419,83396,83088,10763,31354,16739,39885,54464,87728,94223,25491,88143,99807,15463,19153,18670,78699,24489,14779,26605,96748,14358,61264,11573,84351,10284,13138,20027,69912,18849,47321,93763,80306,41327,90771,90237,37162,12826,63461,63321,48251,97728,56698,26103,10588,75429,53845,45416,29154,18591,72021,83026,32142,54276,41850,36786,36041,55073,80121,90325,23519,75654,13814,65444,76203,12356,32287,67676,95203,52135,47781,78958,98544,27346,53516,77492,87921,27690,32602,24705,79885,15059,18267,81505,96750,10508,37857,17032,90451,16211,27651,97536,10777,69049,57906,84896,44995,12959,96037,27613,60699,48906,69938,66712,47468,20918,16316,25394,20423,52224,24540,68033,66959,67047,94858,93494,95890,80944,27940,18207,49090,78329,88716,90710,54641,51815,60366,84984,59695,41518,39992,70886,87048,61181,73155,23510,56927,57783,14652,40168,12788,20073,97957,84423,50683,47410,57539,61317,28687,11422,78726,84683,43794,65198,54400,29688,14445,85839,20629,36195,24258,87604,66954,40905,98661,78671,76548,41846,52137,15559,19128,58910,53352,56159,14265,98613,95108,71024,85974,41309,24740,81275,43682,44330,13224,87637,91818,43772,49791,44138,63104,49220,11221,68600,79582,17762,66855,56943,23955,91487,50562,87440,61509,55781,63420,38997,22201,14278,24766,91692,59898,94602,24830,32801,33133,99056,16502,94773,43093,82638,69056,90155,36292,73903,11320,55948,47439,76514,54988,83653,77005,55361,51234,62721,95985,24758,57625,38914,71822,11040,51887,39661,97519,38716,50980,27915,39451,11158,83615,58864,70177,19467,78237,59455,38987,39917,83755,94304,80468,82793,94188,42681,82700,31635,49375,73703,14537,26855,95951,34190,23994,88552,83866,35400,10201,72579,22664,53511,67872,36592,56876,94351,33617,13178,78330,21262,55334,59603,95252,71117,11681,22922,18179,38504,57701,21968,82574,56352,41524,39691,34997,11239,67278,28050,17982,83258,25268,10442,54260,29587,12738,40725,54192,56252,73941,81761,93497,78329,57975,29859,71804,43707,43156,56966,16458,95421,25365,51066,30316,76935,77054,26155,35691,61174,51685,69212,22376,30661,68545,39389,67376,52575,19333,24403,76214,50402,91326,58187,31958,37690,22393,61033,48067,31907,81383,88758,59861,13732,20153,44406,62858,90961,36600,60999,64082,74973,78497,57937,11589,51572,36276,17436,10392,63888,23014,14725,96024,40492,53320,57774,72921,28029,19221,25521,92709,97955,15309,25352,26990,75266,54439,55787,74766,71110,49082,62335,83606,13001,64667,63169,31356,62038,19315,17380,21393,74664,40570,20510,92084,43007,68621,96610,87388,79674,17760,36856,76011,15611,38347,88149,88386,91965,61767,24054,94464,12773,64190,99188,98323,27156,63009,47466,40119,15790,59118,56282,22553,14016,44314,50780,26580,69930,44148,18075,96905,38518,46808,23134,22803,57158,10560,91814,74882,76461,68940,25044,94440,50088,56989,98678,66091,32677,27954,44227,25379,69294,66200,45335,15127,75180,88128,74922,30607,93514,24053,50846,93912,72534,87694,77598,35296,33050,31721,84583,71917,30437,75659,17569,71090,79290,67169,96448,15884,40526,83148,70088,56440,17852,62540,27984,92807,17296,27988,40025,84221,98283,64731,53856,97823,26467,70471,53938,22591,58305,37489,76677,99889,25363,37019,87382,43781,15906,65993,46861,10691,62937,28357,86921,89527,48488,25352,15061,10426,80080,72362,92445,67991,49419,62831,57533,92482,18318,75783,21532,22596,47711,75110,53647,57067,99031,62989,63961,82227,80532,73546,84835,54312,56817,13301,55733,70809,59950,69971,25809,90507,19497,54172,49959,13645,85550,49534,54570,37925,22029,19868,23030,37455,79044,34336,52509,65721,96740,58597,23423,16085,45987,78802,60340,23614,64594,34335,21673,14706,74734,20754,68651,37300,23663,52148,39440,52291,97618,35870,48118,33177,79359,11136,67473,99846,46935,23304,33346,24505,89869,37920,62475,89550,25774,81635,11691,29779,61743,88623,20020,38083,99871,56518,55654,57882,49193,96180,24140,42656,13542,18613,61978,41349,42004,38162,89966,35216,66765,18862,83784,92571,80276,18241,21353,99783,88564,36168,90443,94652,88336,35758,80993,23934,92844,19232,56683,64285,77219,22924,22265,20134,42667,91076,17102,64240,16618,37140,56633,71137,90803,17821,19543,66118,74640,24576,74822,43716,63779,65752,22354,71916,78520,32687,29216,51319,13949,18899,62029,73544,56566,14417,12858,59733,10078,75122,91266,75911,95809,45061,17324,50141,51633,64165,70761,39999,59223,90991,52960,65107,14563,43711,66006,30024,93767,44073,75607,63336,48395,86444,87226,96220,55896,29415,72805,23859,29801,80498,68435,90970,74655,51828,44860,29796,44416,18254,25417,17764,18884,21081,53857,54679,66824,72294,95974,54395,14850,83929,87960,31447,31542,73466,48120,40466,45351,38960,12590,49928,65449,70995,23734,85245,62645,73308,54974,32037,66437,37243,36572,28367,58495,86344,81195,56021,14551,17327,47067,26763,76118,43503,63099,63683,24452,84905,45229,80830,82290,52827,62068,66900,12827,59652,11708,52960,29551,29523,37458,85586,55893,82036,55249,89893,39071,78438,71882,13354,99742,64242,97136,95438,71798,40393,67373,70273,74588,83327,33046,80248,91377,37630,41851,34244,66996,88923,63203,90471,56869,37293,77662,87739,18669,44598,24600,28609,74157,24160,12585,69994,34959,49952,68924,21407,98209,53596,50815,92920,65532,46257,91406,64361,25901,83294,86289,73722,78061,89961,43994,63950,79481,48643,35817,94634,52783,31458,68553,24487,17785,92652,90395,14736,37640,86448,89698,42022,17889,88860,60352,63634,49450,46006,58084,28886,90850,20122,92475,14323,29169,62634,85347,61399,13117,91557,56883,55336,42554,10863,91124,84358,80193,68613,50808,33354,33828,69991,74669,75656,61429,19222,76565,80796,61734,59719,59767,80466,57391,52970,11502,94398,16679,37529,94234,16224,98857,92192,67310,32169,50969,12958,15792,57870,32557,97483,94390,76445,26846,47467,12209,31252,84614,69444,28924,39427,52660,29257,29200,42350,34345,13857,16221,32576,82102,74683,49053,80437,49605,96838,53055,64328,95034,65490,24707,81938,64011,99927,88848,12383,96931,81641,14532,40896,10660,77731,20356,72408,87238,41982,79648,62898,89813,49771,25769,40788,68723,42573,42579,63285,78057,17025,33645,22969,87670,81737,48452,69281,53075,74759,96750,83846,39107,24346,28936,43190,47893,51685,74346,62054,81429,48600,66007,89085,16732,20435,67962,94506,86780,61716,85892,21988,40254,48986,41163,73530,92771,19927,12709,62199,46376,16978,78841,56668,24813,90094,47883,19626,71764,14493,36064,68486,87580,48680,57637,41418,10168,78359,82144,61539,37858,28398,38747,58078,60502,36002,28459,37396,89092,62204,27852,16975,26897,19302,73444,83873,64444,66859,46390,83164,69288,76342,19869,25121,79871,99336,92235,81503,43679,44134,66520,40565,84083,96326,77606,55170,80731,54760,61752,63803,49126,96825,81342,28939,87886,19810,91514,47063,75006,49263,39826,72308,58277,61272,30695,24861,33606,81448,17605,99730,16092,23973,74387,54663,86357,38192,65518,62313,64323,85717,74592,80655,57183,33040,71294,85119,19910,41360,46775,27962,90752,58118,64728,38649,65224,11233,93580,58289,20413,68752,22015,75763,35166,67880,67432,89863,10064,85521,87538,73430,63468,31694,26251,79892,54232,21489,12999,99162,56684,11199,48617,99174,89647,83756,89113,30133,41432,29538,92057,44499,48062,48958,50726,45283,10714,81192,89095,47267,89966,40749,56541,89108,60408,99734,52802,30609,12856,95066,23319,19178,61589,74503,36562,81326,99773,39431,74974,24082,25707,45342,12638,71067,57922,70337,52073,74908,88088,25272,41245,30274,84182,42339,40687,52757,68473,15714,70477,29170,37513,15110,24442,19910,68007,52948,41075,14820,77775,53084,27762,27068,58181,46349,24141,28990,88847,90204,32487,62738,75972,38998,22572,92854,78971,22728,75962,15101,75442,35043,45278,55856,45242,35763,35493,37170,11799,62927,74548,80723,51554,46884,46653,73394,62272,58850,76947,15524,85479,12365,91902,68965,94976,31111,43224,62952,42628,28408,22147,18654,68710,60487,31047,72155,39751,10968,73571,19127,32590,73228,58780,83850,76330,23486,87897,54946,26577,94134,50395,37668,12648,11850,52502,81444,69124,16960,68396,12353,67562,46563,39152,50451,64086,25828,18365,42647,75605,93894,21841,11167,42274,93681,85479,29062,49737,52226,64793,36301,80521,88880,96446,19013,70180,39877,76551,49421,67382,90325,65495,13605,47406,67532,92023,26904,57204,29042,96505,37374,72588,18928,43619,90278,84699,40929,51910,57915,19650,41171,95828,47159,22518,23157,86366,36737,32364,61845,93490,38527,60747,96304,32723,85909,15835,46001,28707,87770,19020,59003,97008,40409,11576,49456,26478,60014,79929,27827,44655,81140,80633,48908,25837,45647,99306,88493,38403,41241,88638,88869,47938,17332,30506,82862,21095,70628,57667,97144,18726,94232,54567,50478,83932,62471,92037,32691,96530,21001,39971,11372,22241,54886,22865,78369,45781,47937,44279,21486,13574,65553,89894,51007,13255,24704,65063,52231,91972,68431,36134,96493,22666,32790,42022,80990,30881,90923,18358,63336,71892,65047,38764,46494,32562,98996,94698,64071,65906,69745,87709,81224,59776,86509,80580,60327,22908,55917,95816,77907,15100,84124,26919,17768,78789,31085,25317,85559,91359,36380,60121,60391,12007,37799,52515,61229,44637,49622,88278,97273,33725,67639,75168,43505,47879,48123,59222,66787,37218,15281,62005,81168,51289,32920,89959,26430,12050,10516,66204,87675,94047,54727,24198,11690,93465,11576,40161,50316,22569,54085,67213,58624,41919,97167,18461,38302,19352,68390,28419,64320,38445,39728,41614,17622,62038,71001,69153,11202,19870,49485,86255,26015,80711,28742,79559,86095,77510,46213,74038,92078,98044,47927,41828,41311,22652,90715,23180,92186,33313,55243,92807,17216,10245,99607,64883,13363,10389,19490,31257,72060,14473,35077,61226,21670,79387,14635,90846,44138,71783,60909,27659,39519,80315,41423,12975,31212,62991,71180,18522,85934,15733,20766,83575,50542,45593,86799,18650,13841,56951,72804,77121,71076,85119,82685,26024,22681,75263,47195,55470,63114,94342,75520,61078,26221,29142,15502,41514,91871,76301,72484,12440,90769,78664,71313,47488,35404,51473,50752,87869,71209,84823,27159,62216,93842,71589,93789,49979,49666,78087,93280,46655,53440,85053,12682,64122,28971,11453,27507,47174,65607,51189,67772,80775,81083,87065,30885,87116,39215,52538,36991,65486,67769,15298,38783,42330,12648,77713,48205,14336,13553,81302,34833,87628,27779,65544,20935,31191,59300,32493,52734,45979,19660,35027,29471,24417,75378,87730,11685,24702,84077,47194,42148,28931,41233,13473,23310,15098,13286,76541,92363,45690,98665,15245,50050,25311,16669,44877,45120,79416,44018,20086,73361,99771,87856,44228,35002,24944,55110,23571,53607,73324,48037,67418,43912,89297,84372,93183,31636,36130,15372,27716,48282,20219,65350,18221,58244,65090,26253,25395,16978,17756,23458,57342,24354,33441,54193,30083,38598,75533,90690,56827,65226,84506,46062,60144,99852,87260,40451,97083,58850,26419,86414,60958,67212,11451,16226,28273,85749,75251,17711,99478,45975,23427,52325,61148,19532,95575,30725,12306,57627,67698,36363,51819,36409,33130,58649,13992,39432,55933,70191,21747,57905,31555,73285,92856,15724,39867,59103,74531,68509,57696,54013,43570,44928,38718,28482,20328,25937,36376,87144,80344,15559,59800,51763,13688,17271,64445,43195,64913,13421,37185,95452,89030,99826,39917,91244,33147,54071,54094,39859,77488,43389,44998,21232,71969,43413,16778,85213,46695,65966,26842,80890,81668,70160,21843,73886,40329,12043,61755,12348,72602,52436,77443,47975,29763,12736,62857,94960,95629,69921,84861,17372,47855,40807,28551,70567,74449,60942,52626,60810,39610,82811,46526,89399,34189,99697,13431,83640,48862,81595,99061,52109,19285,95876,22329,77723,61269,23486,50448,33274,88355,73723,71827,80954,51035,25551,39547,56349,70701,19026,75852,30732,37064,60930,13312,76364,78586,83062,32642,82853,43583,22328,33336,79034,23851,47347,43078,34733,34495,62710,31802,19155,74442,84626,62900,53241,91501,88215,80918,32603,64315,34220,67595,62735,22788,77605,48068,72323,85425,41359,52848,38414,93419,58863,47730,53313,64623,62562,17730,37257,21830,49214,89886,63724,87304,89897,46185,26101,91070,90806,79058,57992,79592,83782,42712,86304,43330,96546,66720,74290,69210,45998,50633,92688,83055,28825,47246,92806,15023,78730,96437,98703,77549,97766,21538,81309,63380,59879,48293,50549,53022,98874,89792,60121,71849,22877,97683,21464,49578,32583,70185,77896,19785,28728,59298,76534,88243,96911,92447,93442,26206,31568,128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,25447,70713,23393,19259,20403,45090,79150,16374,60028,42041,53905,60187,57050,46862,22590,43491,50392,91356,81914,79679,21032,86445,52472,84443,49387,32309,70119,72972,56881,50231,96411,68422,35977,25554,90948,50969,45635,17841,16355,58215,76422,80561,11559,96282,49217,82241,87973,81871,64733,33328,84806,14101,84780,64858,30610,87844,89826,46765,10285,83833,17570,68961,58763,73825,24743,13760,42330,53265,99689,53154,97233,31814,33955,50620,35657,24390,51152,87801,74839,58105,66276,55704,48519,17106,25822,89579,23951,67275,30446,65975,92566,32647,20165,66259,79576,70937,74183,80825,14814,51506,40064,47029,69122,90160,63198,34298,70996,35431,78210,93473,61965,65194,26468,16662,56088,54910,51056,30164,21388,44428,34498,75614,70109,83246,60116,89905,92033,99385,64789,11425,58527,51480,68527,82367,82276,92606,64123,10623,41968,17005,26289,65276,47276,86927,83723,39031,57991,59661,60474,97052,16656,33175,34304,44465,61500,39265,84680,33507,23498,13783,21056,96049,10263,95073,73596,80804,33201,57336,79248,21050,27514,37931,51758,67454,27707,47667,55550,24528,28993,63807,65874,93047,38894,53076,85333,19356,75924,41397,32441,34994,13769,78636,14166,17427,66046,62643,76173,28333,92960,41262,75088,14161,80563,33663,11712,93031,45494,30132,11973,90949,76489,84247,76212,29215,22457,99362,71852,42443,60918,33556,68441,93985,12344,16547,18079,41186,91230,65659,84533,80021,61924,74923,67611,29197,90713,15160,82124,58022,84917,37812,22814,46269,57680,78012,26072,20416,53543,95252,30004,77993,83649,13143,45904,38991,85763,11196,13951,90402,11148,81484,27874,40055,92852,36444,73628,29136,54743,51177,72552,75203,69564,72538,81433,73960,18733,92761,61832,89757,98304,94400,75106,89106,45809,94016,32012,66589,11603,55295,13836,79479,69884,90510,56642,25588,33805,74404,25934,89985,71975,27129,93970,28950,61347,13514,39679,45317,94541,21260,93791,25723,93498,96554,85500,91358,80510,19960,15542,42729,12781,32878,43762,98524,62108,45251,12799,10462,11834,62877,82687,72687,75170,39241,29393,93675,48760,67356,43698,53328,89900,62240,51746,85935,90489,84732,46918,68611,55318,17067,62548,14166,64016,84641,43645,63901,38008,30581,81381,71814,15891,91361,96963,89542,32030,15774,56095,43100,76289,73602,60506,82060,48141,98182,53444,45139,42279,61815,28499,89477,59836,78608,76311,16403,10999,87827,87311,62954,76852,62298,22647,81441,10471,46963,47591,33544,82892,87844,43264,78893,28424,93704,45951,86992,82745,37728,65546,88348,56633,27423,39867,26492,66871,82433,81734,27493,53277,20575,47829,69233,81699,12887,94008,15605,79549,61584,99270,62780,54930,59555,10764,76657,58860,90454,15579,22570,86275,68267,59861,13684,30406,22917,42403,85506,74611,76860,36223,83720,35320,25207,25394,14648,36574,56444,70028,90576,93046,64490,96999,58052,73082,32280,60285,58757,44818,33876,54496,47207,62426,56501,88715,37278,11254,73141,40328,21542,99866,44254,22843,66090,65289,80152,85560,69953,83900,80977,29368,83265,92045,97391,26723,93216,54960,53721,27458,12877,60499,50851,70224,31027,66486,66913,21568,77640,18715,93907,15368,96093,31447,86059,46639,61152,92907,79908,14975,94952,29793,58757,97547,94006,63174,31225,46402,33198,69898,78818,83670,98375,57616,68263,43717,82793,12530,42373,22794,61608,73350,37176,81051,84337,50537,17058,14183,64074,97889,84219,89889,35441,19140,12827,25024,55154,92520,47845,64602,57181,95042,45319,70229,35215,88642,86678,86463,10948,21072,35028,53542,44202,12821,66643,35321,17021,62922,35655,40083,36909,41762,16757,98498,75670,82170,50155,92299,34993,58327,99362,61522,77000,69072,24798,94110,23389,11371,81628,79890,69479,31017,54103,47535,98162,21719,57743,38763,91248,92301,31172,72286,43099,80369,34258,15202,94197,14376,62342,79749,81172,55259,17537,94971,19969,43257,10763,40420,40445,68401,84773,40513,60709,53838,46649,25809,85398,53899,67956,32824,69862,96635,28579,95616,84474,95947,29851,56449,47395,49428,88764,34448,59580,86496,38905,92583,10325,37940,96566,97985,17919,64412,37892,85785,87387,93088,70533,72372,20922,37343,96602,49326,23707,22788,82326,97026,32392,10074,48563,92443,81322,48768,81508,53881,19115,12188,73636,64207,93261,99152,64193,55009,74959,23242,41399,16742,85858,19599,80595,73436,40829,85094,46458,23866,29914,87736,60061,14407,83090,85818,17557,57756,22016,31204,38735,67235,42014,98277,98720,49093,59742,38975,22132,86222,78717,91284,19580,36281,37653,75782,95277,65757,46144,61852,64524,40814,80283,88458,91654,67593,66370,94732,44041,82944,14611,62036,40427,16759,86927,81636,39836,64464,76364,57817,37771,46892,34436,13924,55618,33930,74955,61259,48481,12674,24861,12371,68100,58671,90373,95067,64677,57908,72959,96859,55947,16990,16385,13002,90891,14045,96212,86731,48696,92553,13072,44671,55618,40928,49676,88186,86765,20714,28817,68214,69592,35447,49148,68741,92606,10967,10675,71669,69749,39807,54097,27040,38680,88335,23571,99034,93966,98586,17978,80818,45914,37209,13395,90130,35366,56945,97818,42773,87119,62975,48391,43211,27822,17495,76256,79838,34038,63839,21944,33309,37290,19691,26570,63040,55406,99774,4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21,20419,33763,72124,40896,60504,74984,70522,82091,50982,96819,14614,30189,99740,34699,38583,55121,82435,88323,68639,23359,19319,22397,49607,96131,71163,11061,61504,57360,18097,33731,35777,18592,79794,88832,72069,95046,14269,61476,89379,32461,74638,86512,67330,33383,79075,22228,91377,65354,53687,87682,96720,70665,49033,46818,39404,50745,14269,85252,63010,66393,67529,43199,14963,77598,40763,28600,86525,46819,41746,17037,10412,73428,26485,62824,78724,82574,62744,71578,74966,69248,60122,85075,35685,88790,48691,40012,98094,97115,74603,80393,27949,10232,30441,88445,15561,22298,64687,66823,69965,52570,60897,19577,54401,80935,54030,50716,14271,54392,22097,28029,21390,54800,96487,40450,93390,80476,99582,20094,67136,61283,80390,34565,59793,12163,16124,62991,78341,26530,91874,46150,53507,22561,78513,66720,76261,33928,32530,51520,17247,20641,49346,68289,56630,38801,66853,27281,96909,57199,50440,48568,45460,42503,56925,34567,99084,89151,32543,73328,78294,60513,31562,12854,59587,21024,11934,97760,28363,27613,65622,52379,74248,61338,78726,85314,23298,69255,19547,96206,31193,20404,75097,89056,64190,94577,49218,62308,50411,56112,18955,64887,75395,83242,94597,83614,81636,34022,59102,76597,63393,41687,25411,62805,69941,41780,39722,11811,97874,40491,12223,16176,44055,73625,55322,48213,35246,35531,40997,29226,72579,28099,95034,14443,59282,92073,82912,74383,95542,87805,31611,44999,46373,71758,57355,79256,18755,87068,27401,65811,53293,92210,23883,39718,27710,20192,59597,48782,63661,16917,32826,47218,75330,70153,67627,99200,84077,46286,40163,75969,46004,67394,83712,40418,51183,52123,43844,98764,99588,92818,84879,11519,81436,71827,64486,18203,22901,11956,97634,83960,21201,20388,75532,53123,12402,91936,91772,22383,60303,89967,58207,47481,73064,87976,46658,94218,14373,57951,12449,51659,84968,12473,86596,89838,96515,45608,12449,63047,92802,90083,82435,91931,65338,87069,60975,96492,43433,68324,93449,65233,45789,74356,11929,35235,75393,28382,95034,37119,10956,53915,54803,31873,53666,75904,79355,14777,43075,24171,14163,54303,33435,82866,22016,59518,22426,50761,50226,60348,71735,22463,56862,26538,58159,99933,16939,59446,47535,15890,72552,26004,22747,92916,86690,89764,73921,42415,28954,62614,21762,39595,91855,24147,48517,35279,54161,68998,34224,46813,98728,13318,53433,12495,67208,16784,23613,83257,28314,22203,50251,11778,11059,45348,42355,42569,27787,80238,57272,13843,24769,84448,37523,91361,28032,25342,51904,60289,53958,67237,73753,67224,20290,48103,64850,15357,79069,99293,98562,23847,48505,41393,12726,67422,74725,99411,71038,60156,58031,36690,45343,85174,94754,24123,48426,21738,77570,15352,90706,17590,97068,68026,51040,76651,24534,35849,38545,38786,46674,32854,49024,14751,45563,58301,87652,51472,41483,25486,47648,82238,69036,93991,35246,41098,42657,33569,21454,56437,61996,53209,68025,55597,18143,95879,81862,27753,23367,64290,51367,44643,40798,19925,98006,18518,25368,12979,83535,24484,22513,30404,79407,20034,62334,91177,14592,64628,83778,49150,82112,50670,95799,39708,53089,30115,62981,87914,60367,58553,40580,93988,32115,85048,66499,18637,10660,82021,40981,96502,76766,35777,80913,14197,44870,69067,25019,10623,25185,85192,45655,49792,93195,60794,54769,69949,58318,73634,72771,51610,62446,89214,98397,30437,73415,61989,96567,95745,51245,36973,51165,57037,32298,44924,62825,89351,27149,66082,18778,16003,29320,77530,85423,35002,49926,87160,70375,82847,83553,49899,80985,52335,19298,69820,32617,16403,96925,49999,12875,47287,31550,33807,78152,74239,71924,57000,85268,56344,51837,40143,33732,66207,57864,35467,87277,20906,60451,77094,38559,59336,89016,18119,86268,79271,52418,88782,76849,14041,53049,97224,57737,35261,97578,65004,24306,32283,57750,84206,57617,96252,74757,19716,67660,83360,15012,47653,31164,53128,60439,68207,10880,66928,18566,26212,91399,96836,29144,43477,60097,64933,68708,18055,81907,26397,66482,36861,80782,94568,43148,45416,82399,10113,32011,69471,83362,42328,57543,19712,38825,64836,23908,15422,85720,61997,43710,44743,44722,33700,57680,88021,21974,69588,81567,36891,99189,61081,96713,13126,88760,74615,19268,96966,24446,43054,45823,27075,48539,80349,57319,93643,36991,49293,28386,20551,74414,16755,37312,70728,92979,13381,96577,80894,70721,55552,57222,88128,87331,66335,23619,41829,66055,55193,86998,49349,95038,41523,51604,91941,93982,31492,49986,76910,87593,41977,24656,54091,18542,79290,69161,28124,45383,55639,29940,17171,95966,31447,37833,65532,27851,65891,33835,86326,89996,68088,10226,29903,80424,13462,72454,13157,44057,80461,63920,65886,92085,72325,41784,50414,59999,95443,48168,60713,37757,86922,24793,89689,42586,61258,38948,98726,90345,50478,37224,26124,48768,22676,56980,51504,65609,52917,93058,32855,14151,56648,11153,16472,36225,38050,45590,96611,70170,51473,37376,14507,98773,56909,28504,22722,29250,47051,26656,46738,26672,42449,12905,34416,38116,92299,77539,14692,49240,28859,89511,75298,62231,58572,19015,95474,91623,34627,28992,92152,71526,37248,45960,82968,21678,95182,12368,70836,15674,87943,15186,24126,99862,24376,19569,62867,57996,24254,85742,71969,21313,55600,67170,68175,62179,15829,79037,99701,66009,65606,39158,20238,49422,89175,78811,40276,78319,85530,32429,13687,15944,16228,44544,61597,50428,78526,98348,79484,79607,69597,84793,91907,85657,31414,50597,91302,48536,31067,23499,77932,14278,42931,65807,16485,40363,38974,70767,68633,10925,65410,15087,74881,88538,86113,51712,94091,24358,39048,45372,46316,91823,73703,65999,82431,99282,23331,67785,22112,50537,88479,65001,82461,52286,78019,42779,18884,68321,82915,90936,87367,97261,55226,96006,90545,38552,74644,93149,28955,22322,74340,55424,46771,43229,79348,70053,33822,67073,28542,47056,88291,88072,44140,38292,82725,13971,26939,53340,74569,62385,85393,11538,18643,98876,71002,99749,91962,95976,51682,36764,65223,17069,25437,40927,30989,80760,10266,40018,64945,83368,27298,63971,90940,54161,59589,38915,20005,46176,18761,32197,84180,27991,60521,26959,45589,22201,84606,59854,39583,99112,34825,52113,27706,21234,28119,13048,75528,90707,16848,70993,17388,89441,67485,95821,95482,31959,51532,73032,59434,26707,15198,70227,89749,61517,57881,98030,48999,77782,55147,46344,54466,45873,58806,15333,43874,21755,61009,95524,72712,12776,68552,49412,23444,40945,55008,26761,47835,34158,19823,79796,99654,80994,25112,81989,55762,45606,56406,18513,23758,67525,92803,88710,45364,28294,69088,53373,99617,68700,61304,91045,67630,69469,51292,90122,36363,52154,21149,20347,35162,32885,24122,49075,78500,98127,62724,30624,96247,12236,58618,98690,44470,50042,44369,18213,55662,93136,60496,85156,33558,81459,49129,77349,68001,98905,86897,39940,48498,67493,58092,93076,30778,20784,41095,70784,68631,34412,65162,31358,66099,49263,70333,78776,52227,16091,17132,98316,49691,10594,69612,38245,70091,77357,49653,36197,55295,95177,68497,52453,13332,71276,18426,64508,81760,27658,79567,48366,27043,29663,52780,26522,99838,40296,95116,76491,89764,56708,47782,42538,58530,87415,15667,69960,55490,40706,50965,68187,43463,20914,14317,17937,30064,19671,84593,44846,11103,42992,73247,57174,17337,16304,24281,63314,98758,49744,88522,90107,65323,91492,58734,74049,99209,91924,41664,36062,67226,59890,37712,21114,65272,28541,20084,33852,34651,71130,17339,18223,73140,85301,87323,68188,86891,18218,27318,13946,17007,84049,33961,63822,68325,59214,63511,63632,93679,60054,98516,60078,31516,75928,60036,84750,66262,62484,48269,55204,53389,86860,62688,70094,96495,73771,62089,22598,10926,89163,79641,59128,77762,56856,71019,30049,13422,55026,60137,57282,67554,51573,81881,35846,23396,36341,52777,51499,49256,37936,80225,97769,13051,91296,40244,41248,15411,21520,93131,57082,72955,91414,68032,77206,21344,69990,38085,12059,85964,63900,35803,96604,45965,61678,97669,25225,93971,69617,76527,71530,73540,89293,12040,24862,59337,39001,58466,29771,55028,33096,93296,81562,42557,80308,79134,78501,60095,85163,91056,62531,25591,38095,65588,69897,50469,32597,88506,29280,80392,86278,16439,33296,69131,60786,69173,44722,33028,19175,24417,36297,70733,81595,64633,46441,33375,32884,25467,94776,45766,23179,57589,36242,73205,89153,67432,15327,75077,36205,58475,16890,32574,18017,46644,44374,30693,39583,50344,58112,76541,91956,97315,87515,72978,37019,61397,93844,67980,55186,64756,76284,60509,60190,43748,36656,12465,99256,41944,31619,43688,30605,67328,24545,20293,95130,82827,88186,36737,19805,18347,97514,92058,27338,37093,51124,78685,30369,14580,38327,68561,57453,17562,16248,44916,61396,34881,81498,53854,11090,23409,18777,47859,70832,19997,71803,88826,81040,36706,87671,61333,51391,32501,89073,90464,49405,81528,22307,57851,82429,96739,80834,70857,16521,25723,68028,28237,75136,30687,21356,14354,87889,77236,19420,86370,36799,52629,94865,16740,18616,87355,41699,48342,75824,23960,53458,98697,33153,99252,38877,35254,33548,55068,14485,69289,48986,81959,89557,30945,92946,40026,18485,44919,69577,61041,53419,74115,30911,52137,70716,83389,30033,66290,18255,79229,80023,77189,13788,11017,26468,34762,42096,52135,84195,82844,57269,95365,72621,43198,23297,75274,43890,56174,93332,27742,50450,40469,90486,68613,86593,59261,56637,12758,20337,74831,18179,84068,70769,85164,14115,52836,45304,71959,71620,99393,59865,83894,44904,89648,48058,71881,12828,64171,10066,40043,97117,77703,34491,73277,39785,65097,70940,32750,48735,44399,92890,95989,38181,17498,62497,67156,58809,97962,47966,74412,75668,85543,68907,94595,24173,63134,45514,39977,98628,24430,46779,51024,84164,75637,59510,11995,36565,22447,55017,53432,38349,93688,85865,68897,93521,92291,94369,36698,17122,97141,90705,17689,97348,52184,77889,97929,72715,85193,82845,37461,42539,44282,11609,54271,90895,90242,78052,27066,72389,48933,85077,72810,89364,88712,80177,98312,16277,93278,35128,82371,80692,38496,92451,15450,20475,98801,74762,41191,76247,45162,41750,55567,61214,57119,98845,44095,90314,77940,67594,28503,64197,94008,74545,44836,24022,10019,34529,51807,76606,42808,92332,30157,28172,31853,40814,83196,17676,88753,31310,30467,83695,94700,15501,47373,25174,40808,81111,20779,55786,65683,37810,72919,67940,72121,18835,89923,48236,54318,76828,31736,63870,31172,70517,17589,29463,84966,49727,45466,14768,53010,71562,12175,46484,10054,51507,97432,82185,91994,38277,96958,45423,57809,68536,27135,72775,62267,49335,30081,14223,16675,21128,89971,79167,80616,85533,56809,85627,59705,30541,78108,36220,71852,98667,86564,88669,68990,88624,72534,13760,70523,61133,21819,53323,30053,33155,50786,60444,19792,35523,84050,48184,25671,90918,22686,85790,61520,95175,99638,81156,31642,10091,51433,18969,67885,77443,33457,82320,21282,26862,82813,83113,57301,68261,96366,71346,52263,92885,23631,81818,61150,67508,93960,50955,34378,32138,74523,29983,61940,34920,83296,44505,75754,65450,85211,34539,71241,37689,44368,72321,81186,46920,36736,28958,49316,70583,43609,82153,90122,94764,36890,79799,30683,75102,75202,87462,39580,98182,18593,97111,14932,86142,71573,79747,91419,83703,82379,26876,10266,76269,20219,82048,12630,15620,16165,90421,60056,16034,87890,87981,72246,24067,27129,82766,99043,32502,57422,27510,41051,63976,83139,58843,41025,23241,43591,33255,98217,92792,65840,33362,37872,57336,90750,96430,57858,63282,36760,50462,47289,48342,25817,15336,71246,51739,68454,81412,19030,46638,80139,75424,77766,31638,64655,93828,35094,60147,76149,13981,50217,36483,96205,87683,74446,88408,63253,46462,45784,23425,50748,94590,90016,47680,13502,23375,70941,91105,37522,35846,14884,25380,90704,89155,10673,94474,13864,19108,71569,49014,24835,82068,27923,88188,62604,98539,25724,41389,43618,48499,62323,48963,22652,90411,32500,30432,30057,15611,72899,12761,34601,50278,94226,39101,17545,26082,87655,87633,34429,50375,40585,13246,41132,57805,40007,89953,38486,19699,29156,95104,19022,20339,60778,28530,20695,82386,44438,79157,33102,76316,10078,90914,84944,65443,59745,99230,43872,45687,95872,21495,68215,22735,71583,48992,19117,20466,50196,29547,82705,27444,15315,21089,85535,68624,38075,12472,95814,26065,79050,56975,72634,85531,77434,18796,12168,21756,76226,85343,99676,54285,86516,17698,61200,96125,28333,92288,79221,50647,34593,53917,93773,75228,83598,88953,85929,20974,92198,68020,86005,94910,67063,20824,94124,85827,36076,39057,50732,11325,13775,86012,88245,44094,37511,12420,91090,27313,76355,15438,61684,51144,96797,45292,95304,91298,83329,75792,46621,60143,84486,91780,75034,79071,34235,16245,93295,62887,22348,72172,87011,95008,72522,96846,68666,96888,11600,68093,56520,52853,90561,47891,24317,70792,19001,85673,95492,42711,47260,36060,78399,96470,60216,76630,15149,62126,56749,74540,71560,92973,22925,78596,12764,80660,47672,95040,55867,77541,96599,49471,73834,64061,17740,99540,35049,31979,73106,54703,36782,65197,43321,62474,86076,35084,94353,26877,58744,39156,16133,82734,15145,95247,86237,15678,89603,92051,84558,46557,52866,92962,31229,45026,34637,59967,75484,19128,94046,29127,28364,17134,95806,71935,35451,33432,46449,53396,14098,26735,84025,61970,83944,74626,90929,32416,19326,39982,87753,91106,86379,46713,85365,43721,44183,74658,19032,33856,14419,41530,71890,61186,28520,68149,53123,53686,39516,86104,79211,93625,86712,90640,16451,18858,31010,62256,67730,30330,12613,73118,77728,15112,79369,38779,86991,14622,40492,89142,88355,12503,43840,94571,57181,35019,39646,71482,58139,51001,11754,70500,45002,97238,60785,98529,42800,80675,68437,61412,76219,33888,99510,61390,63189,35991,33113,67900,32439,84518,94512,10943,78308,85415,45641,53821,46854,25348,47649,21950,86229,36405,91577,20449,88068,43147,68391,60180,75199,87754,18325,55796,31291,80988,97655,87144,47011,62344,71698,14489,92188,19202,14827,62749,93428,36865,30492,73787,55809,95793,60833,55203,88295,97557,36982,93723,17759,77471,28930,55307,28870,87702,93120,47360,80743,85559,37412,65159,94055,17710,13017,84945,98400,57130,71510,64717,53304,52933,39031,95850,87655,54552,37735,57532,64653,58395,47738,42618,85642,69946,74118,36371,76771,93075,85150,79326,68885,85527,78970,10730,86176,29410,58290,56560,18714,16006,39265,38746,91784,32221,18413,55221,78336,67219,53518,10772,33599,45214,83487,84093,72562,17244,29254,76608,65856,87819,22668,19908,54065,77759,10095,69463,80685,37530,68611,69481,59102,60213,45408,92209,66488,14174,31927,39590,90299,70498,42547,53111,58107,29138,82547,28833,55769,40762,84342,70251,76048,64893,35083,62515,30523,72993,54131,67397,62587,61866,55350,37428,38056,53223,99119,78879,85656,53654,44971,74968,19839,74958,35430,77874,17723,53236,46021,10664,56013,73179,22347,27636,67372,96064,51544,63671,69006,81832,71781,75481,55354,70132,51318,83157,44283,61355,63601,81505,77983,21747,45746,35754,39000,94487,79587,70080,32094,16814,17697,47249,29211,78195,37205,87393,57033,89525,30414,22500,26958,98372,42962,42153,39990,86064,80456,12084,31195,25880,31720,56853,81095,63956,25273,50303,38706,82509,51017,55736,12902,85759,17585,90338,69517,33628,85373,80926,68031,30797,77833,77958,26397,37526,97495,25097,20551,22837,74334,99758,80535,45497,14272,90937,52623,87396,16055,90170,55696,34140,88932,84698,57845,80041,21960,94064,76162,35164,26736,12095,18962,31375,54066,32081,45794,55500,27527,17762,84852,74191,81722,39672,79822,28610,34960,50587,84697,57542,65264,49504,91190,29944,48175,53550,78864,79810,53797,68832,30462,42781,82311,66754,35509,32748,24038,29845,79022,21031,55163,90090,93261,41780,48649,94402,42997,92264,42762,11330,74884,45454,98468,12925,56334,59579,40410,17704,71060,20852,18924,27245,24246,82619,30326,23257,49686,35648,29311,20256,14737,31214,71773,39451,90531,65768,93932,35299,82652,81025,37529,13316,40854,82548,19050,69413,27206,27189,37615,39415,30108,34441,90308,60113,79183,46755,58416,85544,71183,93434,77478,23232,99079,71591,63155,67607,41992,96205,74601,93939,21276,88921,66976,86487,46463,82112,45347,91981,54092,37580,27426,45821,43570,77461,24259,98179,21844,55472,58581,62824,28158,29309,38560,55992,86040,57733,73902,59564,41561,47431,40780,38032,85171,48678,96359,46672,83935,18170,44079,72694,89513,14563,23527,41767,24125,89100,63926,19622,98069,88566,70362,64410,89496,20576,83037,36052,77278,77831,47534,53363,81202,92280,81850,54569,83228,15031,44879,57154,36818,40357,56864,10613,36924,98075,94261,74133,38716,51352,29611,93968,33559,56529,54796,57870,13024,40006,92154,20894,37672,79207,47244,65230,85404,88760,25711,88320,42047,83598,46616,44610,41736,41000,59479,40392,19654,47379,68160,88782,76306,74622,46980,23199,32209,82163,35117,91462,27254,90859,96151,58720,88802,89482,11362,36644,23422,73054,22113,28771,74288,79841,44655,83946,12796,22151,65831,33313,22185,25447,90981,81833,25922,24445,96018,83691,96051,59405,59989,13950,72226,54211,45778,58250,61075,27345,36621,59332,80617,53638,77961,27349,65307,57190,74175,66880,71591,29474,97540,61367,99681,18579,37282,50969,90518,60569,58580,14891,29220,55571,61311,63484,67807,11021,99660,77541,86991,10376,35689,78755,25919,44772,43298,70476,48918,61987,56063,28050,76769,76001,99172,44747,97054,64958,27825,15692,63963,57823,51140,54644,47922,69570,96484,92473,22827,64628,61880,18417,69442,90924,14438,13039,24513,61456,45686,76397,43750,69410,14692,21591,55158,33745,86354,22749,33336,21726,64706,86787,81090,79685,94586,24818,24730,11686,37051,11790,84134,82169,65169,89230,19070,81096,29944,41432,85497,91660,37407,35451,40246,55864,39896,40591,22738,45432,62481,59678,40982,91230,81725,72090,82096,23718,77598,16727,76157,38550,58099,15130,81801,88229,49240,83387,24198,72865,53710,33384,41763,10916,24782,97377,63041,30385,48720,70603,12140,73779,47364,30394,66359,96327,74324,83000,35931,89492,80227,15367,83639,50106,26645,26917,31748,27829,94355,27761,53055,20820,29471,30033,13960,77523,66927,30664,84393,80315,60070,16520,56589,67419,45053,30431,85185,24482,76196,64782,19272,77450,19371,18638,71543,58330,37190,15906,61643,40344,57809,82865,64687,85830,46481,10541,34130,82855,25576,71753,89695,73325,21811,21862,97748,13109,78461,66142,30926,48364,98810,59771,41181,79928,80206,43916,10283,17231,29170,70708,23355,71351,62172,58398,89462,75727,30718,44059,84851,81402,79944,37754,84690,24476,63905,70352,90006,65501,49742,41473,25468,13420,50520,80862,89971,59469,79363,49471,82787,55720,57060,81915,97603,60486,13327,50791,35329,83427,28939,56098,32823,64460,63835,22426,74462,63589,90615,40662,23130,28446,63243,23677,37184,50487,75853,50772,13701,21296,92193,98079,38458,70888,80340,41814,66331,14854,25184,26539,14951,28527,48051,42139,58148,71484,20628,64920,66805,70986,78346,44022,70970,21801,81449,84928,74913,49423,60895,43172,88054,19604,54255,15247,40636,13944,99578,66945,60562,94843,15396,82473,24417,40720,30484,33492,65543,24098,86005,35534,70345,18999,71306,40347,47595,21927,33789,35094,57420,92979,32393,38519,60326,73209,26066,26474,16929,64612,79993,85965,16625,60002,47616,13896,94894,61527,56295,66642,44173,16219,34028,16093,47900,10757,40922,26208,38909,29305,38743,17885,68108,52156,48110,40715,62365,89216,54713,74959,29083,35478,37857,45238,28850,38629,44297,86250,92439,63984,25523,40075,60453,38209,89932,26726,81506,84840,31343,72911,69990,79083,10900,18655,51028,39177,72793,37752,26255,21489,91714,25486,10462,75656,96498,57481,83912,40268,27943,54731,43412,13618,25040,86530,21493,48579,33904,43271,30415,66485,27639,60119,56471,53238,24341,16199,51218,10709,45167,36481,44536,82437,24031,38885,22928,12874,27257,94353,50148,93138,69094,81538,18613,37365,96031,44754,23364,98195,49316,75418,72736,31944,91435,51540,90034,12231,53584,12511,84825,17087,75867,62774,80329,94488,63666,48348,36738,29146,46093,30384,70978,66878,37390,20309,19122,34559,45047,55695,38750,15174,76458,88910,63625,99739,67082,75906,86416,97118,34782,84166,68525,11889,11382,81365,16408,93493,50328,17810,23533,89896,88207,85535,61683,56569,35419,78967,66283,50718,30523,97091,32181,26936,68050,87656,10813,46165,16158,53047,54948,57247,13336,91129,92100,12616,16149,38089,93674,75770,82512,24467,90607,47079,61580,40645,98667,19188,11663,47129,39136,38630,79304,69211,19024,43036,34749,29799,31619,30083,37616,76806,49955,46055,17105,70810,43560,67774,19255,45824,81611,44013,40004,52553,59372,57793,79502,45495,84673,93199,32852,22950,80128,70718,93718,37683,48039,45103,84109,30678,35401,35721,63562,85866,29681,35782,75551,69129,49030,50876,18056,87700,73306,83792,93879,94638,15668,92787,45055,88391,57575,48435,39121,88814,94724,14142,51344,55998,98930,13546,69658,39369,53988,75177,61037,65147,15931,27923,34116,89654,94162,41437,43687,49925,73811,83893,14405,43309,16430,83696,95877,81175,29753,15452,83703,29603,25226,71028,49930,47686,36958,36554,75061,64518,67617,48069,13307,12823,36434,27732,76035,70986,75281,66459,59518,25236,21137,63361,88497,71162,77874,35566,47399,23750,48567,69630,98725,99670,19050,66850,44022,45293,26416,63611,42946,71832,55031,68603,37039,15952,85257,68801,72885,48685,25028,82803,12157,21349,80822,28881,41768,23448,80617,66894,56664,64757,58790,88332,51242,60532,15654,93026,43164,87058,83675,80865,16945,70664,30153,82875,90372,57000,60324,24725,55644,18693,67487,62267,47942,53201,18072,19447,18282,63065,48174,59350,28015,54735,32666,82591,53654,43734,12245,26712,79559,63665,85333,96682,68163,96215,23327,76715,38335,53303,33935,83911,12217,62942,69300,36242,95523,92669,19906,11028,11460,18115,24769,22632,13054,34170,21406,46736,70427,57960,49364,84849,65573,94598,92120,34139,19504,25000,85140,43331,45444,72091,21823,93884,33869,75222,52264,27845,13126,33294,53395,69589,42628,38258,53301,15496,63378,81277,98056,51840,59520,65411,33598,30754,15591,20520,39563,20815,95786,41608,42480,94352,24844,67198,11122,62523,89951,15595,11279,18288,25512,63284,37980,34916,30245,99103,82253,15239,41123,59241,89734,61542,27457,99853,62856,87248,16653,27256,52992,64247,78916,70849,39719,52007,14487,47644,13901,67700,31304,90525,26878,16302,72577,86383,11962,48393,12721,58675,89768,31983,42486,66292,19575,48116,43688,78588,42227,38342,15896,93800,94566,71263,12055,66727,66639,86584,78264,76228,58167,17331,71025,13585,59410,29665,16261,22671,74235,83582,51905,77258,14373,65851,76607,67922,10789,64070,90513,20492,25089,66997,66466,63779,39849,76445,56227,35230,32615,49425,80762,10046,56616,80692,87312,23967,49200,46370,85539,13424,26145,39800,67719,46383,21256,42471,52428,12995,63695,37608,18799,68104,51465,44652,98019,74114,49578,98563,44332,27742,42901,61231,81614,90168,64251,91571,56959,69886,94445,86991,74295,73993,67650,34247,39473,39137,28738,14746,66587,40038,64517,91458,13374,75455,80256,10575,76822,51933,98397,45431,98889,83584,42620,17371,43620,99635,68927,58946,48819,80065,48030,10060,41984,44067,35254,62531,85611,40856,57731,57111,57923,37040,45193,86754,69673,11118,41906,60606,30698,36532,83944,25792,33276,74232,78694,59221,49682,39006,56216,78266,12416,33417,73728,65039,12460,93737,91004,93831,32541,14485,68487,46214,99923,87514,73845,34113,86676,95379,98142,62371,44604,14460,91769,77053,16374,82398,54684,14968,49029,82201,64301,63161,62621,75888,68159,38779,83082,14354,34798,76439,39395,82161,84991,89225,53879,72567,10188,95297,31829,60736,97597,81471,73770,19485,74221,76542,22874,91041,15426,92666,36299,15799,40034,13900,62609,33000,59170,29235,42227,40174,26359,98858,60038,64914,57668,53848,46610,57877,23484,67492,59811,86361,74372,23475,78802,15290,35270,95956,66896,38965,75994,41179,48972,19163,56178,37287,25927,56137,34815,68390,48610,73932,48861,67731,80841,42002,78712,62263,95731,28160,78504,22306,97666,79752,42485,59860,68465,93471,28497,10850,69367,92881,82632,15931,55399,50720,90203,39424,97976,64349,83150,41711,18901,91402,12598,97344,34879,51337,25659,77870,25935,79600,87384,25925,26283,80248,86995,34554,45027,60120,65717,71968,77948,22758,68372,41276,48942,80158,40319,68767,13524,68067,78407,26145,63328,94067,52157,54119,36254,49600,28282,12366,44978,81238,48536,34603,79706,90166,90550,57284,26020,79109,88007,57068,86837,34653,31218,41593,56445,65522,99802,23885,99872,30714,12485,57202,50617,69836,37784,88072,37566,64805,55138,89480,82723,87388,21965,95895,72852,58908,28280,58114,25099,35285,54026,47463,77380,36731,48402,73150,29668,78078,88793,42826,40848,95655,54559,48493,12960,94351,11403,35382,36619,52647,59002,97631,73569,40997,75146,78637,55420,85282,58886,54769,34963,73128,68298,64307,88905,21241,94147,99837,91869,22113,33462,52138,65970,87175,21052,51203,59300,67879,61058,89552,36589,15495,98380,81474,30844,15992,45475,29752,92567,66404,11920,46363,47289,42803,95849,71194,35888,26786,86171,14509,14443,23994,91736,61915,56238,30740,40583,71305,66496,62513,85933,14048,55709,78537,30428,21706,11994,14572,47016,18957,61019,18397,22967,48413,12279,24286,80737,96783,82945,11463,22655,52716,33958,89513,19119,12369,46446,24006,13573,18966,25474,33277,84791,37319,33131,39287,80858,74938,80360,63065,72792,88048,96793,84061,61464,17952,48106,75088,86310,72151,62975,43432,61338,75718,55237,78691,51374,44009,36553,46719,54465,39856,28640,14702,85317,70926,14007,33108,66207,94642,19778,41482,67012,30948,43401,63074,72073,89566,86664,61366,90237,30865,20617,16615,78244,39884,71925,57321,94217,20222,33801,38698,39451,44715,63896,17691,45979,95160,99464,95350,57549,52961,16221,40653,95800,67387,56368,74459,32997,35915,90156,60752,46918,27186,16664,61112,34355,69156,56332,25265,86248,49621,56798,20572,32510,46671,35402,87101,93210,60592,62215,48463,43676,75016,98885,17796,70250,77715,81510,16877,34235,47719,12977,85783,45688,39392,84249,83220,47169,76018,31554,35304,92567,97443,80931,79784,77729,96073,24996,63342,67800,63842,69567,92401,93276,24662,18220,25528,28414,89421,73345,61420,75230,96090,13292,46803,15587,45518,23310,18508,68574,57106,95776,92958,48520,22552,70747,70431,57906,86751,65013,72573,45422,44033,80082,51679,21308,83647,93664,24505,24993,54321,53096,72589,10108,91691,68536,33909,92660,66589,87162,44083,48925,53183,66496,20068,59041,83529,19781,92809,85392,45412,96146,60421,14424,67476,95409,69013,22800,55265,66945,40551,14823,60359,10748,99513,53023,69096,99813,82749,10784,76470,19741,65429,34235,29101,81037,90844,91581,36579,21548,73624,49056,45062,42823,62741,86277,81143,20632,46840,79450,26512,66037,96245,12832,82047,46260,10844,37041,37599,69119,34114,97595,37083,27439,12186,37446,85331,71502,33654,74424,72369,71391,61402,31413,77547,59459,57323,62636,51902,14574,15293,50248,30749,27183,55627,48606,84924,95239,56269,98486,15740,45786,47721,27561,40118,54387,50292,67455,94004,48638,34097,55846,74448,95101,96289,47132,17528,82754,54598,80153,52558,15100,44566,22521,19105,51970,25190,61250,49291,46787,14588,63749,49017,46320,79023,43445,49737,16237,11688,65029,30721,14162,37165,67245,44865,85233,51578,96999,43118,38229,23784,45082,70215,65461,92443,81674,34814,78852,42450,31343,63320,85442,89596,69960,86041,63275,74622,81132,67016,91559,32089,43758,71460,77671,23725,51627,78555,46248,84083,35778,77511,35483,29241,61694,10274,51225,12389,32497,48305,61353,21214,20353,37902,74752,25278,76798,74990,33383,17665,45062,22833,63808,52848,21799,38022,40694,50700,67061,48639,75676,74538,93086,11745,19891,25704,99123,72394,91745,56138,98135,46857,98717,11676,40790,31677,91233,35805,89095,27259,19730,74186,51300,68763,94595,22940,30707,82336,14869,72449,20819,38346,60197,40680,74937,13612,49273,76883,78455,92548,34800,90698,40043,61306,14729,45462,29393,72364,14118,91309,76780,20662,16542,15248,67381,29122,33735,54151,33956,34960,48856,48107,79890,55126,28264,46580,60439,93359,97935,92068,44034,10503,23783,17069,41361,60317,89307,42949,11693,74633,46313,76768,89199,17266,63624,23686,43076,58478,22569,54855,45803,78086,12541,69370,20225,30778,12003,24961,78875,27271,37127,28666,59041,30319,81555,96010,43018,55953,66122,25671,11988,76446,69897,41814,74447,73126,91808,27819,93466,44152,46563,54136,97716,55683,92188,40743,25030,67147,54511,62331,97674,61686,50997,38166,90316,83769,29768,64466,96396,76159,33712,51056,57002,18465,85985,72178,62226,91547,39004,98033,44514,17081,24261,46886,78584,10402,27060,12985,83125,13859,38947,52377,72080,77684,92233,65348,88129,58742,47680,91548,99192,14859,40558,47752,37947,41553,80256,46824,68125,45933,35256,80074,61286,37505,26090,86966,62390,72948,48880,54520,88679,82319,94634,33074,38688,59434,22772,98519,36241,25545,10227,24978,38849,63735,43049,18295,14347,63579,84274,86319,14672,81966,97517,58748,39667,74607,93009,70859,59456,79030,50205,80524,93845,91855,55362,96042,19438,16204,69567,40732,58597,57750,97032,95920,38664,72470,53966,77869,91644,89491,76401,52897,82783,57609,86519,85745,47581,90279,78506,90182,11786,76351,22365,18825,41038,93364,34665,38246,72554,19051,69115,49478,11145,64250,59680,11448,72597,82489,85691,53794,87594,34980,27410,73054,44675,65520,55064,97484,65297,91074,39785,25564,61713,12393,99935,93999,41461,25793,46287,65152,83890,25614,85695,11623,17901,35532,28030,64645,71152,60530,59677,38192,28584,48339,83976,73267,53327,55185,25356,33197,54663,63048,52166,95211,69185,46764,30738,23290,24951,71660,70904,36569,90958,36088,88359,88227,41082,77620,29236,51014,90204,47542,63344,17243,62841,74954,75554,75112,92382,27560,19296,29519,80960,83110,21681,53603,35752,22097,95546,19134,60543,89356,12322,28700,25793,51230,93410,34541,92872,50813,40097,83668,91391,64771,32583,45152,60143,30616,14780,31463,25736,88969,91788,95245,59934,74691,94992,71394,26099,37107,16729,96575,88833,97130,87628,83149,95934,27078,93798,97767,59615,14731,45472,51110,79511,89291,65059,53212,62549,88283,75822,64165,89360,62951,81027,48791,95614,94442,58537,24857,99819,97789,86229,80850,89140,61528,26556,83556,44667,21158,69963,66204,26492,19021,72410,54246,19459,62679,81536,15573,71457,56972,84324,14693,57166,61317,90702,89083,17230,59227,48230,17942,28817,75920,74295,91708,43486,32326,33275,53824,85309,73442,35125,76528,90362,73076,65101,35774,85468,33141,96380,93419,23782,30363,83728,28056,93433,27248,21453,72258,26896,61138,46851,27617,97829,30616,62441,19239,22237,41431,84361,85695,76050,48769,27863,44537,88207,85912,46404,55326,34656,94712,15405,63577,75361,58574,25457,78498,11760,12939,93241,86853,99243,52785,63230,88211,30294,70144,45768,89149,38575,19187,26949,17766,39557,89639,56546,18932,36022,82156,56109,41454,90519,58886,25404,92242,30082,50931,75386,48563,32712,20675,89366,18856,97421,94404,16698,64346,31046,48958,63431,36229,33289,54710,63996,85845,13495,46580,35277,97317,79432,54749,33108,59795,83657,26439,48800,18248,34042,44697,42550,88906,46409,18402,94895,36372,90156,30281,42173,39110,75856,93728,64850,21247,45072,53424,89664,67971,88144,68707,54104,40715,86467,88802,75173,75349,40103,90985,74784,71490,76096,52965,81687,44080,76364,95298,79012,10304,59328,59290,24420,77086,47598,32172,73451,40533,42282,83819,35534,56021,70419,14698,18243,54150,79354,45649,76916,97347,26160,62340,90077,87633,52766,14703,17213,75546,26355,83567,60375,13635,22059,13557,15359,37687,24676,50847,60833,25769,36860,73350,54359,64830,85058,14729,58866,18395,77210,46204,72824,75943,50910,92522,58562,47679,10086,50310,60135,20724,28527,81336,43587,67759,33029,40236,30596,86570,89170,87953,94740,86869,28989,31788,71855,11594,94115,64594,54214,36049,12732,54914,21164,50773,48750,90927,75931,15091,75845,53987,53139,17322,42105,37722,19270,99006,89363,85062,78542,23273,10958,44927,45312,88384,44822,39963,62795,20475,84298,81096,63460,33183,99972,58585,35394,25956,83980,96365,97628,96974,10583,67994,48004,80329,30997,44194,13498,27021,98290,82090,27867,78092,67095,53446,81294,67928,95294,39667,66876,85798,75109,81748,75283,56724,45677,34954,17212,49747,99451,64511,73466,83500,95612,41790,62129,23273,88982,39556,71433,36140,56022,73101,70942,79304,61460,71971,35767,50799,98358,14664,36593,86466,38070,65493,25107,78992,39701,31681,83944,58042,37953,49051,45854,46761,66975,42470,44512,87302,20304,86353,92936,80070,50753,94510,10449,27783,75295,21222,15070,48651,16928,89797,34986,62900,86322,69379,28341,15377,83053,86127,91620,43324,61367,57932,71159,51674,66671,34918,90221,56955,39406,19045,37146,82735,77255,67660,71206,83125,79173,68783,36878,60265,23764,62326,29283,66343,41486,34314,81919,83834,16315,80185,34064,54891,98715,51946,45465,57749,39877,63988,41077,59410,25047,17769,16029,77584,22575,81575,14051,60563,83942,27743,74911,18616,27021,69842,77849,58267,62811,65294,55853,71576,55129,41372,21544,79949,53662,93967,55529,20917,26581,85609,23308,33688,83582,27219,75295,78767,47937,25866,27805,61188,86489,77810,44902,22073,38276,12407,80747,11749,58897,68758,50547,25163,37728,55477,11091,57727,67511,24751,48918,93928,87243,80486,74258,25258,68971,98195,94172,16826,87379,81595,82817,46532,64563,76286,82022,37983,66530,55687,84202,69501,32657,29368,58699,94376,99952,78282,64558,78090,10391,47882,13016,69915,67817,64607,30287,13659,99131,32410,27134,10002,28903,24378,33464,56502,91807,35456,45160,37992,22426,35272,27648,80653,55461,62478,64781,25585,73551,88355,99886,28270,75636,25695,81539,62956,67403,66736,94089,64584,81486,95946,71919,15546,27711,37895,36886,51172,19502,45912,68474,90031,61185,75261,40363,84965,62608,34834,11503,37754,65326,39748,14564,47474,48385,69431,76348,66252,30217,43020,82288,96548,45883,23663,13116,80884,36646,87209,84321,85060,93944,45831,38530,58900,62901,60441,86574,36876,98474,96875,60478,78016,21664,74084,32087,81665,10398,18373,14672,94227,56907,52327,82005,33391,48751,96101,48868,92940,71782,91191,61813,45188,22446,71459,89368,90102,26699,11190,59698,81614,96469,83930,36114,11483,67410,12755,54406,69978,33372,25935,54087,23319,26240,78047,66884,83825,46975,42229,29483,30553,16302,48749,95583,70315,61508,36571,87892,41549,82050,20556,61565,99921,49126,52517,63047,22664,92142,79721,30778,72070,27698,10688,90539,78411,18460,21098,67860,42939,23140,99681,46148,30501,97321,14441,33273,83081,79102,38790,50953,28884,11583,70706,11449,64299,33981,90634,27352,33945,95714,52722,63446,96076,23464,65714,15332,53785,17690,30761,11730,97929,91967,81315,42393,19025,27151,15547,15348,41876,97246,72467,75223,21210,13187,90404,76752,72539,22330,44422,85523,31883,47647,57715,48519,64637,87370,82898,95357,49930,28430,50925,36159,28719,80218,93531,45439,99090,72833,10028,43559,37971,64654,41067,81980,42602,11376,41591,85051,78867,11822,12559,76522,81271,56525,94780,15682,30138,20311,57719,98303,70654,62794,14975,29694,84155,96949,85610,82302,67310,62038,84827,97109,36800,90630,86916,49569,52264,91114,80664,79196,34170,95390,77660,33893,71741,47480,54745,58043,29644,95787,89040,96225,40922,95494,37239,64840,52028,39649,72682,52242,91022,32856,38850,23729,72236,82552,94348,70553,40553,92962,34406,97951,98063,57936,67190,64135,33573,76284,80154,53387,63153,17285,44107,18482,40769,52349,74074,99896,89385,28875,56896,66440,42614,27958,24935,45655,37173,48183,80782,22393,20881,62240,97960,99956,81748,28432,79660,83850,53954,64251,79704,12760,46107,84522,89435,60612,55844,16846,62136,53620,28435,39187,95377,89231,81073,82806,84240,36824,85663,10384,94475,88116,38042,15844,36521,20410,44153,41290,40687,33926,96852,73471,98846,14965,94720,91981,18071,93231,40504,94668,57576,21537,57339,86021,94588,13672,99001,35994,52034,79203,31019,30114,52912,59725,27638,24597,26551,55295,78404,50654,72136,89399,70674,22556,12641,85438,42635,33430,72961,13058,55302,95976,88928,61967,72918,60509,75982,92252,29815,44295,26393,67140,60884,65341,41434,10647,10983,66870,92484,84365,93373,53691,37842,23895,66985,28220,73161,21474,84143,24136,53625,64789,43366,60315,29976,61577,98579,36258,24281,20079,64495,53738,26732,63631,74734,45826,94842,97086,73003,72861,96638,60935,58203,57348,68185,47383,58001,74508,18007,28450,58319,57065,80838,82157,50975,98272,29876,10478,18316,14727,61998,29005,38822,28895,46718,32478,59779,22329,18289,74101,54276,42492,48992,99599,22740,55953,75091,54494,31904,63102,12115,18740,71599,93359,92667,94519,95288,74579,55461,74807,76242,53144,70546,98758,44308,59511,43374,35961,67738,89848,57660,62430,63319,68885,28652,57388,95413,53879,52365,32814,28544,42102,38363,27842,16721,56620,50973,19548,35188,91202,29737,71380,63959,53633,83177,94884,87837,44101,49706,98066,73861,89495,88297,85740,76283,78257,23874,86848,59058,67347,93211,45077,48983,98475,30027,20775,43127,83667,83115,39415,60493,39167,67226,17794,24856,63794,89562,90344,59421,98686,64856,44186,57485,27345,94566,24656,58797,23424,66902,38533,25281,55644,97726,34088,88459,14900,27282,63706,63776,51164,91289,48065,40706,81765,65582,31061,67557,82772,31316,98071,48685,27225,92438,65420,41575,38077,49927,44331,68692,29487,90847,36315,99204,94977,40720,70038,18534,39579,31632,23379,52657,82811,14921,97437,47320,60418,86478,48692,79268,69920,27485,40723,99637,74368,66687,40353,63450,24963,37903,63341,32449,16481,74345,62650,64917,89912,76808,97363,40681,10540,85867,71814,22856,43454,49973,54227,19177,48591,90693,34500,11326,61996,65211,51802,67174,42736,47417,14605,29710,18835,46256,38574,26498,18038,98738,23799,34956,52827,64211,27327,35066,50171,27898,60294,67270,31728,54079,57879,60763,69176,87870,63232,19026,93781,38330,26922,15712,11302,57962,78902,54128,98589,80598,60753,15880,19076,30487,36666,61341,24280,72481,16153,55618,43740,83437,19254,53295,95156,25740,51775,82749,66547,56071,25838,71686,18578,53588,59395,22517,26113,25048,60398,80441,41141,32659,22307,35298,24414,58049,50055,13672,34653,67125,84940,44911,12700,34209,31695,27065,52743,81610,92843,25080,60857,37443,74316,59520,87104,73516,39177,23740,94737,26690,27623,45551,92882,85813,33745,14765,14115,77437,57484,86649,95344,95417,17209,47204,55493,71770,92584,37223,71891,36626,98245,59770,60748,49048,40217,52167,72048,52418,87392,18682,19793,14824,99913,40150,76369,18887,69266,57454,75187,77997,24794,84656,77581,34753,65448,64213,83738,81845,32332,88454,69551,15936,35741,55965,26886,93932,50446,72500,81466,17275,81742,82399,53877,12334,12061,47004,42943,88703,47623,36385,78522,99339,37139,47388,68766,90926,51473,44892,23497,44006,24069,50834,82610,28694,69394,82143,10132,87809,41070,79897,56873,78291,93168,11062,58943,64223,86685,57052,19282,49389,57422,37546,22051,68506,42163,50158,25802,80602,80362,75108,13872,72325,43221,12230,15864,42408,78003,94949,73849,66850,81142,37503,58845,76447,18215,13883,54906,28731,33323,99350,50007,88048,56056,79629,73816,89419,55573,21905,32044,50323,27226,65407,13062,42739,78456,58204,60467,85902,37191,37148,22166,14399,56572,60856,82878,43129,29097,90490,70173,18162,32030,52513,72107,41245,24563,22161,64276,61122,39838,56577,92048,27427,39850,58428,20365,96690,29612,58782,79541,16755,46251,39248,98847,68980,52457,81655,25755,71584,61715,86950,27332,76728,29567,14769,94814,21742,57696,63782,58745,96814,80740,51333,61461,90533,20763,79586,58624,67929,13862,11241,40895,60687,42332,72193,94994,16232,71919,82675,95152,38899,87051,50641,29588,74737,78520,71311,43975,42140,30259,59085,10527,52139,78502,85634,49294,85441,84883,22099,78960,60338,95152,28713,56870,65782,81760,14921,59267,67155,25184,43884,85359,77814,43799,45612,73490,82878,89456,96149,72087,30874,92156,90292,26034,97650,46690,16928,56476,46144,58417,86801,98859,16191,85165,17324,12303,74191,93858,89677,80807,60398,33649,84612,23888,86995,64728,96837,11734,15796,44522,38361,52548,34602,34594,13907,14175,49837,49242,84367,26667,38918,58602,17409,38657,75187,11184,46625,86941,12074,40213,39883,43463,43298,39326,88572,94797,39770,16104,39455,59553,87352,29481,40325,73288,50323,56198,76044,43183,43391,12555,46395,89509,10345,78619,47985,64982,67276,29164,29311,72276,52687,55241,72497,52117,15107,58301,59195,20613,56165,97942,76388,62556,89271,11559,45722,74950,53854,51757,21322,62624,38469,83606,43780,80360,19419,29177,29269,97374,11851,13433,44476,81866,18285,49947,15097,66597,26935,57573,70950,13325,40225,89048,37177,18467,32052,39430,57357,92832,82653,82174,15498,39182,61416,70337,40335,19439,95410,89742,90256,60676,29278,44155,92095,57954,29991,34586,71564,25894,54047,86866,27618,33538,51623,34202,46975,43893,18658,25425,76041,58823,41890,32827,62032,88494,13376,62902,74069,18917,13694,23224,98130,65424,62498,14075,42154,76183,56698,96969,74445,40871,71553,10121,61029,22061,87233,85456,97248,89333,16149,36811,29714,39416,10990,95940,64834,64688,18137,68089,30950,62711,26473,58794,81746,65355,21532,48574,12084,64289,47206,27492,16832,61293,18046,81092,64742,61014,66988,76921,65509,95679,76941,25383,81859,87095,31974,29596,61794,12914,30191,12848,79634,84161,58636,34348,47507,59250,55449,60078,10400,68829,56069,95036,39930,40632,83208,49523,63954,16834,87170,54780,24266,17425,29086,24913,72062,67172,98801,60489,48451,48184,24548,39676,57194,48630,11036,20858,60186,42388,36750,94643,83928,40975,44317,27024,23758,88241,48136,42074,22659,55416,49503,54014,43337,49042,68469,52984,91425,45221,94993,91005,39354,26046,97311,27196,13071,85725,96482,28998,62657,88329,46746,57246,28210,41849,11631,17646,22718,33084,17703,22530,99033,90773,11310,42576,79358,48605,28831,68747,94387,59741,24729,98860,45393,15892,55687,76168,78136,70186,36850,25072,88605,56409,88730,44381,87577,77274,32991,48373,63827,84037,57238,76613,56049,97862,37425,95409,46131,46233,28594,65490,89608,23054,45657,57073,57421,26942,79925,65331,15524,41036,78638,81808,13960,80483,47029,85565,62684,28357,67804,42129,64100,31225,64444,34587,26587,15478,61363,89467,33764,94338,90039,25087,55387,93455,83358,71734,99918,87396,48256,70707,87368,33888,40875,98254,13934,89174,93309,75138,86414,44099,63493,14990,21574,43183,78981,20550,15151,66604,48557,52219,68421,61426,77415,48804,38367,92709,34546,35347,99485,11062,64960,21131,23475,28038,14760,97229,98646,62257,82248,87352,75124,46445,13343,78484,94936,90146,12740,33767,94333,49349,66996,32062,34573,79886,33729,34174,67648,46525,79308,29968,72877,78506,54577,24546,98730,72657,21329,71492,23911,21187,36259,74350,94957,67029,32317,24403,87812,68782,40764,17593,68835,11648,55413,70825,15057,22797,85784,16507,44134,53937,73569,97368,67732,48468,72199,18008,88079,86638,55316,81025,65708,61685,18499,57426,55577,47436,75692,23906,63983,68114,37665,84339,69534,15738,50999,62517,44911,67996,72010,34313,18207,54004,79588,30310,91422,89684,23982,27520,89315,55495,13918,30399,14223,55377,98393,40578,80735,43286,95465,78111,74722,15262,46994,69627,91248,39303,69228,75215,57170,83353,22895,30244,64549,94156,18812,93885,22333,95975,28082,28214,26490,72595,60771,58607,22899,16198,80359,41007,10466,29781,98534,24082,77099,42318,13665,34949,19063,39137,27369,34282,52282,78966,13610,66531,86247,86405,96617,27596,73674,74891,43272,61555,12164,21487,82257,41872,66928,35969,91466,32261,34907,96718,33522,38947,95369,26618,28761,81328,35154,85555,27944,75378,96489,63590,86039,32444,47888,55312,13402,66279,97807,26356,91111,73334,61933,77495,45815,88320,85634,10293,42993,49531,70716,26995,26258,61043,32868,99538,67160,71932,91117,68053,87873,78066,87222,75707,82408,42324,98548,84193,22269,35523,78450,93988,82930,69152,84742,55984,22690,65131,97301,46247,98518,95773,47373,51389,80035,32086,43568,27059,20652,78200,77223,25191,42830,36208,82435,88438,45623,30317,55843,69243,47482,78757,86984,91264,78011,40007,26938,70709,18502,64284,38724,30045,86929,72034,71481,26481,70101,32699,27621,25194,22176,37970,91214,36882,74202,32697,48237,25005,84626,82577,76540,50442,62178,54332,49769,12717,55375,14985,65566,38979,18967,70834,41408,56132,57910,67213,58348,19301,56385,85357,76424,75555,64968,68113,23289,38485,35482,36417,55352,99887,19045,97545,32660,98152,76009,99868,25497,32349,20259,83614,84487,59167,28382,14848,38613,49371,68788,50774,10233,24696,20202,22185,33985,35947,15991,99454,88936,51289,71184,22482,42081,71706,38618,67633,24177,79722,86373,85060,57636,66546,31306,90126,86498,20558,84979,26023,13968,64471,98580,75327,73117,79165,96708,21283,25699,14602,78488,47678,21177,22389,43804,20760,40282,77409,47275,23967,69765,41294,72174,61767,66602,12403,73154,66934,42171,81953,46902,64807,82440,61235,19414,85539,93714,35974,17953,13576,17127,78084,69226,65094,61225,67368,55994,99251,24713,21628,33289,31337,91156,36710,38909,37693,92379,48900,59407,62556,31638,88438,60410,59588,12150,33760,76749,47073,48469,87441,99584,66392,63251,68224,32061,99333,87381,78419,64139,20763,37948,82826,39212,94259,84848,73292,98202,13012,70362,75681,23564,13133,27970,72577,38212,99994,45303,84191,51995,93855,83115,83487,78094,65794,41020,90115,32504,12127,73842,77194,47672,68013,16242,57856,75119,38046,69401,18992,64000,25568,68300,42145,57622,96650,65014,41855,74382,13688,87110,74424,71633,43342,58497,39386,99162,64062,24672,83513,97304,53951,33832,65686,89718,25628,93525,93093,21660,55713,20993,87034,63100,98675,99690,16124,86431,13632,15120,95716,13343,26743,64680,90167,95135,81690,22163,83615,63692,64004,40338,18711,33440,29127,25914,68546,78852,12640,25758,17517,18133,64604,50306,18191,42815,36682,75474,87490,19304,10401,93160,96654,37205,58737,56838,53950,62599,76622,55519,74984,15370,21010,89908,93192,38760,73833,73404,53366,18048,38222,48647,93957,79668,17284,89946,52046,81146,29608,54149,74576,38961,15966,55768,50039,36340,61696,52737,49203,97082,88234,31026,31297,70034,35128,99302,16181,15757,29923,97529,99483,18728,50548,56499,84684,69827,33343,63197,74872,99053,47471,85320,85892,25588,81794,54631,34345,98182,19564,48510,56210,70773,99564,92835,17239,25129,24519,72434,96466,70117,44431,94933,77086,17331,31396,49066,81420,29576,78448,85455,45531,54822,12296,59274,90619,44049,76321,17916,79617,16789,32331,12687,33773,57138,76209,25405,62568,38938,31914,35040,28833,27312,99414,55270,25026,28178,28833,41648,79188,27516,22521,52826,87999,85687,90036,84915,33141,15078,74402,18146,69380,90346,53211,85218,33523,25718,47195,90368,59813,46734,20918,98737,53627,57929,65325,80908,41883,92994,36245,22998,14925,93748,79705,11498,25343,70369,37937,72265,82400,28894,64030,14231,24632,40832,61236,42088,45419,59330,73156,17192,22310,99882,34652,72241,35811,31356,73616,82211,35439,57425,37577,59855,82749,85550,56891,20747,38370,52577,11556,50299,54139,28666,38472,84627,56902,81904,88937,20376,18235,42904,85743,63037,68227,33605,81937,81412,15421,70746,62942,51896,62178,60530,30944,60945,57717,96627,87942,76891,25970,78148,60930,41399,55633,38681,96091,43048,94988,75545,12974,33933,87265,54908,11871,76808,48701,44058,22324,24343,31621,97610,78130,33968,49056,72347,88843,56676,49297,28273,77538,58392,82152,61321,46385,31781,69931,14076,83710,33344,99304,27196,10750,96406,29330,87004,49934,44969,43105,51845,28769,33934,85382,91170,63078,50480,48153,27048,95269,19684,72987,11994,98856,35861,42031,88881,23832,38968,36144,63153,22847,26687,54334,32808,90824,75676,91736,92726,80961,58872,19818,66369,26823,73424,91574,14373,55424,14673,75474,46657,27904,24466,77052,14765,58088,35053,47952,44597,94463,20450,97099,49480,65100,51150,17846,55434,86222,72413,70834,52027,32564,38391,46946,39019,64124,44970,41029,90640,42164,41501,14275,67348,33159,24386,36501,70102,21655,13398,40867,78052,92094,14090,51561,73212,49875,71393,72344,18287,63033,85851,49564,22770,63958,98078,14337,31083,77089,99581,98537,33105,65064,61070,89245,65820,54098,37245,74393,85904,32283,36909,92642,14598,43152,36390,34494,35928,60809,83882,54750,40680,35375,87784,59935,51276,74052,39537,14966,50674,30768,88547,24071,14018,74805,88621,42003,68527,21132,21048,30179,10603,79826,31116,69490,85262,39447,49895,16825,79862,95382,97102,30283,52297,11012,49661,65342,11051,79315,67702,27020,72074,90930,76897,52185,64067,41830,90881,42921,87413,29480,77959,70616,36291,78890,40140,36896,56824,22618,59232,79640,93316,60534,18252,72546,56862,45138,41982,59356,86123,95713,54358,34022,45846,44153,79014,46658,87451,55071,28877,98427,44059,43684,11367,67151,66139,87084,20522,98116,17507,19452,86151,71549,71217,74930,83297,29037,29874,15584,39014,11808,17413,23490,64674,61062,52803,75766,64840,65922,42600,85067,35558,21701,30716,47159,29876,72315,50723,15857,50619,36604,21621,63393,25042,63931,91763,84272,12068,42264,40541,77871,50923,11015,53301,19559,40939,73101,72462,68062,72013,47126,34542,73932,84355,42366,44338,87691,94279,67489,86429,83164,86453,70001,85845,64654,79869,59242,29000,96815,78729,39614,29199,40823,84481,69936,81610,11039,82823,82898,13526,86073,11074,23804,95156,53207,97081,19376,81841,65971,56729,75144,97060,53518,49444,56356,56906,56770,36220,20669,77394,24289,16095,58919,26790,59694,55372,10016,75571,20798,60347,98038,45178,19134,13453,55147,51627,60398,37299,95679,87765,82141,83292,71036,55440,59538,59638,70504,42842,19200,42152,26417,44376,20514,97426,25653,76207,79246,69067,76488,16494,31354,67429,57518,24241,92046,38089,46968,44545,73945,32132,69778,78172,47091,42282,62023,22882,45103,17228,41688,31202,68047,62320,96305,56257,84624,17331,60109,78499,48375,35081,90121,56194,67359,96272,45804,99092,61929,28524,34422,76853,91786,87555,38856,45625,21866,60682,19336,42119,77472,41445,11064,42356,71651,85228,35077,98826,51153,48826,11950,81513,57451,42157,77788,85784,77939,42121,45034,40223,37835,19806,84978,41097,40365,86166,50266,41246,93480,62808,18617,37081,60069,94935,17364,53576,38359,89512,97110,58503,37698,15781,31050,94485,94819,75287,21314,80979,38528,87100,22050,78977,85493,98972,33916,57137,59690,71039,63267,63492,31563,21009,16102,67472,66965,61773,98732,63930,86326,54114,59794,83999,62185,28818,39566,58793,40243,63808,41039,61280,71391,51671,64380,36458,91067,56834,20585,86647,36354,97942,76758,21966,39581,99544,30613,27924,64507,95561,17887,52943,26173,10897,13051,26338,13791,58376,46578,10160,83540,94330,74720,33036,34060,85713,87266,72571,43943,32307,43698,75145,97968,37392,77422,97276,36990,69226,86724,42923,72098,39930,71277,49155,33254,71940,16456,79942,13424,63011,64785,98554,52337,35322,81327,70329,49780,57070,75650,58468,87476,94196,89511,62180,10617,12600,11538,96154,61634,57577,83538,30676,61756,50193,13152,35505,61118,90862,84053,54123,67769,48055,64620,18405,96736,41118,87758,80299,33434,11264,87623,80773,89086,80017,88147,16208,63339,86405,67559,16386,50316,20913,35319,45899,76928,48570,25127,82069,44925,25376,47297,34199,29446,43703,44109,47797,62282,65984,55713,55901,51990,30466,45001,37518,37263,37623,53681,12020,57527,81496,77393,12988,24651,31652,92583,98027,29623,77337,43112,37459,42826,50581,76698,93342,81178,43026,52110,39689,79976,30440,27178,44771,21562,29828,69143,68474,89717,98365,36507,68643,72202,76491,80834,41551,85423,60507,41065,26157,18805,23785,40856,43523,44201,62215,49614,92381,15858,52814,91581,89861,25641,62521,40958,29731,77819,82863,24273,37396,98780,37788,14378,84252,37926,48403,11607,87899,72839,75671,13156,80955,67394,21616,41390,28285,92139,51261,77039,17260,87379,44008,58369,87182,60062,38251,41452,35333,75934,26544,50327,99764,74218,16468,33775,66314,75817,72123,16364,56115,67774,23068,89913,37857,62909,99743,58894,64434,43914,66727,65083,67302,72366,23145,74855,72416,85596,68156,79150,59535,26488,33543,40514,73848,93151,94346,12502,78879,81177,45490,57629,34977,70532,13180,62314,75284,79390,95132,83708,98952,36759,55226,94767,86305,28613,24609,16730,47396,82189,52903,50893,31315,79749,82532,86639,20546,89433,79495,56986,94281,15327,96080,22243,35953,83773,16602,37655,70609,89860,23784,84257,52521,75643,25795,88400,27505,43063,31425,71619,50311,54453,66715,46725,63416,70206,31760,51825,56737,64462,65340,63114,84129,97297,31032,79928,12073,60643,91382,64080,33683,74398,35729,50182,18960,58425,84004,66919,52807,82661,77161,42721,36765,90424,54448,30045,17230,30125,12582,40843,63920,79262,21624,22674,67057,45253,95521,28460,78506,16870,72011,10991,81877,98268,24126,86059,23413,89575,34551,92791,39800,13681,41344,81867,68732,11874,22503,63007,58670,94514,39909,92188,68938,89408,50836,56070,28458,58670,36074,59124,63865,71516,44019,95513,64487,60500,79021,29151,96976,79170,43717,37933,17066,22178,61304,74742,10185,90340,74211,89458,41540,59303,44503,77183,72281,42872,36353,36847,77692,25037,88434,84578,89181,16129,39317,92779,28983,79680,56159,11540,91717,20667,29118,57718,89644,48876,78610,65500,65361,58796,73929,28721,82595,21487,82051,18966,62421,14544,71261,41570,16581,94020,32318,85009,85234,62462,52989,53131,44388,28077,25932,27797,48294,62687,62701,57830,87438,82660,54471,95197,34798,34183,22770,81491,60716,47335,63230,22238,76194,63068,60919,15210,56215,65588,99074,22600,32860,11024,93355,38111,75380,87825,49470,54790,24765,41585,52165,11846,13133,21810,28822,59401,21867,96427,33044,72137,63660,45856,73093,11851,22645,30384,10165,72451,41131,27314,85644,84594,79567,96645,37947,20367,58324,54181,88517,74932,15002,61035,48340,33008,68204,43446,67944,71140,88419,14125,25338,94866,48586,61626,93273,14361,85718,85610,26445,15516,35007,19564,78503,34077,20366,64830,11722,78570,31001,67195,53646,87840,45035,47235,84706,19736,31073,70635,73840,86381,17884,18792,15559,63533,13679,20147,80583,70279,60032,61026,91390,80178,68494,35445,12756,83056,73970,95066,50466,76754,50362,61285,76574,39282,84047,36313,92947,58902,24510,91908,35202,45642,59500,27752,35848,17213,16331,11090,21372,44384,20490,31822,77754,72314,81179,60421,16607,11678,78705,87524,17348,48489,30791,70006,84294,42517,56020,93804,11967,12086,73156,51195,58348,75024,12845,10213,99241,53420,99982,10607,46270,83249,86783,94609,99284,33006,21556,84104,98564,62532,65734,20420,53159,46190,43173,73115,50315,43262,47742,35297,90026,33901,20648,78695,84106,47153,56643,17945,28293,55591,13985,59852,66129,23780,37152,81989,16534,47140,73578,39305,61367,92877,20909,53747,35249,81640,86180,48512,83930,63749,72807,18750,78393,67108,37245,83930,59062,26254,20480,10674,55157,60962,81927,50080,81351,93978,74760,50191,14408,64294,20967,54155,54811,11889,96786,50615,88918,98065,18779,10108,59159,27061,81328,36671,97139,38086,90155,62063,17411,83816,65581,45737,91253,93234,10327,67822,44204,24150,30249,27885,87666,58134,31667,14834,14485,56370,46270,22000,97699,49355,53491,93294,58911,26072,92762,37020,72379,43850,73853,31233,68729,97045,10802,70201,27944,61792,61897,71963,74045,85100,43223,66461,29388,17450,24079,70828,60798,86365,37359,47177,91436,45896,79070,68567,23000,27825,33077,74761,62996,17672,11733,54755,90379,34098,69919,60915,70471,25658,22823,40875,17157,59334,36865,20859,92628,85302,39319,27045,48652,68350,56677,38592,14805,23818,48593,50980,18943,54458,51294,81567,88335,57437,41361,98779,68460,97558,89054,46110,26371,68222,45699,32406,52222,93016,15122,15357,81730,80186,44512,79887,66655,76163,68524,31296,11282,87896,38060,46502,27084,88074,49657,17511,71820,99844,48040,58716,16832,55704,38675,60632,96158,95573,11692,84699,91074,27492,64490,31181,81555,28683,87706,86346,18697,83405,96899,46260,37331,68696,76338,79642,76803,11432,83686,81158,52436,16874,96418,56610,22297,60114,53335,70060,33985,65512,38166,55304,89725,68793,13581,46744,96181,42985,13849,46866,51913,78346,83726,31041,19405,69981,15125,62115,35358,59651,31968,96663,15105,69508,44358,51960,41682,74697,42600,73084,16952,92916,89872,37550,23825,34941,57945,27645,85762,77566,49175,35525,42175,99033,52584,76107,49726,98515,54518,77989,30145,93695,67940,88475,51453,58960,79588,15720,15116,31383,18423,27066,33946,69022,65077,52141,61592,82495,50458,39316,87902,18499,39360,60687,61526,72872,14861,87471,58707,60605,20284,51096,84326,37096,52676,39451,74908,89190,42225,13550,50545,72584,93673,54230,14896,11252,98128,61175,37917,95568,66845,32127,42736,34779,42661,85561,50200,13994,53388,88763,77229,79264,77699,85342,51850,15615,65897,70854,75216,19770,16216,40787,87396,68336,88207,69331,86079,28298,18665,72922,10879,26680,47134,29281,96619,53242,23141,57051,19132,28948,96363,60842,39323,49835,19316,46816,65918,83116,77118,92433,70549,10521,70560,54278,29119,99301,14230,13379,73913,62663,90768,83077,12442,30613,34531,20467,94666,20079,32388,13957,22629,27290,17734,21850,46249,36161,23223,37279,43689,89866,90976,70450,70446,22352,77681,58402,43022,20457,51768,59846,42980,36276,65919,66747,75350,99069,23876,46738,72272,62084,81678,98446,91498,61446,20564,74094,65491,20794,59011,57171,80967,79724,98944,11310,34639,41041,87928,58392,97896,36504,63924,75502,90369,43438,74131,20267,52828,53797,32706,85534,27520,69064,39317,85303,16039,83599,31940,65567,31099,28228,48064,10141,16609,87273,71035,73843,64539,68951,25601,24504,83590,92766,58116,72622,75577,15489,99763,83883,99664,24052,71329,63639,61891,89819,87476,51816,86626,52096,73638,12392,13334,70798,93065,34696,68557,34859,79446,37934,50407,66570,13099,27098,36016,33543,13897,74954,56690,22402,51031,40238,99244,98576,86635,42289,21778,80644,95375,26182,40446,35614,18908,43229,85054,88466,35694,11616,51653,27208,20262,78198,85782,27013,33747,43678,56371,85413,20253,72862,92226,99102,13560,79441,16733,20248,37818,34137,68852,66748,70703,18043,56762,86616,12989,92227,59726,42404,54716,84701,63021,79678,99657,44248,64949,65760,63217,30146,83599,65524,96916,58097,66086,56215,40111,40670,37327,13694,45435,19164,14867,57294,53502,24355,91938,35483,58172,41733,80222,90927,36780,40950,52013,45400,50466,35743,13713,41765,95227,52282,45594,66801,39806,16847,64655,99129,47011,24552,78158,59257,74164,44599,73014,98008,73673,96780,56021,81605,46467,73492,65848,44601,33060,15653,36700,93247,27937,68550,20857,43222,79392,63596,67950,15617,29391,15283,98398,78906,57172,91843,94953,50620,96887,11228,69379,51297,94217,47250,22552,89668,15675,56399,45008,69739,31170,29725,80592,18047,56621,42948,59363,52050,51499,97018,32072,86635,71895,84669,76834,91233,54895,40133,79078,30815,50089,74202,29993,21026,41513,75926,91713,50665,20661,87744,37151,27793,89372,42999,53133,49653,72391,72686,26950,85257,60788,99084,86370,64264,55051,32183,15612,43222,51692,29007,37879,27790,40546,40553,78793,13931,11270,95924,45938,19548,30513,73620,97589,54318,38324,46542,31389,50763,51528,23510,99271,23126,81945,45959,52342,16156,35582,48879,85726,79667,51192,54517,88152,17073,21180,72685,38798,82450,79116,89128,91183,48569,71488,57299,97133,55638,32615,69562,11151,49525,75499,69757,62856,65367,21565,75398,55655,92079,57499,35234,27701,78029,40611,25621,47632,97829,84012,10089,92930,11779,73846,19757,48955,24714,23130,28269,26302,19880,46949,99843,26510,94189,99710,96566,94587,58813,25936,31003,84434,25472,77986,12949,15673,48772,53585,14725,33798,36506,32847,90579,27241,93591,44473,68675,86854,32099,48959,25960,24988,13796,77803,44556,11501,40803,66439,47785,12074,71314,80442,20396,89372,52006,97402,69205,76790,12008,27178,39871,29962,18893,74156,50293,41501,69994,36656,55531,40070,97661,44162,27635,46208,43366,50459,96774,69993,31270,42371,51565,11879,45819,78370,50834,69394,15342,32345,22242,42621,47818,21504,52262,55056,51568,43796,82324,31537,52945,40822,62863,62793,32655,14840,89875,44023,63534,66361,83116,84351,36219,40317,10999,48878,93400,77266,35723,16213,96652,94039,44948,30610,53515,15670,32203,98272,68083,22122,66386,20486,22545,77337,16109,52409,55165,26477,63338,93912,75280,45732,99670,48154,66628,68988,61110,64695,65552,32637,24765,84760,98609,36958,30693,90112,55104,30051,56066,21860,70235,52182,11584,33080,81752,97754,74577,42850,20007,38298,84574,58515,28182,82788,77290,73526,74930,25713,26776,40084,21825,62797,18993,88194,56987,47182,59262,59434,12829,39724,57577,39858,35613,58380,81388,16054,52516,96057,87894,66131,96595,87849,89411,64821,83384,28143,44134,98663,87720,25318,33638,65154,88794,34044,68842,67824,16059,25788,75224,58135,91472,95629,13122,96282,17209,53575,48081,71420,66463,70125,53414,53098,11093,56357,78867,30202,59784,85872,66840,32848,82097,18846,31185,91431,91436,14195,44020,62242,22716,71319,95783,62058,15929,51248,23681,51589,72951,22506,90864,91634,10950,83954,64784,20121,22555,35112,36962,62610,59952,97316,49195,80353,53849,55777,97821,46031,90421,83723,86834,61614,10944,14456,86892,23339,45919,42881,14992,68567,54367,58036,11301,18807,45374,66802,84904,51068,68010,86818,36676,74855,61802,96490,29261,29605,60028,31013,22674,43514,29657,61270,56748,40509,85411,45131,37704,35631,34630,65653,54388,94013,86627,21759,42990,58591,37693,51038,27205,21238,58147,79609,79599,81327,64174,76234,19511,83222,90031,20366,89832,45361,54389,14344,30600,52465,60551,93992,50049,55885,13909,80651,80108,28055,19836,55068,83322,15861,41264,60823,33608,41981,55255,24045,48321,82200,97641,24114,51445,45275,39318,24352,79757,88109,62458,66493,71428,47236,11030,74906,22320,89834,28495,19744,70124,32381,11488,32174,35622,71056,33156,64578,38177,96321,95216,40249,41831,65210,23118,59930,79903,28935,70963,62366,56684,83211,14570,53396,37993,69795,74980,39698,87961,87778,86153,38739,60727,78930,58347,54952,36830,33133,58278,76197,28130,53736,20607,94783,57439,27791,75243,77506,63115,48112,29709,83514,16769,40063,24012,69834,88940,80397,41982,36988,85123,95168,55164,89783,88607,37368,86372,42619,38658,22189,45147,49292,41200,78791,48903,87694,59214,78123,86974,58705,39274,40064,92703,17888,67268,35045,71767,63504,29981,72724,72633,62900,79458,31984,68048,32188,65864,80274,39539,43111,51090,39617,39082,88553,65861,69336,30862,47392,59562,98952,60263,91976,24692,32061,47238,87770,17989,47093,13321,86797,14952,19983,42269,18795,45603,26217,15002,24376,93239,44332,63792,38481,21579,96552,88738,57775,32946,11825,89021,90928,36044,74193,38263,44881,97345,31531,15371,54472,44354,18338,99964,81378,78590,60451,92755,34388,76616,91374,54913,31231,73775,89612,88810,63556,29667,78520,76583,17678,64954,80668,98161,83395,26974,18358,47022,38793,51562,80297,87609,45462,34571,54381,62134,53398,13377,20739,14617,43267,85236,12929,69911,89214,76113,44666,10638,46885,37225,32528,70078,39640,52851,54139,58252,14131,24089,44088,55280,66692,67219,72349,21848,92897,99692,37458,81538,32654,66116,93184,66572,49147,80732,66101,79763,79728,74675,90818,57090,12889,34499,97543,86645,71419,80294,85543,17313,93846,74366,27328,11467,49377,17171,26457,41696,79642,38965,65199,18907,74216,69577,53355,81563,83448,64458,11772,64180,99064,19368,86867,17888,45796,86374,89355,28753,43326,74224,37703,77832,23884,95633,88558,48779,15339,33017,62914,25316,48404,10890,55595,13338,73850,58494,90164,50023,76631,38159,29555,55339,11424,52358,40533,61783,38081,36054,75088,34896,78563,80938,96357,23505,31959,67512,88963,67902,37810,47403,19266,12941,74276,40769,91195,64907,68459,93027,91411,30981,12994,43189,30335,22581,35952,67188,47688,53879,58778,84679,97857,14663,14195,66871,41038,62594,92775,28309,56616,73307,87011,13607,28275,60864,85608,84625,62920,31179,96381,44043,12117,27282,38631,80200,16850,71728,96273,31553,87956,62246,15878,91459,44335,80332,20733,63585,48720,44574,40478,57082,70968,32158,68089,15298,38774,73907,93905,99990,54023,54644,41598,34933,22201,19958,74838,85646,33265,16652,36866,78601,66657,43694,63101,33406,50441,13285,79005,86882,15175,98373,12665,60571,57634,23795,91401,91496,45599,41442,22698,69726,88197,60083,76757,38443,32147,22971,21470,45402,54907,21900,91846,60141,94507,22791,43131,44232,92348,82750,95134,67376,65128,53026,16365,54134,98424,28013,31696,46498,50481,51326,71418,36943,83493,47512,41519,71976,14886,81021,51288,61041,38434,95557,66125,57320,48208,39665,72663,56406,35189,23157,94735,30912,69772,37486,11336,35151,79826,55246,98336,48856,42544,68735,87442,44049,61738,80149,13559,57775,26767,46999,76562,50073,43056,10659,83277,87323,59251,34005,36535,44414,42086,33848,43789,75917,94685,13952,27529,77917,36772,26201,71830,50689,26601,19578,64119,95942,59376,83704,13424,49114,88916,25918,97650,20797,91740,74442,14130,92214,73852,63369,42125,72675,95362,48031,65885,54092,31011,62482,26485,50556,47988,53626,54516,77685,75370,28648,30219,82141,44748,46396,76037,35878,31471,66152,72955,99682,40786,20191,45204,49264,49868,21799,46754,51234,59438,56291,85967,31231,93865,43894,89157,38196,60883,33424,98044,49153,41077,23370,34081,86032,82672,84546,96607,85068,98751,66716,96692,23937,55015,17489,46227,99432,26751,49267,10357,12352,44988,40947,62484,71315,60118,72099,94091,68796,98871,28613,89411,73121,96084,42086,14641,52596,62564,94838,47916,92597,97796,73866,57997,66849,81993,67664,39333,34515,65614,89474,56465,66267,17122,43507,34014,84686,84019,42671,78813,99877,25716,85004,62109,51835,15647,22343,30569,58658,31334,60201,16101,13682,19502,79431,15772,65058,37964,44942,45318,27921,86286,15377,69769,24192,38448,25666,18303,63983,36714,73646,88591,28046,14317,65289,24962,26088,73622,87698,40985,14065,51103,65123,78435,25310,26605,64481,14737,15215,30734,21450,82277,73577,21157,22513,88061,42842,93510,71592,81234,10664,61377,80066,38123,39682,33938,55161,20219,75403,60239,80680,96639,16935,59696,13455,68440,58236,69549,86825,43172,99238,10847,70199,26661,17423,80891,68931,36367,39278,53163,24453,11923,41812,53589,19200,67912,41512,76811,73076,41084,41394,34477,79307,69190,23767,63687,55753,59576,65196,42710,44299,41746,93345,43090,59415,91564,66781,71188,49154,51582,15507,61822,81644,83747,21940,25175,91893,47865,10670,68316,57551,54339,54423,74887,86700,10952,15149,66441,22069,42196,73351,20472,66457,35607,10433,76041,49465,47364,78996,78041,94811,59562,52780,23146,55174,11099,50380,16749,42650,86004,61383,28437,21943,35520,94375,94975,35382,34036,65330,28787,99565,14754,54162,56516,80928,20827,10137,17228,98028,79107,38361,80829,51468,76462,31649,72633,97810,52730,75864,80751,10634,81284,87881,53682,38055,64211,97520,22127,14056,34934,10350,91735,26250,62394,35626,50680,70198,57867,52208,27243,17740,57242,80512,87490,19736,98622,77821,15303,78615,34525,13569,41634,68698,26188,13410,30443,36738,77354,54298,24381,75938,82890,56018,86612,96052,27468,25615,52765,34624,14764,54989,36472,14755,28027,30022,47778,73180,31993,75073,11435,69660,57713,91694,27961,65078,35846,60088,32142,98541,17450,12235,51349,92511,37074,33475,33298,17104,84684,30829,95938,33728,70202,89288,67417,63314,86005,93830,13242,54667,61619,31525,58872,28513,90496,37622,86705,74394,82765,51084,15134,42673,77283,95281,14320,85464,12191,41971,21404,27664,45926,36238,59845,23459,54184,96941,47131,52840,19507,97930,79312,27360,58531,55195,93620,97519,27910,37677,63300,67771,87500,39773,17573,46454,93047,47248,48018,46024,28218,98687,75911,91174,51954,22098,38960,16566,62046,25119,62136,21942,42235,66957,29276,23044,28734,63247,35071,25698,65457,18061,91035,47302,37114,72483,48731,50998,64852,57643,70359,53968,96200,46166,31811,36117,85624,17716,97741,78961,45051,36092,52618,74107,39483,65001,95538,83973,70870,90414,48044,64562,89600,56185,16175,12831,41861,30362,55008,29981,80061,77645,28535,52228,42982,36717,77511,62419,69999,51289,55761,10920,47733,18537,75018,57249,82076,12756,76270,33388,25488,90924,47673,62831,25732,85991,91628,51414,67430,88351,65911,72447,76499,13857,69668,29043,93552,65809,12993,87870,92728,25020,46414,94227,26785,48049,93595,60570,25060,17112,57496,63083,48525,64109,65779,36088,29460,91439,68948,83004,79895,68982,90293,56297,75637,80441,54614,74577,13749,37026,20095,57399,21908,73162,68012,55607,45538,28307,37860,10754,93321,30483,29394,11462,51385,58030,52598,19680,83477,73505,66900,36960,26114,86522,14148,51346,70929,28417,81089,49307,95780,60229,24260,99596,33933,70698,49123,40805,80660,20205,23670,80457,12134,19403,96620,20969,67296,92172,39554,63789,42626,96459,48250,11188,33620,77565,73922,29429,25022,12058,71035,43187,80924,18193,74507,96123,48276,12744,60834,81398,94858,49651,54358,73815,65366,79414,62277,47613,49950,33201,13133,19567,70941,14220,30063,31266,79063,93553,50898,68426,64180,56447,57241,21077,39090,80294,91206,18244,19139,25791,67904,95091,58865,91585,97787,17199,39627,29757,81871,38267,58946,49625,82214,33590,75493,44339,14201,55964,10645,43252,74652,11370,16605,85552,31342,51600,54632,92270,93127,72576,64031,89304,52843,28377,63278,13445,53110,59569,86423,45902,40181,85437,31494,60543,36163,94278,12209,44916,27702,82369,32733,39389,96101,31538,73893,42245,12013,31303,95162,57583,71782,37409,52160,15672,32978,27305,28596,16806,39570,98401,35866,48838,59060,88942,56342,65321,32318,33670,85151,54313,20130,10838,38325,50444,13130,47038,92544,47354,73067,34438,66403,43296,85132,23039,92025,26946,33383,38963,53462,30534,98885,67949,33372,87472,92350,91003,62632,21197,50895,35925,48530,63562,23933,21941,94647,88239,55223,44088,70782,20663,86798,68380,87018,19310,30871,29696,53245,66443,84088,82647,13275,71972,54609,97778,87249,12740,14512,20448,20383,31092,15907,99647,86180,56647,21933,85604,54845,60071,56446,38514,94588,69634,27018,90474,46133,93243,63270,97833,33635,18937,64529,21150,67546,56991,52679,17918,19329,72675,79111,10270,99340,76880,76435,72129,59288,97335,69444,68521,99341,19812,71973,52427,90707,47331,38474,80928,97903,78574,18430,87767,29834,54417,73634,20267,30560,41064,72534,76318,50911,60860,85200,58802,18935,10151,24865,88598,62171,72298,62681,39363,50855,66810,46800,27859,30217,84659,94364,15095,24352,79376,77373,57998,67937,99914,10988,57973,56176,96363,84384,88934,40574,67463,38299,31606,14553,13129,55730,46721,75212,88719,67774,86968,53619,64603,57249,67067,62778,80466,56843,14090,62317,87222,16855,53126,52434,98629,71572,73155,58361,94765,22675,74388,15396,17214,87853,94930,85350,15532,44898,25224,61178,44946,42304,71478,26855,72841,21737,43895,97466,51235,17189,26932,90346,86924,75913,85408,56796,95121,26139,93766,44497,34311,37821,40717,95399,96441,23433,16743,22753,68565,37342,14037,34590,64627,57869,77184,31966,73205,68731,45086,32718,97029,83099,27017,18636,26243,87080,40178,59670,39983,64236,43077,65550,80493,75797,23957,13442,84824,29895,74373,93165,18094,29171,85955,97644,56325,69930,51613,41700,74335,21508,90434,24920,15435,27050,43500,15504,92832,15071,60866,47876,55667,40069,51258,86864,38677,38726,97808,78622,68000,11975,93350,12420,89444,45329,65136,71932,67569,28629,99823,33185,42505,56138,79718,89862,15841,55009,25664,57187,38042,47101,44755,17015,31209,50409,36195,64111,37199,39302,97272,82738,47341,89399,50920,97508,87720,22960,49149,24121,52605,35548,71564,86057,80181,45734,91758,38653,67161,46002,17436,79926,30966,78699,23385,38365,60479,53131,63922,37247,52680,75271,57654,11073,87228,16505,98539,26834,44300,93041,92722,84534,60900,29897,45980,76509,57251,89789,22874,24165,19918,96054,69347,96898,68298,11374,53291,34738,45092,54258,20094,84500,52200,39295,45310,51502,82007,63845,34910,89186,12765,85773,46070,79965,11654,13641,99309,22300,25234,22766,47953,16693,65037,87535,49586,30789,43597,49801,92689,70531,71045,37147,24294,90564,67550,40013,70544,89131,20947,55593,77460,95669,36926,46606,81979,64545,51644,48222,33249,94811,37138,76884,54447,59598,43973,17165,91771,89855,60098,61423,69245,91603,16310,71627,39382,54916,14339,69860,16016,53151,25813,87203,48840,78247,25006,70013,60274,19002,55095,87805,46082,7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38,44850,57837,96440,91432,64759,96468,83237,63582,31938,14441,61091,72953,27313,89605,79875,94278,45460,30156,69743,17396,47157,85532,64687,10263,13047,46831,94411,70749,95066,81337,11146,46062,57313,42069,73610,36521,82783,33005,80595,73659,83478,47106,36037,26101,18763,26128,45423,46927,31931,70530,53085,80870,77742,43226,87223,27637,97693,93567,81229,10881,42281,70579,80410,47331,30550,41145,26855,78039,60739,27191,13792,48872,44206,88314,59812,43699,71877,82635,62825,83817,78654,83262,10426,73622,68756,77366,79137,62247,45843,87638,71392,63547,92646,78073,25465,53758,58978,42157,69592,86023,15379,76354,53634,85798,14644,83186,66607,45804,53306,76020,61469,48863,76073,80894,87473,72365,59273,79142,51516,37098,28084,69773,72403,42874,80077,92588,80008,89578,96903,97821,68705,31617,35807,26462,96225,21573,62468,66446,35889,13780,90123,40454,71174,53272,63000,68254,36056,47900,95170,95136,29576,67973,14986,14234,47041,57908,51212,56836,33608,29828,39890,18161,26215,13785,64435,66712,77508,28470,50468,37605,90500,56929,87527,81337,18301,95754,93312,52259,70964,61443,57887,61879,55471,26920,69210,18600,64789,64178,52578,40935,39078,53541,65240,61634,50508,19359,51938,45766,92265,80924,23047,82058,10903,51463,53302,40903,46202,89840,60419,20291,90496,21160,68308,12313,84464,96544,22804,57686,41188,89144,64652,12941,64801,13095,77485,58913,95759,30465,99247,93019,11462,44219,94923,86096,23967,12807,50929,64464,75603,35375,46508,93397,71786,91122,64971,64049,96701,81772,40673,95303,68285,24460,10773,72331,63691,78939,70062,45840,43264,75667,19266,98833,57518,63004,30245,98101,60984,16555,70399,26775,83320,54862,36188,36066,28731,86023,62931,21162,38153,88960,82739,10374,68115,62652,72439,29770,86227,49724,19728,96925,93973,77320,98993,24935,40150,11740,33179,73467,35825,41041,45652,92176,24570,33798,49392,90798,13949,87064,48372,99500,97794,75807,81461,30748,74088,46237,44289,71280,46374,11753,55850,61265,35390,27295,31521,69613,60815,23866,74653,77584,42857,79135,77409,95211,77363,16217,15357,59859,28435,93433,99940,79079,35441,47620,21803,83506,30411,87016,38330,37679,20699,35714,31286,28386,40322,89874,94145,65622,60433,42860,56109,37698,21363,93721,57719,34204,89403,71638,95322,97714,73391,61859,63283,80379,36652,12162,83123,50430,68025,62691,62804,56692,96212,32869,95682,78613,65703,44012,52390,42833,56880,83608,90300,78716,90189,62016,28881,57543,44051,82288,77731,98506,94997,61563,66637,32469,16624,19629,65536,48017,29405,23108,14587,71872,26057,14482,37393,30816,78668,92046,99199,40902,55307,43533,73826,49587,87638,68326,89140,15411,94983,65010,44475,18600,76176,13355,24443,55632,49612,87851,75848,62762,82424,62233,47517,78531,15478,59064,43750,48841,84404,47971,78609,31589,26226,49961,77032,21561,95776,45307,98644,44370,37945,18992,50748,27738,29038,57489,38117,56926,33559,31251,94654,34684,20961,82617,64074,98964,92503,13519,31975,21206,71370,50382,18545,97687,68203,86445,39020,74186,70410,33801,39974,87156,28917,13856,93349,61919,97602,89252,91470,51501,22085,34240,87592,69830,62778,60951,92703,23576,71251,40609,88836,64172,53023,28887,39356,76715,25201,74925,68814,51064,10120,99191,21035,50842,84837,35453,21210,21549,17692,30543,40981,34125,72129,77774,81874,55092,14220,27400,76623,57788,38717,67172,43032,20111,17888,82761,77901,13038,95756,46767,86623,97887,63602,52521,26301,63382,94597,76002,55369,93533,48876,80184,12308,41946,19464,18360,67722,94493,52714,44136,78143,18254,72662,16219,62465,78828,26066,28891,45739,74693,64658,53706,23727,98658,79638,83648,58591,94588,70037,13393,30204,50343,89158,89029,22334,91577,20100,80056,79888,47426,74886,13950,77910,30867,88956,83657,16950,44447,26080,97526,43154,67902,30726,10894,27330,30308,38517,24813,45924,48510,12751,58462,70574,53838,18486,70810,28201,41794,23629,73727,50719,21135,34318,43108,81801,49218,78408,49744,70926,23761,41963,19045,81711,99225,77614,11979,23690,38212,90566,76494,35586,85473,75278,55161,83595,47420,76618,29835,63916,45080,99936,23938,28834,92825,67213,24766,61596,94188,83139,93101,45717,11392,25273,59556,30293,82190,41154,96774,86050,61309,20264,81287,32328,93322,89135,65194,86402,48205,47216,95958,18699,20271,50001,14094,41163,48798,63272,93292,38690,97248,41427,95871,37608,60057,34053,16290,75195,87498,39433,17618,43102,65080,41148,64951,82788,84170,52533,36923,46718,75658,33749,88851,59533,88572,42154,16350,71878,14590,64825,52040,20019,85121,57872,89048,66756,59418,31610,98569,40415,79838,48060,43955,56369,85800,33493,51104,73490,38720,40092,48753,66417,52492,36874,29185,44814,80374,86273,42966,55843,19272,39146,42827,66827,51357,81132,30402,85950,15906,44176,73047,96630,62074,22825,85674,51519,56665,17135,11565,38833,15673,90541,78477,78327,77298,51104,46450,16482,48539,25311,85156,29843,45044,30522,62109,28402,58735,66649,81399,10800,70457,51482,84528,63917,86407,28998,58782,79501,28196,70598,71985,58053,14537,99153,96882,51517,18059,85791,71137,66950,49969,61338,20752,54667,78479,30366,34104,76047,57007,82951,56893,44282,26300,84451,19895,61491,29393,45937,27500,78989,48001,41345,60133,41217,19720,82605,25444,79461,81530,87848,43977,49894,21976,16325,85049,51585,47067,29000,78703,67290,35578,26745,10303,13029,24482,98824,11709,67233,83882,60893,32954,10054,24700,69916,38209,36579,56853,66180,25598,89088,54096,83572,34950,98373,24760,46512,52717,49767,79795,17482,79659,28918,12717,94958,81051,38975,66004,63708,89791,37306,26471,47411,79626,29799,11697,62334,53858,78115,27103,22277,27299,42336,90567,97845,47811,29088,67015,59998,79750,75800,47478,59670,38755,70256,67997,27401,28025,18149,65863,89595,38492,49864,57233,73217,50385,24167,28949,12709,94506,21228,24302,70517,47588,56962,58803,86072,89310,95569,96312,42361,43127,95576,53276,96729,43095,34888,75886,10994,24482,77725,12783,37849,85860,59465,65322,32262,57723,77090,18136,99519,51185,99345,72956,37181,24235,39889,39916,73755,80695,42775,38832,97640,37188,53158,67556,60130,64307,12663,77578,54587,78627,93909,61658,91743,34116,27977,76984,22812,47608,78498,88607,14945,74924,16368,29543,63615,56619,30720,90748,17200,68806,86521,48492,57029,67100,95565,54557,52400,52277,76876,14061,45593,47362,12563,66540,43248,25349,10383,41303,34904,46951,43834,44126,38627,35362,10550,69610,60650,46163,73815,77408,58520,16037,50143,16456,38419,33474,72592,43261,58297,19163,24632,44278,68348,38283,21050,12031,98101,15111,50307,87483,14005,86095,78440,26304,47688,15577,10892,30919,59372,42033,28161,47979,63786,17244,25615,11056,74409,78216,56326,50215,85805,52673,83830,61875,17917,99371,53440,51942,35584,34187,48216,80943,90611,48295,69100,86145,86324,34976,27924,80224,74056,69781,65931,69793,85872,77149,43604,58517,16797,29746,88243,13206,42405,37833,63738,95466,59169,35527,13211,72132,69474,57356,27977,25230,74501,33237,65547,30056,85286,57049,20436,73554,80322,51041,89677,86777,45306,94278,76672,77436,56542,64626,13208,95033,75567,60273,21903,60278,85503,62542,52150,80306,95063,43991,79647,61587,54328,69532,34324,10833,93632,11242,12075,81820,41043,40411,50677,74415,97858,13746,57728,28511,66529,30869,36327,16501,83998,41134,86410,49241,24184,15090,14872,38567,21655,28640,23586,35070,12071,58707,70531,31888,32740,12167,99157,68672,64432,91611,59322,40888,78591,90675,15129,85656,55078,31711,76813,36162,13199,79684,19914,92811,21480,56237,80103,26570,16256,59860,70980,37306,12876,11991,99147,56852,18605,67819,99175,18415,15967,70091,16914,37365,33378,16999,99732,98008,55577,96184,42568,59070,12416,25307,23743,19653,84089,56663,48348,43375,24617,99343,38559,46454,44246,41504,15200,73715,23186,28846,35609,62663,64477,46722,98891,45718,35088,98545,58534,65635,37718,41912,62327,89413,67593,42548,92130,68897,75986,13204,39129,95302,98137,30931,52426,70653,52019,25971,39019,27994,96601,24894,76224,67876,97681,54343,46828,33457,32993,77932,14490,69585,42500,61323,79037,97126,17794,52736,17320,27079,40311,75416,31239,76983,54396,89591,23595,12968,44848,50785,63999,83607,12468,74515,62236,11420,30128,25134,19042,57502,50554,85168,89986,12957,79690,54501,49582,79737,49665,14236,15815,40506,47534,43057,43946,52347,33856,12957,85012,87662,60191,82614,12480,52331,42101,74830,28095,57732,90596,26670,16682,51663,84888,68008,67422,71440,73526,87962,27203,44294,68147,65007,38132,18673,51091,73907,44998,72102,79001,75759,97891,48689,91318,54079,52458,48705,50255,32044,34882,82087,25957,82672,82790,57127,89969,87278,98257,80381,59193,61133,15986,40386,38803,43136,10747,67437,62281,87597,52632,69371,53558,91722,70217,40661,76084,80165,84169,54660,57403,34524,17944,88723,42768,50534,41430,79282,81159,83642,53992,15812,82917,82402,20794,94733,18507,87789,52077,89475,81664,99660,37781,49962,39643,31577,45779,91319,38408,29640,33796,36087,97477,83279,38931,54325,10906,77501,21829,35769,56871,36492,30804,62583,32244,20358,47706,92213,81923,94882,52692,66852,62647,57234,66475,18936,44909,58712,93752,75511,70833,50259,88660,13178,78737,69221,93822,54962,13342,35271,62157,25612,58997,73276,35296,96428,78617,97505,88309,89784,54561,53342,22276,40214,74050,89085,80174,55397,83701,92601,59448,71616,64471,13020,66551,35695,34728,30617,63363,12890,72015,35344,58505,34957,41151,24647,72361,45103,45881,24396,56820,77318,68587,89078,43527,64190,99809,16238,75951,88841,26702,46364,92699,31067,49745,82214,73541,93912,26877,29867,39034,72078,54397,94711,49559,16259,88879,93470,94618,84620,17226,75961,61951,26145,78312,82077,99200,78926,47949,26729,92477,57236,64122,44438,29780,72826,13560,15996,52834,59769,82867,14028,20093,84722,27716,57362,69718,13412,25972,87672,13896,29912,41854,48264,97554,92129,66057,36292,81115,58056,15332,77486,87969,25176,75867,81786,63916,37202,43359,32144,23060,28910,99660,57104,77178,17200,10629,62417,56313,65442,75913,69271,99841,98268,63375,10347,77733,19819,65577,56817,90550,37286,95862,92306,11126,41602,14629,59278,58075,31625,86431,33435,25110,23344,37641,65576,85569,91447,16702,11975,33907,97925,47501,86483,84734,98948,21577,55057,52716,85656,20977,43901,13518,57393,54729,36705,56981,78862,69153,91397,81528,14356,42626,76093,12342,71430,75614,64963,28133,87306,87440,91526,68813,50443,38265,47675,57133,61043,98105,30394,78430,16303,68851,31717,74638,99497,67426,14139,52535,72058,66373,91456,59756,85697,47586,11114,63300,41340,17905,33950,81518,28061,97206,63018,63564,12809,14471,50137,78679,13656,54242,50213,87098,87238,74318,39660,88372,51101,50488,41575,85240,76895,13339,43579,12262,13423,62285,74230,48323,16467,48748,97602,54047,51733,64591,97396,54669,84249,64164,41386,12438,67605,71904,82233,11760,57044,61243,82066,39044,85514,76365,25606,66644,17202,48618,69686,47241,28143,99724,28062,37461,59489,33154,50172,47959,13855,90857,62999,52689,49482,28649,52446,74255,52432,71070,34191,14302,63423,88094,39619,24015,29490,94118,62983,48769,51911,59903,67494,42733,16010,45340,23705,76895,68431,55790,94310,26355,22058,56377,58376,74485,64889,42465,19362,84712,14671,52150,82732,39198,50913,17838,85421,50986,20261,90780,73231,79525,67284,61852,92356,57529,56283,11440,51432,32239,69209,40968,59725,11790,70404,11842,57897,46405,93347,11658,10451,18653,36660,19516,90087,44068,94264,48397,95415,74277,52211,55606,26720,56822,31368,19081,36269,47244,93909,99510,63598,67944,39210,78242,13840,56839,15481,90787,49914,33436,52963,22053,56145,73189,25934,24687,50252,42022,50191,93984,36208,69548,84582,50276,21961,46710,64789,83808,45790,42776,78151,47743,41091,96849,41459,44793,48195,35077,42373,39112,88229,85729,12022,55734,12589,82775,49677,18779,10155,40415,46573,60088,48409,14840,37734,98529,67539,47075,56229,18574,72097,81913,29744,10163,51783,28774,27925,97899,29149,53636,23226,39601,76299,65257,88652,56884,26911,74598,45979,86695,67328,22066,32133,70385,43956,27377,21577,50386,38210,59827,71218,79829,97122,67740,25851,52703,42400,17526,44629,78225,10389,69921,13603,15661,28031,99119,97044,18507,84037,42442,97619,33592,16912,68643,17145,62329,55252,77655,40176,79675,69241,57403,46337,98195,17121,23140,91189,63434,35994,69216,19673,60858,87033,42620,27946,24388,11519,85566,88957,13787,24615,51464,91651,80458,94618,50638,14098,22060,83128,51344,85853,94726,46968,16226,15257,17276,54378,56877,38439,34673,37681,92617,97152,47767,59183,51546,70158,33427,96798,56697,69245,25432,37075,96381,17640,44348,51407,65010,24928,75317,22085,76127,49312,34025,24073,87462,28809,91032,83675,73763,41558,62719,46651,78324,77107,50508,14827,36052,93396,33979,88154,62155,76590,66667,28802,11038,14105,82749,93084,38022,25708,67363,52255,69938,49317,54316,50184,35157,14766,87442,96910,70646,16750,14070,56210,85868,92374,28352,58989,68071,68253,27691,65588,51151,42574,27184,69698,92843,38091,49587,45315,35338,95246,23510,49030,71068,68916,28786,35724,41951,17185,94206,47761,26324,87040,68388,91224,52613,10337,87268,40933,17486,88884,52745,30846,79010,76072,63902,94957,55566,82605,43999,15866,80752,78869,96580,70281,32567,96515,76374,58919,27778,90921,29960,85215,57508,21604,98510,68648,49284,51443,54551,15768,17286,30906,39348,65463,66872,49232,69004,48518,86482,88255,58208,27026,50748,88385,74525,33363,76639,99415,70463,32109,29312,36241,27017,61313,87129,94437,63002,28189,10565,54118,86029,45002,80699,23157,31574,94417,79562,33464,15331,65777,71418,19876,70821,66662,61475,27709,71381,80010,74776,20531,43283,93314,29145,45784,50368,36209,30898,47248,65999,83427,50224,98559,18520,61697,49301,72229,48018,94443,81380,83656,18834,71612,78852,23352,42839,22498,79673,62878,76371,74527,37824,23007,46093,37295,56279,56081,37883,27889,74542,53071,66953,48999,75872,28472,51353,52268,57724,10970,31695,68730,24320,86673,13896,91650,10636,48644,53832,30242,34042,78322,87860,35776,48818,58448,19429,53280,61981,39974,14938,44209,58708,29764,80971,28380,18809,29187,76965,39554,79596,62650,59436,30293,66966,17306,19520,74018,29141,81211,26516,75566,29083,95704,28380,59854,81412,14039,98207,96959,46287,73974,87130,16566,64456,75991,77488,53482,40695,69296,93970,76271,67690,17315,71652,92316,31072,56198,50238,95362,74141,12532,16105,61181,40657,52201,17146,54063,80602,55124,93631,42016,41648,19330,86310,93645,35117,80662,29083,82911,67898,80438,38880,17694,30345,42424,21046,70327,64423,46166,20467,71334,48178,51750,92273,27756,19544,81709,31893,23550,24153,18360,19502,19568,15834,41344,75099,42361,54437,96090,82469,62789,71928,12328,47853,77739,44239,18716,84694,39371,75285,14473,92698,97809,11296,37900,42697,98789,89948,32965,20026,48235,79138,55832,72704,24233,26748,90983,35100,63252,22409,56736,22040,84205,88262,56319,31987,56717,61932,33123,60866,91668,31155,18460,81009,87140,21332,14124,35601,41923,61104,65476,16934,43911,97566,82798,64921,46049,19007,81387,50387,93331,20356,23241,55462,75116,46374,14020,93327,94890,71397,14940,77715,89889,15196,45145,56809,97450,93624,56487,65322,36000,42120,94547,13727,43897,86248,72086,48095,81055,70397,16509,63975,29557,25753,75643,70401,69189,83028,91421,20838,32885,95366,33383,71951,31744,47933,53149,62570,47233,13400,44611,43312,53337,66076,83008,36876,65003,43447,53394,48808,44922,19842,96555,41498,77092,22550,10532,22552,19639,28447,18358,86004,51373,97999,31886,90332,95395,43353,60531,98470,48223,55180,18968,83860,28829,92806,35296,59296,61432,23449,45822,48071,23176,27810,39921,12995,30453,10549,21674,92645,60232,85952,53233,90477,43411,19811,49444,87730,11989,88209,97314,16113,46941,57276,43281,67986,53549,11198,14378,23900,58978,28290,41120,73831,34410,84301,81157,82692,59646,92079,18476,20924,58013,32107,11486,92645,97162,14226,50465,52386,16339,47768,81514,56754,45484,51395,62339,22443,69363,41736,51029,60893,10319,23510,10157,77674,33338,42974,24459,40974,50244,65537,73971,53389,22972,51461,95979,47692,63603,18248,36332,74996,53975,83074,47613,80278,57363,12910,65089,45585,95479,13019,47155,23485,37850,40547,81263,59091,65540,43070,23036,14666,89555,95343,79750,76307,30928,42583,47513,60466,31334,23713,80907,43831,81026,62341,91561,95080,92582,21071,90127,43774,84193,52204,92578,37247,29343,21919,42003,89024,72590,61315,91409,96285,21169,65340,49982,94314,85195,45720,28206,58823,89892,58554,72618,33923,65109,13502,26781,27929,79316,82167,95089,39237,83183,89938,71092,35105,21781,14217,64747,91820,64862,24021,85713,77615,44716,30601,93028,18337,42617,94066,91943,42569,93207,20194,34725,27895,37129,35062,25166,32371,19396,69486,64471,84867,84305,40506,23816,83762,25239,56589,57950,20797,14657,78851,89419,81704,75583,69372,78463,32756,58295,41203,89241,80192,48536,96114,92767,83758,49206,73882,77982,10904,66379,33175,79534,59358,10700,56955,63334,32872,99522,23942,29492,81028,89058,34992,45443,71882,81970,32926,33781,49403,10885,92443,40827,22981,20680,39392,56429,38896,43740,76875,84513,89500,80019,75450,15665,28016,76705,51615,19257,77346,65530,27512,56099,48225,91565,42504,44772,57059,44972,96469,31983,71263,66468,22573,70645,70765,27326,11642,66549,69862,79620,33025,79853,14429,84654,37198,91157,65028,92005,65460,61214,25999,38417,11647,49769,50592,89514,80665,93025,11540,51187,65787,73356,71331,81168,74042,25057,77818,18970,34287,49224,61189,74302,74075,21779,62038,55958,69782,27544,15501,23054,48769,43020,20925,58350,84020,99014,76754,95616,94475,86739,57002,16518,36663,33189,20901,57986,78964,69166,56555,95292,36868,39411,29593,33180,16217,61449,96319,72744,61507,24347,16557,86866,27250,31308,56648,60142,72487,99511,11394,75264,67994,96221,67816,27044,28825,94116,57855,58255,75433,62225,37241,74651,87997,18721,12319,40559,22330,95568,90868,20193,43634,68476,57673,28093,10992,27119,49232,51446,18766,68766,71655,94899,52160,41592,99496,29971,65255,40208,81937,33450,95521,29385,88052,65216,56276,64885,92917,30618,28853,22057,49040,99815,52568,25799,76186,15853,42661,11460,59256,50153,72490,34308,94796,56273,97239,83944,63155,47689,56335,22003,87708,85931,46677,50192,45909,19851,78292,28480,36231,10116,79279,84668,72760,39908,43577,36526,51740,15278,67060,36958,36196,74443,14796,97023,33072,43900,52212,49850,64140,33971,49391,11835,35203,99473,78246,47609,13565,97664,22951,90858,65242,56573,47754,97492,46230,57795,82980,68597,26609,23150,88967,52608,54161,31361,88852,55623,47467,11895,10759,81595,47474,25932,43930,45243,21837,53369,81595,62064,49962,28821,91543,91421,47281,86816,49281,79195,52916,92821,65986,95979,38913,77603,38913,34982,77664,71192,82055,18375,24529,75099,69164,51125,46821,11856,26831,84019,23811,37029,75579,70109,81211,24479,15570,76873,84548,80753,35604,79095,15118,28604,36241,72096,37363,24747,57597,84092,36821,92873,99181,77691,12976,75424,20239,64246,65566,94174,44358,91568,15810,86400,33118,23608,89308,47746,29087,54753,99527,11997,23993,98419,71961,92491,92250,86032,18475,87770,78124,96575,43783,37715,30153,69025,67880,46598,67685,69155,61998,59676,24068,22210,11507,16165,99479,13769,74967,50151,59574,63207,65787,36794,29079,54221,83244,48694,51628,53331,23891,43736,53552,11049,37014,37759,67523,74878,29008,89519,48397,41110,77556,20088,51725,39240,40475,93664,72717,47605,41865,69984,68881,84191,27947,24109,62515,24748,51414,42823,22117,26876,10891,20225,76986,53677,96222,51520,18380,45467,56135,58287,47807,21857,22128,49973,96084,23819,32329,59683,91492,60889,98737,50280,12751,61220,36160,12790,28804,93078,75535,66733,46140,35707,19097,30431,38624,36003,73730,69660,47966,90082,95484,69795,51404,92780,61489,42886,86640,51353,32212,70014,11600,50775,29585,86572,53314,55033,18857,91371,22076,78806,82495,43138,70383,53690,48781,25518,99789,90717,61259,99608,69451,59228,37940,29567,20199,72841,80439,22103,92360,77937,77124,58244,67851,49884,15634,79028,37385,87946,44153,14409,94311,69502,32232,94216,92850,23965,70648,90722,43643,81207,50295,35286,97530,53497,14282,48351,25314,52287,31968,81015,19050,93943,65442,90658,56225,29345,99907,36971,95659,56331,39638,62429,72693,19547,81651,38229,53553,13454,16081,38879,44172,14740,44221,40972,65742,49856,81261,73698,14539,66858,78964,57324,34057,34163,47811,75608,59118,24664,19367,57556,89570,36972,38173,21331,43507,76625,96482,14361,75343,38895,33597,20771,23365,43729,39835,75293,12040,19210,69621,23336,87179,11184,14217,75240,19686,98623,69106,52636,21197,26071,54346,38342,78085,71625,76936,91237,34090,16002,97455,15969,80591,15365,56670,21491,37320,90734,78676,70758,78091,44280,54125,37524,25528,19379,97355,16919,20878,86374,93748,38758,41229,86049,10085,79068,56962,58299,62876,94793,63344,44624,11834,98928,56059,53285,83800,17615,49953,76464,67046,48412,44378,80881,85847,87287,61287,87470,41498,47655,62993,66279,36793,33530,68535,25948,74030,35084,27283,66702,41760,28443,35609,57913,84526,84808,88532,23772,26942,50033,93421,81007,91328,25813,16091,15412,29080,85106,88170,15812,63917,10710,43228,51199,56907,93773,47160,50434,17209,78203,12121,19394,91990,38571,18315,22526,15576,69546,33426,44570,81061,28775,12839,82156,22345,66464,13449,13335,74350,71704,52780,89552,93534,22586,92105,16565,86871,20090,11049,21946,90116,60680,94438,71531,85071,99500,55792,95653,64143,19089,88146,73456,12865,48459,17267,40082,66197,15390,88419,46361,37726,63821,15804,68495,82915,46727,67542,47609,50824,37171,67179,26741,15305,46598,31802,62387,67811,53953,60414,34826,16324,24452,25279,80030,19795,37275,91231,11451,75803,48234,75456,73710,46090,14814,91588,19162,29701,78673,86150,15209,38968,52306,97791,22837,72124,63191,40713,78556,17241,91090,90687,30439,37896,11917,21457,32152,56005,49500,13804,20199,28926,21692,35018,65545,53877,92370,79722,36687,29453,61636,39400,69559,62956,37701,67762,47266,39901,88399,52753,73415,99182,64806,94806,43140,17974,83119,39198,43048,46666,11199,77679,51348,40380,42076,66801,64063,96665,51264,96151,54067,54652,66467,70753,29157,26736,80307,95657,44734,24068,53578,85449,82614,65525,44498,91760,89543,41967,68773,60787,25744,23391,24588,44147,80693,63419,80758,32544,65409,64548,69238,61761,77554,41814,46819,87320,54697,86954,96184,55891,57270,70042,25397,65305,76759,70788,37363,12645,92021,70595,40053,91725,12517,54521,71233,91090,85237,67663,16199,70292,64089,95790,96312,98438,30263,32970,54548,59364,19785,60348,87655,11313,96667,86491,63642,88074,29742,89664,10394,52995,83649,86539,80404,99857,56134,76804,35948,67263,84606,41960,92521,48322,97943,18255,11997,35742,30690,42459,32824,40347,11546,85988,74194,47208,83765,96508,18512,44037,53491,72600,24567,20301,95562,11441,71014,86435,72878,72860,81553,81516,45125,20129,27441,45204,10470,76400,81609,11581,92110,97287,87269,68142,40444,90306,93390,46878,23364,71176,43006,45449,10819,24782,27026,53260,76507,39881,79362,14036,12577,11191,40445,55946,77794,55290,93388,90866,79677,72034,13124,13636,50185,80755,81517,54372,49193,58404,93290,26258,89864,37988,39962,79769,23069,68169,89780,26200,82778,30344,69955,20694,79303,47560,16830,43572,47092,12742,12668,42055,94385,56048,31530,72253,90211,73497,83705,80012,13532,44690,16878,58324,25004,91166,15180,12568,18090,77920,96286,91456,78124,55664,45205,69444,13393,55268,75663,29698,13995,17232,79438,34109,52448,13282,74035,45248,34019,80579,72214,74117,30231,81964,90987,33936,88536,34611,21673,80318,48048,13220,29531,70283,21790,43349,78247,57308,11673,54911,33975,17001,39012,52701,87565,24542,24457,33220,43329,27501,35254,56797,87987,18533,31195,26441,54247,24578,45050,68299,18162,77568,42084,17653,54858,27361,44625,59456,11271,16407,82783,57049,15866,36028,68514,24988,96268,24444,41920,28413,86497,95251,61129,59974,98094,10408,84491,85712,31857,15713,58824,67205,23931,28974,26553,83007,30127,54062,34449,99033,69115,12479,59552,80184,92916,80095,34308,84569,82167,72356,94414,53324,99812,84732,21544,95737,21413,91041,25723,17356,86022,35611,91728,71441,20309,19653,49110,48466,29788,32126,87271,61948,90095,24836,73772,94602,74703,58896,81849,29966,29343,98799,47294,89382,47728,41239,78893,13902,18770,33805,26318,39482,74109,33096,40462,93940,16310,26642,28556,60178,38204,78683,40579,71056,57765,36481,25549,33709,99233,57034,28303,72078,56127,82894,66733,34332,75280,34553,65763,64818,60678,26162,76498,79014,35470,84206,38045,62960,86839,38462,23094,47280,46588,94184,37326,85279,91535,24167,79558,79900,73278,63731,34084,46349,80530,61715,68943,88837,53686,46462,42883,47153,35320,92133,13867,76784,65418,33348,82121,22711,85532,93603,17825,58427,29312,99512,34914,55019,93031,57801,81264,98014,60195,58721,70350,74454,13193,94453,25617,77925,32978,41110,50796,13069,33074,51144,29298,13634,90626,97294,18705,75077,76228,56482,75359,57957,96480,92438,19681,43293,96322,46237,93740,60599,62653,99520,81078,87668,72496,80910,29021,29737,93300,90909,46088,70460,68201,76689,36377,23312,38325,29792,75064,45495,82194,82746,27598,51619,10311,12922,72047,78501,26954,46882,60592,44272,14396,71028,24796,86390,29044,72379,22164,42651,91819,66650,66158,37272,93253,23760,65510,51304,68335,40780,67871,40127,55016,64569,29373,90527,91825,35937,86864,39899,62848,76753,52926,25348,15785,58578,70725,46203,31668,15984,34348,60388,72959,17803,78875,65999,57462,20471,84497,41384,49548,40383,77118,99886,98908,16447,55062,55308,70033,74068,55353,14933,85320,48560,58680,13452,67985,78674,75059,48161,37752,68591,46076,29835,21993,18489,78086,66607,24596,18906,68141,92546,25570,91883,61392,78310,44126,31344,13285,83395,97214,22753,79906,67912,22855,33612,89040,36784,36942,89258,55821,61593,22128,81130,64516,58880,69552,62609,62547,89982,70041,49379,42292,83740,38791,71252,49396,11727,40869,80541,79727,85173,32454,55152,45611,63797,28626,64891,71447,62651,89852,40293,93610,99147,85382,82940,92737,19096,37007,41309,80068,90427,75012,60935,26774,11676,79673,89259,89342,29147,88480,48232,61198,10020,99300,14947,65141,55251,36564,77174,22965,50844,15145,38536,20653,42634,93227,86059,70595,39447,10562,78779,11418,26049,52376,26258,53644,80360,20216,89065,16766,74737,42898,59893,63336,36356,49744,16778,55859,51532,79040,69125,11066,11582,45357,83094,85926,13023,77414,86678,43175,54901,79343,49295,37158,12560,92884,87593,26611,72109,64677,70560,81237,23233,39900,92725,91291,90164,94811,79376,97486,64754,68801,78097,78451,16698,32773,36998,83023,26391,53790,93604,50532,55920,13187,14740,76841,12321,37580,74333,10119,85881,98089,24280,45537,42654,65957,69474,31043,44723,23727,60434,12314,83383,23982,12706,74465,72329,28991,16853,66916,92105,65315,24028,21789,88658,96827,31465,15899,49983,21580,50085,33590,44557,37031,34478,86441,74335,26005,12411,27421,94200,42711,82967,46637,20824,72753,94533,96307,59259,58989,12414,44853,55073,42796,51181,82679,33622,41350,49620,95834,19523,87888,62930,79368,90769,40329,82248,74586,44038,36341,80323,46359,92828,32711,31288,16134,24534,92699,40131,62657,28833,80688,71017,78213,10166,87801,70043,47080,85970,74544,53446,59939,41714,78235,25261,77688,13952,93058,50001,57073,76047,72541,97050,40820,34941,62517,72531,52692,26272,29007,97121,93811,65061,55286,87789,85467,27169,71021,18285,92918,26746,16277,24462,65036,55488,42672,29392,26586,72870,18235,23244,71456,55236,28370,16529,42271,14917,10662,71166,38528,18881,99952,69478,61684,89847,66335,12914,54652,97805,11515,16400,73949,49854,20159,86478,24325,54430,67703,26344,78015,28312,72423,80343,28029,47603,50029,10952,12638,99895,64915,52802,89560,54084,89074,25073,43247,15011,42047,82443,28879,23637,36784,14436,23499,95919,12063,51724,58430,49562,35684,74587,90438,45744,11855,82209,95260,47397,40157,25802,97182,43154,39470,26786,87232,31398,89372,72614,63899,87820,59088,82067,74702,26030,35290,34590,24983,51926,70461,98134,51874,24113,50410,19447,14212,86819,25967,23219,87423,34865,68838,92429,18824,70188,85183,87341,77055,87992,30739,35054,18840,68557,17774,50734,25563,51091,84277,29189,17902,63137,88170,63690,43961,88098,18024,76019,20435,59769,66262,42158,51340,21976,18996,16115,75064,98848,42233,64515,46708,87623,95881,89521,22650,83935,64336,37790,78091,55020,15374,62364,46760,92301,71272,97531,37348,91134,16915,51544,11810,99374,67885,60699,76035,37857,56449,92658,98095,11538,42030,55723,26049,82908,33838,11227,32923,30644,67114,42073,15615,76075,83459,83696,39740,16949,42076,85767,72503,25228,24221,92708,29589,97725,10828,74533,67168,42621,53813,83861,83497,23887,95153,73845,83585,10809,31563,84228,74685,33476,84717,90274,99140,42641,65522,42364,27168,97233,28606,84454,23183,76563,35389,93401,84110,39740,75261,64508,13609,36115,12740,99199,38679,23575,12725,33034,28222,92186,33554,91089,34091,75247,19573,74551,27626,69343,20166,42734,19881,12159,36728,49397,46513,95003,26250,47438,11808,91591,69901,69927,95602,14444,76977,64116,43124,19531,60514,88934,60042,88713,40460,20451,99942,55469,19498,21126,47286,66175,13598,16744,27474,62557,75597,16252,16504,93979,11573,47035,83089,74789,52096,10169,35755,53420,59483,61964,97630,15667,78819,18969,96351,91556,54417,19194,12036,79594,92632,54710,49123,84585,37155,26788,66152,41449,89857,62343,55795,10235,39390,12498,77879,14613,14113,25123,32138,79028,22661,65942,22749,29423,37504,56028,14985,39235,42771,60969,29592,65610,42186,66048,68778,85417,39100,83160,65437,56531,16728,53833,55115,49402,81172,46905,46576,40002,18098,93637,74855,13623,36313,92719,66763,15835,29566,61825,46069,80469,25604,99034,18304,22057,73299,81405,94003,33844,16526,20924,45157,59341,21273,29061,79667,34876,65007,22666,77553,49589,55401,80938,22165,23857,53349,31543,71019,44539,94831,40897,17368,17642,96798,46777,92633,87207,21969,48668,99792,28932,47055,34053,32733,77220,53838,44440,20447,38879,52334,18754,51916,92118,57909,16269,60873,31789,74112,12878,62236,57802,57590,18350,88056,54069,58948,34045,22279,28257,20647,18305,42446,40778,96814,68428,28461,32553,38252,68298,21652,46224,83384,73236,60686,98379,10140,94904,43913,38790,95734,73756,59467,33705,78013,62932,33640,91559,11688,16523,77446,10653,93559,81659,75391,32855,92965,85753,64032,85725,56109,98078,95740,70099,59000,81738,60981,93537,13457,64527,66332,87765,34590,42155,45060,95997,37878,63532,41720,48609,59407,29654,89352,54623,28236,78538,21463,24108,83791,44682,16293,88635,56505,62933,70384,16366,30126,16885,24665,22799,50475,74557,87557,72040,33780,56949,98866,56158,86160,54625,77562,38776,32478,73706,21610,42557,70343,94423,11155,58645,43011,26766,65326,57427,66087,85925,14429,18789,85487,60703,28764,56833,18982,21348,55411,93623,56237,87848,22209,69699,15714,13754,65674,93707,99905,15545,17331,74942,17948,70138,49101,85345,77935,82144,68831,73021,28292,78297,25798,55832,39164,11959,55416,24093,47721,11572,18545,40460,84367,92719,28231,54649,21789,30937,40759,15675,96606,42665,59597,49274,61292,94300,16482,96951,27926,16214,62460,28919,19241,52558,78017,85900,30165,66858,33435,36708,44776,87680,91583,21764,18217,15938,93823,81809,38357,40251,22610,83271,47137,19785,96370,22720,33402,68593,72104,60827,39228,65637,79412,99694,57757,82725,31532,16973,78827,97099,38764,64339,25425,21073,17114,48804,93198,48873,34296,84291,12166,64446,97967,80279,26499,45975,20373,15548,60731,56888,98516,19958,17329,66454,77071,26139,35838,83894,38460,90389,72931,98678,25371,51430,62289,51036,54019,86199,74160,87026,21330,58391,46761,63222,16226,16103,71739,18087,91777,72762,51057,95238,29988,59354,77787,17968,12838,58193,75284,42894,41256,45578,23108,39051,48274,32331,43101,72701,37248,96533,23244,97388,82698,28560,85360,76827,29572,21653,46246,25142,14908,35137,74631,49942,73581,22052,57884,65812,19532,80285,81259,61714,82343,13220,98826,10607,17782,68228,15820,32331,61749,47377,30223,50914,98904,81497,28740,38801,80619,39862,52299,17446,70306,55251,66555,95989,72515,18250,69965,75484,19458,92321,43079,63554,67183,61775,31606,84918,40958,56307,32920,94428,36552,95117,42825,83200,50364,99657,93190,10202,67020,63087,15814,41719,94025,22420,43452,16331,62051,40050,16043,23222,26996,62857,47084,39355,40782,28958,89910,94095,10799,11464,40476,43856,52141,26406,64456,51814,28941,10133,99666,49692,32510,64685,70710,16328,39179,56525,92035,46707,93273,67333,73051,22371,34046,94773,46670,57088,64643,34929,86348,16994,21267,57295,41808,43951,25673,87899,84490,39348,72624,92332,64435,45875,39063,17517,24126,73567,56010,42815,18991,25757,39505,93012,87755,31441,55625,81273,76762,10357,57986,66859,54091,62473,20795,41462,15954,11812,39688,52992,41504,80292,28623,33191,21854,15384,64088,37614,83992,63269,88542,99550,38389,66148,60912,30717,92458,80223,61948,71184,23903,74012,68739,55575,56263,94423,53409,12067,79190,33149,27208,83093,69046,82526,51062,65382,31836,46245,11582,91273,29190,68266,57636,28324,63514,48178,88706,65502,12955,92492,22416,51639,46640,95773,24158,90621,52257,33454,64889,45718,39441,58397,67724,97901,45074,94856,34526,74105,88031,81067,28109,52185,54903,39976,88795,66509,74957,73981,69147,78212,73171,57084,47320,97530,86438,79661,72893,46852,79908,82858,41435,27787,46933,51343,77510,63723,88145,41905,38746,37697,68213,92190,40925,52258,77753,80135,87617,17299,50774,43085,33283,11170,88987,43741,95470,12016,53780,87725,66161,94882,81254,79304,20421,39519,77433,75300,44652,11789,72640,61261,43876,30268,23195,62381,32612,52555,84945,27734,71264,42721,75462,77720,98805,75388,96998,86201,11671,60404,64677,48286,33677,88502,35800,62907,96282,95998,60509,63160,68708,97384,45244,95645,56689,55188,70893,73870,83264,42541,61345,27965,46049,15618,32725,38510,76478,41919,42758,50915,47894,88949,11313,64920,93846,57459,30093,97876,25074,70912,49862,61122,58423,28452,69891,61007,55837,80391,28243,40231,53510,29755,70092,25773,93408,75523,86947,25208,10176,55695,67328,65484,80846,38824,15442,64645,14397,34286,60803,47532,64931,74529,37971,55523,98091,30151,93257,17016,16101,83436,28859,36797,99553,23132,36010,22754,90245,24120,35423,37224,10846,88085,87943,35070,83536,29928,28093,55313,64834,35564,28723,89855,41251,41272,25681,12875,56256,23468,42775,74330,36767,22067,63253,23041,14059,99579,19645,72733,51288,65007,50882,75908,94180,18518,48093,88290,63136,24420,49861,10469,23342,74193,42327,84106,19450,82387,55666,78494,52635,56475,67891,95642,74202,29383,24423,15778,44961,72018,13097,43588,83642,66343,62411,66740,15905,82522,28837,17759,68838,27752,23726,93510,63578,86461,50436,48713,83323,80883,49881,27764,42309,78710,27349,49660,32163,95530,26806,37685,97514,74835,25564,98513,41299,66573,93897,57233,23945,34385,96299,77504,20834,34072,41825,66138,21908,46055,96796,10120,36803,65153,39706,57914,24321,29308,32508,36332,13549,59948,47049,17160,79907,68206,43481,48498,33370,10567,63159,20879,16371,26825,16815,94175,19342,67063,20298,59143,50404,91725,23913,39971,37584,14630,10572,73929,46022,62100,56829,52941,66136,99674,71960,30880,81096,23535,34549,25281,76528,46668,57539,75516,33936,66403,46261,41321,53561,55330,33087,97922,63153,61126,41352,78373,80671,38335,79396,13189,27085,46943,79426,76553,19486,24277,90234,93088,36205,92018,92433,68539,89522,87180,27477,76081,90810,28579,36246,22722,12804,58243,95927,87708,96695,97894,31920,79350,57605,74142,46129,68506,79934,36790,39261,32767,76696,74731,69015,21993,36679,24874,96542,65215,58019,32269,46235,36574,74249,77421,97036,18642,67548,13013,78136,88096,80738,88989,38631,99018,66392,80816,92144,79405,41481,51189,83244,59942,27361,42896,59051,91741,34870,88609,31889,77672,28959,74057,91005,61351,15322,90630,22731,67255,96835,38596,56290,83344,38686,30455,83194,58452,34915,26261,64541,53889,55257,66043,13057,28217,51148,17918,36861,36784,97526,97113,12592,70356,45830,60882,92171,30171,79193,99528,43165,59975,35138,89505,98860,92087,17333,15315,71225,43334,52857,25976,95746,39336,10821,23839,62365,47861,95278,38664,89095,37440,59985,17310,25976,84441,87302,13046,69795,89690,24562,73884,47305,98787,56131,97789,25965,16916,62108,78744,18021,38165,17969,82422,22790,38563,89469,28772,57563,89155,38680,89695,69643,90953,37595,78493,26716,81259,21899,57976,61083,29568,58482,82041,88693,45112,51684,51094,38492,72672,41555,39766,52828,85780,87862,31009,34987,35151,10141,75946,59825,28803,51874,50446,29363,52818,78672,15528,42797,98485,88087,20124,49916,89683,10145,90497,18399,34480,56136,78587,32228,69948,17016,43702,12734,95631,98077,46657,80133,40042,28126,95769,36404,87095,28042,94464,18190,84949,58889,47670,50071,56236,68603,58810,43386,43806,24291,67965,43037,72682,31810,42900,83569,20254,76805,98828,81100,22170,64998,51667,68644,56506,94722,99338,60956,45145,85316,51443,70738,27035,29895,25155,96067,58177,75521,38116,32578,38691,67861,74612,99525,47380,14305,46034,66433,36497,65904,86545,55432,63964,57054,55133,75531,29960,78816,91732,10928,77638,82863,34382,26626,68029,54569,69953,67029,10867,62231,98583,67172,53058,69547,68760,25468,46618,86647,52344,50701,27586,27761,86405,34453,27480,59853,39225,63189,63482,68031,94568,66827,52781,27217,29540,79764,36433,10121,27266,42594,25723,47037,37202,44562,69467,62468,96919,70695,49236,41151,31054,41255,72282,87654,68996,55733,87324,31820,86226,57298,45305,23732,31597,52082,68208,43579,26709,63616,38811,32440,19724,46117,95531,98157,81532,17512,51059,75378,41436,69327,98858,62893,31021,47517,71569,68068,59182,10960,15814,17697,38328,22785,21363,21985,38358,34013,83862,30621,32441,84488,35345,25212,68146,98875,60830,45949,60901,16203,47051,32284,86076,40589,48252,20989,10954,19606,78961,61532,44618,46751,54772,86529,50264,89842,86719,70659,91774,99061,50133,16129,57684,99033,60652,82499,95470,71381,83278,16705,21493,54983,26959,10980,34775,14695,87065,74621,21944,42603,79482,91302,44236,39582,22402,31719,63635,94029,95285,54699,82257,46297,70989,53767,54086,30917,71586,69392,52459,62400,82991,56229,28082,56106,73566,50636,42279,78945,18833,15411,62250,59801,76414,28455,46481,94309,83494,16702,57141,39230,69609,56335,66294,42249,30885,98477,39808,21772,90963,70659,90330,81208,20937,77899,99792,64278,47636,26389,40641,63685,11997,12825,35707,68287,35936,68713,64838,57039,20166,37342,66359,38025,62160,91389,80650,68578,74029,58359,30531,29071,55333,62418,17667,38490,26311,85568,12380,17605,55041,10410,39392,38866,48091,66623,86154,94753,21193,37995,64892,52908,41637,55392,42836,95676,82796,75507,68865,97080,26716,76160,87939,73740,25454,89202,57549,19339,83196,25217,27631,71248,34469,69037,87555,23695,40668,99385,52485,29852,97737,12165,92324,62107,32335,33626,58307,74524,58160,29745,91824,60794,34820,14552,63621,73410,18054,51095,25028,56053,66795,18569,36073,94028,77320,89368,98603,48733,71257,37848,71967,50350,53746,75949,12595,83476,59711,12682,83644,74060,39619,63728,49055,13650,45032,23052,68198,81747,80123,53237,29124,66008,26308,15610,72699,52371,10651,57459,51623,19529,53031,45424,74907,84809,76021,76304,84729,91749,60865,29451,22059,24047,72149,57908,60740,43310,54482,91215,88318,21388,20118,39171,76393,14587,54908,80909,11710,96178,95107,60319,99326,24607,80117,44562,55022,80767,81387,42768,29926,83758,63648,36153,55254,62092,30061,71312,83741,66676,29905,35259,43240,15181,21795,16478,42431,72592,63663,13873,68690,20310,68779,91568,80697,78139,53270,54208,82125,78073,35166,23019,87497,93675,87636,62638,35757,30808,63171,30815,66168,22226,68749,41623,30334,57815,92707,43419,87357,40293,56391,32740,60754,93996,79263,82484,15913,77320,72777,33796,40807,16421,90427,38983,55184,50266,43278,72240,67108,68989,37869,42516,98415,65815,39539,90710,30556,95947,62235,31633,78485,61749,57126,84968,25825,57806,80028,14978,99539,49520,31455,35756,14505,98089,20025,48918,21204,48037,17241,45981,75200,98034,52749,73469,51935,42979,52971,78835,91908,53864,32309,69362,86536,97076,32917,48000,83515,65861,21567,77072,95489,86269,99149,90982,71193,81848,87529,75860,93852,33528,79019,88909,69072,32909,27928,79682,17120,75357,70018,96383,93730,95880,83068,54123,73031,68731,14417,60152,76408,11450,59721,78971,93997,89522,16889,36619,26341,33106,68627,21695,28473,26302,79266,44687,22038,87422,91085,65103,67371,46134,11021,98854,28508,24990,85822,64579,56322,43553,93364,19422,85061,26851,95191,79710,44218,98725,93786,28135,80512,86430,37321,76086,68441,31853,64321,87083,34561,26261,47644,80627,76721,45794,72672,84741,62854,77124,52585,86362,74471,23802,55155,62331,98931,77171,14490,19969,92601,54985,50071,66031,58292,27625,38815,68025,66053,20153,42974,12132,91051,31740,74391,99677,99536,72468,66408,22284,41889,25943,81783,32667,86063,74165,51310,38720,34906,85817,51395,57111,54239,37126,22774,99274,35642,43152,68779,96675,21897,35624,21571,16713,75018,34209,37281,99715,56310,31913,16602,51896,13659,72552,98654,35472,74508,15806,18495,20863,15633,39205,91108,85335,33040,10734,79437,49143,35224,58403,59957,27911,20721,19291,48693,22628,72926,92429,44233,81102,15918,72772,80058,93020,96111,96437,49039,85983,58648,42407,14994,65265,19643,86775,63325,21789,56731,25775,40479,93337,26209,78312,82859,41057,61540,30158,75748,79630,49770,45477,40865,88248,34536,32919,31045,96735,75425,17097,68617,35648,38856,13907,78209,64524,27662,98771,63834,38474,31810,77514,28111,87135,93738,26294,32127,56175,12755,43530,27391,22830,54680,75150,17263,51863,90995,20397,57620,16727,36075,61827,94668,73591,15292,84689,92943,39475,39521,96718,71723,26078,49255,37139,95920,51733,62132,22736,79532,29925,66576,22014,14382,54385,41737,18927,12027,66986,24318,57777,92533,94815,60756,66249,72161,60652,66091,34124,24782,78037,85005,46143,94393,42586,50356,87997,16185,36008,71213,21851,52305,25038,80321,75997,75602,38023,26833,63684,23759,80127,63258,52216,66933,34379,71280,46204,59770,37098,60253,35545,91945,90157,68375,88971,42874,43022,15219,38745,17417,59507,86025,34131,14785,56604,36498,33460,13715,36431,87880,71153,93660,67230,98485,86406,50747,42434,15087,95978,64081,95176,29512,35129,14312,29554,38234,56627,71063,88278,90054,46228,12331,19549,37491,74285,59081,22532,80840,55013,71597,20554,16146,99072,99296,11817,22565,81160,81642,16441,85211,30557,66829,59455,90012,14889,34350,89756,62595,58492,82724,85348,93712,78608,86910,87022,12305,13478,66669,54499,66638,88649,80243,35579,63560,74935,35180,65391,70997,20455,94408,42110,20037,95151,40302,42858,81902,67096,50456,52094,23317,18099,89797,83120,70556,78440,75651,33072,27876,93647,97785,91957,33359,25306,39279,89434,39661,70111,77204,23130,65030,71676,62433,97954,44206,14449,58765,31165,97588,66977,69977,23883,89651,95483,47335,78176,95546,21535,52434,87939,12844,98928,73476,90063,38117,21370,13877,49877,59292,95989,63790,23916,23803,36679,63511,57910,36262,87605,39509,43232,42141,53818,45635,70667,77685,49369,71613,94895,82978,67517,75360,32655,94980,89110,20423,25475,42184,90534,22601,55414,77280,90546,68922,53666,52740,89675,64435,95124,30388,38860,19033,37613,15579,50235,88617,75357,31712,17264,68621,25999,20329,57675,36619,39580,15134,41398,46004,87208,15131,78212,19894,25189,40373,29928,78022,66809,87809,99398,84156,68357,46808,90227,54846,28755,33646,56585,45695,99774,65939,80647,56484,35109,38939,58941,38982,70172,51794,43441,52146,59888,16951,63359,84697,40850,21910,79144,26751,85477,49218,97602,49774,70450,31475,50682,24693,68931,51540,93139,74283,22601,42253,38467,55262,97173,46981,52966,95664,38919,99356,52119,92123,80143,48417,44463,95477,81965,56368,34146,80939,82101,53067,64250,15517,99830,17136,30054,70547,56560,16792,42252,41015,18306,29994,15148,52474,42240,98656,78357,61615,87708,91541,43478,64945,13769,67175,67518,94935,32118,15486,28747,37201,98962,21441,84180,40914,33698,34842,98085,22514,26862,15921,96638,49346,46536,20178,10276,40527,90338,98128,33742,37512,13501,30311,82504,72338,56729,70332,67271,64469,60616,14049,31306,36722,29479,67772,75835,29242,55104,55647,98860,60076,67196,72418,67089,22479,78217,57150,80769,79635,94773,87134,49008,29597,24619,99039,71767,63648,30416,31750,53286,21945,27800,49277,47388,75769,19625,97694,86055,34134,73288,89873,37627,77493,41476,46876,93155,79517,66950,16468,71737,64224,87057,15926,67091,91825,69038,39004,35192,79542,51048,21849,66631,23169,96767,86328,32581,10851,85207,28858,73472,76566,72454,45808,61782,89271,10895,53817,31648,44440,95027,52752,81568,40856,29728,67823,98889,65192,24070,19171,75326,48665,37330,36420,46147,36805,36449,34572,59725,19045,27567,77938,39626,66261,97741,95764,59455,29891,69015,82213,60423,88397,68177,55191,90513,89624,95519,20416,28318,35132,38088,53474,59784,65869,39648,59429,36049,51871,86844,36756,61071,93626,31165,88264,89575,15042,35447,48764,28945,96554,59472,43182,13596,53769,36078,63664,50343,63027,44415,44287,85175,18692,79564,22033,95904,67179,56701,64655,99144,77864,66636,97396,29609,89935,60687,20119,41697,95239,16423,53977,53230,38511,64000,46816,43316,65503,95085,88627,93662,38124,41592,35798,58396,19236,60490,29958,14205,91248,66805,52616,76993,33568,74705,66241,79685,72213,78236,83676,64074,14880,35308,62327,74402,84976,93927,65419,45728,46157,95306,56515,31183,37745,90987,31213,78576,66661,49115,95788,58952,80928,84556,87103,14645,37280,26887,41791,50538,31542,67883,10133,47172,53162,84874,13512,56738,10601,53326,15517,80966,80287,30553,44939,63619,98293,10981,24061,42112,76014,99165,40444,27977,10372,21281,14595,92546,62357,26069,55836,50971,23228,91744,14613,40201,93276,19115,90635,96130,91070,96915,34239,65774,86562,25012,17492,98190,62148,97932,16412,51077,30962,67278,70259,99357,10143,22754,12072,65007,45721,58239,62524,11050,80435,42288,91191,37312,31924,20668,30346,70183,79260,43580,68502,28610,19885,64644,60154,17207,13452,40950,93754,91471,49326,88638,86829,11596,29293,76375,27775,99425,66415,59798,16841,31813,25905,33057,59370,53889,30054,55080,38942,74125,15554,50511,58475,10819,36195,61100,16870,81699,76725,15585,71154,39692,23056,27698,37720,26565,28103,59435,49145,90926,78822,19440,66058,37662,21308,83852,86185,71063,52359,42544,64979,55247,42461,93037,73945,61231,72550,33810,71574,52715,92924,20804,22719,24275,41970,51329,80572,28874,22304,87972,91041,72211,91003,44584,27811,60922,98954,74634,30907,20716,92949,52662,15852,91049,59483,95660,56915,98429,98109,49478,31743,63737,70083,30054,74454,72291,78976,50170,75789,58696,75749,56457,44399,47210,88614,34692,48129,57264,37736,76975,91521,22440,29953,41338,41719,18552,76706,42219,88812,93128,40388,19643,19234,48200,34115,79651,20373,87977,33420,44678,10778,75643,43099,77521,53076,16737,21741,71889,48773,67639,10302,55506,90542,43218,56241,74374,61133,40361,20836,99719,99733,62965,84490,20294,32025,64199,84475,32457,20569,97725,63544,11376,78605,67828,39077,42540,51599,35918,26107,86379,25122,49348,76628,40969,24585,10280,26659,91628,81615,20747,98329,96565,87232,48502,64523,56258,43263,40081,92235,58344,38425,47374,52733,83918,32956,83361,50072,34903,80593,32666,42614,34394,80922,56888,36614,59814,22377,21388,48120,10176,47335,39340,38440,88210,74530,66145,92804,42123,68214,51864,15278,75776,63386,62243,46603,33405,26781,76724,15623,17704,26367,91743,55454,87058,98315,15586,43263,57594,96101,20327,55433,10149,93506,38024,21371,14507,86998,99336,47590,76578,79103,59393,78814,48645,41237,60923,78654,71769,70455,73615,53955,62704,61392,10380,47256,76664,21320,89054,55370,23747,32076,19868,19895,16441,15949,50839,40462,87905,14955,19766,93810,54030,16786,67451,68759,71474,34954,17023,37286,94638,58036,63283,80126,81480,40984,45774,17304,84491,59966,70724,61152,64764,10336,62623,44176,69603,27279,49924,15560,66716,20069,91325,50173,13185,70191,71449,40923,40875,62995,95753,59356,22521,87833,83098,84599,31789,91856,26976,18608,60335,52781,46079,97781,39537,14856,59959,51151,47100,44696,40348,21963,11963,33147,73012,69569,53119,29103,71334,53463,77695,30410,20556,65306,91520,22117,34304,41986,99067,83422,82218,96155,77981,52946,29570,69232,19424,68720,26724,48666,90415,89985,50038,98586,88604,56116,59194,61279,53235,17926,11857,28084,84443,80641,47915,44674,16018,11261,61650,20718,78678,44327,53108,93225,51324,94178,61082,75344,99688,88074,67602,59716,74892,61456,79450,86312,95342,97503,71488,66403,35640,72698,34798,47126,24980,12048,18999,71194,76215,43911,39458,88780,25994,78693,31290,42599,50946,54595,70715,41046,83065,82455,93136,75911,33782,32764,25342,50005,56907,56876,37342,31600,42118,42165,11980,71979,64507,80616,41335,13597,81709,76826,40951,52984,92244,81156,68256,36145,25000,89767,72188,23821,65864,12623,75648,29039,73363,60846,41198,80830,35040,51564,46748,17193,13187,67859,10835,88050,76143,24070,14303,32882,88150,15637,81437,71862,71176,12224,46696,67030,21442,91434,67137,70170,95472,94982,70196,45892,58601,29297,60908,38974,95938,63533,87645,25043,93303,81511,82370,75518,76248,27148,97790,22805,12810,67188,77599,89000,14878,27323,53762,64989,48466,15786,82933,22829,58205,47904,49706,84009,25726,29240,45360,62582,36888,96769,42110,79056,11657,64753,36282,83358,63105,77500,48873,93289,82339,65583,62551,82725,45666,31463,45973,34821,38634,24837,34465,18766,94844,34918,72606,86866,83311,46929,98102,93741,98873,10281,82899,49510,46791,13372,13696,75732,44274,49388,52920,38173,77304,70625,87272,11039,74329,57072,34313,30834,41729,80912,75978,40470,22152,28231,63157,94745,59795,62540,95749,13954,86226,83231,46703,10573,41580,95980,97081,68247,91968,33831,99200,90163,34030,61764,84448,63929,79097,92280,21343,77471,54144,19307,69102,77503,66904,16536,69469,57733,63944,12628,63557,58525,52705,76861,56076,79792,41827,66742,49829,60071,59922,75792,97456,42914,14365,42709,86494,28792,56516,50172,29376,20663,16522,81461,47541,82918,71662,52526,84418,75224,31173,15797,28932,69979,93426,67310,74524,11682,51340,13035,29692,23818,83127,28835,14144,23927,14299,38043,42018,44883,20504,30442,74769,43207,28959,91082,83868,88102,85042,51813,36561,66824,82514,41598,13391,50236,83417,48460,50678,31342,13187,79245,54761,25688,84765,42102,49385,44946,11296,43415,84787,22577,51708,66900,92366,19740,54413,66421,64302,94931,96727,52724,69724,18595,86895,81310,45733,17397,17239,64771,91225,20339,82490,20578,82119,67740,20263,66219,10992,47865,60312,60432,26999,41305,92497,79297,22119,28188,61077,70527,33982,91700,81600,31734,72918,44836,83700,23635,15491,48448,22489,24818,84588,80715,36182,98566,66160,67371,92371,67115,37992,23080,43463,20310,32621,47791,41485,17193,15675,68437,40028,77021,31899,59992,59261,96460,28713,51558,65619,73694,30265,38654,31039,51852,70600,49792,98464,48687,49070,92890,69999,21337,65304,26383,81390,22705,50026,27529,60626,72773,82792,88956,66100,63227,74262,16580,38397,66105,75131,89572,57219,78993,47098,83603,71616,35565,18057,17866,60475,96037,95754,67882,79791,72062,95682,67859,56792,93214,98139,53734,10055,67921,98275,18867,18134,84652,19855,73631,69795,30070,59839,36032,94909,53102,86764,69029,29256,93238,39250,67796,60384,20914,64427,72995,35501,57372,21634,47724,74380,19065,90281,31722,46458,63293,24038,13907,34398,35048,38107,52173,18284,44607,54044,70028,57796,60959,50299,40069,45321,13783,37881,47247,22648,72379,68095,74304,81658,90368,96969,61081,34948,79833,55118,13735,15915,49269,38306,91523,91410,44532,53031,86923,52792,36467,64802,66529,78365,98481,35017,66170,96688,98450,40800,32037,51825,78907,47597,54327,66948,34834,70861,58572,71529,93101,18325,93749,75575,44289,57860,92862,42455,60394,97649,77821,90798,67863,85321,53439,27917,48459,44938,63745,95690,78635,96804,18626,25143,81808,14030,62311,70402,37435,20939,17328,11375,76715,82089,32906,84005,65103,47615,96751,45651,42552,77139,22016,83669,90487,52639,40299,83084,48505,95070,40531,15771,61508,43189,99804,89025,67386,37406,35272,21490,94896,27114,41097,13583,39159,84937,82709,16902,75576,34094,82460,68432,26301,11468,65633,84127,82012,67458,21382,42995,71996,33532,94905,15144,22884,67824,19947,38945,53861,76435,75293,80990,18911,46333,19089,29625,11178,60935,70646,93461,71965,20446,62604,75101,64285,59200,54667,31617,39360,32729,55818,84294,80375,54497,86576,13530,10008,49587,78701,30758,32583,78649,90173,88959,45705,54824,78087,25325,19402,98354,59492,97780,32811,29989,74859,16609,75590,11182,13938,32926,24861,40319,38447,93819,22903,33523,71913,92825,30539,46939,77610,53661,92159,57586,99670,14451,64720,10573,91672,64876,33937,30581,87427,43946,39358,54924,71323,26332,49611,51315,43199,46954,68722,30666,52551,60495,10611,59007,28473,98068,69862,94441,73589,93126,67216,14492,43038,94747,12455,20602,38186,18191,40428,90261,58816,85430,96775,66227,24919,90920,58118,22336,65576,46768,78574,28518,44868,87820,25426,22383,44750,23674,69002,30881,55848,38454,18457,43075,93545,91552,39701,85638,98225,42925,25615,87134,40952,68240,98103,56506,49925,30677,93500,91053,64881,94313,50939,80893,19548,51037,51464,73197,29214,50438,31990,76589,44012,34141,70811,19141,30176,42622,96155,78483,64300,83134,92180,26730,75222,66636,35117,52822,34471,33830,69675,41420,49809,18486,31158,59685,39033,62344,21893,36888,81747,11445,91077,23978,95964,77175,84047,62386,71487,51020,36127,73447,51223,73217,27606,63640,86463,75792,18935,23579,65881,69632,73392,37695,36316,26879,37480,26713,36109,91049,50910,54894,93661,97881,90874,51170,49222,80656,53267,23174,64700,83675,40844,78311,89346,41111,49706,75696,51837,75633,94101,30661,83192,62764,94802,23804,79121,50304,43539,18793,28603,64030,82901,44426,42583,12034,97890,52957,57366,78559,12685,78573,70938,85102,62886,86423,66558,17719,11321,32710,86653,28894,28010,79722,37070,71501,22431,24547,27631,21590,74112,62422,75406,59099,93201,86555,58616,35919,84045,81951,61012,12878,68283,15542,31837,16669,16309,35675,48456,85577,40202,60745,32130,53631,36482,44398,60094,18466,37501,29847,93713,68064,65463,81540,33297,38073,58668,80440,60802,60995,46763,75947,88246,24262,91238,33772,94416,15823,92439,68012,87902,37116,96226,85506,45738,12435,50063,80005,36836,30574,72573,41378,62649,93886,84349,31360,99722,15095,40787,54977,87259,30931,40146,85858,37883,80744,97626,99228,45701,35953,19513,38530,60363,30149,80693,40364,10805,91776,12909,24725,85118,90800,37977,25454,10507,96452,69189,19410,13456,48597,85259,51147,31892,10421,61856,35892,45125,19092,76522,20427,59157,29313,83355,43433,50898,80055,89661,10712,10517,24842,23841,48925,84843,80422,99365,90964,97898,51379,81806,54063,61628,95614,38083,78480,89993,83026,51754,30485,67033,75496,94412,78032,63480,53669,79860,66242,75870,21269,36316,21577,16915,60546,72464,48919,85307,13109,31360,10161,83345,32147,51328,46070,65494,63561,32001,92255,52157,93662,41115,43685,21659,84056,30101,14850,27438,82611,59185,51665,29118,48269,32632,60346,72267,83696,35061,52861,41500,18235,45151,57477,64196,12668,80164,84359,89755,40669,68363,47941,87180,90902,31536,29954,20047,70222,22185,94361,91674,24774,96520,87882,37940,69180,41287,60909,51416,50175,22961,54550,88469,64518,58289,63740,94006,85414,50093,57172,21581,78898,83339,42220,15710,19394,75320,92420,30973,84807,98705,67958,66596,71387,79644,35134,98916,57120,53166,56434,20568,62581,93676,15692,70177,15995,12724,50235,30970,83538,61941,93094,67648,30155,27808,14619,77878,88388,57153,98208,69572,72598,10649,84488,88791,13241,98595,98892,54997,73796,37161,34845,33256,50314,20636,23068,97673,58691,70817,70332,74991,33357,47192,95708,41110,34530,82660,13553,18519,54087,26788,25007,56690,75651,78896,68927,87249,34221,83657,32222,11380,17823,21669,59708,46998,82017,98686,13353,81199,64529,61492,90822,63405,66540,50851,84177,56018,91674,89971,93351,99389,99332,19356,82472,67983,49161,79292,11820,76479,28076,58231,13476,15202,80770,39190,95448,83522,42292,13078,46504,45081,31472,65557,51732,20670,56098,18297,58221,60862,62053,51141,80395,65729,95930,56186,78036,13748,95048,69207,26507,88556,97906,40688,89908,31607,83161,94337,43946,71424,14086,80455,88122,96367,40162,95443,34575,64864,43309,51576,46176,92546,74620,95753,81409,39863,31116,68118,78670,50394,34408,52395,22625,43731,53672,28225,98389,82194,70022,53842,11664,39310,24513,34019,71182,10070,21372,42795,57490,75633,94216,83745,60311,34456,39398,74581,92455,61336,35351,90127,48960,84561,12837,14155,56320,58771,50639,65953,43912,20171,77970,14530,72570,28935,10341,49413,76237,74544,12730,80779,77051,43723,12041,94688,72949,78869,53183,10816,22121,95456,34181,46373,96443,92504,39522,53946,62630,61235,52669,59166,91853,97314,53414,71891,86837,73786,78562,69272,16251,57949,30181,35677,76355,61837,84549,83082,52922,34258,35873,88804,61546,47752,66451,97889,33132,43540,22947,27456,84192,34157,19654,67612,56004,39876,77402,11750,33850,75823,90120,35799,69464,77869,62266,27716,92525,52199,86740,21060,48882,21933,61727,37694,49264,28453,18420,81115,18998,27524,37620,21879,35169,43566,46640,33769,74474,26824,38599,69800,51717,55848,71293,48127,37575,25745,81765,23520,27149,51478,17537,49128,33228,71519,23722,91234,92462,12626,98644,28625,75881,90660,69478,12664,96323,80023,65168,45857,81572,71350,17289,42514,50566,22103,39955,87087,35805,28773,52401,65633,36272,69974,19420,38464,49588,59349,18356,82636,18937,31254,77745,16262,95716,15491,96777,17943,47407,99523,36388,81828,63617,40981,26592,33062,52706,23707,48405,24295,98925,59946,50507,86593,71673,55584,52065,42070,82720,89728,99893,88890,65426,19945,96085,23110,50455,17722,14648,65048,77930,40397,99616,14304,22960,76823,88122,89139,54815,14525,11246,30351,94174,77523,22359,73531,71563,57959,23306,26748,86485,23705,45747,34698,49049,53899,86965,52789,57378,31645,59827,82428,90557,60063,66743,80111,41619,97778,24418,12105,71999,31632,86179,37714,77060,72447,48004,86917,22672,43209,99962,58567,18082,13897,79553,77085,45405,11556,36178,47143,61326,93064,92512,51665,51653,10891,67247,82983,30989,28382,91768,43195,76774,39427,60313,48621,54178,54546,28967,10165,85809,89261,70308,55846,46978,55115,28799,17296,38968,66898,73646,65577,10775,62971,70732,80665,36637,31174,29836,22571,12398,17890,53227,59198,84898,74613,90501,88960,34685,75345,25774,23269,35785,24869,65850,29176,97354,58049,90229,46173,18417,12680,67920,66255,88638,86740,68511,35364,64042,98989,15936,63605,32645,23883,21723,70943,15336,46069,98075,20247,18632,75582,62593,86088,74316,70536,45795,70593,81802,30076,34417,64383,14301,84223,99317,17020,10954,50187,21695,64588,74291,24025,90819,49219,74355,61004,89277,47666,48141,33864,30429,20502,69301,64942,44411,78577,63846,85160,78958,82079,93288,16172,18852,87169,70208,89370,44334,89941,83672,68384,51449,37384,91674,92538,17728,77937,41459,90269,27869,75199,77249,27964,24235,75699,14838,96725,22012,69416,81764,88463,64688,46467,30765,37925,61696,91005,17592,94028,23956,88216,19228,48717,49140,71950,98932,83697,17230,66361,42897,34996,80467,59239,94422,44282,96882,45228,24119,19130,66389,21790,66736,48320,34686,58027,52300,15539,11149,26666,95980,33655,62990,26328,49349,62499,98445,53780,10387,95348,69644,78766,91272,42262,98258,89328,82742,95540,31761,49019,72460,32628,50494,22283,22774,93307,31824,21127,68958,64139,81103,78499,52657,43217,46344,54582,72442,53236,16086,10545,92645,47919,64376,29389,79184,87847,36094,73422,60093,99874,66920,66900,20854,22374,64296,79611,18955,42437,42879,79635,61841,92414,58883,82907,75734,84820,63617,95140,86120,25891,40962,77781,85200,49789,89515,26492,89160,89675,31714,12216,62955,37397,19227,91777,35547,77945,92151,61761,28179,40479,30396,10533,45373,51975,89281,59443,79642,78372,64220,82231,23887,59271,45652,49357,42364,28647,98990,14520,44010,34530,37072,16252,54580,65173,95260,36868,70914,16812,22266,14821,35897,93538,90718,45610,56436,64143,67916,14715,42168,98998,49242,52868,86747,68240,72271,92321,62993,98980,11982,55757,84954,13395,37928,16680,98866,64906,23183,73942,48456,18359,11087,23316,37090,10776,70452,61942,41766,97383,24438,89882,25417,46127,50295,58943,84622,44347,84093,21785,60308,23007,86737,48167,34246,53422,28248,63617,97078,97595,86085,91729,27608,66115,96594,99216,16063,61661,60663,65888,56734,78682,45814,78008,85243,13195,35671,40429,60670,14448,83452,12684,68161,34043,30592,66978,71874,71784,33449,70528,57436,99100,48402,95193,35213,31704,74976,17776,26030,94411,35779,85671,77445,97152,53820,44910,43167,74442,52147,91834,21157,92560,56805,43660,74589,85728,63704,67406,22150,23925,58194,84355,94962,10323,82647,39398,60544,96395,15460,87194,98746,32179,72545,84648,83794,65829,75499,50684,96505,68587,19104,51080,19048,76744,26192,43468,54840,20177,36742,74145,26850,70692,59417,53116,47381,70951,83312,77762,99997,15729,42997,72575,42010,76068,58019,55476,98176,71315,42809,78572,84162,32872,71465,89421,27974,32533,88705,37095,89567,58555,20946,48924,83601,73138,61065,59713,56236,15687,82122,41134,98538,34462,26879,19700,77564,97319,12785,81987,89936,93542,96451,11939,15060,37977,97248,30880,18103,54652,18477,49324,65762,28738,89031,43208,47948,18661,10355,38500,10212,89173,39977,43885,90641,34431,40537,90077,26227,46361,27634,40088,95298,86941,93214,87957,21243,55090,34569,73158,12533,88011,62519,21065,80146,27865,84086,77461,89078,39307,69074,11959,82383,95597,87790,23107,50728,86323,24142,35888,11321,61255,42017,83231,43651,20137,43904,42093,27300,23325,83879,79238,96444,65794,91418,52366,86262,63284,55772,20089,47252,83754,36630,73288,44601,33871,41547,83739,64265,56484,62794,53495,54328,58858,60822,24194,38402,24455,98019,29183,46178,48061,82573,52089,21377,18269,52012,88544,46784,50552,29164,80456,95343,56058,36884,39123,33611,38292,86619,55899,97509,60664,67743,50211,98052,25927,23225,47328,88809,66592,63672,97289,27849,30402,75712,31419,47443,45103,61147,72942,77889,48515,43213,88384,33342,70992,83227,53452,93699,69812,32480,83749,93832,74978,33764,48892,14315,58232,35000,39208,96314,49337,57624,10930,53636,14607,94739,88910,22249,15123,12885,66469,74152,17232,66671,15533,56200,63926,23933,65026,19010,13650,22499,92251,50009,30492,22614,36669,72164,85339,34818,21451,68286,35265,68461,38018,68371,41696,19352,64725,86260,54639,60473,74056,59375,48266,69680,36806,39553,88399,69928,13753,96687,25484,69950,85852,44627,13635,40616,41657,87591,89088,90143,19678,67905,57401,54632,78580,52190,81073,37092,99848,54188,77941,18587,40066,15420,86716,76565,40538,61727,89291,28773,86954,48754,66668,70979,16622,90640,98348,73902,88276,14120,22646,84328,30357,52642,18386,47553,84530,40401,47145,84035,39239,85747,79649,37557,77927,92585,59548,15111,96119,68910,61273,56155,69862,46317,78961,64815,84474,69757,24325,49844,66514,44908,76440,67149,70552,68593,81401,99498,63026,83560,42196,22048,32480,69671,92286,67581,92543,97044,12044,96301,79051,17365,96341,11126,40881,38015,75328,65287,55435,21205,31231,84496,60939,79872,70267,83622,80259,84020,94692,59553,68817,31334,52903,42677,99257,29149,93529,87721,88971,75219,59399,17942,62831,29379,82497,60411,96170,56553,54227,70581,95237,59568,60644,44151,50611,22619,28644,10505,29305,64184,73583,10325,91131,67006,76731,76866,50533,52068,74592,24241,94589,37399,95726,51672,23910,71388,50353,83672,92670,73412,67089,39966,77601,32322,36046,88649,14903,95946,93535,54466,13460,43951,37991,52770,78776,30263,27513,92329,80284,84668,83861,89486,46944,80432,47804,50569,85728,61340,10018,37593,13240,24012,18641,27569,88133,47762,68354,65127,29218,14023,91466,17791,41495,89424,52818,13873,43954,75435,59047,77764,90199,37653,85987,20472,77032,41514,55291,38024,93872,32641,46304,74464,11844,96451,77980,29893,99268,11670,16381,22743,77794,71493,24419,81910,73382,15143,54310,13268,41673,52934,32244,85909,35183,78677,97351,16618,25289,40510,47567,61989,26747,72821,75277,54455,20738,27971,79472,44097,62441,55266,74385,59337,39238,25234,84666,42382,15385,76356,80898,11914,23185,98134,92834,88474,14338,42698,52209,21976,42269,75849,39481,78108,80665,76170,34662,10687,57810,18527,32048,41202,14109,67267,55786,22202,62192,45026,87062,71538,80208,46339,66055,75436,89031,86085,74631,53101,79151,13166,86430,52389,26006,41666,70202,16455,86579,64738,62001,26442,38869,37504,14910,30341,46258,20432,89920,85529,90886,73918,81881,45191,60919,10273,12880,83252,84299,80514,82498,86752,82041,86046,51320,13521,39933,84212,13974,83488,60545,17858,31215,75666,82889,13050,94580,13638,68624,85864,22636,55772,61275,34656,94657,40706,35672,39559,32526,23120,42510,70552,39970,43132,28926,60226,38180,19322,51753,60615,23352,41073,62876,89239,26064,68972,37946,77506,67468,93082,59353,63011,94581,30956,13712,51711,67667,65558,89129,95102,16957,81664,36852,35882,72921,97527,64733,61399,84417,86972,51309,12030,49397,73816,77118,89501,98199,17743,91538,77564,39034,59195,69415,90625,76549,73351,78941,22794,16158,80097,81515,79149,73945,87207,67192,11903,22905,38716,12562,53903,65487,95698,41321,90299,31304,64456,22091,87343,56795,91900,55008,34532,61527,98001,47463,46378,94320,32802,27766,25035,17637,78791,32719,99395,33469,47471,83411,21054,37163,22903,42023,38426,45405,89865,12804,72991,27209,68710,31611,94817,64008,97364,15212,38655,56907,29414,35997,50509,56597,16045,27113,91584,69569,59469,19072,77322,58365,46507,64809,14184,97414,76309,39626,62784,36087,48596,11994,59561,47987,48800,75713,85503,44599,92333,28481,76110,20107,31952,98061,89555,84449,90217,27735,92073,56854,13568,47899,58718,19976,63880,85836,81668,34210,66739,24324,70740,69126,23375,24358,35469,91707,35396,29227,81198,34651,17464,78938,77111,84331,70011,29870,95364,98896,62860,85672,91983,15414,75712,73663,72788,87965,19709,47629,44658,13026,12746,95556,11302,54251,93569,97607,27402,12951,36522,68807,79757,35913,50335,86109,44593,64651,32917,42639,80176,61945,64054,49704,71177,68594,97379,54201,47816,91534,20734,74624,22259,91855,75394,48550,46374,62766,87582,54211,50920,96465,10603,53911,17238,23380,67278,47769,29425,52848,81585,29949,54288,10016,96452,49647,39677,84429,74957,92254,75416,15637,38597,26774,90663,38548,93152,25867,23164,73869,85242,88546,11840,24960,78002,96163,73268,40741,29743,32526,27129,42676,20254,74546,99780,67127,49037,14049,52131,48141,28569,34014,18705,20599,22163,54992,55074,31803,49552,54179,22439,29407,98531,58828,48060,32000,10303,12873,24747,34498,95744,13399,26211,64833,11021,22765,73877,77726,24140,92563,50046,32891,11613,36834,96255,44291,21899,76082,90394,97433,11263,34023,47044,28333,49418,22263,21396,84512,33662,21334,75048,25222,65484,77678,90358,32506,53905,77873,32880,37537,17808,23720,43795,25853,53707,78213,39700,63647,23133,83530,75925,14746,74015,50852,33468,18310,77219,68633,57952,22556,17474,83741,19312,43517,98545,59306,65288,58816,54379,75693,55150,17915,33283,23750,34970,81916,72049,26754,92077,75655,41706,27712,66146,87688,15981,89996,33495,91747,51289,77959,63637,96543,19279,53750,92207,70545,55488,70934,26924,26922,49391,79353,43951,63541,10058,88364,89883,72931,23067,47505,41544,96781,34310,17400,87641,20450,26667,14814,81886,45152,55989,15480,31376,32160,49374,34287,89079,12270,50400,98915,98744,51541,50444,87682,18140,61419,12703,54528,81474,89209,52422,71051,22085,93726,10574,53394,53137,70899,94751,31616,53823,62854,47870,32072,22881,17501,92402,84386,37358,41386,41533,67186,12933,15271,91981,82765,45011,38920,15104,34787,43770,59729,92055,63568,39584,68512,46771,10690,67281,92953,34335,37926,93057,69450,97906,39929,73923,18728,83875,51915,63521,48783,88663,29811,81476,78457,39115,75498,56485,70424,85079,14231,14256,30399,48872,74766,60331,46139,64176,10669,47883,84593,65396,77758,71241,31705,97422,66124,85139,82640,82729,48829,58467,37350,18353,66992,57867,20853,34431,84900,26007,63390,76120,96936,76206,37224,36084,84422,46566,65251,34225,33278,29752,14588,91907,22815,14651,56757,79680,28849,48078,44341,69706,15229,76158,15460,78567,60114,84759,71568,81013,23911,50975,44678,56421,21817,33151,65994,44674,82197,48135,62323,66015,86823,43612,72725,68779,80979,93534,22862,87502,47537,65192,36117,62792,63524,28586,13413,97401,95315,95182,79612,61711,79827,74145,48231,48790,34397,23639,50631,28405,71968,88667,33647,19418,60528,59251,54274,61044,17253,59134,76335,75812,49838,49517,86478,97492,67531,44733,48746,88041,34642,94918,99672,86260,42910,60578,74265,78623,22473,22848,40596,19291,97669,80841,65777,82252,65186,49524,39698,62339,97612,93104,98540,70758,60505,80777,44747,58176,63232,39047,58763,58619,96305,37282,82690,39396,15594,37579,82185,70600,64224,46499,42063,67137,95394,47804,83738,56334,19339,55377,68368,45913,50109,99561,22061,22279,47963,65650,17339,13705,71287,18056,30975,24569,44065,80925,39888,12736,47369,48045,92441,56462,31660,81766,42494,17978,61827,91267,32549,89854,99232,58462,23033,64079,15969,15510,80844,24130,52736,33164,89535,14562,85977,47834,17953,57321,28547,13318,46303,48825,55798,11772,55662,52250,19082,20703,88776,90687,61279,63119,81153,79845,91739,37004,44923,45872,73239,48741,61034,58276,28227,18159,45497,42309,30426,33249,79539,37488,12021,88729,81193,95013,76198,62354,29088,72843,76240,16303,82426,49200,85066,26176,71014,73514,36441,85929,12439,78468,21796,24116,33805,83486,68956,79538,20244,83888,71022,43420,53357,28574,38050,79455,17599,96311,43835,13688,35539,92306,20623,12265,45910,64207,40531,45630,75195,96367,19810,50539,11745,59259,81018,21979,52178,76541,88150,65330,57577,65237,53868,10377,69622,11427,92110,59249,67575,80941,20848,30059,57070,12511,69752,36980,32444,46713,91436,60974,98447,40191,54775,22055,89752,50358,16377,61435,50861,20203,67921,12486,77105,50038,78009,49265,24843,92751,29289,54574,76099,14963,39158,38527,56007,53218,29624,99968,24433,22352,26387,49295,93222,13779,37009,36579,83202,85188,71805,97095,79035,26708,98027,61209,78332,82941,26541,82963,29503,86083,15492,58802,14285,78424,40624,71373,82075,56167,60004,86609,22121,81739,77812,57926,40273,87058,44646,62856,34102,50370,77355,50641,52461,24741,70754,18615,80755,18402,51427,70627,44385,14176,41459,65003,13405,41947,96782,67830,17508,76887,10831,78038,92296,62579,80968,82863,21519,51090,17906,84813,30121,19275,72133,19500,48513,48262,64530,25560,10979,72686,66092,87558,93201,28882,12625,39067,32931,60899,82950,19584,32285,83508,33859,73025,37695,38014,13833,29166,27102,50939,69278,93731,23293,68702,60041,78359,81092,31943,85872,92901,52363,52124,98205,71908,44940,25099,47836,34135,10038,37441,48756,57191,88520,88700,42017,67342,82268,83820,47599,94673,42591,57302,90135,16676,32658,48157,51995,62890,75148,10429,24548,48207,48020,60433,53155,20719,68546,98558,84895,37764,78273,95266,65119,23668,98864,82476,72936,65630,24971,67418,75696,55681,28823,50386,77483,81118,38456,27253,91901,26486,54468,31057,31877,56768,37858,89851,63709,16726,42513,72917,52080,41317,34191,27622,82065,55642,65641,99276,56144,42398,89784,15171,42267,80052,71854,51116,28507,52987,36944,15690,39754,30631,87546,82038,23679,48489,66528,65681,80740,47176,41101,58543,51022,96908,70507,78264,70405,66458,10701,23673,53789,10949,13945,65604,82115,35673,46638,69329,50903,21262,34045,74091,80982,92488,30268,55111,91173,18208,85073,16088,85192,85471,93154,56697,34966,13098,50627,45119,15708,91115,28004,53779,76502,48499,43533,78196,76412,91635,64196,70177,84804,82904,29845,31935,56077,82255,99404,77484,97413,82410,21571,83810,84334,77360,99714,45837,56351,32768,78636,49315,97810,84932,32139,79942,49677,33327,77067,64139,82886,81878,88077,73451,71454,67922,77170,54649,45455,16163,37804,56683,69895,23619,97659,80867,91598,66920,35824,50557,26759,75933,75419,35287,19306,18849,14026,39901,60176,56557,22367,92549,37643,77017,60289,22202,37668,27998,88046,81772,25731,33740,36561,38378,44534,92475,50538,52599,58813,16836,31628,77068,73041,32612,72169,36599,16410,47564,13393,44436,56256,92906,69319,95883,73868,51755,55583,83514,81406,61329,67612,87437,59257,19042,22936,81818,58337,50236,67975,30594,32837,64404,61338,15494,40850,11386,92724,36622,53703,20349,24650,27451,96600,36161,15271,45529,97557,29631,64199,48746,53633,78063,24394,95830,77523,43211,55329,81947,98929,98456,85178,19463,10624,24316,87116,79199,89524,28545,52193,16987,29282,73247,23561,65222,26792,73652,21299,80140,70689,97077,60568,38478,19526,38104,50941,99458,28014,41483,43670,28288,43812,68246,74029,56345,25400,46274,68878,29001,38124,83285,27296,26817,77600,26750,12150,21674,39818,94296,80225,81320,44582,34729,80826,61258,94077,16638,77212,80956,13216,96922,28166,66646,81122,94533,93497,19664,17735,30817,64743,63450,41627,20936,57063,83673,80353,74315,57817,83710,29875,49008,34119,40665,23627,11789,85583,70235,88132,86011,99804,96803,44186,28823,55795,94633,33992,87936,79154,88242,76311,81396,46069,29293,81671,51219,94692,43753,14805,61268,94052,94516,69588,34724,84307,82892,37869,19421,68149,20840,58469,80655,99056,33609,74993,91889,82938,63733,55805,57161,60869,73285,18698,73103,77203,78302,57928,27640,71757,33862,43524,12422,19622,22062,33190,40031,85474,21179,59726,59760,10233,26264,79687,23999,50304,21729,12146,63345,24280,75467,50875,47252,22811,53422,51525,92222,16305,37721,68547,17848,91106,51703,10665,58902,34664,14810,63731,36062,67554,93011,71372,10173,51361,40581,48754,77104,71261,24039,97195,11943,10297,75669,79962,87874,12932,92442,66858,67374,85329,71413,98852,73085,47036,17081,54923,74714,67450,74961,75297,67005,30084,12499,31035,38952,32513,44590,77096,89108,41715,93009,84786,94022,92810,67006,29405,33750,72499,59577,85124,76345,89430,44030,78486,24442,92442,55001,35553,67997,73405,68890,23320,41031,95653,58809,97931,99357,76435,74702,73663,77544,45126,50749,45855,14579,48566,93501,55683,33950,26519,57336,92597,13366,28351,71337,81433,49217,91464,85133,92605,28207,26624,16055,63938,64580,98784,92172,55935,78799,94876,56310,81594,90342,92031,76791,10593,99002,13432,64982,78329,76596,25414,45849,60652,57509,67390,32220,59169,86652,25087,95326,56368,52868,93675,67313,19737,56096,29496,73541,27113,41990,14962,11849,20337,58619,97271,58451,67405,60111,66014,17849,51420,74163,70259,52420,38547,18915,95568,18629,98680,49522,52499,81086,56340,49235,98378,88637,64392,44177,36779,27614,26214,52221,79807,24092,79913,34715,72069,64856,21387,25554,77348,23027,39194,54760,69303,85406,18241,67198,72893,64272,82828,92154,89092,11274,27102,55849,26877,45676,55381,17020,87037,32727,71979,98431,33384,80243,97894,33513,27994,17410,55888,77568,29691,95267,98641,56252,73145,71948,25583,16159,12607,86284,19190,35607,28929,32801,32514,44509,38314,45663,69748,55811,59338,89197,75654,59137,29692,27838,53558,78656,98401,49790,46514,61708,20557,68250,98487,10108,64761,44296,36548,68347,14517,28021,84223,22750,86373,16784,45739,73154,47075,75517,57814,75310,79512,36696,67692,81681,58210,15831,86412,43050,98271,85830,15232,42590,70777,55878,46395,66003,55583,83238,73866,90373,23096,93436,99173,51951,27884,98719,24387,89595,94281,53843,68698,90971,62650,54904,71570,49292,20672,82181,52542,33944,19566,95320,55295,39655,22120,21885,22397,56866,24733,60615,70789,64879,73010,33954,79366,85369,28749,83791,82171,99321,97106,66555,30558,21109,37959,30542,83577,47129,74880,24231,45366,83618,72110,86198,95827,35840,96884,48352,72609,29893,46550,24994,63806,19313,59259,47950,50239,56466,16887,13089,42136,25919,94073,82308,38688,65572,56909,44269,73199,87538,65453,36344,23174,22164,39234,56613,21272,89460,80521,91596,58179,75220,16683,10175,10777,54491,83935,41966,73751,79320,45023,61960,68722,64758,50435,89234,96952,29179,19914,48712,48378,58594,64047,86783,76730,67846,58721,20681,86604,93439,53849,49698,76494,65073,42080,59144,95024,17212,77202,90225,66410,41480,47096,49442,60059,48443,76944,40586,10725,28180,44761,49584,23824,97242,76741,94649,18539,42274,10761,36317,89075,74111,21192,59752,16096,71353,76510,87206,88750,99623,16377,66892,62038,74021,45803,33720,34486,12065,96778,53999,74964,85235,31774,99600,97243,82663,10754,66965,57937,36009,14223,64430,18662,66941,34843,53065,74349,62135,98260,67635,81946,94898,26828,71136,32879,41349,45504,15105,37418,32731,24431,62863,64316,72162,81583,78092,70587,88479,49617,61498,92577,13029,26375,73375,87151,41893,21313,16015,32019,20021,26338,54880,47939,91273,53428,67287,24258,19378,20486,87575,39545,22849,33196,32477,21502,91747,31254,97085,34974,19520,37623,81764,17726,24394,45655,48425,35530,77633,47231,48696,49371,42092,62091,40613,27369,26762,63546,67734,26170,21297,34949,58883,92492,96997,77578,37786,91012,28691,81109,55262,69225,79186,74391,18689,75434,50036,74916,33055,10635,74452,87390,92755,63836,32259,18814,43315,85426,15715,18495,82524,48615,21372,69703,83843,24770,58617,52726,83729,39039,99619,38740,42487,62409,84081,43418,30425,46092,90545,99624,54438,31291,91043,39024,66180,68674,73643,82325,61452,15751,79045,74137,98376,87945,22253,14129,57991,95350,16032,75320,50325,59820,55426,94298,58414,86044,32132,36968,76786,93348,29327,35555,36784,24538,38258,38823,54082,43988,19600,36945,10680,76990,75374,39514,78249,30836,54450,38068,86330,27514,25306,88602,91841,93213,34696,66464,83608,49746,30808,92160,95216,66025,20335,51449,69443,30283,77383,91367,63151,36434,83542,37204,83266,35753,66220,43904,22735,93317,34890,80019,66780,75694,14346,75296,44260,68429,46854,72310,86616,56698,73828,25871,70035,52508,38772,18509,44505,45712,28775,85274,71604,82653,88705,34141,54132,82821,28998,85543,37017,58131,74510,31310,20016,63118,83750,69177,55571,39100,49611,81025,78606,44431,43593,98481,82199,20908,51889,49890,40418,94984,97818,43393,39401,19692,77070,76249,26100,11005,89266,44935,24988,30569,49436,87633,93779,78744,58197,77341,77101,61323,27235,91259,87313,19905,73263,87504,11066,31515,42614,27114,64333,81561,73758,11906,44059,93612,82531,18935,67428,49220,63873,37729,99458,83984,94598,45979,95471,42519,23339,11835,71385,16212,75329,51972,42202,31030,66029,18240,47892,54084,38958,38624,18076,87132,95450,10348,74309,26424,81675,49744,95615,76452,43755,39200,37719,65672,73984,42189,13130,40425,78548,55735,22567,35288,80024,31554,57818,96322,78362,71088,53437,32763,95621,55842,33855,69476,78387,49993,46785,47651,81981,18590,42827,27390,42376,65071,72683,25008,84776,23699,43732,58253,88415,28459,43023,68413,48580,25890,63169,15740,70972,85027,94930,64349,67648,52926,88479,49364,82579,27612,16325,83432,52985,63474,93196,75277,29005,70179,69676,15351,43894,36336,17382,64832,44337,46740,74385,55658,31647,58627,76084,17359,44449,63981,97297,61358,25192,58809,28491,63015,39750,92184,49520,29817,79016,60500,56005,39960,35222,25585,21044,42273,28335,26579,80794,13639,80715,51712,98169,63004,73151,91368,23588,73498,89858,97064,24587,70445,74443,61205,39674,38916,68080,14092,52566,32288,96118,33683,22270,65279,53923,53379,76883,38580,68683,73620,25048,73304,82653,57053,92213,40454,29492,62872,37615,99064,21385,10983,84697,67238,59032,40368,77156,17853,67059,37115,92870,96341,68843,65785,88474,31136,27907,81227,31840,14353,90955,98908,49366,99029,91106,16780,99757,44408,82102,51702,52009,25069,71884,88168,29729,78595,21828,18905,23406,77592,95600,54746,27388,41172,71679,80078,44917,10535,26366,80888,42985,45448,23426,64091,95838,30127,70177,20481,38968,34087,23696,58980,45206,69171,49555,78741,39128,30593,88030,67022,81445,10956,82745,77677,19615,57665,16267,90456,15691,85537,86550,64225,76600,12532,78434,70236,98592,96553,62751,37839,21090,42614,44139,95064,83633,38698,63307,78774,23081,98031,95394,86725,82325,31143,77586,52639,20073,18284,18526,58367,13697,82876,78687,18101,36420,60529,83776,49520,25515,46439,39424,35272,87132,46079,44663,71479,71397,96169,40329,89635,24295,67745,39089,47271,93255,11616,68256,59493,77255,72415,30329,44194,18718,41248,30115,26113,93419,43122,97336,19735,59816,13442,58692,48469,84743,89157,74905,51394,52135,24915,86474,72527,27274,14101,18089,16474,67650,14641,78630,56089,18916,19925,56077,75193,94808,67164,79266,86700,11325,80767,29159,18407,95246,20047,40546,44818,45021,40304,81630,18133,16884,24303,75122,72875,43397,93870,26295,33247,71752,99097,25678,22782,87520,78748,65544,78270,83601,55257,12991,90220,61121,33936,19123,38808,16684,65933,49396,12069,31163,33053,89437,70802,90802,35619,24494,98941,93820,54579,87472,71989,46781,71104,25506,26134,57109,34944,31094,65798,84854,48080,62258,71034,25610,87295,74503,62483,76368,51693,24697,34605,59337,58376,90177,55828,40749,97614,92396,18254,82470,31326,62594,26688,85862,17696,27165,44195,99406,85863,98243,79285,29070,15209,96818,63767,96692,80355,62051,46163,85819,65177,45349,61122,58155,84141,82753,21573,73123,13614,75851,78851,61789,65299,46348,80768,60417,18001,86314,18978,54262,18702,17904,88727,34245,44596,17944,48301,82887,28223,97432,20444,41015,23625,93928,55217,96460,14636,49269,83281,54802,51194,79075,89846,93942,37422,68812,25882,61857,85495,65269,39266,24095,68305,59129,31591,43805,97975,26715,78919,15838,43943,47795,60684,35930,38785,44080,49616,63098,14088,24485,73408,28606,44871,27501,34667,21099,21613,65262,26249,50295,40881,89604,31973,26827,91720,43736,78508,50180,53386,31903,75412,12203,45211,56246,94053,23751,53715,75467,82205,63972,39255,86075,23591,97066,52950,88063,90051,17541,85510,27850,84809,76452,51590,59632,22475,62130,49061,64242,89560,59892,96378,76492,29778,28579,46888,95538,95479,90027,84190,29609,85485,20571,65424,84744,44034,62643,66436,48540,37539,65579,53522,21125,36602,95165,44498,12228,77268,84689,81691,12603,40402,74804,65775,27607,37128,94879,48807,43922,55236,62112,46564,52803,68612,36323,59422,28741,44392,15394,21133,77855,71692,86716,56884,93280,79662,91609,67783,10966,31815,61934,29788,99684,87383,43938,51946,55580,55468,25086,42997,62165,49211,77953,81934,49146,94726,60976,27033,16160,20862,27132,77793,12063,46068,95520,90727,13667,44518,79508,66040,78880,75918,42870,40449,66631,52226,74998,72392,47701,58163,33561,15139,28609,22081,33978,13994,80830,98511,77961,21312,15039,82420,27739,60614,86224,10551,69359,88311,54328,38730,36957,80836,58815,33943,75715,39115,46123,30493,74241,65664,20970,17797,20807,18832,82473,44285,40638,87159,95687,15394,11200,32963,71279,15281,94575,84309,32272,40491,43761,52869,72167,71541,34906,84949,17209,57635,28057,74462,87390,33102,44132,41387,68443,41476,34756,85728,66646,92923,10451,51264,59049,59824,74194,14236,98612,48751,89834,91176,10044,78217,26949,87088,78797,76393,75991,44893,58520,95438,35673,58307,64397,84176,55463,48373,79497,85750,83701,49196,45991,33617,96836,96603,42283,58249,71003,96734,41425,50744,22290,31529,99560,56390,91970,41765,41270,67540,26452,67088,66143,41977,56273,11013,27658,85817,70615,12981,92242,73007,93082,63972,99301,29043,79514,64994,24934,47840,72650,85001,34815,63231,93307,42290,48092,35278,15433,52209,28794,76420,27453,54681,64688,90581,66164,92579,35405,34189,96372,18843,91619,51645,50687,50886,52544,93997,79943,20933,37967,95704,75135,37977,16220,66958,27360,29959,67333,89418,86061,15382,42596,31448,25235,69355,89821,38094,93106,58625,50953,68461,84449,23170,68103,29661,81306,63859,94555,43059,87584,76126,74461,66825,26783,36317,24464,24479,71664,42858,10388,12561,78022,81457,58597,59630,47630,86295,26435,53769,83343,85302,99896,45698,96477,39609,41366,86986,80704,44836,99409,92569,16178,34102,37018,83255,35868,47294,63796,91888,27463,88345,32312,97333,63409,39498,58816,38455,34805,87072,79119,65770,57624,62372,49098,68026,17963,59652,70110,18461,36416,59784,15027,72255,53886,71873,21016,48675,87087,72715,63420,86090,60156,18092,87460,96063,65250,47138,41396,89779,35648,39176,52704,51992,69886,99648,80642,16475,92559,34288,57687,33951,42826,53430,82834,42348,93698,55930,78917,89287,63416,35455,85848,59551,34223,87797,94057,30928,68635,69595,30986,14393,52241,33841,94404,84697,68638,69251,79790,14887,98673,89387,37679,40581,58987,59139,83080,66771,66404,40947,51173,27114,13532,16432,94728,66497,66316,86036,91513,82125,93307,46608,68882,98552,82676,37951,26206,36356,53850,94351,51218,96126,13952,18645,21169,48794,56004,10840,72499,91972,60807,51766,11625,35801,21206,22856,12135,37387,52579,13224,81067,24344,97394,99304,76266,46121,32578,12608,95589,31788,69231,64434,14714,86213,40718,93088,64751,58556,41584,82310,46052,57993,75687,33311,81742,90114,32603,64661,43121,91126,91356,81145,71506,55860,49155,96566,27824,12394,79949,66274,67591,85108,99163,75826,39853,25932,38703,89646,94902,56374,86956,18748,81578,73325,52960,37769,24948,47410,91361,64249,13812,14636,15882,90401,90804,69061,94346,50403,83969,73700,86854,69301,31627,25369,27163,52441,67018,22756,54854,80924,68570,87555,52647,19905,74357,14032,89976,90475,49557,24537,76984,39141,58595,76729,15878,86668,18333,68771,16005,66377,81982,40549,87502,14631,54495,66259,99722,26817,24980,86488,13640,82970,83611,42981,23400,60765,69476,54150,62617,16912,64516,72341,12225,54327,89399,86752,37172,32095,48241,90313,13656,55667,77031,36056,19126,46491,37191,99029,31584,63902,61466,43318,87058,49526,52600,76160,12492,73318,41586,52268,83795,61218,52921,83933,11607,37718,97505,59453,98988,59820,40837,47276,14861,12405,46683,38816,45705,65522,68415,69609,67862,67205,87206,14383,15641,94448,76410,74609,88253,87120,70125,44442,93933,72571,44032,27829,43503,61895,42470,96839,70013,87537,79499,62747,34226,44605,66403,45468,22185,99806,83407,20853,27042,36279,42484,75587,89446,47329,49137,95088,11734,11012,57605,89689,69159,18692,14432,20670,49450,69129,12152,89679,26211,85270,89871,34597,78105,77621,65148,68232,58164,43953,94917,87838,45184,30835,49691,39651,16285,25348,35778,19588,37308,79661,53964,77452,36385,69176,88112,55704,73206,69055,87133,36818,26834,44355,50612,61788,66532,32375,13644,84736,96471,41736,28891,72391,71028,80720,77547,26588,63464,34130,83966,76185,63819,39774,58407,79378,92233,39414,42253,84381,53944,60262,71032,82210,32668,39544,21959,72047,78751,97170,51836,71267,19133,57497,10953,70016,88490,49066,96179,91780,95475,77516,16025,98561,29963,93442,97850,42134,75486,27129,50184,78379,24686,36925,30256,95352,40027,31323,35937,16897,11858,18133,28928,62982,36186,83209,73301,53157,89581,79208,36152,92011,94500,34434,30913,25601,24117,45915,60823,90860,42402,39740,73801,93342,77095,61735,93860,60188,67814,78717,82665,84652,64056,26592,13956,86357,82817,88918,25289,55438,32578,78558,99175,79358,96023,29332,64947,32023,76600,27921,78331,65361,27555,71868,97151,61689,78458,64067,95975,55670,87421,52663,32310,20518,80526,18823,95178,19037,81778,90587,35139,87147,33277,83132,11835,39497,69810,37862,95574,72728,74034,70714,11964,91457,32252,45536,65663,27242,55763,14960,31461,32557,56297,87048,36738,21272,83541,64558,81515,98503,17438,79692,56000,61667,28203,71326,28970,87990,58549,56857,10682,24078,97820,76265,88493,38375,79733,50824,46039,98534,75735,72439,61397,22683,23118,52968,60746,48354,16574,69132,11448,55076,55979,25471,41529,96882,45532,59097,66066,48185,87790,62353,48325,84505,65422,23895,42013,94439,39052,60087,68313,73882,18772,18342,83586,50420,31464,93325,91102,66644,89191,99694,50761,79787,65213,39318,49486,23265,86977,64979,60777,38424,29317,25781,99240,67540,50140,52072,90751,75113,68301,56599,94164,87756,14784,28136,77145,65091,75513,26711,96558,67997,99190,62432,72988,80238,94422,89508,20453,68330,78292,37999,25846,29153,55405,97149,20167,55017,93320,60982,39716,39467,94134,16914,87861,41576,79433,51971,21241,36099,90437,10804,63546,94146,72374,75924,70877,11213,35698,38422,73860,67891,36166,66013,50426,99229,32847,97579,39364,83848,62905,77522,90669,73822,47697,44150,60626,19220,49554,80896,95356,13140,45104,28705,74625,18619,55827,21516,65981,20924,82975,15175,49764,54394,77297,64406,74981,83714,86797,34617,81086,10636,49651,22849,52157,86807,67950,93046,99247,63848,95559,67593,27609,80942,55817,28432,31816,19621,90817,96744,18009,30473,18579,78438,74208,92856,19264,22489,92611,51545,63507,22333,82923,16683,18400,24908,60556,69495,81610,68247,13514,58907,77806,20007,67094,94272,41247,48540,98631,69954,63125,23732,21639,75579,57505,80679,63920,99416,48639,98291,12122,99473,50574,94432,11016,68382,58346,35862,20825,62147,66051,44331,40839,25983,77915,73342,66596,33520,79541,76259,35679,90354,10540,53873,23710,99777,33295,53486,18866,53697,10949,79777,14564,61881,82236,84085,32882,27629,22742,40409,53164,90543,48864,35231,14540,84833,20816,53059,83566,55380,94252,62573,93453,29727,50983,67618,47089,83939,55063,81177,13913,81972,87384,72028,73335,54759,84910,13325,16475,46832,49616,90659,34012,12879,89236,58715,64588,42280,14792,59994,72784,28478,76020,99017,62439,65204,32123,44726,68148,56547,79927,52889,17276,74255,92887,24555,84009,93566,10936,32249,12892,11457,14989,98636,98402,87699,29819,61600,94474,68311,66869,26069,45068,37200,95144,10785,84919,22358,31323,43423,76711,39542,85476,43796,94489,47778,70556,97503,28299,46860,29005,60071,84944,42002,72929,52604,21349,28901,75359,64483,74925,42657,58182,54413,88258,20357,18607,97729,36484,47005,80989,53057,75983,76264,38772,74863,21041,67664,58770,77789,23157,95658,21538,18359,40343,37360,87451,43627,38011,34061,46244,14468,18812,20716,73902,78339,32214,75457,62311,77872,35516,74228,86009,59748,57997,85847,13342,76309,34444,90039,91410,34658,24919,52054,41199,55078,28243,87075,23442,85140,33317,63506,27590,82771,92964,38601,82513,31752,49954,38550,60234,22629,64480,75750,99078,76277,17883,46157,78446,63380,34736,18843,39140,53517,35466,86365,79703,17717,53814,99649,11401,48919,62015,85777,23974,45247,57691,93842,15613,71945,91753,85512,70775,33539,22679,38433,78387,72176,61806,87785,21293,91791,97757,41035,24752,12994,46340,85232,67679,94343,99759,96617,86146,39184,84959,17676,14363,26497,69325,79154,82574,19476,93757,16771,57555,54776,94868,56542,42539,18524,20149,86451,35134,79186,28540,27952,15224,52474,57440,28681,14479,59611,35915,18438,15714,15914,97457,28034,10548,62023,74924,52336,44674,75982,56396,63771,73911,51064,70659,20895,29454,53366,80008,16132,10148,32421,66319,43005,48622,44034,39450,77317,97320,32499,67613,59812,57506,83703,53805,38877,52936,11692,33851,13870,25188,84650,42090,67654,84344,58853,61886,49367,26117,62601,77897,99030,65118,87512,88038,35375,49058,28814,53002,57799,20001,97363,28815,14199,35624,46697,33551,94773,31923,41973,72682,63121,49061,53244,72791,58643,26194,88914,34065,44491,14907,42147,20450,71106,29243,27588,82555,50511,54797,84142,66697,55311,26748,91265,36280,55037,54367,47528,22686,70338,99523,42832,98783,70538,58399,89348,21184,79053,54724,77132,52501,31449,34114,41931,52821,55147,79229,67046,84402,91123,83551,55537,55303,31219,40938,39496,73909,19909,23052,48343,85506,45417,12852,45494,10341,23206,86760,56294,98758,20547,94879,11966,50986,16396,96780,46264,37629,28711,66678,39040,90436,26910,22374,86918,32049,83467,54641,46575,46934,28881,76120,70949,68129,80815,49393,12608,27080,61609,97155,98454,32445,31811,52115,92831,42583,67334,41238,34482,81859,65678,30702,58061,51746,37778,89207,15453,55209,15551,19828,34399,29306,60485,38815,71017,41017,29364,26673,41742,11714,72664,54830,48954,93788,70354,78553,88729,75467,84610,29519,36277,41629,42719,81922,54714,36745,34996,11743,41775,43010,57907,57383,41784,60779,85523,99707,45373,34824,47335,11580,87947,82387,59509,42964,93957,94185,26677,47424,20862,25457,93741,78159,72451,53210,20188,86170,11811,10165,21627,78664,65832,10350,55684,57995,57233,53440,41295,88363,78387,58681,62607,27545,94769,90858,97260,72474,67703,88630,99717,19455,92185,47312,83124,49668,47261,95626,38606,24308,18124,35271,23633,93548,70696,14447,83834,61626,87399,43630,43880,82368,90604,77117,31893,94499,87151,32208,39319,92105,29917,68543,63508,33527,48153,24237,92996,74480,26435,78344,70621,64899,64565,14821,73368,65014,35348,68322,55250,36856,31113,60062,92326,66845,77497,58901,41053,31971,14487,41139,95312,30863,71226,37123,71887,65015,27017,19155,20397,52067,92749,46195,72475,24256,63199,64196,56427,42917,95320,58338,76444,46889,34731,96702,87138,64949,64580,67551,40509,79109,10273,52785,79181,84645,92530,35629,34581,34661,21619,94739,24264,61675,49742,45478,82755,94134,89194,97598,48993,29933,86403,33717,82977,30054,91326,73474,98949,97057,67190,42797,16724,34485,76760,27571,44118,52642,18693,70571,26742,65450,30852,75513,73365,87124,26587,58823,67336,32500,77109,55945,31225,81581,46359,11766,44744,97706,47065,69988,76098,96166,43415,74729,30438,84679,71927,67751,46632,25012,55056,50842,61449,38113,24923,62369,88106,85313,11266,56344,34158,29557,28538,72651,33445,16276,32931,55862,24350,73324,67826,26548,68002,15557,52393,12357,41872,52977,79753,62894,69746,46795,29472,10338,91856,50621,52528,63993,91933,74213,70346,43705,26324,93342,31004,26600,95557,92310,13307,38948,12815,92668,76325,89278,96949,38567,56140,10327,36035,73892,28289,76059,46633,97866,10848,66336,23993,66201,22772,60266,16057,64714,92750,79351,41551,67493,84408,24463,71524,91321,17498,54265,36767,75001,86603,49253,33229,98831,24339,72116,51715,29276,42440,94511,81887,74809,65281,83552,69551,30523,28717,17611,90108,22240,92694,72887,71988,39120,78019,20715,85000,41302,45589,79418,16303,98214,35349,88764,58894,33708,51746,58847,27570,40110,38653,30026,77485,58762,94388,53276,63367,37256,12933,84913,17403,24289,41610,30559,41177,27585,65826,23280,13914,51665,45914,38177,23272,85176,59359,59316,24504,49109,62468,58310,34487,70811,31267,25507,32858,88886,62112,19177,42027,13513,85329,75586,36045,56587,18234,16463,36075,64010,40785,50741,11723,31170,26479,90325,43558,50718,76481,91048,11040,71189,45160,80217,58501,78775,90685,44711,34059,22967,94456,47272,37265,54498,33191,15571,60086,86491,23306,10502,68004,76948,89295,52662,17683,30027,23032,15019,54004,49808,81639,11956,54609,72809,15375,36561,57240,87648,39607,49205,30797,84967,31471,68338,34037,40426,48028,95953,42336,62386,91091,38732,67349,52763,28756,85628,41436,70645,13178,12209,93736,75750,94806,56229,25675,19550,63875,86664,79808,17923,15380,70525,17235,84436,92437,12558,41159,49752,27226,66744,13319,19367,18503,35476,21178,51684,84760,95154,78105,89008,38151,48108,87291,33838,15115,11855,55023,31235,12115,31167,94024,69485,12939,63685,57881,22711,90871,97960,79398,58125,80897,80112,63072,36931,94660,72094,98103,75145,71529,51304,68681,61235,52759,70972,14950,39627,28988,74267,66375,54440,32511,49261,15882,92819,55989,85006,20823,78459,93351,90495,46267,25066,38494,97727,93528,82594,47467,65264,40753,72484,43470,31735,52336,71174,16758,91069,83105,50328,57638,74470,53104,90664,29993,61366,69331,97673,73531,13895,66907,78303,96294,49468,19853,20552,77531,26359,37317,28403,22889,91490,78481,42699,80204,91340,40841,72272,33903,78114,29289,96342,11471,32530,33065,57020,58437,72387,70479,93587,71609,50835,28891,92395,66783,48783,58985,45757,24121,47684,10889,42185,94849,99035,55334,11322,78258,92042,62704,86489,30131,35258,24180,28115,94013,77605,62212,78833,41420,81211,27005,89168,78288,66261,42497,76818,77411,65368,17474,19951,90102,68956,76155,53102,21927,56756,79924,77662,87997,23797,86467,64380,76329,32632,24743,76767,27156,37717,85575,57393,18275,35132,20363,14235,29016,60715,62347,19720,76318,59052,41468,41759,17702,23162,31563,70997,33454,63318,17850,84467,28546,93332,78349,48098,61792,70287,48631,41462,70841,50155,24807,93254,87955,23183,15894,91980,90348,99501,98813,27587,69007,66279,63897,80881,18061,28071,44392,90285,54043,48462,32809,10328,92236,95805,95302,84291,75252,89307,90090,24436,19310,19503,49343,54187,18147,25070,32849,52785,48654,68946,58328,55451,96509,47336,87373,75182,32632,71438,23676,49324,10141,17726,41904,99709,67882,72174,59903,21022,24289,75888,46411,86370,59312,13334,43447,88908,36287,82860,61730,24233,29925,97987,13102,79444,19250,11032,68097,33702,72593,76879,47472,90173,46093,24488,69354,24184,43792,37600,67462,91566,38027,77301,46750,38104,43423,96436,85755,14623,48471,83931,33789,90321,41105,89818,22970,29681,24622,73533,49411,80432,73191,27634,11100,67801,25828,36523,91795,70131,52983,76403,46405,86339,88132,57558,63636,35790,88010,32608,35671,67286,80938,65008,24873,33179,63495,92121,63501,95498,96810,61123,37528,63748,29155,73135,15686,10387,17201,20461,12616,46356,27643,42501,46326,78920,24389,26107,67312,91177,39128,81655,75817,87561,78957,65439,83810,35322,73214,79732,41729,73181,53358,98068,93066,47789,74750,28393,25751,19357,26057,32570,89477,21619,90198,24327,60213,48154,84967,24321,42073,18103,71518,95125,29260,57359,84980,32187,39379,23744,42338,25251,76663,22831,71608,90465,46719,47390,51150,11420,13678,22719,78111,17308,90000,59025,22813,76601,98540,67537,46435,57049,29756,53971,61199,91245,42633,60390,89363,57347,30918,53705,70393,41040,80992,44560,64544,98253,25955,71543,38305,39949,33109,12403,45889,30302,77738,28360,44324,18653,78448,50371,65559,42004,71034,29668,77805,12469,61305,72213,91690,64794,88569,96546,75338,78590,43800,26748,52605,88044,44134,78013,96735,35346,39788,91027,90456,18882,87554,68061,86411,11854,97138,29065,65484,92746,94773,56269,42847,12415,63715,28533,56442,49885,96266,31053,72791,48255,21628,59693,70082,77161,67499,19287,90172,76459,38379,11814,12161,68492,75708,99178,97243,56148,84872,49207,52852,37070,79650,43158,51096,35759,32650,38572,44387,28581,99436,23385,31986,62559,16871,67946,42745,11949,45202,83723,52024,78145,92238,65186,22281,11281,57523,99936,14051,68084,31827,41066,15613,41589,89208,59916,77779,35908,56631,43430,46300,22487,80183,59913,27956,63252,87267,92378,91494,40512,11596,63503,30162,65441,24022,43490,90574,94267,26571,88098,95095,80658,75949,78415,24252,37334,92434,18393,37118,11952,39320,22897,92608,96776,67074,18214,16083,29012,61298,61327,10990,90113,27594,25254,57583,99495,17690,73358,43458,43714,29250,55034,92214,73001,65189,24743,14976,74712,47036,24972,43362,22408,91949,71167,11461,50387,33838,29380,83459,43315,49388,32222,84186,15430,37611,76866,37982,48395,61588,79095,10995,11138,83603,51735,73589,80471,74828,36919,25797,94192,56802,19736,93539,71120,57848,45089,17217,90190,18791,26636,86607,88744,69788,80141,91084,80487,42777,18194,94138,18995,61422,38229,53980,49886,51579,48466,25806,83752,35314,64018,54605,49093,91587,18807,96542,86521,96740,95889,58328,66371,56109,26153,30830,31496,48415,24797,25406,12258,11374,55674,31712,27675,52146,23152,19000,54865,41849,10363,54797,90542,42382,67422,46197,50241,56743,70275,41736,61552,67927,42637,83835,11529,88322,83384,65537,74978,57304,44661,82706,48927,20240,58227,15459,31831,52732,44161,89456,32598,44231,17241,94263,62254,76078,38408,24007,51169,13322,20624,92476,44486,75947,42042,40382,13496,49827,22434,19562,61703,29376,91534,22441,23132,32636,76518,37269,62836,67591,15007,99533,21476,83505,19742,58618,15442,30715,68637,38777,76034,83616,76414,52280,37300,63372,50292,35147,11099,66822,91134,13878,41887,37229,95960,35976,25111,24286,80974,17873,39581,70018,70584,62737,52264,49584,86883,41763,74094,41087,44407,56645,13450,23266,49856,92427,57180,25824,42307,65061,52868,95492,73140,41244,28042,68407,18399,89425,50910,86592,63001,61394,38517,70945,81425,18529,35388,90784,22790,88479,12504,48272,36286,18045,48127,75108,90276,42611,62191,54296,88300,92102,31924,64002,14675,20295,33285,77724,10539,71769,71189,32344,66694,87774,80924,36822,79743,40619,86521,32342,21474,37493,53746,40451,21278,28670,12636,66214,58700,47630,99955,97183,38203,48217,10844,27990,92502,17698,15364,77607,44945,83825,64903,35603,58684,39390,16680,26801,98097,19035,12651,62632,70077,40466,50269,63166,82718,24848,54848,66551,48619,54434,17069,22674,53866,39458,22716,46424,45881,79157,35537,27295,62151,97429,44027,45480,20973,11694,80110,35434,54601,83977,20135,89435,74603,63965,47230,68138,25902,78663,11914,97557,91082,35068,23121,33054,13328,90682,79768,75089,62542,86330,89646,50725,57260,90779,62482,20246,96758,90338,45150,89322,14044,17263,72860,36189,85072,49495,50469,89364,60212,22614,91813,18411,87982,20217,94437,26736,11238,29537,72026,68905,85872,31473,35943,59356,48809,73607,54725,16016,35785,66288,45447,49055,19780,43608,61062,41676,38221,42763,64851,10306,21303,90717,90424,64907,88856,27168,84733,73939,17263,30541,87717,41708,33107,63069,81215,51022,36080,64101,86443,13365,43342,72294,84407,12540,56201,87483,24092,66176,18899,84293,29905,60653,90885,42331,72056,39759,51168,18699,86684,59425,45909,28392,56379,68296,75228,87713,78014,17790,79999,22036,73045,92020,40893,97785,64792,42332,25669,31233,89186,61656,26159,86399,24615,17420,20840,77437,86966,25859,99364,53659,86803,37530,76995,24319,77372,50507,57303,24792,12389,90557,19461,16017,45765,26948,43571,14802,91918,68042,54037,60935,22646,32463,60776,46336,80657,18749,70873,39603,88926,12707,14305,84909,85145,58070,65762,57044,69735,67222,48086,98664,33271,28372,51766,55449,11044,68095,52426,72528,40724,79765,33104,44185,80963,11663,57633,44751,33207,80215,43629,17542,44422,70406,52377,15582,99297,93039,40302,82452,34028,87204,83094,95914,80251,72716,28732,76186,63923,14937,86694,41636,86502,11941,72494,51307,28672,67333,74007,59868,41565,22944,74462,54713,67490,28243,51305,64416,71650,49420,61844,90280,56615,49175,13107,97651,97911,10684,14202,76221,33525,39059,43941,58290,44919,42370,82953,32451,91403,85086,28401,93307,45778,66594,11819,83425,80706,91763,14765,78072,29280,95797,82732,21457,32019,90559,31524,82418,15283,33982,70165,87489,70765,98694,12071,30604,49621,92495,84840,52393,73313,70886,33968,47824,40725,99497,14344,18514,70814,79694,10479,79339,76456,93144,23136,81370,72023,34321,66151,19585,89073,75169,63240,71942,83936,49235,34500,97329,75847,43778,64020,95954,38943,22019,66723,18063,84196,62501,39743,80960,20290,92907,45960,17016,48442,13347,90572,37438,34448,35798,71070,78429,89470,98512,53362,56943,30507,82219,76257,26550,38641,72130,42031,15406,36448,85667,86919,19111,82561,99205,33154,19799,69722,21346,35297,14407,66484,53627,76451,53614,70667,19988,97178,31855,95502,21842,26953,99165,80708,40188,75783,54610,16031,80801,35213,37107,54739,59740,16852,97702,49606,29148,19562,88027,25224,18417,63407,54782,16734,55040,80622,40164,56894,40295,22262,87496,75067,31765,96701,25719,91045,41600,26335,66171,22302,88962,91101,39838,86525,53422,52420,62191,95715,56453,79245,76537,32837,88548,49079,11493,93057,50440,78041,47053,71175,17369,34723,56347,86655,44528,66553,89895,10723,44865,56197,37181,41586,89535,30246,52444,83599,44129,64021,93544,16169,35050,25929,51455,87001,30248,43450,36791,29202,88371,91980,76246,49554,33416,69853,62810,59876,48598,66017,77025,86467,45110,35461,93135,85899,51299,15895,26401,24470,50971,39371,60386,32116,36531,55803,96998,28998,58464,78581,44595,54969,71031,78651,70054,41215,68306,70079,73638,91403,69950,58154,34638,66386,72465,18466,50177,72367,38668,15731,65615,66260,88196,65004,64126,40090,46950,83165,20817,72006,92957,32688,48703,12382,50233,77158,95635,55938,14170,43151,11505,54694,50269,13523,22037,37338,39136,12950,76954,71487,46876,25289,82889,61759,33464,74502,80533,31421,64496,37003,83993,98147,46055,87331,62459,29566,97929,57151,33349,64602,14766,31269,31320,39734,35497,15697,36365,12269,47303,79024,81896,76513,30023,59977,79677,54196,26911,55739,83033,48734,52580,48149,33845,63813,69385,96133,54209,47973,13204,60963,67445,47773,31953,50718,49244,17643,83167,49057,66958,31893,24884,56025,22722,17910,69153,94805,86728,74573,67799,53313,90278,56619,39032,25484,22209,73477,97076,95881,55211,94631,90973,40752,21795,52270,71653,88736,38384,45355,20864,85164,49870,65261,91390,28724,96338,30522,44737,86682,84948,90949,88409,11023,75380,87949,69303,76468,38859,69788,79346,32856,61826,44730,82960,37742,60135,96280,55096,71939,32506,13338,59277,62964,51492,37958,90806,63861,44167,41789,61913,19627,46872,85412,46364,59584,72702,82122,11199,39587,79383,81788,64030,99620,96895,22283,66634,60535,56444,95329,37810,32060,34663,21092,96896,56157,24514,91740,63026,14601,35752,95844,88862,75568,36046,26720,34662,90285,59412,87577,52069,80968,35216,17085,95790,96326,74173,55021,18581,82137,11589,11235,30386,17608,91528,87124,89589,53133,27266,37880,30882,23916,42726,84886,17419,37441,93489,53000,15694,82200,47601,96951,42331,67819,84884,57144,45011,60847,61205,22011,79782,73799,48646,24854,45508,86291,32016,98668,72735,29702,11955,78547,28782,46587,65331,89988,39095,72440,11425,78907,36053,14535,90802,28729,95121,29775,93445,56850,16235,87259,28367,18336,27926,52198,86041,72399,68387,86822,79748,36456,77723,38286,15130,38591,48190,78601,26675,16127,50459,50121,89408,88061,57592,77389,65744,39812,17791,39766,32849,85394,65677,49473,10837,57227,70271,31170,68478,72862,25922,24194,27243,96615,72249,88871,64789,11237,71790,44243,30327,71747,34006,80448,37404,49982,60963,75951,29425,61263,56693,63862,60112,57806,46196,99617,18146,48226,11263,14642,61426,29727,41319,82728,86193,73186,60250,81353,10452,13599,50455,50077,11045,25442,90084,81084,77674,22332,64839,65218,81598,30486,26111,83384,91273,79412,67170,94973,76944,20089,25547,41693,57133,89091,68245,70706,13042,85269,93035,59523,17344,69530,54821,16742,60937,60346,44599,71429,39552,36986,12305,91029,99160,77558,49510,16807,70905,70389,86276,54683,29959,73029,72441,39561,54902,19736,63262,75207,94126,93803,95063,55017,63557,29130,41237,36633,39098,48140,57988,74242,47977,77459,28128,56287,23712,89611,59669,48168,48028,19235,90777,57560,10072,97812,97392,29142,41267,85862,48690,36234,71119,44506,72458,42384,57532,11581,38209,80133,74899,76377,22488,38834,25449,79161,38346,61197,76218,47861,84255,96440,95518,47513,38672,37125,17855,11291,44325,92870,93528,43354,22690,23207,84689,29587,53027,87040,76725,44243,94026,74818,18369,49532,20731,65582,73758,13585,66230,50949,57063,87052,65409,88332,68722,81285,59565,66124,82535,33233,66594,77578,74442,46745,21291,79480,56461,23863,33904,13456,32608,23113,14580,50064,34950,91332,18227,72618,22018,72742,70589,76139,77265,29364,14137,10551,69333,47111,60326,70606,42901,23032,26317,89587,47854,75048,52644,53902,64105,64186,48941,68486,88043,98482,95397,94525,81473,23241,70245,59855,48531,78470,10256,99158,99666,89101,40798,13127,28672,86311,48837,71989,12061,86364,39237,99839,87057,39724,27284,23954,26433,82979,40364,75014,34740,13945,88648,43089,86773,78190,89750,87684,56639,45878,83719,28793,43275,48426,81787,67179,22167,42571,99967,49942,59135,52967,83193,58021,85525,61015,87794,76724,37018,14478,29362,14864,96975,67878,73464,83336,79514,68876,89108,11352,60771,35135,38420,91191,16035,83010,55831,16381,72380,12267,38037,16452,50977,87587,54413,28699,94443,87304,96293,41239,32044,98344,77044,51298,58626,45645,81171,87089,75123,92354,80838,65330,96047,20154,70489,54130,15398,36302,40423,78708,45809,19669,32353,18831,73463,52812,82691,36029,42976,99458,80191,65763,31938,92286,77942,71389,28965,21175,61870,95321,26856,26679,55115,50709,74112,80194,65076,67643,34943,60256,30861,97099,23290,44164,82456,13802,21671,27207,18583,69601,38056,75367,39324,98063,49136,32809,56503,22901,56091,17479,38069,65011,78714,18284,66084,95911,92821,78086,78721,56160,63955,93617,37939,73959,57085,18156,83312,46622,22251,71914,67760,24093,20151,20236,94506,36201,93162,90242,79162,72484,58435,18180,87051,16196,24640,91402,28226,91862,63723,18497,47413,26069,43392,51197,91666,20421,26801,25112,73302,51505,59880,90651,59009,33779,53141,15785,19259,95050,67567,22137,14945,36193,10709,70570,32617,49136,41282,33209,32320,55992,89133,73549,43852,16593,74557,75096,21270,96179,88208,67136,11439,37724,25549,69983,20067,67701,52353,88671,65694,37510,10804,93349,39649,39621,71962,57182,77945,49093,81113,92407,32002,65474,43602,17717,46873,34142,52066,16605,14178,54893,97522,45252,47605,61438,27018,69352,35911,32832,50067,52808,85931,43551,42229,72011,57018,64783,65191,63095,56581,75059,11456,72374,15010,53296,81376,87666,93248,52502,52122,40061,50610,65385,58007,40122,56359,67960,89303,56616,37645,57547,46651,43738,23126,59417,14260,81815,80669,32734,87133,60739,18720,36186,15073,86587,28025,30802,54464,59268,78420,73403,79140,80274,48608,40723,95700,53997,55272,45319,36800,59472,65906,91819,93284,50762,13791,34191,13217,83207,78669,46051,94939,28301,57127,78131,76884,63790,81402,48517,10732,98711,52610,79120,71892,36781,23869,35814,46780,45799,89721,96645,31028,39837,90682,72767,80308,14985,14509,82643,89794,25679,48388,18308,29610,94059,92435,37910,29181,45531,46791,51808,21619,45659,78642,63923,55432,28242,55205,23757,26212,48339,15823,20828,82980,44905,78182,62247,25273,86015,30181,10080,19047,89075,11350,10112,81500,96810,72586,35588,54053,24479,23454,91870,73790,26941,10238,33877,84802,84924,15682,92112,26371,92728,65761,64467,30973,98729,62798,82689,37393,52984,14824,53001,58013,29536,58813,74176,10284,69594,94701,17291,72261,63478,88975,43749,75406,92813,96189,35316,68115,88398,53365,72156,37940,94333,40728,65624,54380,45254,55253,45340,68815,68258,71542,27533,26907,13505,95714,69552,63978,62645,28277,48458,82664,10648,22138,88598,18840,10359,72672,54082,52885,76869,89736,32350,72576,78329,85973,84362,67547,29269,98675,27821,45764,44095,77209,81139,17754,68922,70406,47998,98539,22939,68717,48701,51163,55284,88159,33649,85159,76604,13826,71550,20842,25934,27655,47900,64166,62353,33752,18231,76465,58332,22287,21955,77567,91364,42791,97062,93329,19159,78112,68868,40293,49174,54766,94175,80886,59388,18342,18218,51284,51814,55972,70852,14033,70188,27344,67421,58666,40365,16136,90645,92734,61155,42710,64278,64532,45535,58609,91240,48103,60284,72799,76828,79822,49669,32435,99449,55494,68750,17961,45044,61960,75454,66264,27476,59138,42420,17638,35228,94908,23357,13910,16594,99467,94376,23774,27488,80147,83348,46833,35200,36759,62396,21632,72760,45803,27229,26061,66260,45360,96291,90568,34073,62347,87412,99832,55045,35789,95454,90779,92498,27879,62613,20812,75728,57881,28474,30716,15249,66877,16273,19755,34515,28573,46613,96129,37829,98268,82374,46437,28715,28237,71336,76480,93117,82691,28621,28157,16744,74918,46895,89973,87591,28447,43972,21140,84100,46604,56355,23181,29828,68801,58420,38180,61705,41143,24189,34417,27879,34149,80900,37607,38189,61648,37883,62764,47543,63865,69279,58489,38204,73798,50253,29788,64993,70362,91281,80434,21797,43217,32582,23191,36670,41003,41429,63577,62396,68223,54130,75842,41590,53265,77741,53961,35026,95198,36577,63188,78070,78198,65122,58950,45377,87215,27827,88155,18194,95947,21240,11644,50872,35861,42849,28076,49356,39632,49673,68507,82618,64542,97631,16607,52453,78760,86698,35740,62280,89318,50918,46863,44534,87493,56207,98840,58618,81192,36999,25658,91714,50523,85672,31345,69869,50103,76799,12224,71981,99207,97672,10520,61806,15966,45562,52338,39898,26780,17204,42169,91062,85284,99016,93361,57588,43540,50862,59086,30934,51659,39409,30481,49473,80353,98385,83985,16756,27573,57658,39830,82166,72716,10877,85083,96368,28782,83951,63006,46462,47360,11202,55465,70984,40253,22163,70202,17612,88463,48410,33208,97556,98888,36310,85673,92415,79704,90417,48275,47837,87819,26756,69207,72811,61379,29870,86235,67657,74367,29084,63511,95631,94592,41371,77253,85872,84645,64510,12330,54542,74143,13364,87508,76889,22996,72872,21241,66438,60815,77446,80281,59845,10703,46722,59108,88147,40055,23762,82249,71761,38228,34914,18278,76726,92876,57575,21860,66941,35848,36440,25990,91250,23360,99683,25652,36454,11333,34451,65369,57030,28605,78240,43782,65079,22333,32531,97662,48749,81814,71779,86640,57622,64882,72110,86313,64801,50895,73080,25964,14081,40912,94205,84622,76727,68347,42931,74584,52222,37746,21330,92885,42083,65080,48634,65362,51441,61517,72102,83453,59081,84819,95985,64580,12185,36898,80107,75455,56131,27876,82554,40003,97079,20118,64456,70234,12466,92905,16532,38767,30848,11081,42598,65149,45501,17156,68549,80012,25737,39551,38998,83505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3907,60180,90973,92922,65321,91761,43332,26374,96809,13419,68103,85301,25285,17519,30960,41007,96178,88866,98508,30598,39746,48208,29669,72232,59144,20938,23282,91806,32942,48306,49993,71440,55163,86174,59437,57698,65784,60413,61040,99216,39897,60384,44579,94086,65032,50590,76875,58621,80387,26747,59426,47220,37585,46827,17132,19836,74306,76123,35625,48854,24185,94950,31948,76174,60654,35160,12483,26161,97603,81968,71215,74601,90259,55621,74843,47764,90656,45336,68046,21152,78460,12766,33857,30993,17664,29350,68195,39297,22533,23095,34289,37552,31277,93344,92898,52919,43058,81213,30802,33226,70037,87308,98274,31199,84737,92476,56519,33914,11357,70206,79403,66257,19810,53619,87854,94871,14717,67338,23532,12392,35083,67588,82673,41039,44900,67809,38981,66463,58306,34198,45589,99996,39417,56245,20888,33326,52243,75553,86096,24066,26941,45492,10158,38429,20848,78768,21819,98226,73047,42601,43416,51586,26494,97513,91704,18062,33804,23512,12790,72750,51924,85427,88084,74145,12525,10169,72878,10064,54081,26033,41053,77406,18395,11622,46177,16985,84151,70726,22123,49644,84726,49893,45139,11664,29408,78807,76398,91263,99506,42060,13330,93097,69572,68043,98277,73356,89768,74670,29060,66260,39074,61010,70271,46876,87828,38327,19696,57164,95826,97780,11638,96676,31415,53491,98455,45869,58284,13808,10058,47394,91077,63972,51711,56395,77624,56408,37772,42348,79964,85498,98103,49060,98057,37252,51159,30321,93130,21703,67865,93851,14555,39074,35475,52497,14509,68614,91322,94238,82027,19573,24751,69387,48143,93647,99370,36615,93884,12731,85397,89414,43924,85923,32302,96817,95510,42984,89750,28925,46223,60195,64022,45984,36450,19858,23651,69733,75418,68806,38352,11740,29608,21731,22130,49263,36622,36325,15500,73842,97600,33425,98954,71487,15100,73692,48109,21484,92886,14867,13047,99587,82854,29341,78509,10193,36495,94497,20867,38100,68250,34497,33130,49172,74181,66272,93242,55396,15590,77109,80760,32572,82011,97106,31157,74025,65194,77066,36296,27258,63589,44056,23135,85630,93791,33675,15293,18490,36499,82227,10334,87189,48165,31296,90392,45550,10082,69463,95532,10512,67428,20703,45946,33922,97922,76374,55466,99353,89372,54302,91137,45274,38256,57694,53951,20492,63809,35590,61839,79320,21253,72564,79474,88752,43393,84979,24923,42479,40751,43918,31792,24947,66226,86723,65362,92245,95509,52084,25635,54626,61226,72386,59725,79506,18302,76941,89441,15516,22570,65943,58751,94505,32559,74262,92072,60295,56549,18938,97871,15631,59617,20944,87881,43105,85792,46226,97440,19949,61568,98644,15486,15025,55337,12493,39505,55145,67799,36281,86943,99168,75102,63059,48999,28578,69309,24763,32928,58794,35072,10947,52173,17956,33656,47292,26977,19127,47721,60046,43419,28814,47002,59236,58352,37332,22910,45397,69805,30938,51503,54326,33660,74007,87191,31558,76722,82826,90262,69477,54197,61734,20868,77324,76905,33616,28159,64577,36843,30881,73103,19825,63558,53445,92687,46065,16442,67493,55215,17253,70198,88579,93628,56473,23659,49999,84839,47263,79375,46856,47047,88238,95810,11789,30126,35911,36540,39865,37459,93811,70721,48540,41095,50662,10523,94021,40506,97912,71906,81958,15642,24647,46466,84366,21294,79009,81115,14459,20401,81715,54702,95753,96463,42347,75219,19025,60671,75904,63104,68154,92352,58934,38759,95905,82353,74035,52029,16348,70390,58907,20552,41885,38838,49659,64425,10616,74103,88971,65629,65047,56536,35255,75897,16922,61241,53358,72505,84737,55294,85867,83023,68520,55785,85028,97663,95044,80086,53609,60064,64260,17434,35751,74415,94644,91201,45294,52335,79729,75908,72175,53171,59815,69700,56869,79472,17841,60390,63837,71736,82571,59078,30778,20970,46797,31385,91131,38633,60257,34633,55775,13161,59798,70189,13964,47775,61947,43758,21905,97750,54386,73991,49944,79071,73534,28779,31371,60918,45147,12371,79234,68186,22789,65730,33425,62905,71845,72426,48250,94320,17359,70048,35026,46382,88569,27294,26714,89596,75462,74767,32670,64432,82297,75626,93804,36679,87595,75242,56701,30549,47848,88437,94810,12576,96191,89101,96903,85027,25796,22829,45964,82474,62438,49034,99222,77407,67376,30083,94332,15027,95691,15086,69813,54719,67575,60334,47209,81011,23490,49588,34158,73811,23579,78612,32389,13019,16842,34907,42624,33623,62954,95733,42018,30981,40524,44477,44054,56789,49112,87015,40814,99257,32603,57507,97930,47169,40604,34151,40515,69820,45920,63908,67407,47592,90436,69392,26032,70360,71648,59499,30547,53320,18510,50689,25808,54218,50350,71652,75154,65751,34308,99429,76006,25081,75899,69955,47030,57362,74344,93481,21772,57339,63882,49574,44789,44118,24625,80483,97665,62015,47794,76814,85182,17014,96908,82830,69893,28892,42903,86698,96895,71830,31506,42111,10254,51431,27103,10846,39116,58787,40303,20217,84934,26336,33667,93716,91998,97726,16688,11624,48977,58318,96676,38173,82248,31720,28736,51919,52400,18994,80899,57039,66768,70228,79383,21693,38888,57988,12778,10416,55410,63180,40819,97316,96749,75196,79821,55373,84916,29068,85347,70244,97703,45322,71956,28076,70251,24619,94685,47245,85980,84182,21474,91138,58620,60048,28422,79849,19959,26334,87518,15777,41429,51344,10227,24907,44466,92215,69161,57055,89067,51469,71547,93282,90724,39046,42627,59110,14219,61001,92248,97699,79978,72463,36841,39893,53130,79429,28704,60220,78244,40437,31669,73242,60233,78325,83963,22430,54699,87543,52432,63317,58193,14434,50148,51351,51637,46946,39705,49121,45565,25651,82259,48012,96556,71511,59034,68719,34651,48953,55429,19728,88996,40075,11325,84838,63969,62291,71011,14504,65205,66984,92725,54679,36213,54552,69029,14312,63620,40801,42775,35748,85399,20450,59463,74733,63446,50195,61326,86952,77522,66535,16096,42904,72223,53252,23957,61990,21292,52893,46758,69347,71280,60690,10695,10553,67634,24349,83448,61487,53749,37781,30284,19283,37727,37833,14891,89613,78846,58906,69320,27007,28625,57745,27842,60817,80789,65896,50869,27768,92518,91575,34344,56262,64562,51191,16411,27603,33726,15383,33568,53270,30071,98770,26481,26103,26428,48099,70225,98817,92465,94448,17641,54818,66631,37096,39493,71756,94582,77314,88518,46240,18956,95478,62310,82882,38928,21067,78332,45175,55797,62223,28115,32075,30457,54872,75884,13398,45120,11248,30942,68502,66523,72097,75207,37201,97572,80965,83623,33350,67211,89574,35602,38189,81360,15483,58511,97476,34349,91736,68147,89211,76271,76450,35841,74121,40396,45987,12029,26939,54959,62332,93203,32470,20266,96568,25606,36293,45442,76715,82961,73697,59957,91673,79843,66739,78049,62331,82891,69712,13231,57943,59080,47298,15763,85327,67930,99510,10420,96926,92640,11464,83310,94700,56665,16462,90810,99125,81965,12065,93194,83931,37525,24660,29729,28833,42519,19007,79668,75880,69736,60014,92316,95938,92067,10425,23715,29369,95735,37484,63736,45204,17646,75555,10037,93648,85762,37493,89382,40365,26840,79612,76516,71913,19331,60796,60094,51308,79709,47233,66151,19033,50877,72408,77304,54461,26248,82152,75313,17788,29572,96068,51288,87154,65210,98453,49265,32346,86390,12723,88421,90744,74459,25129,64752,65085,75504,25797,18591,51420,38578,94692,36727,50486,66854,79423,56226,77143,13963,71784,60333,12920,85155,94337,42606,15949,36858,82470,59927,64209,79841,11841,15020,38053,89134,30349,14369,89553,10672,80693,30089,80273,33251,40734,33688,38383,16023,49109,64523,30646,32149,46413,13730,92446,33634,35326,51151,56185,35309,72269,68937,67326,15041,58437,72966,24917,39014,23942,69012,96949,67673,74745,74419,22062,72561,49693,37093,84922,22046,81025,61286,15891,41099,37184,15769,90100,54480,90869,56225,48581,22273,91889,34410,35195,18262,75177,42986,20593,49679,37872,89466,29634,95669,73946,22826,11136,86537,30573,30403,94503,69003,86263,69293,65612,73098,28564,29912,67271,55371,36082,11202,64911,24060,37654,26363,78044,32980,63366,45353,51163,34789,65356,22836,58017,97690,53935,47680,78514,54475,24122,78311,88953,69255,62087,69594,17571,18426,26268,78585,36904,62548,79297,65537,89054,62352,60181,63452,30312,93580,60293,44249,74474,88773,82558,24536,29198,20198,99818,26287,71007,65675,51982,68093,52449,72128,44984,24629,24301,10539,46124,52673,99793,99435,43657,86680,59617,64463,21808,74059,26042,35019,72751,59071,56444,92120,99303,50234,83568,34254,77124,46400,48667,80766,80367,58862,67409,20441,55773,11089,99876,64592,54124,44414,21648,97245,33998,53821,75011,58758,64689,98974,26255,34207,62857,36090,81073,95960,13929,48290,41015,63492,52541,35386,24699,45476,64797,60783,70434,39025,21954,50282,62334,80215,29772,76273,46302,93274,57677,66258,42392,74025,11060,39092,81116,78108,80541,25745,43478,70938,67087,29531,14460,79300,15607,68846,86745,70598,32616,67249,11921,31185,15918,99123,56108,75608,40172,71217,46886,54906,81891,98995,31186,35331,92334,81987,29628,14953,91248,27063,17917,73746,74592,41316,98763,33641,87543,87370,96995,14833,59032,25644,48479,18845,53659,77627,23704,65188,64603,25321,97165,51892,93129,91085,61711,51580,50672,62628,78354,99115,52907,71898,64233,71909,48861,82625,92464,56628,97130,40832,21302,70241,22122,62199,99835,58857,13083,69797,52900,68518,15577,95975,54678,54100,80768,49095,57064,79640,45790,30293,42144,57437,93272,22271,95355,60267,23034,52234,53217,27311,16850,14455,61670,46196,76253,63484,72616,50051,43621,85121,53087,55912,67689,13883,19717,95545,86980,53901,65771,15203,78526,95685,63588,18860,34250,31650,66376,35380,36582,37078,57855,84426,39238,15587,68036,19427,31613,38912,33084,28408,14939,98697,19161,49647,23724,32305,63948,15035,15811,19257,33555,38268,82919,67968,51808,19485,27593,33843,32056,65469,73313,55624,77816,11342,55145,29050,80385,76540,71827,48398,42961,53271,33132,55460,94042,18989,30856,88870,33611,64106,55059,21262,86224,54521,51765,27622,43642,53619,22057,30006,31718,53584,25192,28719,37285,33033,23627,49717,68362,62474,95327,20977,95508,12044,49352,18145,94468,42666,45599,43105,88022,97010,60515,18576,65190,73389,21355,26895,49343,12883,49110,57147,42875,91169,70177,84314,23352,68916,72996,53883,28336,89860,20379,86039,86781,61724,56769,24265,15094,40215,24029,90740,65758,62716,66664,65839,59861,16948,78331,17202,72572,95681,12016,29949,90226,39532,18027,45099,63333,52436,74843,19329,76055,56097,40441,80301,61499,10174,13532,93375,63520,39181,41882,80439,46726,38102,59168,66917,34937,69820,62611,14977,10889,26869,62851,72150,32485,18732,24435,95989,12294,80199,93272,64285,81819,60334,54263,77249,65228,15416,51531,64962,17389,41475,83680,38341,87496,17026,93723,48515,57931,47936,14988,16507,35384,79524,16060,22662,55293,29988,45228,32105,87489,16589,55642,14731,10307,11763,58209,54543,29691,16872,61214,59190,35301,32342,74271,21608,31578,54093,70558,29355,67741,22127,69513,46841,33652,51299,19743,52029,43410,69555,53217,12876,41341,86967,65144,41145,79856,77285,72894,95703,12080,19790,89831,12189,76830,23015,82217,46015,60017,92539,50617,59094,96356,16984,19956,10736,99441,25951,61645,25779,48035,85715,58089,50007,94668,83348,11075,63367,37305,57732,84716,73382,87318,60216,88974,62585,89264,65605,77366,21391,36756,15091,66009,43257,63239,17698,57644,70198,16223,51657,77366,33816,91967,84911,33581,58236,89898,92920,53680,82324,99848,99214,59997,69251,68717,50815,41999,50312,36898,85388,87140,98071,44386,45102,89294,53502,48662,68824,85789,43071,33854,32853,47703,34290,92036,46853,21543,21148,74737,41056,43297,21882,55351,12932,36838,10483,23114,72577,88050,97053,95941,29614,53956,27444,88747,46415,96653,88045,19600,53731,60841,68787,75761,92273,30730,43778,14609,24836,37556,12038,68951,89539,49927,85400,56306,92597,87419,74153,33333,60068,50623,52359,81292,19453,55765,79007,28130,84557,47944,14858,82419,64188,58381,58356,80828,85160,58512,37707,67497,84369,53539,85782,14294,86157,72525,20241,92861,90818,41788,18596,59343,55204,91692,37253,30157,35566,21806,73442,99434,71240,30997,80384,81995,43643,36405,16178,15492,32388,44317,57875,70586,60298,59280,88807,89831,92461,90802,87836,80166,56603,96084,24492,22762,98058,12160,11920,28314,76314,24315,17542,66032,68731,87260,23363,58082,57410,40648,28331,56840,46062,94623,85301,58797,50075,77627,31700,59377,33546,93350,58537,18882,51621,24110,91298,76631,13102,20043,15355,96946,27607,74814,37096,56190,61507,21206,64183,10136,20663,45637,90766,26450,94120,26470,18921,86964,14809,89673,88966,21884,45847,54168,55522,17237,77314,48570,73674,48312,89154,99269,40759,25733,56787,78911,67066,36912,85518,55947,63904,79425,34746,63029,89663,37826,12770,42614,42041,98191,33116,15762,29384,89540,46790,58404,51511,47481,18429,95440,79474,89576,37736,44032,43201,39893,47087,89680,40973,96831,14495,80897,46802,90720,39979,15650,27167,84703,12156,26078,39848,57207,70104,90385,10648,42582,66601,12271,88619,43790,92133,28512,57209,90185,27703,18064,88481,81953,27500,62642,44409,27815,51197,67522,18109,45832,74116,66693,52023,28395,73663,48082,57928,42852,46126,19208,45548,84701,45811,80682,79888,19554,96265,76511,84732,65047,74541,74473,82183,51242,32199,61014,18860,70187,64438,82016,95682,12154,61549,14255,80028,51576,20975,50413,27695,52220,65427,44860,63413,42566,89031,15241,70378,85259,41340,53532,86047,79042,76147,20371,25162,85567,88467,38246,11598,73248,71144,88620,67719,70555,39300,61113,19024,50585,95916,88557,71866,60352,88557,50488,15168,39063,68878,26063,81076,62851,54708,47604,49275,29653,86358,22004,34388,84148,22590,29417,63298,42356,43647,74893,95807,37995,77731,55609,17286,92642,42852,63271,41897,35044,21228,22752,36080,58266,40042,16980,56846,99424,60422,12371,15324,78157,62873,24600,40430,67120,52423,17601,46163,58788,54872,14282,76887,58110,58011,57426,20636,95481,29725,42716,25361,45893,52081,22914,51259,15726,43121,56272,40640,30108,33744,52350,11849,38538,20552,92546,57027,19335,74046,46829,24807,31883,35408,52474,92422,12748,67296,37941,47635,67176,65251,36485,86341,88206,80994,94639,14920,59855,94039,41180,11942,18488,73488,80898,98999,14916,52693,62120,45246,80458,93582,45631,91692,77971,23483,82991,93342,83418,63293,78362,12186,44983,95765,74427,21030,16418,89294,54990,59143,82145,27773,98981,94617,69458,53958,18124,85533,96620,42736,67378,85289,84256,87733,38284,33409,66098,28653,80881,98502,72724,13280,30370,67497,85102,81593,41752,31373,78401,69716,75552,77085,20975,39659,30467,43138,44806,85803,62611,60735,41320,21737,66912,70285,89070,35898,95276,18025,49086,50031,92740,19393,85638,35600,44638,28665,43175,10849,51645,85149,77538,58952,93928,85449,64780,32892,21767,67052,63037,75869,34773,61495,84801,38276,78886,16467,80516,36714,85003,77580,74469,42047,24095,17003,30985,92351,56481,62572,73794,30711,17144,70981,75617,59417,16755,16859,95450,83454,89551,39039,49748,76390,16485,46493,46815,63041,67205,92359,38801,28914,98932,86509,29412,49722,39871,38249,65280,41883,49652,96869,32811,95613,96299,49626,96667,39209,46560,16527,21483,51765,19909,25225,94536,90313,53473,93668,10487,55804,33758,73160,45562,76229,68503,62874,86005,68185,20304,15300,18459,56657,85502,77697,79945,59916,36623,13066,16471,27211,93947,96051,80641,52159,73079,79291,17776,93637,94524,61639,18503,59790,49656,48075,16165,17654,98838,12037,42385,51646,40627,89200,10818,87160,35381,28299,37754,47832,69528,71131,31126,80941,92524,19344,74371,28977,48575,64562,23587,48221,18428,25941,32040,54634,99408,40030,33890,51281,91803,83705,98037,77600,66146,67772,15212,58231,28493,54917,31843,45695,97150,67350,25171,33826,33326,63535,23754,97760,60542,39808,11319,93341,77075,46058,25264,50560,90372,92177,91401,65626,75473,35445,92567,54996,92241,92637,35114,40464,43937,43163,11632,64719,85812,27793,51914,93325,80521,73070,26525,12151,68277,70244,62142,55747,71224,47650,49374,75707,38825,82562,80422,95318,66902,91502,60571,29258,94797,53772,60594,31542,11608,81017,38550,90515,44571,98702,84080,50407,99072,60202,33366,18193,31092,68995,21977,14940,69906,36543,55596,93141,35253,81918,11884,48777,85884,27501,29301,89416,37339,77133,23293,58797,16758,16268,73078,49408,76994,18868,50967,23579,88350,65826,42734,16934,72677,57526,42172,77108,66882,50655,55121,52018,38700,57987,59037,63282,29894,51656,61977,42085,91933,42537,44899,82810,45686,32065,95283,85434,37529,18428,32515,92978,93792,50702,46454,45664,60290,56982,38580,12919,99103,41164,51605,51904,86408,42874,72055,62417,25133,71407,74902,97872,32973,59968,70418,21564,99759,42748,26757,75103,53907,16766,22901,36851,61336,98261,15062,34994,56307,35130,74031,24314,82755,15877,79498,32378,77954,85736,45949,41255,50849,26370,15188,32827,37270,95762,78159,98015,43730,59511,29011,55810,85676,30020,56878,20835,80865,22699,26826,38331,29209,44234,55268,16576,10243,33332,13705,44694,82492,84585,64720,28731,37557,10467,33422,25467,55406,34996,71530,77977,78553,72589,65688,88307,82957,40370,15327,32547,70764,37680,52929,87783,35052,56977,94301,77460,35600,61483,51007,78337,74798,46226,60706,62083,47763,35094,71793,21187,67396,86636,23537,26463,75127,48560,38454,73782,16844,43982,41905,12075,68822,21696,87635,33171,65996,65007,76200,90557,31643,51988,80160,76150,13355,41627,66448,74311,16440,92773,73351,32632,65337,97159,81998,91485,81706,79664,58219,29166,81168,56348,54051,62531,82908,83771,64608,58129,79707,68358,46648,75821,15757,33212,71190,95590,62072,55388,85640,50341,70415,37597,19058,26042,35017,54034,94283,57748,25976,77480,95895,88121,93945,57759,94515,87648,88830,25509,27871,51368,12696,14737,19451,58902,44796,76951,54672,60307,85035,24322,13177,29633,52848,43510,51497,46001,35088,28989,24164,27013,82047,66794,12427,67726,86262,69249,68095,55189,79478,16131,99297,26264,88229,54825,15981,18241,37085,88725,84120,84190,90195,24989,76198,91332,99834,62041,92116,80597,82783,48495,12582,16007,12772,96275,96300,77137,72239,12822,70555,89779,14383,70207,66695,94329,59127,25660,85519,48408,54083,92768,28972,54082,11225,32291,40074,88534,17309,42688,71427,25196,10775,77494,28667,26114,17056,61315,97023,11652,39762,73265,55840,71159,59775,48939,18076,35286,79359,69599,59057,51379,48910,71336,80728,86819,94133,12139,44213,71670,16137,29113,44325,72714,82090,45034,72931,49700,76590,62590,95834,83667,12920,96108,41056,96498,15777,61338,72207,35089,26737,81840,41386,57043,80131,53120,67654,52496,79502,26254,51312,24068,61987,81695,99603,89101,89300,92756,46150,17390,99375,82020,74386,99617,26532,69336,87951,65635,50034,74981,28116,68950,64558,31246,93631,30440,72323,79186,84510,73896,47490,55277,18457,84958,43436,64604,23249,84841,80951,17790,97177,80037,92711,63857,70759,84471,91693,40991,21993,65233,48154,57419,21551,53555,30349,12841,73449,54479,79136,39063,89092,91033,43365,64569,32291,72273,32708,51217,75712,76785,33926,20967,16953,45445,50708,67308,70389,31480,57797,47289,12544,12770,86526,68985,71481,91024,96047,63546,83121,65363,63361,10593,63558,98607,83888,25415,71610,39059,99045,82746,88969,88986,54416,32226,82394,58759,82014,60097,31647,63651,54078,50883,27521,12348,81198,68934,99227,82193,39900,21333,49945,18427,97877,59997,83883,66139,74940,50780,26298,38025,51702,24437,57636,94352,87516,38993,64872,21039,27568,12042,88658,32963,67133,33982,90579,38558,92989,95231,52016,65885,47729,37534,45958,25269,26597,43608,62087,45129,82797,17921,89175,15589,81123,79677,77128,68500,99858,65714,89568,12042,39175,51627,24774,61289,80384,56931,92889,12635,91693,77245,16882,17494,24533,14501,84420,74329,48384,19367,58482,26352,71359,49695,54716,76126,59650,55047,96114,76000,80392,51272,79052,13332,20435,60912,71626,34080,54396,75946,76803,48871,46194,83761,69258,24552,35251,40997,16698,28028,61124,95758,63860,67676,73652,41512,32781,59812,32348,30021,93245,37430,90658,74951,85024,60861,68433,99615,98377,30157,77955,52356,82017,35003,64666,22513,45471,87598,88502,99880,36528,22193,87653,35472,66010,98597,11680,32724,71362,31372,74943,25574,22557,51023,37813,16782,10696,61061,73408,66048,93262,18986,21072,98144,41380,71506,90996,21280,64339,63095,72062,81788,56167,61768,24200,14171,91113,69280,30647,72781,20310,12301,66714,35956,54561,73216,86300,70207,37546,49488,39372,50717,28299,35441,91983,30161,83655,33705,70078,53679,33231,74378,25367,57512,26652,17759,70733,44741,17465,25779,52951,57619,31007,44860,63456,96655,78339,69783,28666,92841,97097,85342,10968,15648,95994,95348,56360,39350,42102,52870,81943,11342,10662,31500,74412,43638,46609,57169,49717,74663,55733,66488,27398,61289,49360,36189,27474,33680,12987,55896,85891,70801,44769,62646,43672,92694,15222,62536,91636,96703,61504,56062,15870,86997,29469,40934,62860,86303,58908,23458,13867,65223,99693,60894,44678,72849,38620,89003,47992,54940,47047,81250,14178,46024,63214,93171,65790,34095,59255,65658,67075,94757,74000,68250,73759,23362,99446,53504,94022,96974,93568,50334,59331,88435,51136,21286,38393,92362,63451,68333,98683,98486,89383,92595,16034,41495,96288,80669,14177,55541,16322,88823,73928,63142,29355,68222,81105,15447,55709,91160,25603,20240,49823,95584,79764,24671,98478,34398,81678,22282,35658,52871,69645,83789,72198,34260,35508,82718,51668,38362,76235,55948,10737,57991,33371,23785,49854,77965,77633,83405,87196,82933,27940,58785,93006,13773,61648,21456,93957,13145,35778,19940,27039,28400,65656,55929,94049,40854,91209,77251,42830,26957,80725,62572,84378,15099,15980,67573,15572,13579,24801,12725,41610,48484,60726,42832,15156,15618,73526,83862,83460,89845,79987,31514,55018,99594,82571,66676,35671,93515,70429,63371,88818,11964,57668,88737,42087,41524,74947,55374,74458,75002,17746,24904,40543,71268,78897,63239,14269,98763,14663,30259,70328,46818,89750,34885,89633,74375,15356,51005,48102,77923,89865,59202,65270,59743,66486,82624,53131,14608,30020,96378,69307,15956,90095,64947,56577,91150,58195,82075,38365,30059,36547,76513,96189,14615,84483,85831,49157,74923,43451,56500,65262,45676,39226,72403,75536,65663,26942,94366,77771,66429,72715,66362,53676,95227,19052,19774,44140,48384,59078,15594,24968,21604,73217,91666,14388,83514,54564,52041,63748,93752,59744,20556,75577,55417,17877,26999,87621,28673,23184,34004,55604,73063,36504,53961,36108,44714,62849,10740,64437,65226,59844,32775,49683,62884,71336,47707,67410,64292,88547,51854,73353,84525,10884,74852,30183,56477,71437,57007,30742,25006,68273,90711,50253,28819,62579,28318,67523,83383,53397,78728,93780,61363,66781,32756,40876,54248,76811,81513,91193,57559,75157,13727,13028,19094,67690,40752,68524,21649,63272,47177,68512,53516,89249,35630,56928,57808,54267,81740,68423,41295,36800,10619,78346,89675,89105,54381,71304,87310,79980,75261,55332,13462,90600,56758,55442,85425,86713,94424,85502,61786,77916,91643,35196,11791,69467,34814,73385,20650,51211,54496,81806,95245,48050,42218,55754,99756,53784,82089,43077,65051,67501,45830,26821,50663,34705,61416,90007,89495,14499,57314,66658,31365,89196,12253,56252,61637,67943,97551,26712,12943,75791,29344,66806,89700,81272,53610,85209,49605,14444,98837,43453,56383,14710,99830,41009,28652,54301,25952,55012,47902,54870,87747,92066,39265,97608,61945,35426,70400,50393,98943,57496,14643,67363,13191,47507,43248,80632,64811,89948,82007,58695,58860,68620,99239,10225,32075,53551,11184,94550,56389,19104,34837,74002,57414,86704,79008,54028,21257,45474,17244,42236,50146,37122,72315,16017,88723,22826,38256,17276,69952,18170,62455,44426,32076,18764,57847,25928,89176,53539,57428,89905,57413,84548,54242,46959,81045,73527,58980,33597,25437,59480,13317,89549,78491,34873,61452,59609,40842,65842,74218,46047,52306,99082,91899,36485,99810,53895,12657,37694,61230,91978,87909,93974,50784,25558,36776,78709,94059,87873,40643,71218,52134,38700,67730,37789,10658,18651,51313,44135,91564,67155,42141,85069,92772,36670,91898,27564,88662,57185,64815,93422,21271,22632,17504,34357,88181,19454,81729,45354,60576,51857,63266,19932,46068,73942,70075,21810,99817,94099,87791,61680,80773,38945,52608,75205,36507,22965,58514,63113,17795,18676,30387,17858,89160,60230,80671,76384,26788,96664,68441,65998,63995,73274,56141,90917,20559,46043,38014,42667,93536,48176,26862,27209,63201,28872,80313,84692,34942,97144,88407,10709,75877,72791,91574,52510,12314,92802,48145,32766,65010,98512,89687,19304,10649,11941,35270,54693,55645,28578,39925,53511,93412,85009,83877,39529,91257,22720,29357,60087,86828,47838,95347,54759,67106,66301,12100,75176,38905,85462,41229,47737,23587,10360,90009,69294,73850,97833,55945,15025,81467,47307,82242,76963,88587,14705,11386,22742,49667,74493,38512,91564,45898,89605,60866,11021,99239,95242,83056,29205,45268,18995,29640,80518,26828,47341,75133,78428,62170,72075,25174,57969,81481,75844,71679,56993,53522,73330,93297,50048,23081,74780,95182,23947,64956,82440,29375,87229,31423,52802,23154,85934,89274,17544,87913,58522,85802,51083,22482,64028,63466,59103,67275,95487,22054,46295,90978,35487,69692,94239,73735,13933,96936,12464,95502,87697,88923,69572,53412,81805,32697,17001,80770,15480,15434,21197,85131,59462,30604,45598,61289,69887,73140,97552,83837,82844,23464,63680,98829,59336,11444,67197,84346,60497,70088,68568,77256,49715,70943,53263,12266,74706,30253,72072,45770,85955,85270,46796,14718,79060,54597,72292,82392,82742,69774,90912,23169,74987,19163,30121,88166,60333,35660,87681,91566,14546,69792,73782,79014,43597,19984,36499,27305,96300,50946,80924,65429,21470,13003,85250,64092,98628,10501,76250,36053,88028,71822,95315,57998,89693,47709,96313,75153,35050,50163,69259,16592,12557,54386,26407,85665,35226,17637,16445,62922,75742,28106,73980,79910,97631,86543,63259,66971,97824,16788,53258,89478,16680,80177,45008,25903,42966,89943,51697,58344,26553,66877,19979,98774,85488,69261,59495,93768,55798,65447,28751,85853,47860,18990,97879,12531,54717,30828,53633,92287,60807,53917,55827,14258,42766,60582,37501,89142,40793,20480,35643,23244,33652,40686,78744,64556,85823,53431,59908,64106,66043,45433,20946,88005,65835,47879,30826,74068,77263,97168,16599,78042,35703,23760,50886,64969,92071,21829,20517,59201,52311,23102,14459,90593,56969,62251,96712,85418,51752,72224,42645,59612,91226,60770,56453,88142,47562,53624,51843,99056,72709,91951,98916,75712,24923,85726,40514,91444,12054,21294,46182,48968,36710,41477,19589,85760,72504,90791,76240,66624,32379,54977,54248,30581,51496,62364,29810,40577,56203,42799,46826,62730,30781,76571,48160,56037,18275,58781,48293,77602,91733,87720,37957,98608,37096,13194,31428,46937,34415,59291,13352,59790,48952,62816,70743,71840,92507,57992,92265,77833,97411,66329,30406,89334,98708,73680,97911,79582,31203,89919,23151,37983,65897,42052,72143,99248,47681,40688,34560,62587,42490,16618,92930,63838,35911,47944,36542,79764,80145,68312,11614,23602,64800,95905,94804,36937,43258,40713,16394,73226,40730,17541,79024,81224,61807,75770,49251,64180,25927,59567,10557,26855,81923,60983,34983,16717,86014,17604,37213,48076,53461,68022,20025,80809,58339,99797,68075,88702,66493,44875,84345,98230,46864,39455,33041,14518,35642,17122,86428,71169,80088,87913,12000,39516,49304,82226,19273,86046,40466,44320,11927,19207,75687,81984,97188,15870,50854,65500,71814,99717,15701,68546,27100,84408,22711,83094,41753,17085,32310,56753,50607,39606,50214,52215,34193,56626,11952,61499,47067,97897,96503,91811,49062,57818,57830,12592,99079,56399,96733,59718,46455,27692,14286,18052,95543,78398,84530,98316,40873,89133,34499,67860,20076,27807,43544,11114,84198,97653,34141,25813,14586,75192,33229,47191,65755,92026,56890,13327,74168,78457,36775,28608,45035,75381,13103,23975,79202,96757,55873,90166,48772,89245,52546,38308,95248,65489,74175,59421,76865,90721,30500,44458,78402,74162,99939,31551,67474,62877,49017,46511,52189,96762,71563,29101,60140,56840,18899,53671,81334,24746,54949,36381,12727,47275,46543,23981,47775,61033,39012,83893,74532,73775,82775,36844,34008,34887,81645,48625,89411,23304,50543,34092,45706,51126,63158,15080,74632,91571,92173,72817,81014,28935,38122,54633,77356,64615,76025,52008,87369,72764,20537,16934,94836,99514,88729,12464,16510,91015,99431,77859,67061,20757,15824,16436,51600,40705,72970,48621,61087,80749,80276,63344,64342,28332,95707,39941,76077,50389,79907,24965,19285,95037,90457,23366,11425,83106,56412,24767,67221,48720,37834,28787,77184,44182,42710,83977,97760,26533,70758,57598,13178,60398,33068,55109,76383,44674,46864,21959,31915,60652,64239,30050,83435,73904,63839,67977,42951,79670,32568,41617,85650,22636,81817,39100,39371,32089,81901,68678,32240,37495,36608,97024,59340,54879,49305,61570,29115,67495,57015,93502,92491,72960,10788,69716,95014,25807,91055,26050,84311,61030,57143,43022,70764,40343,79646,28233,42547,15801,81655,33927,46167,57931,38269,62167,98191,34073,84179,22628,59338,45568,94853,88719,56755,16620,39819,34310,61161,74674,30182,58560,24225,86832,55631,85070,59504,62269,68205,57596,63370,24311,52924,16664,75819,97705,26572,94959,67528,40951,30126,25343,79303,39233,65687,53753,87970,17738,80536,78874,66442,53195,79587,50926,39529,94777,53843,44705,77706,56369,24780,33028,51194,47308,43694,55936,97034,73406,59000,77103,32594,18360,40007,81791,17795,51232,14100,49150,28520,56778,65549,19789,96065,39977,72294,32600,23336,93769,34828,38438,41067,19611,25319,84208,93529,56930,64951,29538,22158,72154,18113,17969,39223,87711,79808,22448,53027,62836,27480,67575,36898,58640,87910,47826,93834,38704,16651,39925,38791,96790,55123,54267,98300,89040,38070,66683,17569,35622,71653,53514,63722,34418,92713,36081,69995,27896,39999,76801,50912,43263,14562,99997,46015,87814,40415,13347,32638,57424,97751,76351,73339,92477,82614,95543,78889,92614,96625,27905,15119,60743,11431,18899,66606,54178,83613,28182,63524,94867,62573,68521,84668,23620,85064,45300,26726,61812,68385,40472,32249,61707,59946,31595,42664,48488,51697,55571,83793,84354,33177,38821,68514,94778,99536,58768,16997,24971,33014,64332,92232,51999,99273,21363,68484,91039,26696,44228,54936,47964,79065,37965,76420,75066,96172,36301,73621,70250,81010,38089,49201,98943,92578,40551,13534,42743,31790,96210,16840,15127,55053,95000,29433,77961,60826,32412,15095,41837,25662,88784,42801,25854,58094,21108,11782,88581,56054,77474,91922,29089,95131,52042,11182,34404,86359,55158,15444,76604,62578,62444,87345,19474,38982,83042,34912,39311,86280,56024,83982,38857,67551,58040,18710,36052,25290,20501,60519,91132,68304,85538,60058,94563,43539,87509,77312,69501,50388,59173,33576,10688,74396,37701,13827,50604,77682,64755,50201,96115,83571,64938,28955,67766,15969,96710,55664,52585,18580,42120,19285,20919,22383,76728,65580,80026,32720,30034,42549,49339,11538,46319,20834,21953,37756,77698,62684,58160,75526,93862,92147,65593,62444,40510,24044,37120,29131,58958,42358,75423,14924,73015,53676,34450,96345,21843,69367,52542,68140,62399,82883,42423,37748,74245,68692,70144,86343,87513,87736,11676,35257,79208,68839,70368,55722,97944,38320,12179,32548,64946,44192,29201,93783,98801,76573,57057,42186,50338,34343,89113,80671,66421,36786,14593,47584,69768,45112,34872,28687,35234,88917,43756,57048,80869,35291,49180,38769,42309,93983,99961,85322,82045,14405,91218,16612,12149,43562,59729,40591,31839,66355,76612,74921,71296,76378,92718,46065,60800,63280,15218,73061,83057,96463,74453,23380,63517,71660,89090,28727,35120,40773,85253,71819,59013,62027,79408,25524,55428,15315,35624,69620,14524,27528,19681,18969,41511,15777,65490,90376,40648,74158,73690,36173,79395,10819,59939,66799,96798,34029,81957,79644,77643,14083,81302,94565,99213,81647,16951,89729,58153,66933,78259,14762,92542,50508,31292,19777,97415,32797,48937,96465,33373,56478,37202,36438,12536,50050,98151,53943,91536,80677,30711,35223,39794,57219,36310,76058,51574,33702,81232,49485,82812,98204,28460,76961,28178,41308,79001,61824,14761,85714,91562,66675,14895,59717,47852,22033,41718,33294,91040,13044,66929,51193,82063,63804,95425,81001,74870,51076,11923,96340,42012,72591,91576,28889,81758,73054,88140,84302,60371,17021,38743,12689,40001,29478,22331,21017,27545,20421,80773,51746,25476,97263,49813,53584,65963,41505,59347,39758,73386,58051,20229,86152,98177,88952,12120,29448,17955,96788,32870,74386,99298,68483,20170,50361,99561,79464,10253,91521,78101,83568,75496,51425,93852,18243,36756,66110,27047,91624,85273,41485,70679,98124,39094,60049,49326,54110,66038,91840,85909,99122,89155,68410,65613,86656,18267,99837,49588,55671,78093,79631,51655,36937,66465,66707,52406,99518,78412,67172,83409,47815,45554,31563,87050,35517,31463,54838,24541,64462,97011,65983,59421,33416,28718,47832,39061,23398,78829,52894,20350,70813,57780,41164,32372,17040,66734,90942,12668,76596,32821,72087,12155,28424,10602,39740,21687,39563,48005,81950,65459,12827,77544,59236,19784,59832,22245,38151,95152,46502,43860,57918,21272,21238,77591,55582,10488,54861,71243,19240,81611,44789,52130,97575,21742,26395,83637,64274,11688,97297,22560,89441,94419,95154,16123,80533,34579,24070,11621,83712,20289,13567,24959,57178,13197,92290,16301,85755,44056,45224,42857,21544,33595,31324,21756,32113,53318,38128,55596,99571,45903,98214,19664,95579,40940,71321,84219,35177,72176,31077,94157,54850,59514,97881,75902,17872,22601,68282,93767,47452,10513,28984,88204,82390,93328,99764,53719,43460,96556,42874,52867,98385,97990,82418,79360,89045,81843,91318,76768,99349,53905,71085,21445,99962,17024,70273,35279,46560,50286,66416,56570,64096,19701,45354,38446,21310,44254,51261,37012,79223,85238,47683,54416,58820,20388,69685,69131,63831,46161,67087,89615,94660,40350,77831,59141,27387,29580,14618,41840,52963,66597,81585,19422,64545,52227,73041,53257,71708,91647,68627,41126,95713,16293,51089,64474,91922,21906,59219,45859,81207,73033,24028,66617,22035,82898,75708,14519,69729,15933,12138,44312,76328,21793,89921,86101,70673,74118,11516,36980,99244,25967,66220,28755,78207,78940,30313,43136,35337,22414,54998,80741,96386,13044,30902,88620,56591,47487,91541,42847,58371,79025,27929,71214,42020,31560,11400,93994,11825,61863,60253,57315,98026,86718,51034,94481,44323,42718,94078,47059,31137,82047,29793,49532,87209,83378,26251,28368,74095,15840,16041,78801,31570,22617,71707,26577,89748,83266,75084,32196,47182,18118,14166,82633,46616,65900,46777,81638,33993,30041,30832,12793,23878,93575,68432,26748,76481,59133,85699,44966,33187,94849,36258,77233,36387,88589,75221,26759,52701,54566,93754,67608,51613,25676,47907,76052,25832,25634,66085,98692,80323,16439,86545,65162,15421,70594,87900,76452,81064,24012,61468,71508,44139,85204,81979,54278,35208,13804,56180,40179,20722,98606,13734,19041,18008,17655,23110,10977,10346,45631,32966,57337,30944,37393,41097,67388,69988,27782,16285,99063,41636,35526,95077,67335,54859,69136,23126,86705,11690,58797,47852,88995,59582,65311,70719,35336,65527,98634,64794,22141,22317,24061,48320,20982,15020,51777,66555,95309,69495,20605,49031,80121,31403,25422,51968,16089,56984,14768,37129,40803,55590,34913,21598,37059,92689,86992,55221,73032,44822,23642,91579,11007,28028,10873,88686,16041,29625,96347,71816,61582,69550,36158,79169,65203,44390,68670,28605,72711,84873,99211,62251,90332,44187,55720,13459,74793,17394,64174,40270,86640,42817,27240,80689,99147,29939,93533,33563,70263,92989,70220,41781,21483,68090,47044,96156,34106,31961,95314,38672,80488,92224,91695,45872,83232,37880,88407,80259,31092,85787,81999,49944,56366,27057,43898,74367,49058,55975,84625,17750,19173,47812,72644,45356,81355,29144,71777,49082,87694,36305,68752,69470,79558,36444,30306,31385,74694,88794,55717,45795,18009,47077,46494,65716,17065,73431,60641,99577,83388,58549,13927,71436,64591,86652,67188,40619,67686,52706,60621,37443,17407,35595,66482,59794,36662,40280,34643,97660,19822,97378,96530,67644,44305,76883,32547,19321,49208,83332,71627,39112,86925,45129,57095,24200,24503,12889,60961,71611,61969,94072,35161,98923,81160,46799,69265,51769,43396,88173,30276,37439,62210,29428,58026,51223,79154,20954,80362,38279,95343,32481,28492,73155,79733,40454,53299,91903,95358,98852,32315,37709,21176,35284,33386,89873,83842,46157,78426,53027,67081,58429,61249,44306,61568,10996,85505,26555,30954,48138,45827,45142,43588,96728,25381,87381,78757,99160,40190,88326,84040,35859,84481,92832,81215,46603,62407,39547,99463,87057,10204,96709,86327,28572,68270,79069,31362,90653,87687,35335,99259,89173,73529,62469,98964,58581,44463,86920,87109,38405,25048,62256,13126,67781,90845,12120,11027,63720,34327,71831,19140,77227,27505,99770,58805,70491,72387,59603,42234,34507,42572,16029,79249,18031,88122,92861,43794,51884,63120,70874,80650,96013,34538,43576,16507,53470,53348,50537,16398,93008,93944,60615,14410,46594,27408,27767,85429,26340,64373,70423,34919,29126,42050,42560,90316,26754,82586,69514,71821,80348,22264,68590,47922,93342,21294,13846,97303,47609,93802,47497,41833,79596,45075,92915,18077,47750,14996,86794,58575,39171,99909,78484,58868,55486,58644,80663,90934,92500,98414,18091,45490,25110,96474,92065,22974,29143,87120,67553,35631,51115,86664,56949,62634,61045,50529,47213,14399,76395,70287,44053,95496,57592,69793,56570,87586,90651,90201,15027,89382,79255,63614,16046,73536,33792,22436,43758,12690,88044,82124,29507,19422,22567,49238,64635,77630,48005,82897,38851,93426,45974,53340,52131,39676,13886,81625,37719,38234,93013,25112,79812,43248,16290,88368,86628,96699,52162,70808,43359,29879,56346,43307,24067,34213,79526,43700,65934,98429,29776,90470,80267,65272,72180,60731,83430,96268,22259,88653,22385,45966,50736,48574,70460,96633,62021,97445,74271,86449,62990,66953,75780,89023,44715,57401,46975,68050,65642,14533,23819,89296,22921,18328,87824,92272,97435,60220,53894,79505,11377,73293,35677,50240,89701,59819,58132,24831,99052,83041,57794,37360,63020,38527,69601,27863,93026,39272,94467,89553,67115,84397,66867,12457,73993,14650,79286,70559,59395,99914,83814,31193,72977,47313,89522,20563,83049,31137,35221,89509,81060,96998,46905,55959,42337,85523,16397,91152,32570,97331,61287,34600,60149,59076,46795,41934,43142,44351,54898,81415,26708,37445,46148,38323,83144,73708,23197,70676,27716,54669,14814,59886,54331,60696,53358,98580,94191,54405,63444,89427,92493,52395,22729,72797,15041,50109,93249,85710,97412,99207,22139,21439,32850,55999,77234,99148,68570,13715,26547,87305,54055,56939,13356,73861,70049,43269,80994,41038,14675,84150,97022,51744,81324,68134,54526,32474,71252,90276,11518,60319,91964,20228,99476,60975,93091,94208,43827,18682,90757,67124,42089,89022,98710,42213,83595,44883,11268,47708,68829,22427,94409,97959,24095,76766,53597,95763,59469,75732,35990,15009,60719,68788,40417,83069,10465,95402,95423,99225,44692,77262,90023,94183,34404,69370,24854,65434,48720,72290,64206,19575,95834,56301,90476,48457,97093,29764,17830,98518,49296,84995,75729,99197,97327,80206,62385,45789,94372,42601,41689,33513,59694,22486,66820,68798,39771,40366,62030,84063,95229,38414,53886,25930,30959,68321,51566,24837,90142,94029,27522,11637,88322,60610,89694,64141,64755,69873,43105,65666,59377,39182,11633,83837,83404,52678,97500,81136,25594,87408,70162,58213,64132,56494,89222,69761,88351,47252,90742,55434,92735,15936,36558,81582,90383,26232,40681,28426,23133,12404,39427,26994,13870,34333,41170,41316,81390,62888,45328,72574,57754,19936,52581,29841,73362,74171,13231,23906,81220,50382,87720,85140,61838,55006,51751,40644,66349,98677,13791,20391,73789,78342,27652,75228,77310,57886,21291,98436,53427,39555,92214,26859,80938,49374,33567,67890,89697,42651,94039,22488,77800,71684,41680,46037,55628,10585,38991,89029,29802,40373,90664,21067,86121,51526,74051,98109,91900,72917,55421,26592,97568,60044,20063,99973,93193,26918,19270,47195,52092,96122,54890,84231,82054,41932,50713,79556,14439,55743,15742,92440,12407,63393,56214,98052,49157,15298,42917,72776,41895,82095,16225,57724,77521,14595,15123,18998,57268,33921,50526,52863,76115,65186,13039,72723,18572,87683,42615,97876,29644,98471,39935,24074,94793,41423,67689,60104,78901,97158,78139,45723,16405,61049,25514,99882,13810,20106,15199,42774,17299,27158,47992,17892,61353,19653,39433,41479,46200,22848,57069,82876,38859,93776,38521,65153,96304,56707,43823,27952,59650,22648,49585,76455,76079,82536,96522,87646,70726,40754,81951,86902,63477,76635,59548,12775,87297,43830,67614,97410,66889,65857,98910,99121,43655,93487,93333,21449,31499,11885,39193,74245,86272,75611,39969,16795,76747,56716,35064,87439,31922,27033,65349,22129,58534,80478,38899,85846,69636,78689,76779,98406,59030,35149,87256,49488,41230,13798,21283,78231,17488,91008,37406,12514,57296,55247,95881,30506,22930,89263,62039,75728,42426,33471,46800,89430,35604,17041,64176,75475,24734,30559,18587,69587,79570,31802,61171,23897,92003,10669,67437,39308,65832,48314,16551,95220,33187,81849,11422,41560,59413,15388,71678,13048,53600,43304,54651,90826,69196,44612,69620,59055,32051,77088,56347,75072,46962,19515,41700,40285,57314,62046,97141,45519,21707,84415,96167,88597,58887,75627,86023,71580,59607,57177,74855,62818,49306,57008,75501,42891,66394,21306,36785,12106,20338,82832,13165,25135,89464,77423,88546,14795,35646,28605,29708,45111,70471,99801,86738,24955,31879,97132,34364,65212,71366,42512,55451,46228,74021,50065,71865,10839,15897,74354,80113,45140,21091,29836,75213,30342,48398,43079,76179,14933,30846,38760,65876,35488,29713,66811,94310,41141,35862,61664,65842,78398,89113,23076,16026,96625,64608,41621,37475,92574,48985,78409,71123,83516,21717,57904,63922,20298,35886,83265,44316,14818,48745,20755,49610,14615,44776,95195,28672,33156,78179,51573,92572,55502,43223,77148,88877,39743,61982,60302,39052,27384,51049,77772,49726,71795,20731,29827,52268,17355,76604,60267,53534,13787,12932,41446,37983,39777,19395,77887,50186,97719,89470,31562,60637,26318,29056,93772,60244,23193,10962,90426,57203,30868,82925,25065,63097,42559,25981,33637,48537,83264,53987,80366,60728,89167,95362,73499,19659,18851,42945,41198,33965,64749,36224,19375,20923,76327,15606,93761,29884,12424,22016,51612,73353,50820,91703,36164,91879,34769,81390,47315,41308,85762,83004,47275,68201,14438,43290,98728,70757,83272,53065,63075,66179,20581,16230,33681,86322,92410,15000,66381,93689,35104,91066,72947,18017,23248,72353,56598,75406,16889,20559,24506,41904,97638,56148,48229,39600,93175,28326,23377,49173,46747,79559,34222,46520,75432,23928,57363,35851,65325,28960,72384,35970,13126,63142,17422,53176,39341,87899,12120,95240,64821,74372,64347,58079,31670,41942,74712,54949,54798,36490,65317,12204,56583,86201,46776,66896,26163,57460,29320,52208,65552,18532,44358,91437,27321,57720,80355,74284,14768,70076,81164,22161,59533,74206,77395,84593,16254,47755,84003,36892,86899,73044,50684,17303,86915,95078,71159,35899,54272,27259,58619,30008,33145,43117,85001,13211,72781,58808,84027,59339,23987,76513,24129,88503,34034,89517,72985,75624,16481,10380,23824,32338,99433,85871,60609,71500,19681,78033,65283,69471,49048,29744,31970,87716,61476,23558,86894,11422,51624,25571,95507,74465,83073,61711,54509,14917,61762,21247,57300,27113,57803,93380,11634,45922,97573,49776,72164,53353,91100,59901,78005,45032,70514,86022,97698,92781,25244,32756,88697,40999,43228,57498,76355,30066,72640,94262,23244,84682,99550,95708,98900,32244,77927,52035,11791,26228,26760,65810,99087,37459,30905,71079,75784,60383,40991,12691,37742,89488,14567,24311,31385,26931,80871,98555,40049,57963,81956,14407,71199,43722,43773,95004,48972,35231,86113,91136,29784,29696,68721,99008,75077,94870,58307,87897,25582,92681,51124,99809,81445,38748,88224,40582,44882,52496,38669,91257,92838,79031,48252,50261,63913,12580,25624,27405,74286,68363,42848,88005,82748,53169,44941,31041,20426,44776,44059,91317,43974,69131,27977,83520,38961,51919,10169,65209,41441,81642,72661,99639,21241,10761,88779,14579,62233,66320,92747,41119,31806,41959,43832,49324,85067,73473,92741,39811,13102,44431,27850,97000,79912,46084,86334,14343,54299,37048,72011,35398,92484,62360,82952,61655,33381,37465,69703,76203,50001,11608,20606,92418,61724,32681,61316,54759,52196,67319,48227,94773,36269,13548,64755,13644,15774,55348,83888,18674,78835,94179,19967,14185,46143,72673,21965,32311,30210,79498,12274,65960,51754,15843,12684,39345,72267,94083,72970,68512,79149,24951,90962,17033,72048,80739,40759,81311,32910,24729,39565,88355,18830,12996,21128,89984,45385,86998,53989,48869,77069,52155,39217,26126,15066,17349,81252,61909,21990,14914,23430,46321,84372,69927,90896,57345,10289,84029,72287,46841,46936,13753,25872,12026,43650,35109,89604,60240,12262,46376,37722,72772,13370,61936,34518,15831,16557,13303,76672,39018,69320,81268,62646,52544,13109,52911,98576,40142,49098,75036,78253,80479,72357,42907,74068,55341,60608,21607,29706,86702,26851,19491,34479,35197,71127,39381,76520,50548,19605,96641,43773,80172,19415,89239,62311,88699,60108,96124,18422,80857,67193,18507,98176,36644,61126,46327,73162,33168,48542,87823,13006,42564,55413,22773,59885,40236,31131,81417,72262,91216,18068,23017,43187,93588,90096,98361,93189,65783,60003,30030,42992,98667,43251,31442,88204,45527,78995,26908,25847,45680,87355,66552,77872,69452,76619,56261,62520,43196,27883,91327,88329,27928,68608,61674,67123,14986,93027,86662,53189,86370,68923,23754,58643,37312,64559,65338,40797,31163,59033,32815,80916,24511,66834,40047,90992,30235,58166,97068,14880,20069,58508,96701,55250,69606,50115,98796,19954,54095,28636,82740,45424,48145,11581,25522,21245,36811,50570,58120,72924,32273,13744,44369,59157,34550,42689,61257,98617,27580,10527,39576,45463,32090,99251,86230,23716,88702,62412,64661,67441,62238,15030,29159,99237,24137,99737,55132,95667,15047,32430,66335,47303,59911,91387,60655,68048,47831,49265,69946,17359,27008,74552,91394,11474,79519,23646,87315,13805,89667,25754,52909,34890,58839,72500,92263,12783,34085,41212,44184,63686,98789,32543,53583,18719,49119,90864,47908,45047,21540,75367,34331,46530,29411,71701,82449,51864,49624,30820,80563,30353,67398,15871,69169,63530,60683,64766,11453,28061,24169,60293,93748,28853,88670,53255,11355,25271,15086,17028,65940,68799,14128,73206,83791,78464,88106,43344,65578,14520,95166,36779,73182,13276,93816,35959,24692,87762,23974,99308,51512,78214,40236,29724,69757,88075,57440,35962,27092,67652,83671,56603,53716,92919,48187,32418,37477,34757,86004,96649,50751,52936,41272,25955,95509,14069,84948,11941,27461,20802,90965,59282,21282,98736,95614,88281,36181,42797,10101,62117,84796,90634,19875,61569,69933,12015,77204,60012,98724,42116,23523,84288,21378,65464,10330,79563,61026,98809,34366,19849,39754,62480,46696,67843,32334,96918,17409,23814,65157,42779,47714,52437,29096,96566,34242,67962,53785,16188,87520,77236,70817,87084,28324,18653,91117,34148,23351,10349,16877,20460,67537,54319,88856,88125,58556,68112,82623,99057,20001,14938,23962,63680,63092,29081,32231,19554,75674,27785,19764,19697,31464,95367,12889,15638,77912,28534,92842,91067,92600,31321,32410,99030,19914,30754,72957,53050,72401,69203,88355,82381,91578,90679,36006,45965,60532,78180,89801,91461,36302,48333,77612,95984,69998,23335,23965,39828,95844,90255,73230,90030,99936,73632,43842,53983,67133,99093,62428,15148,78573,38021,71301,64172,94110,49307,80244,52251,32832,23474,39549,93909,51150,42508,11898,92128,51423,27549,30543,97032,22852,86497,79252,14600,35646,67824,24122,81339,40885,31095,55804,38693,92179,27084,58135,54984,47164,69562,69789,80873,94875,10765,36203,55658,24830,82001,81938,31459,74220,76323,59297,24399,56889,48867,44723,26925,58540,72911,94261,31815,95317,38125,38907,98174,16963,43850,46525,20444,98174,18615,29540,93248,87548,67306,21763,54826,66014,58200,41580,72807,49876,62919,40433,41616,50507,68070,28892,42075,59750,65697,96807,29642,35258,56246,25941,59881,48326,90244,82908,84020,30460,50063,63157,17574,65723,19251,50752,43542,66189,28468,10773,75569,83682,57637,75191,52743,89551,12816,46292,67220,50735,68348,85006,11492,75185,95121,74083,51791,65868,19142,42375,77522,59148,87245,49311,47562,74459,26912,65045,43503,28322,56488,56973,60098,38879,49876,54765,52791,14448,23218,34751,15738,22155,89534,94000,49026,91341,58288,78620,99198,63132,83666,97519,74115,40313,82150,43531,12627,43856,84240,79097,22387,42505,76560,69247,30742,59204,61541,43816,55584,39819,13879,27664,25902,56136,98595,60305,97418,62524,68189,17807,75153,25003,11396,78899,26433,37873,85458,19453,25273,26658,25775,44380,37714,61138,62756,42718,15130,79481,67989,95242,68451,11559,19167,50392,66658,22943,47818,70979,50922,26003,15227,26580,12258,78059,48246,36751,64261,79109,84230,13950,85276,17616,91434,62667,82900,51991,49935,65320,92862,73605,12459,81927,77917,13028,32147,72711,39761,34601,39350,80543,47737,14265,95272,77135,18024,17395,44409,62292,60292,92707,54246,65145,86853,22979,55798,74201,53904,49684,72279,10134,73289,22130,64396,95517,85512,66711,47414,56761,47225,70162,39255,16287,97456,14985,51538,71238,15056,88077,39727,17504,53565,10113,55057,31224,32456,68987,51792,53780,25088,37124,16711,90214,41980,95683,34397,28535,57566,76282,94608,70122,54222,13943,17816,80056,90376,46743,67100,42125,46947,34906,87412,89771,59430,34223,84446,16992,66101,97734,82281,72414,78913,62712,35860,26308,38331,87214,71960,27319,55320,94378,72892,43037,10528,51450,37000,89045,31303,25972,19094,34553,12792,78864,99638,73269,58683,69953,36039,78653,58420,90234,83963,13427,35803,28401,87113,21479,28532,55914,34706,65765,82250,73499,80597,23400,22787,19440,56875,83451,89616,89850,56869,11515,67352,19231,69531,45163,86205,23437,97173,15416,88326,73575,40930,69435,67956,75670,75919,85257,62998,49591,26167,66859,61598,59834,61156,46777,88439,78847,93605,34566,94145,17880,21210,59170,98393,48647,87219,18500,36525,24220,48900,98119,18787,11393,23484,69336,94873,10352,99932,92125,54620,35042,19914,29363,43444,97717,49601,98680,32587,87185,40104,73613,26944,92727,94264,29782,66985,88674,56208,13283,13053,24682,25228,51578,87415,30829,27647,58440,17324,76082,21040,70232,22320,20579,74007,49225,23496,72110,68002,19054,24831,28026,28102,98604,23691,45460,49391,74538,77266,96642,94466,76585,24094,20243,16034,81707,41386,39130,65510,47074,66617,63649,81491,17246,23867,93535,99481,66322,89979,55636,16641,33969,77977,79910,89370,71018,70294,81516,42753,54712,10980,90835,40233,70912,81948,96011,77859,62197,59887,25190,11411,43520,58293,87457,33885,66669,26077,74160,41479,14412,93767,57952,19247,81749,92429,88952,43943,35555,45210,90440,89006,30867,15655,77920,42235,72280,56714,59612,93676,14862,85123,84636,32227,24972,79320,66988,40988,28425,92635,32499,72969,47567,39561,11482,42480,46981,73194,59985,23218,87410,28096,69261,47274,17432,18042,19941,45713,31625,48450,36954,16944,39611,96625,75874,16545,51955,82735,20333,48043,22673,24580,62686,64609,37510,72676,51865,58237,25323,43320,10483,84585,85430,90656,69352,49693,92205,24420,17649,12954,73736,62447,95645,32427,94742,92827,74222,41851,59826,83922,91170,51260,61761,61580,91468,72548,85278,20881,90012,36988,60696,20866,63449,87636,66077,57656,35388,77942,40223,19192,23669,73174,46273,98578,59969,25302,52824,50356,99061,27199,74858,59933,53486,37736,55312,85215,20925,44502,38075,52104,15956,55979,73786,80613,37848,30441,67362,60995,56415,70602,38542,82879,97206,65021,56028,64335,56991,56259,49788,33889,63294,58306,90624,56299,37290,11535,12346,23056,54995,32791,45523,20685,86921,92318,66403,76923,29483,77356,56044,74439,21451,40670,22674,76384,91604,46796,99689,83539,88198,34790,63689,61840,55311,64058,97014,27864,41302,76186,75899,82345,16588,79635,21453,39880,56025,28057,78591,77391,87377,10481,44044,57666,19409,41768,13557,85218,59089,44195,78725,62601,81954,79753,16944,34159,35133,63664,28180,66499,52539,49250,45061,97655,36421,74910,25774,65711,53788,41499,89585,42104,69615,85373,75512,34490,91394,76927,94045,23453,39011,66165,87063,80292,31455,56332,34491,66455,91717,78360,54728,51565,85856,72842,69953,38342,55915,53122,10579,59604,51789,99194,14899,49692,82384,90517,42696,36608,43391,95420,67101,35601,81327,97555,60392,53111,68533,55281,43493,66406,36074,32698,91153,29238,33127,97539,48740,59169,17873,83313,22253,89309,18131,90809,99436,57925,71268,50679,99312,96765,68022,58948,95210,70318,28217,30629,67883,70635,60498,38037,96478,71429,28812,26304,32381,77344,71770,72398,61872,33344,39323,20911,63345,59226,56117,70711,71292,16482,30341,61136,74741,72152,35448,78445,28263,58263,18819,10902,55247,61258,60257,63121,42160,43584,84430,72597,42263,37004,35680,33152,48472,20451,65713,40323,10603,86044,47972,18044,14479,68327,94061,66876,15197,41735,52259,52780,80046,18127,93634,60421,62510,49787,85192,46491,56100,80030,82091,17080,97621,69341,17910,78177,16131,48323,84305,88568,13800,84487,26356,15240,73648,46484,98451,72895,72515,90467,76436,99538,10672,32898,68600,19670,38072,25706,95492,50339,17679,54696,84354,71688,56160,60822,82281,27727,65304,26670,18068,85662,96375,40446,28440,39690,32242,58919,90237,78996,84190,87859,11271,88423,70619,41610,34591,72750,73919,96715,29151,27255,42660,75113,83626,19057,20322,42373,49120,97233,36077,55868,72314,61200,86107,13427,83851,18901,90435,60008,47213,88301,47682,67941,63560,22031,55656,59374,55315,67883,14911,25216,90588,40570,80917,84569,14333,71646,38746,77754,45896,25418,88934,27159,43872,16520,37519,37665,65368,99762,37004,69039,33379,20041,65998,25933,98203,76376,46292,90460,18687,19766,55834,23954,63850,55072,67909,90678,60593,26990,54028,92900,15967,91284,39094,99800,58999,24615,61828,98692,20063,44899,17070,33041,95358,23807,34645,77072,62310,52447,19848,82938,51452,86510,94914,30470,25245,81946,32691,14186,80072,50931,70471,71804,21922,87367,56153,63140,12234,18473,80864,13653,58494,40455,33596,82163,18934,31045,45281,83994,12399,38486,67479,19853,59258,84268,23066,86473,97072,44219,31579,55436,19837,78415,52960,93390,78947,76487,45502,58288,41006,47397,40920,49999,55752,26235,75356,10483,65313,94971,32423,75993,81305,52243,28862,52458,93512,25190,60441,34825,64115,80988,73740,54588,23876,91515,26979,13478,80436,39562,74068,68044,46436,77277,75841,55883,72678,30841,86985,36176,26443,61988,93179,94732,70458,44558,87355,14448,93055,26341,80087,63628,87962,61914,12243,74377,99685,59314,50002,72219,12825,24417,89741,21913,86857,51084,15828,36385,71637,31454,52454,33059,89415,40415,66333,82755,63144,23037,32623,12302,10964,61945,96340,34243,23786,54941,82526,12766,22365,10610,78811,84873,54329,96017,85728,13486,57437,31559,95571,68321,40722,16214,76811,75911,96768,23117,69720,57556,48557,89044,48563,20630,44613,75540,85226,51602,44678,67736,52550,31669,24063,79566,88812,46019,44036,25344,68053,61487,87690,31857,15355,22675,18303,73509,57313,98199,23864,43523,66910,77155,47800,90767,89422,37719,85769,96828,47100,25131,61750,31339,54842,11091,17778,16090,55998,84305,47717,38696,67346,12291,87821,68910,47924,46025,58392,29421,38623,74850,78904,29401,86003,63711,61297,50103,49023,69145,56490,40991,82738,30464,18212,78286,91647,66792,91859,48234,58307,82612,63977,12108,37869,48937,43845,65009,10178,61454,67586,37688,54667,24753,15765,83110,42571,60918,60307,23307,70713,50079,30385,81082,20987,47296,79871,17542,42650,58471,88650,76401,52794,78499,20524,64108,47016,23555,14350,18955,18509,21106,60036,52202,42417,58468,75974,41051,63262,45560,70888,83233,61427,27578,72161,70485,35797,30538,64769,85644,77958,88547,11621,17195,79404,16898,73445,98588,71404,68447,62873,96527,43140,63743,15672,60118,70502,71284,71954,43636,67471,96941,79894,21082,99931,15905,16151,20627,43775,73133,65934,48965,52602,11061,82637,46701,59792,90193,26937,60158,83831,93076,98034,46562,21259,45406,61044,85929,15564,58174,12227,35643,13545,81628,14576,71207,61596,46523,77637,86213,17299,73726,95771,12492,50926,78945,30875,78278,65341,31046,90117,87982,36724,33356,38902,54012,98752,56361,48521,26426,50718,89071,94957,20621,52714,41760,15935,45353,76205,50030,29373,81858,46579,40803,15345,27758,69949,19773,74042,83063,86986,93748,39625,97911,92964,48476,75117,33933,21261,63049,65172,12096,52634,25757,90550,43645,60341,75130,90537,85684,42268,79736,30974,33657,61552,84229,54505,35137,67386,86771,93965,86281,25538,24240,93726,81967,35805,39389,35395,36123,22396,43115,36821,37973,56309,65655,56194,41411,55264,47592,71679,24782,24290,57923,38808,44304,10834,96322,21627,16142,30133,81392,57730,71032,71463,34776,55099,24681,82833,98407,74404,49401,63412,88296,78456,70235,47229,25624,40835,76174,20067,88156,24318,10921,79536,12122,41969,40504,43940,91189,96841,38124,94255,79889,91009,79994,46312,79475,37798,65975,79776,35958,95936,68471,65199,78574,26095,18506,15792,78909,18564,34398,53621,90324,72389,23419,94302,66425,47205,82089,82233,41363,38081,71564,75091,85720,54981,39974,58999,24254,33501,66582,27956,99789,53290,59200,94502,65994,78820,98993,35728,84007,43276,76028,83114,83480,89762,63496,62665,64354,14282,92849,70103,30310,72466,70685,85306,90852,15432,79934,70390,86357,10228,12324,22690,60730,20716,37364,49597,73863,59279,54498,86305,50151,13025,39534,72214,65890,41662,97469,29009,66312,14251,87724,70846,81830,81083,38752,41293,69738,68088,48757,34357,48011,85964,98325,47002,24186,60436,18302,57952,11839,45686,31811,37623,85913,42345,21486,57275,55146,43624,28129,12398,48796,60351,59251,23671,53390,33261,56742,47447,35172,47891,84177,24365,42291,18376,44763,58107,32964,57404,97128,97338,41785,68916,64616,88203,69211,61261,96006,36603,35954,29886,40694,98025,36414,65535,28399,98291,86133,28418,88973,58510,17712,81684,62223,86986,69403,52747,83151,59974,40395,90962,97010,78588,37605,21920,45507,11989,75752,31303,55139,89078,30555,75222,97406,70839,62882,77224,61977,95989,33888,90654,43457,28604,89887,60645,32322,66422,20367,14489,74377,74302,14544,54115,36682,90073,27296,53345,96110,97728,89733,11041,43700,91187,33758,58904,43523,33241,13869,47421,90937,54101,18504,27086,77784,48201,58969,91764,85682,48813,29020,90880,47601,74273,62150,60375,92988,46348,76727,99525,87570,39778,43309,76864,65130,66328,50274,63481,13173,78743,72441,61635,82249,43076,31017,13011,49900,31926,64077,47295,58902,87237,82311,73085,53552,23050,18939,92308,93748,98814,50314,24127,58213,66775,29366,15460,82213,75475,70846,11563,95579,96982,67708,15308,59266,36235,73096,58741,41613,54592,64368,38940,60681,64551,18041,74357,83077,59285,65643,63917,69001,80985,63073,11572,75393,47312,36182,22704,76658,62385,92100,55743,20313,19491,89259,65352,36605,18456,60388,43867,43610,83417,74101,51266,63867,45347,24095,44695,68482,76391,89989,46671,92685,96118,89944,68317,93492,22556,71883,23578,37535,84937,99451,89375,64118,69720,91419,55194,72418,79020,15472,48029,77259,13381,21785,80653,15453,32963,16966,69149,91207,80462,13785,86632,81354,77003,99002,53820,88563,75871,88798,95896,99027,96519,32564,18467,23912,76681,21032,21437,34325,14491,69510,84245,37975,95043,74895,66381,10227,38662,22683,30235,56661,59100,97458,70206,15877,17700,99362,11598,76018,82729,21746,83524,68560,65065,91010,80187,17503,98031,75043,83982,92272,57197,17797,94223,32424,46507,30761,11836,69216,10589,43411,93491,42217,81163,61518,25628,13064,65143,17698,53771,99427,23659,48866,26359,92182,90825,17793,56138,24290,46537,98400,24729,68130,26578,82112,68928,34375,92418,45559,98489,48526,64039,89455,39851,37583,63201,47132,93302,48572,89248,97634,17999,64011,73923,85037,41803,85361,26902,99867,56674,72643,17374,27102,19207,88631,19666,72529,22561,84101,72335,84410,94416,57333,97923,52651,20171,93359,82076,83475,28879,99045,59433,46125,84934,79609,92068,99898,94636,93688,28606,86324,31628,67673,25756,21284,19453,12660,48799,33054,62887,52747,71782,48216,23256,58181,63926,22558,43450,91083,99550,50388,36397,41913,45311,15488,30852,13329,20241,44869,15792,17243,98998,28914,48456,91872,18856,50429,21155,42453,13252,72979,71186,28945,11534,91604,70980,71313,58291,23036,17568,80068,37550,95698,46207,55664,21157,57159,71469,49695,55846,59806,82187,81259,70917,45125,68190,72756,11995,62305,52270,10949,94712,71332,57120,88022,92435,82881,84490,20569,13389,29362,55718,60631,28655,43468,10531,14892,54980,18668,42778,59353,21582,60925,45231,36562,19561,77582,72473,91413,89525,22611,16988,87393,78151,43902,30824,22398,28960,51258,13569,33835,81358,51791,83233,34611,44972,22605,33809,45601,71742,93344,99957,30833,66878,90106,77847,96189,81758,55971,61750,16892,17880,93590,58284,36818,21335,15940,65250,86445,29043,33783,49723,48229,34399,32513,47985,86509,71654,68688,95282,25479,96402,53542,95508,23741,70937,51186,11024,75141,44777,27920,64297,41204,39950,53841,94811,63115,89511,43227,96752,25744,18913,84253,86243,21670,72407,39606,45255,41930,85764,21146,63420,62782,71486,99000,80219,71766,61831,95528,88135,15050,41817,36004,19140,68717,77164,85510,89528,22893,37820,81178,97143,24220,14123,45885,67481,58722,85024,92091,55425,29835,74357,95061,82194,48435,12316,60243,95725,21735,33060,20520,48252,61433,97935,94032,30593,64452,81730,24523,18408,97976,97319,72680,42501,61125,95766,38435,13432,57247,24261,19105,94142,41128,26503,45882,68192,44621,66424,52146,25220,30078,67885,44213,95477,18000,95838,13341,36359,75718,29568,71702,43176,40716,99678,94414,53564,46207,13175,56493,80264,45856,19075,68531,23481,22343,22155,86021,50982,71744,29754,63694,24600,23374,20103,22090,45732,46897,49228,57238,98975,54485,14602,51420,42139,50832,47344,54087,60637,25354,89750,50154,11923,74189,47903,75743,51201,17603,15112,71788,63736,58760,57845,33548,49722,93282,48301,28641,67138,79009,24063,13927,34699,79374,93201,66568,91562,35092,50256,88860,76179,56495,86826,56512,18270,88955,27961,89264,42103,13502,42000,46583,79777,54773,96605,45572,90602,36123,28871,83893,61668,17411,45340,54688,99879,36727,80148,34558,92736,55163,49147,63419,49399,11867,22839,36442,14772,64405,97380,51298,44022,50963,49126,94795,62721,24494,60432,82160,36749,32618,92778,50484,14792,50522,96673,86069,31303,43448,29669,78182,42072,70682,14891,70769,80801,99009,94266,42246,95714,61454,35618,23505,49648,29420,65396,77411,76598,36566,53522,65169,23113,18605,56433,86824,47823,66970,13422,33688,12249,48691,18086,95770,61062,12141,30958,36163,92228,77442,71120,97373,20734,38132,69981,70200,62602,45992,28855,29065,19185,60334,46742,19996,82019,80405,60313,23423,21443,37769,64745,21441,56611,26684,76864,92414,67934,18779,32943,60498,47535,98617,11517,80251,74931,82397,72263,93530,44023,72563,77100,70138,49103,69791,43020,58532,58074,43490,23313,68614,27905,66568,77617,87259,85651,96194,91427,49221,50419,10303,18359,87213,81115,17540,18478,65613,97163,11460,24460,92895,16212,22901,97627,78955,52334,40828,11604,59365,29912,37527,93288,97780,21841,31877,86467,31401,35394,41638,16388,64678,86395,16910,95780,98731,48768,55371,34178,33259,22921,61220,23196,38766,71317,91843,34312,35890,22118,71760,50069,19977,22869,19240,63001,88869,73900,44057,89413,62669,70374,99831,18582,15057,59196,15966,77865,43465,46543,40054,23144,79373,34554,66245,90476,41713,10021,35652,10229,84176,83678,48957,60377,97472,93839,95918,51606,50896,75906,47385,71222,74832,85740,87765,36023,35288,75199,49218,37639,99013,61941,59676,61809,96685,45761,70339,45019,66398,50178,32759,90030,48527,10715,63439,44542,85412,41009,97634,81853,37082,96638,92857,82820,59271,10376,68886,88365,77063,33431,36419,48578,87071,95007,21830,24558,85339,91398,29291,88215,21622,73773,13666,59108,56763,53464,10481,57303,20497,55688,98264,53327,55470,67321,31636,68146,10237,84295,22904,36733,23274,59319,61631,88818,88601,82689,19338,75956,81781,41188,70344,32322,44102,58569,73560,83081,68774,74172,68977,30381,61295,53924,66319,73434,45705,30601,52437,52200,36357,25325,69540,91235,12882,48743,53531,34945,70253,71089,21385,38387,17995,29713,36522,29089,17637,66197,37784,29758,63250,45500,28672,14984,28113,35241,64533,60790,56669,67257,46958,29528,93489,92336,71116,47285,88137,13275,79981,65545,39177,69961,31929,51992,78048,55039,33476,90613,11258,27468,89014,67875,88081,69419,21552,61142,67586,60225,62867,33609,39481,43826,84744,87705,33223,83713,82104,31779,92656,58171,76409,33707,62437,64804,27694,76473,84700,17324,38717,77677,44630,15463,86625,11513,55743,81736,39392,59446,32578,44620,64704,38289,33648,24807,38358,37780,99183,31736,13524,99865,54393,92043,70243,24392,41506,14156,20112,49984,56386,76206,83693,36797,96424,76743,46261,94497,21448,87034,24605,67202,42719,52457,37701,55487,34098,72211,73248,42274,23738,89283,62059,45312,89577,86806,36538,73100,98443,44330,32901,33332,52296,37308,26229,91696,39038,36804,97972,43767,95099,12112,87149,34971,76595,83062,26830,22689,18795,55024,63241,27336,96734,69790,59593,94141,29879,96833,12358,82028,15543,15951,61817,73329,20814,25372,81710,69246,24911,99227,24571,40347,23511,92517,27230,43150,51569,10129,38779,27898,37481,35231,89844,68309,72262,65680,13448,18938,30605,23982,27020,28391,21299,72634,77696,64625,92217,98763,77874,23035,60256,76388,49442,63108,55156,60133,32993,57316,10770,43542,62927,40737,41149,12113,72728,29388,62905,30963,55015,63266,43005,31942,27754,59558,87361,55038,53169,38103,39987,14370,74312,74361,84083,90268,18042,15894,69616,81716,93504,36266,34604,23723,97933,67950,15816,42662,68274,59887,90088,35415,61435,41607,85552,48345,14460,65550,28539,60917,88456,15574,30470,54340,73632,40208,95232,96797,65432,25672,75943,53141,67594,83594,48827,49885,74957,28949,24186,63851,89001,19481,62235,81781,85580,18021,62387,95987,31858,14806,68586,66907,21732,34133,88229,66993,54868,83565,23801,10670,61951,83321,38169,84726,29456,95335,98534,24508,48870,78987,64141,20798,64359,59715,88788,36019,45600,27682,84233,96062,34981,66082,26198,27369,70395,46559,14681,21114,77732,36336,63806,90278,17186,81032,97480,55653,28183,44190,93792,88175,92596,90684,55398,51773,95789,83008,24569,42612,94548,29212,77296,29588,54644,57862,92813,65748,88154,44545,48283,75714,89799,74639,80419,58547,97196,43024,30810,47608,52760,48341,45417,60868,43992,62049,60357,75421,40499,88249,14134,65098,64950,29348,85426,28038,96387,90634,95944,71482,25440,60095,78409,57390,20262,23724,53284,76492,32898,35019,13377,89951,59059,79493,19028,65820,60548,51334,71295,26269,36508,97110,88285,98058,21782,32258,89947,65585,53647,50049,98451,95186,97212,33373,90452,22548,77477,52659,23977,35915,67193,34945,27161,43271,61225,56606,56064,36787,74780,19011,87499,44421,45940,43228,38408,21119,80290,58529,30943,93700,30960,41076,99551,84898,16013,45026,32953,46053,76707,90360,85223,80055,30047,95684,99794,79712,55773,51867,62149,34063,46354,91972,49594,15562,88025,58455,81919,29675,90577,49354,58451,11345,27234,43526,11269,90241,85838,72635,66430,38142,50642,86451,40192,95675,20181,94037,87120,94572,16065,27319,45502,53257,50308,59168,66767,23266,25386,70731,91288,17288,16744,80679,39520,26208,94124,24388,31394,32679,95532,39074,10010,23768,98305,47001,56083,66990,70545,10576,26674,25174,80427,60840,44761,29998,47357,69822,71384,69430,60355,35143,86914,42113,94052,48451,73354,86531,86568,26072,75853,48760,65730,79012,95939,20010,12823,97103,41156,88284,81948,86153,48278,78450,36130,35186,80096,14520,55569,74471,50409,94590,60728,77250,61726,77998,18715,61020,36487,31844,61653,49028,81587,60595,13671,11080,80681,56146,19638,59449,13352,31034,95418,58674,35006,21324,52807,79218,60712,83375,35054,60461,72607,16740,87565,79206,50925,20116,55582,15358,52046,34703,34294,26477,84306,28018,30953,19702,65981,87376,26536,95164,13094,79378,16837,79038,60120,46876,81014,23252,50457,95737,80994,41398,51538,89739,51971,68980,95197,51640,54122,56883,85043,94636,88077,29682,17267,64889,21105,22673,63253,46800,15223,91905,54540,55671,85138,16470,71117,56275,64590,41827,41675,16027,50275,48610,77594,82657,51100,60535,10167,71336,71549,14944,98536,15308,99878,85933,44556,68196,94810,68146,95276,80205,44115,51542,67348,68632,88512,45525,55411,86228,26455,22686,95096,49920,20314,73365,76972,53317,75831,32521,97228,17923,85818,73290,71016,85185,80273,56421,79395,57562,51450,80293,25595,14722,55893,28925,41658,79807,37299,35214,17447,37032,14161,51319,28800,17664,96384,97000,58200,46776,28284,18049,32631,24849,70137,50914,24739,12268,69983,22020,34251,57012,96651,16996,99608,20640,81475,27618,58223,36779,40829,92819,59923,37369,58913,21159,15133,41020,73402,24734,52461,60396,81531,41487,29790,84513,20297,47434,30608,26641,12303,99075,94190,26430,86907,62533,82743,39607,69690,34967,54000,34370,33504,14450,22007,35204,37799,73182,10155,96284,98030,98311,92220,67739,13693,41464,55455,52325,75882,54209,36514,42152,96234,46841,10550,62646,51357,29412,55995,30703,13716,79348,53628,78810,55174,99906,33717,38527,96129,59092,18229,34732,29897,10246,28565,86894,14957,40300,25647,59649,44351,66567,88015,66392,82751,35533,60530,76141,47660,66899,85764,68784,52730,79447,74680,24634,17512,37562,29336,80824,93038,19134,97542,92230,55516,81677,37020,54273,74513,78878,56286,22139,52834,63177,71174,51676,96997,85529,28597,47764,93433,52313,42270,48209,59082,30826,94286,56378,27058,10846,99091,15514,12889,91205,88640,36120,16413,50819,99399,45486,47434,94528,23335,49365,27865,14037,80263,51951,89105,15970,79769,43177,14154,80202,58978,13054,99598,14240,60584,83567,88392,45249,56525,25739,78949,70652,20609,42646,94853,18683,26054,75934,47669,24545,53310,99780,51191,50663,19220,14711,98911,98885,47870,22816,15935,42410,49012,71284,80506,39880,99885,45363,61955,14806,96588,28529,19933,62288,10280,42654,22289,41914,48096,33417,20425,56197,31900,39980,68149,56394,89500,77603,18456,73637,28663,29229,62535,51769,54639,50971,54730,83889,31842,23494,53283,55763,26342,84709,66114,87329,15637,74786,56653,53735,99523,78968,56186,85940,66385,52545,62520,52915,14911,36175,16796,12575,42777,70866,72237,82672,49587,98199,94017,24740,85627,69682,71745,47493,69453,83109,92216,98596,21475,43185,25303,90838,46805,72480,91068,59330,67402,61573,43511,67357,32059,23309,45443,68700,36535,89817,28518,32732,34167,27642,31561,44006,81883,89576,51479,85537,80816,28509,15736,33966,94079,99685,77705,35625,11285,87609,39538,53994,57210,32299,34912,14509,45437,87835,79653,53858,95877,96246,19064,24398,99674,56483,27131,84844,66848,77707,22355,65361,73027,36705,51301,50330,91098,66515,73409,65513,90086,12080,73466,57346,54756,26317,44056,30437,58362,37549,92492,97992,51718,71377,58511,79959,47017,80010,49394,15831,24106,80982,51734,87099,12259,25484,54027,79720,49564,56234,54550,87482,91410,91254,33368,13706,57967,78223,85514,60395,53697,80219,13580,55839,35234,12326,13005,67538,11697,55558,97314,76154,69024,19779,60781,17193,14006,97206,34337,59950,14186,86522,47839,33759,22083,66230,41560,75095,34136,82501,77085,76754,86016,86987,88252,20154,82238,75987,55474,26622,32355,73151,84595,15303,59549,89430,59027,41318,39165,61962,71336,16755,48705,52806,62240,27912,33316,39509,35110,54760,96999,44045,53579,25018,29718,23681,50598,71427,29303,47496,98733,33601,57550,93478,57741,91086,93615,32479,49475,72250,30190,61080,93057,20496,76437,72281,21103,81132,15248,44745,78679,47591,75050,60368,15328,49596,28824,98514,12392,90426,13636,91197,90844,91843,55029,10192,79972,30991,57912,37225,41075,94420,58480,50469,54028,96109,99304,88006,27044,70671,61451,65312,31619,49473,98157,69389,62535,39976,78179,65356,24777,56431,81542,29621,51383,57811,52677,98912,88065,46177,63614,77255,24516,37940,13849,14485,71771,36371,12421,57403,34519,25615,23836,73271,54858,61050,14141,86625,95944,47319,87449,58571,33160,64664,64151,92798,92950,80993,59892,79301,35517,71463,98411,87460,36365,74204,67422,92664,17478,25348,80301,95123,77435,27837,71880,61116,95665,91796,70653,20524,88628,21987,34607,34213,76875,14854,40945,99223,38977,76719,96604,17818,34242,66142,59029,71071,41321,81383,62668,54183,91827,37758,90191,10519,80164,94452,63638,81174,89908,36502,73697,83467,55332,91404,62347,82536,65736,31435,37267,86417,51479,46645,40813,28770,88735,49665,34796,46742,74126,54483,20397,72801,13766,79420,21364,35476,84932,41634,44563,80134,82581,89258,74809,74225,64607,80952,75553,29480,45969,97918,75199,45280,12204,66376,49868,44179,39685,49939,19534,44502,12674,99667,47273,64254,51210,37499,27427,82009,94448,16955,61666,31039,41653,66477,61058,68458,91805,75430,51648,98059,93725,12379,19316,50040,30480,50421,58642,69371,62830,73906,87611,95281,83857,90258,60805,85932,85290,44928,87210,32130,37078,53801,68602,92482,89157,59110,50148,25172,92031,32961,32789,70943,67142,41315,31624,55253,42856,65869,49765,73258,68883,22896,28112,54141,16837,63501,16458,95197,11891,34643,32726,59015,37652,18803,47561,11904,78511,58595,47592,44121,59250,15359,88400,82047,78883,74189,12006,21765,32372,64701,51001,46359,69302,27794,20104,53193,45967,64516,94832,59258,22632,13520,34489,46618,13601,16874,74930,53087,37331,64075,99964,86158,85567,74204,98228,55952,48435,51478,52239,36364,82700,77490,20440,18027,72214,16206,98921,85792,15900,68114,79193,18979,20405,43625,73839,69982,13405,17601,37933,61226,46922,59039,69877,10048,49859,89133,79159,60701,63266,72128,21823,38159,14020,66968,53496,19151,65896,35434,46518,41404,20286,51455,65890,16050,33223,98006,29931,88635,68669,62519,40975,39560,86309,33418,68181,99450,53525,55643,51502,46650,21869,92902,66619,51530,32544,13059,33085,36167,83539,58083,43989,46422,90093,10780,98301,27495,95974,96782,50025,29385,48038,80602,35326,79209,18463,60719,57845,11311,19184,68917,34642,65672,65141,29116,99653,76148,99929,91245,55781,40516,65036,86039,79044,98210,74573,46953,55491,29864,27094,35752,80078,20130,24023,53009,40478,62355,16895,90233,32883,57592,62989,24442,26241,69862,15150,79962,43393,57653,25127,38218,46788,46809,58489,89004,74633,31090,99308,32390,25102,84533,71054,10360,39444,49071,18883,49310,35364,81221,35633,96296,29674,16626,29426,88706,55622,14951,22252,22006,18286,52309,13321,91616,58315,63001,83877,74202,40605,84124,60722,30498,77848,99307,63217,70758,76554,53977,87728,92045,43019,14166,69694,26621,21439,67653,50184,96184,16953,86117,74789,88200,87209,60280,26364,89147,91540,71345,71521,67259,93516,10457,63144,37010,96143,55171,56709,50279,87975,75201,34724,98569,14573,82263,62091,97376,94199,25647,75117,41684,91389,30372,93528,72266,14179,42877,41392,32317,31592,59853,36716,21196,23256,10650,17475,51939,15550,73960,89110,65595,12273,15428,65184,71801,83742,62269,11157,43632,75135,12275,81740,74515,22866,91056,45812,68089,44715,81064,84880,56176,68136,12827,89787,31570,10991,62805,16047,98491,53836,68664,67182,39451,86195,67966,76981,61877,67098,65236,96368,88898,42322,73446,72567,69513,22399,35018,17276,54665,39231,64828,65946,53020,31175,11996,19593,79035,16959,84686,31909,57324,18394,62037,65852,20810,42258,91110,33757,53070,41878,12198,39086,14781,57559,95108,51207,64763,32800,64969,66669,86665,51303,61726,27102,28487,14162,45621,83031,99954,19219,40169,49564,11222,79098,81267,12362,86795,24233,94271,56821,44263,73727,49780,22952,14020,52114,11091,36348,75480,10990,65627,67160,57439,32920,84812,35257,62437,13688,52487,67111,17606,33886,78858,32631,56404,42645,63959,43170,88885,40180,29710,55414,41962,62077,28583,82604,77758,83860,52977,65162,14087,12919,20781,16532,57887,99846,71097,91196,57779,25249,59852,47930,55862,42914,75478,48878,93407,21808,62296,97538,40583,43164,63344,12160,35238,25984,49994,91319,24834,53178,84442,41585,61533,96320,58860,23081,45511,29171,22796,37789,20773,15964,56069,22205,75111,32145,63855,65763,99880,59726,20832,75164,52394,15632,82000,69191,31258,59789,86466,66592,65119,48306,38744,50451,59398,32645,31931,42354,43952,91492,88937,40544,89474,54346,29250,83973,94223,86070,25597,97134,84441,89088,43741,32978,42876,52262,55655,96014,87101,31147,26819,28907,91951,18446,15415,30163,82340,60386,56071,67224,77940,86845,43455,82832,63179,33664,97318,33312,17607,45476,93770,49178,64482,33028,42817,89188,31805,94739,72543,34808,70574,77785,10336,22672,67224,51959,44194,68263,98955,57504,27686,48543,25820,67176,60032,73401,34754,49503,85221,70480,68849,39954,97520,16724,64247,94377,28454,68137,40545,36235,94944,92107,63879,44951,37257,23067,62550,30786,84924,19026,66311,23881,68967,74986,72832,22769,21206,38096,90201,62721,95857,19723,63545,84757,56707,22017,66067,99295,63543,47443,67821,97574,15460,43899,78275,90284,19231,39580,62950,43277,50551,90900,31045,27324,57071,87496,76026,44512,68525,95894,21021,19382,89791,36039,65463,89011,73137,20881,21896,21322,66537,22805,60670,38864,89962,70550,20438,89314,91966,15476,21022,52966,94963,10288,89991,14866,25641,27739,12148,20499,15654,40859,82398,88736,66935,40070,59996,14889,73315,76996,11493,29591,58659,68883,50301,57344,88549,18353,94772,46373,72342,53710,67775,91598,66400,23395,10502,94217,59392,11171,26907,76190,13794,45255,55276,15565,91265,16531,22456,47913,48753,49669,27626,63917,92551,66956,46374,93722,32855,49261,98648,69689,32400,65624,23481,11933,47103,36214,34877,41285,43859,60035,87934,55506,36190,16528,51804,80915,21104,25908,97571,33537,58392,18613,80060,92930,41318,98678,88045,49578,12915,16413,29898,17013,99278,70706,28724,50736,53287,27589,50962,31997,15929,72317,79468,94346,16061,70271,57025,11657,67119,74649,87880,45678,23230,94804,47864,64759,67525,47944,26276,88016,38316,40375,35007,62444,71319,19055,94580,55757,29156,67374,44831,39473,80881,77936,82307,74561,23198,60138,64789,30986,73834,87430,88777,46515,49115,16531,75381,22773,98401,96422,14291,21000,37725,50625,59599,54335,21218,59904,74489,94388,89874,97306,87289,21136,15078,31075,27656,38620,91216,18140,43320,88267,78676,81735,50360,36675,15682,61498,32312,23213,18449,37205,40820,36136,10248,83313,99069,46157,91725,70905,80128,77922,58377,44764,77879,41456,96160,46744,86604,75586,93332,31477,82770,40783,51197,90227,33589,39895,92106,21314,63924,57185,11702,34512,75569,55908,69644,39303,78878,54953,79244,26911,63512,32610,98324,79226,52169,97791,28932,62953,71469,19852,99222,50137,41761,79774,20935,63559,23164,17973,46207,19313,23242,66106,90717,86143,11563,53433,95332,14057,66764,13090,22399,15909,54284,12955,36845,99464,23675,85832,65308,11244,94969,10003,31944,35474,67590,74100,86226,91350,81644,13497,58405,37603,67592,52129,79969,12397,67205,54858,82143,54957,70325,80607,63698,17095,26400,82852,45260,31998,24701,93135,80707,47029,59248,44722,15915,61799,71167,41416,14165,63450,12931,51332,22656,58301,63041,38167,44061,37641,27390,20620,10268,55040,40333,56043,30799,33382,37517,54601,23096,45029,18341,97674,28193,70406,87330,59024,26300,68858,35027,95954,64256,39941,79027,73120,88952,34105,59543,12417,70064,82897,79049,40328,91052,89806,38685,71763,13069,69471,58013,16633,38891,73586,52309,56087,24942,84440,82322,54177,19334,48391,40435,69545,28171,85587,51169,71543,88140,99636,38642,38951,46897,15253,70035,11596,49207,94681,41422,32656,41299,83145,84010,21289,90702,10389,89773,17585,12079,36383,74422,50726,57173,94767,47686,91246,62307,64543,12907,29557,92108,94877,95502,27760,11043,23363,38925,94317,47467,77958,19425,66769,97233,54589,22944,71700,14760,36215,25584,23990,50190,75611,50618,90934,57440,61358,69879,96681,78313,59352,69712,30812,41130,98109,74586,20039,63721,91010,98768,57034,94125,32842,45897,37384,32225,60654,26529,91206,87302,34034,99212,93971,20519,41902,24483,70259,87156,81514,45067,49748,77073,91133,18473,99512,34676,25569,77499,92820,18734,85884,72469,27949,89731,37004,44101,40722,22866,52754,46755,79293,48030,81271,24180,20969,65931,46824,61901,65176,40565,24601,19380,60481,75566,80616,94448,83960,29591,34520,58632,38236,63685,47093,64365,31823,46922,22603,29513,12087,91466,45771,37170,46235,49501,73091,36144,43845,13655,17895,12223,80098,54373,35460,31518,32327,15567,53114,76284,23967,25819,64417,52589,10023,85409,96344,84198,78522,58639,59183,27217,54595,30950,77337,55113,40471,40417,20242,27427,85087,72618,41661,44441,61008,12103,84366,89626,94832,64860,13355,75905,53192,97255,90470,83327,35059,91690,39592,85625,77359,74901,49250,47176,76406,84059,49857,31232,36837,66653,32910,27013,33384,96353,32526,86488,49679,26292,67396,82638,33093,33971,37791,88141,97026,59449,99553,79704,40844,14289,16784,41979,82877,67950,33149,68457,12769,83572,73629,33995,12212,54858,76725,47776,71052,25943,80273,59458,31901,11901,53688,99821,81378,58126,37856,23500,13608,56212,32907,60216,88306,53025,82695,55222,45536,10329,68375,53762,17419,52654,51512,24512,20051,47887,18085,55396,74409,62985,10074,27852,82877,42786,52097,79697,90599,97883,84874,34033,26028,83365,42024,70294,62187,71182,70149,79319,50367,23312,94700,98530,60034,96293,75333,36585,33637,51857,60490,41435,17347,66560,31347,91057,90679,57713,32341,66245,93105,25525,62384,29796,42153,60339,32493,44631,73247,17846,32358,97971,88609,29543,70803,72547,40503,35683,91621,42860,36016,52929,35179,94102,34424,25182,52431,33274,71826,87781,39952,38318,91443,15996,11470,94350,55578,93692,60340,21075,18634,28552,41404,83026,40203,92159,10820,79301,56030,92596,86358,43469,39100,50188,72724,36237,23203,64558,60842,62006,84201,67152,62097,23504,20425,34502,10118,51963,14793,28250,15623,52599,23241,92838,51168,92514,94155,34990,77088,99438,97723,93114,96452,69418,76015,21183,53579,92265,66846,33347,61753,29335,17852,51016,22201,10225,17460,68858,84135,16753,18687,31655,55806,49181,49228,17017,99766,16520,10375,71783,25519,82594,74313,56696,21729,50600,46726,34247,67279,55348,88308,66064,27857,57297,99555,57306,67116,55101,45935,21947,37981,21556,41185,84107,22655,70585,96500,20022,10319,53855,73760,89087,77131,48277,68281,45685,58677,23587,85433,98460,36350,48347,51399,62323,74096,29831,45183,45161,63032,83616,14566,18652,99726,44215,89244,84105,94119,78918,51088,79441,95102,33085,94177,72373,48796,98997,76203,55102,49067,58654,60061,26668,13764,49829,84063,64496,72989,92770,33337,28698,30305,98255,28338,27038,38868,87903,89815,91435,55009,34302,71775,26080,88392,98383,69486,80198,32166,35880,53424,98377,60340,86274,46883,58851,10878,65676,37154,14066,57685,77345,91275,95380,12850,86258,10259,59703,66810,64016,81406,94845,80054,13885,34570,85949,85912,78158,92353,24974,11183,17965,35165,17139,32478,61311,72548,68119,99891,35671,64809,39875,34239,64802,68349,83438,70257,19958,64537,59485,70504,33055,19282,44791,61058,93732,55274,15541,85664,64592,70664,49456,19911,88955,96616,71101,29399,24999,57221,61298,32988,25195,71549,66531,41468,46170,53261,15670,37069,87548,99040,58892,76352,73045,22417,69922,32987,49456,59574,84323,40171,25824,45579,50876,43257,77406,56996,37101,55793,28038,47725,49586,26274,80839,45215,41812,65677,99702,42787,53591,94937,83384,16691,40801,37543,33252,54178,86639,82594,88771,56064,23148,54086,66133,60147,73540,84129,40513,50799,86780,32178,26805,78071,11728,10136,14007,50717,18849,47414,85301,99271,13119,27625,75581,17783,59569,85564,30414,80627,91677,39769,74740,41114,94726,17819,16634,18835,71076,23520,63955,10086,52221,24356,31462,96633,52423,29376,20109,26328,37387,69693,18950,54287,57438,34404,41209,42125,52381,39027,75878,96368,92684,63324,33718,13494,85784,36415,74403,59435,47097,81076,58969,48690,62229,97592,79772,22500,10441,95307,37311,73101,59826,13166,58306,71029,68495,56271,11207,78909,29044,67709,44331,60519,66850,50892,81009,68580,36999,10273,79835,98405,44799,19419,22482,99971,67828,72791,58431,82331,32591,16525,62376,56425,34920,68545,16970,35947,73851,55748,32401,97074,35679,33773,26373,91318,81187,88196,44126,32893,49603,72824,13194,30293,60947,28475,56996,28028,55932,43534,79006,34696,17879,37629,91481,90539,23357,92368,40397,82610,60459,71775,54197,97096,84937,88571,83633,87344,58294,45482,60972,35956,73937,95432,74350,82079,53291,70549,76435,71672,72052,87939,33637,53495,29463,91250,11664,64156,19440,54603,24114,39482,28636,13869,73251,20273,36640,85990,37210,41438,69707,93749,13392,84968,74210,26217,22791,15415,47776,76101,96506,87936,19263,41675,32791,21519,75396,95390,31110,45681,26835,32786,23548,26804,17165,10672,23030,82713,42775,22464,80950,88640,70995,82774,22533,65419,12836,73677,74027,58686,83923,74576,47630,46663,29698,25566,66794,19763,36355,89176,14251,95014,20443,41958,94239,75974,94615,36012,83196,64145,98828,43115,49827,89623,55647,22103,45652,13240,45646,66157,40228,18551,43485,22158,24528,89714,13608,37631,63567,94946,91994,42591,52622,36012,55266,67697,32629,42116,72362,68622,92906,43609,87315,97584,83101,46094,45581,92096,70678,34155,99916,50477,58957,65386,20226,48016,17756,86757,31771,99239,71666,99216,34435,66442,92490,20502,22081,71484,95558,96080,54986,81314,23325,46854,98365,87688,34316,55522,88568,42623,97578,55661,21963,44509,79473,31155,98926,20933,18389,80982,13346,75011,49031,70187,13828,80117,90550,69775,85507,48416,10266,55777,35394,62584,56925,44238,38886,64136,42861,42211,30951,33570,16976,15435,52466,33844,86870,90661,36386,72480,46436,42471,61811,22080,26809,54430,78462,88783,68064,16229,75187,88224,81752,39350,39595,91593,77604,38970,29413,76990,31204,32015,88097,41008,19826,61960,74355,49688,55582,73300,28261,92161,61540,86770,22324,16862,67069,27515,54901,73598,44009,59846,25887,11877,76312,15954,66372,80001,86320,34357,72015,48629,18064,45459,55400,28659,16445,17088,32972,42616,21959,41846,49555,40546,59867,73806,52292,85372,51585,50054,39686,31520,45097,48820,30110,31836,93565,79837,88377,16276,11290,70792,12505,72898,84902,52904,59705,21468,73097,21075,20104,66815,67926,44626,70759,27693,93745,38755,62504,15820,10373,35502,42997,51453,58249,50574,53880,65710,15983,68518,49778,30482,82903,39289,67241,63535,67768,63547,80057,90626,55159,29233,62496,17114,31818,38091,64845,65485,49027,84339,35859,24611,47069,47389,66198,45424,29459,60828,72815,31026,14840,45301,44031,92792,33990,36121,38341,50397,31849,97287,42495,52935,24700,15011,24603,65425,19050,62427,97446,31808,23558,48959,11995,34552,48581,30385,99017,93249,30876,47132,20056,45365,95287,48785,65523,55294,63527,69622,40140,69407,58136,10341,89351,87856,46714,63277,80639,99294,94204,55142,39820,46704,36340,72938,87267,98076,51742,15526,45361,11110,88484,54874,21376,10582,24353,76064,59013,86167,11940,22831,85556,17605,82239,95215,23372,94120,28799,74595,50522,75161,28481,93338,16759,99305,43526,26313,44120,28800,36721,70527,23041,62850,35716,61351,79025,68389,35964,37180,92371,75880,12059,31047,99802,97635,39393,18474,57889,40851,64058,39559,35153,61236,74380,51463,55858,38662,26468,84478,55135,13128,57181,83570,60528,67398,24777,61093,80850,26743,55523,91026,30478,31195,84637,83693,23453,41699,26940,24028,57870,32524,34362,52214,33706,30362,72907,95910,88730,42485,76309,48431,70012,58705,56138,35608,81935,31058,14963,16163,54772,12196,37512,35130,43448,42330,53749,41653,31687,20029,53276,71131,35989,26512,61691,79589,52391,82686,66344,35964,89533,16947,45534,82827,38374,37439,50761,10397,72806,31566,79987,49780,56288,96688,83123,49125,49431,30388,30251,24848,81748,48583,82791,48193,93793,72961,82649,39716,54004,70792,34521,52580,84262,24322,65206,35838,65910,77562,69325,16788,92356,60561,26401,72333,83533,36809,62388,23132,47847,84547,19237,13000,71472,95374,37264,54261,81670,29701,27953,31765,90172,73544,87482,26153,20248,91191,14264,15077,58137,24886,51173,64095,10600,31498,66469,73189,55186,14049,84690,24588,37726,32707,66133,82171,58779,56358,10540,19901,56935,49551,69306,76566,18976,78764,84143,19053,76899,59245,50685,94488,82211,79107,25644,43457,66427,86289,48097,49476,24910,11310,62848,66955,38242,49890,11251,35740,51902,75079,63634,87399,65919,11853,47172,16159,19211,29433,24854,10782,11977,96190,45105,74318,83513,33511,75099,70658,77320,52002,68438,47921,50402,23630,46925,34885,90125,39347,52016,35302,55347,71990,80640,46575,29555,74221,52677,56571,42502,56540,10933,26924,72339,14046,20604,65246,52275,81629,52250,86085,33412,33222,59259,80751,33942,63305,25257,86477,62474,60605,12560,94947,71969,37209,44873,63009,75105,29841,71946,32294,47503,64329,19410,85089,44975,99572,62845,53817,96253,16174,35508,10020,17576,68288,50886,90318,79547,22448,30152,48973,12892,75905,52271,99562,38302,89733,35687,34066,89540,15107,13077,58793,21943,86536,36252,96163,71521,58209,36041,29372,71348,19458,56892,38974,68466,81965,81873,34078,55819,15875,82883,40543,57552,68540,71713,40057,69681,19557,71486,31618,89435,17221,58655,60373,15089,47436,42934,96370,15800,30184,89484,25490,96487,32566,16517,98042,74209,53674,49276,90994,87180,50367,63934,37439,66464,49389,66893,56263,61101,95530,29259,68198,93684,52825,15404,17971,61382,37912,72869,79409,63476,25563,69122,23787,44963,87142,96104,35836,48697,91554,22261,50394,29688,20269,68324,92777,45521,55762,24616,57347,68766,40961,48924,52376,44808,93288,16538,97988,45958,60854,59039,34774,58812,37887,47446,31168,15424,32398,35145,83339,55480,66157,34236,67123,26778,94060,39909,49816,17211,47058,21140,75697,20388,91917,13875,97797,98069,52185,22724,90086,55881,49349,32306,81417,36091,16746,93470,14018,65252,74145,97389,35625,91422,51605,33993,97390,88419,39224,15184,69858,35345,21464,73052,78671,98699,71753,47514,58095,23413,20488,64832,76583,58578,36185,30177,26517,74037,36051,93847,99740,71783,80299,87822,51917,14978,28038,63429,88620,67867,76234,87711,21753,69642,35661,79111,80270,59021,83364,46389,61119,10673,73184,53127,48057,23850,78459,97837,50317,40773,51380,44651,14216,98954,67277,33456,91339,35822,42714,10901,37810,97873,48500,15711,92189,56018,52231,53357,52745,10433,51908,90512,26166,13138,53597,13742,77766,49878,89920,90742,36838,41218,23734,87705,81539,15478,36414,66438,50955,83181,42536,19955,17321,61772,62562,14925,56160,47113,19337,93118,75648,14831,86101,76085,22097,32503,13936,87798,93994,77710,35096,29167,52752,51725,61400,44616,24429,91349,10302,48132,40744,54385,36235,56300,47521,29065,61573,42773,33858,71371,59621,82399,83291,60841,12684,57721,51675,10533,62049,67685,39105,36390,72925,26084,36316,96737,76975,18078,71643,44269,14356,90862,37681,93579,38241,38562,47634,21874,12453,23297,32707,53299,61770,81254,66582,34250,65098,74422,13342,11070,75898,91291,49315,16595,25401,64113,26707,28274,94771,33400,12706,94674,51827,39058,15289,98407,16464,14927,70962,97562,67225,16944,26560,72235,79051,56187,64794,43539,68887,60567,52234,54162,41891,73504,32214,39097,89747,96470,47945,22179,76793,19066,60460,11263,25893,94285,27162,88955,43746,45965,44967,69454,94912,16537,23086,51015,29236,77391,10964,88583,76007,61058,17070,82933,34489,90023,59140,68408,13100,63166,69370,92463,26777,46389,19766,72555,14907,62749,67929,34968,91010,92720,64868,28066,44768,40878,34700,13926,48178,94517,22594,53233,53442,42416,18261,15956,82181,59580,71565,42816,75669,10142,61671,36582,64761,84478,91858,45204,30631,56121,10617,15197,97125,24962,68337,81877,72571,20122,81624,62383,85395,89784,45029,57717,38509,77183,23850,69651,89451,57043,44874,32236,87930,10377,39128,69507,42154,21490,97925,96882,33720,39044,35644,79083,61884,39404,47617,40149,87207,51748,25760,55960,29229,11365,73589,41326,81171,90068,21880,14314,57723,56269,12331,20282,78811,98585,40262,76442,49861,63006,76959,39778,96611,97764,14600,56114,91287,82845,39832,46510,58879,35833,76479,78764,98773,84756,96705,71127,53161,92588,67845,49104,34891,92805,54872,59248,24376,83281,10061,77441,27616,78303,48226,62387,12453,36314,58254,84428,33137,38394,51624,59944,43692,61314,83892,47876,34798,71082,73790,56100,71560,91187,73421,38058,69658,63690,35175,40359,54767,51754,62731,62061,37755,81298,26318,65238,76871,86450,82892,18090,32879,89979,22589,68410,39995,52829,30570,65445,60253,95441,23095,27143,74314,79843,61324,49524,61346,74335,48389,45815,95688,50681,22323,91785,44451,56682,27162,49312,52968,90109,93491,92883,75136,11416,72283,34443,36096,31362,24860,38199,82439,56542,30587,18933,60850,45233,78884,54149,83625,35869,58457,16183,28021,87456,40910,17462,90654,94561,70195,25615,93316,83296,92313,32515,96495,37226,28362,99896,67381,92105,71673,48005,79870,85665,93089,45391,54331,97818,52734,26891,84155,74015,55996,50572,84221,97608,65367,60993,12544,65813,31333,34559,88119,79283,28348,38160,39561,43851,47493,74429,36901,26589,88523,25860,12743,62150,92183,10081,32704,96390,32552,59075,16274,98558,96435,51191,24906,18671,25682,37325,28852,91457,93118,25997,92967,15230,83725,84192,56347,25066,60000,65565,47094,59753,44192,19625,21406,22863,50702,16663,48297,26193,96780,94072,81730,95468,86048,74139,31692,87388,58572,68469,95287,87841,18482,30108,57489,40565,28636,87606,52935,10033,85362,32894,73951,74230,48777,83678,53615,59102,33553,40500,71685,11548,90284,97588,83734,45455,78592,67556,96431,17960,49051,61994,69424,84335,38113,79613,34660,94412,21818,20266,28763,56548,95677,26337,43229,39841,57935,28170,17437,89014,46716,56697,13975,16980,34325,36639,23056,48504,38857,39623,52754,77944,77237,50324,39559,39687,22973,40783,25424,86824,39420,20498,76786,79469,21622,52008,85551,95325,60231,88228,82905,36697,12799,66613,18099,54328,98841,15172,70333,86954,12398,41961,56442,51993,81864,69596,54220,38933,39081,12272,57805,99095,50051,59746,26507,21809,77680,62802,53511,95421,58414,25747,24759,53394,16292,55494,51672,89912,60583,39283,33632,27050,29784,33890,79875,49289,41517,47545,82509,17717,42277,16045,77846,45990,39520,45886,83542,25253,45984,26750,94586,71577,33301,19181,54256,91562,11638,18438,21150,61709,51413,90352,19711,56841,59998,99412,92591,55685,83906,22780,19023,56394,41980,75920,60626,64302,52123,70591,62066,23722,77250,47278,32425,61602,60663,83081,57906,10786,63435,89858,47786,81863,26977,63036,52414,25130,97174,99179,38427,70483,21767,76233,49497,56159,33341,91857,73928,17783,33711,68479,82319,39221,56450,55006,53078,41985,26127,87858,49804,55428,72066,78192,61343,13603,92967,68577,83973,58060,69180,76719,32999,27855,13718,80096,33019,83568,89832,51960,15041,55821,29169,19486,50126,53998,62312,26215,11962,52226,13108,97180,96160,55469,77307,51987,12096,79808,33714,84885,64136,45861,34961,62707,61322,66430,64252,82310,81742,18520,35654,66656,91059,97555,23391,17784,20621,31294,30426,16166,37298,24838,99521,98547,61944,26026,63509,80032,29599,98870,12477,16357,87761,18097,14778,96599,93508,56206,61575,25971,25005,95060,43968,40202,58258,77230,83589,53765,97269,36132,69017,58677,78194,48320,26684,34999,31995,19887,87804,94293,72722,15603,52876,88319,30836,28902,55213,92680,71842,82385,49970,88512,62560,55667,21063,37765,74801,56789,64682,20245,86703,10126,56353,17292,95030,47304,56961,89665,77710,67214,57785,68829,29637,86619,72721,18977,79600,24097,17783,43291,13836,44845,82528,37860,85029,64794,82398,48464,43473,36361,31210,66525,35449,52099,81261,43789,46977,61136,64487,43790,16600,97052,95244,59409,67384,18222,11209,90115,20035,88108,11769,64113,55411,67162,46906,77360,12452,74928,64187,68134,89983,56755,18123,62003,31786,47619,87735,46278,93378,46508,22190,15623,24710,32402,63290,57381,98892,71830,22148,62981,98870,94136,64343,94899,30579,90647,42754,17971,89045,39761,24133,90815,42352,68489,56830,24427,94621,77365,19320,33100,27513,21518,27699,14813,80995,29877,93750,38000,71497,75294,86167,21188,14294,95583,97992,42861,23815,21434,17527,62348,70564,18127,49059,90424,39660,12896,13924,31498,77565,39313,15486,25917,12512,82931,42203,86947,73369,18250,18337,21301,39290,16960,13939,24077,20671,60844,52003,88763,17595,71961,96404,68264,93760,50288,64257,66589,41946,43527,56093,60927,20702,10056,22331,32541,53473,31851,34211,16388,53107,42514,16020,50193,18204,94942,21113,19911,63878,28762,99619,25844,71531,73225,56840,65901,24023,88298,19496,87184,29764,15915,38559,16059,83451,17110,84850,99087,72587,74774,35832,78220,72242,15118,61329,78445,50017,97207,96077,50904,22976,31196,44689,92598,30718,79178,15481,36675,62985,68539,80973,90768,71669,69648,60537,44160,88976,44838,56582,53078,91528,35071,12269,71542,80922,41146,35948,72599,67724,65427,30919,62892,61145,84775,20937,88548,19941,91353,88818,38207,56473,87340,16549,22542,47009,51072,52813,15182,56261,19361,34295,15909,62783,45273,51831,71256,79795,38861,46639,33716,45188,87300,31316,11959,32029,45454,49790,57435,24651,67560,63208,88314,77783,44583,26336,34009,67863,13290,58758,73512,37157,11265,57908,68829,41599,29647,53531,33646,66507,92130,13839,27149,60390,35283,75025,62292,20652,80914,77471,52741,39475,36958,97505,99329,88432,93990,37288,36138,76122,59452,18752,22384,36533,14987,29984,96414,49141,78165,45854,90430,37453,35773,13598,14074,94914,72920,97324,76487,81934,41594,51382,29975,30085,67778,91244,95930,56579,88594,44336,58623,90842,79787,65585,59514,84514,44924,54977,93879,50877,70822,22277,48407,38621,25210,24553,52458,18840,48762,89641,44071,71597,25209,74394,70197,17816,78506,98220,21326,92933,52261,46041,54396,27859,30967,35301,94501,61422,48862,57994,54376,19726,14662,91433,79579,68565,67818,70404,41946,50555,65453,32425,26972,74929,11906,30648,32049,31031,27611,23740,62472,43120,25299,98771,37876,98429,12749,44927,55273,40369,86586,15236,54075,95957,82364,28064,38395,54441,18480,68228,11896,86633,18275,78471,54711,52153,47569,86024,99567,98000,21441,71647,84799,77026,11187,38635,62862,15441,88737,75857,78068,82703,62369,21633,15878,59006,14242,67322,18405,92008,38642,25819,96760,26200,10446,23990,98130,45466,77349,80194,91041,14926,35617,96596,47371,78208,70206,85638,63955,96668,72650,22790,46900,32235,37509,47141,80978,12524,48270,95421,96961,87088,34463,63935,12444,20681,39236,65048,92581,74699,39657,16105,51065,61049,31846,73205,36498,37485,32180,66171,44254,73005,70387,83514,53917,96182,73444,42006,61988,58059,97195,20195,30179,98005,11010,36333,29582,39268,60640,60805,43142,34500,76422,46732,34287,13226,72482,29907,80737,33983,62267,54316,55890,48077,44861,90950,21533,46526,12916,35677,29720,60676,65146,92961,79877,82935,69777,25557,74366,79800,67336,94644,56721,17443,82494,85690,18186,29379,81653,59103,81864,45205,29547,50125,96546,34098,80733,14269,55170,85470,57895,27697,22235,63286,87882,41953,16152,62402,77413,16919,29945,38185,78596,20621,56639,67915,35640,47290,11514,84057,62273,34619,85334,49207,47860,11321,46994,70285,52181,55873,96130,90291,23161,19137,59632,29022,17919,11901,80762,99887,12207,69264,90946,93187,64572,95265,15505,78210,26623,40431,25792,99827,22361,47153,79404,59693,44049,45139,45716,97647,25370,81643,62512,46087,64770,58631,72899,41832,87841,46691,43439,49056,29384,76326,41427,80146,29271,96124,27359,12802,52271,30110,24902,19799,48220,58670,78689,42881,28920,42690,82185,97303,66934,44763,22222,38028,69402,39658,72117,10636,10488,15670,95423,35766,33124,51382,24394,42397,20325,88523,85351,59011,22575,11979,91564,28966,90490,33118,62436,46915,42309,67783,87657,38846,42042,91823,98084,70634,22273,94971,78972,78050,33946,26055,90704,31122,78614,87337,80753,18105,63846,89409,85973,73626,50271,73704,37243,22277,71937,27240,55603,91954,64276,40427,25897,70162,96834,25499,37570,86896,84884,24506,70968,39540,96602,63655,81387,24084,45256,45261,22622,45191,71655,51363,19931,16244,94877,94954,68780,44824,38078,17640,58206,18716,40565,45108,53866,93260,74362,76680,37173,15078,70646,61049,92212,57126,18089,42100,96998,17909,15802,39041,44150,49083,36507,79518,28732,96551,38414,46319,60335,15511,24709,17871,27150,95080,76550,99769,59785,44121,87718,50969,63736,70401,64868,13766,20382,28104,22919,30155,83526,58428,84039,14221,86129,43495,44860,93651,85965,71913,76789,53963,66739,47331,84544,25275,31972,63386,56684,71814,14641,41290,80595,90577,80264,19923,12130,90518,33330,19492,23933,39566,44142,58220,66953,55009,57599,13664,15081,93462,99894,99824,64270,99759,13752,63751,53280,68592,99136,97016,33276,93674,74867,54867,44330,26661,20377,49465,57584,82739,34015,65570,58878,30560,31066,22601,12648,41660,43952,78627,70363,12487,88528,78011,56252,30764,12796,54389,69387,82321,16116,93226,68346,23498,76079,52203,68524,59737,92223,77695,19815,63194,79681,72356,84516,49161,67932,80579,54528,73008,73116,36521,70176,66805,81507,41503,18238,24402,63440,41310,59628,19231,61112,77650,34271,89317,83385,98477,11104,14064,57299,17010,20727,46043,72100,18054,91526,77819,98039,13331,31593,28797,49305,14604,71431,20672,41665,46372,88789,23432,67580,29443,50831,56185,87865,46122,79042,21004,63882,12383,38908,24286,43530,35494,80071,82357,62202,31886,44208,37582,30991,22654,53642,51039,58462,18232,66614,46436,98697,16160,28276,19934,61983,76462,28874,50273,35561,44833,72453,96068,48768,45294,51537,17226,98467,82860,80433,75120,72231,26752,89109,13871,25784,60016,77131,70765,28591,66001,45880,77062,85003,92744,30493,60787,92499,80026,68075,33986,93385,16629,42496,79565,17821,76988,96463,29878,12450,78390,12280,15205,98416,58353,20722,41076,12004,23888,95377,23245,70008,13081,60207,77534,88786,35397,98315,76201,71893,15172,82409,80961,44929,93742,98726,33422,34602,86310,80468,69602,76653,56466,44005,33080,78849,54872,51637,72576,94603,29030,69296,27600,98432,77546,46250,63401,78553,30646,91729,37325,15839,26649,34062,32542,20715,19745,85187,71123,84687,20210,46053,63917,25804,26003,29062,65141,15763,65387,70446,92724,24032,56326,68539,51915,77214,74450,61345,98632,27666,51842,20985,59066,75452,94877,80707,70886,90066,35369,23416,27069,27201,95685,91848,11572,79971,40885,40241,71776,62887,75080,11574,81104,57752,84106,31407,29964,20843,97879,39176,77416,26706,23018,36648,55436,28828,61586,15223,72499,49991,35978,47265,75626,76299,81712,68745,69012,78986,94880,49599,52576,77877,92691,61147,47644,38841,14347,69111,26832,91013,82796,54290,67091,38676,63776,59295,68829,22515,79735,21389,16165,75082,59438,49737,18928,47599,93456,51002,10862,15809,62767,59012,29019,83883,16893,45658,51250,64621,30886,94347,88055,34153,38643,31055,95706,77689,66399,11915,94951,27991,38251,83944,69860,36732,20976,36175,47054,87742,15427,19767,64584,48822,42298,31976,51172,41582,29440,83698,29939,16899,18082,70037,61041,47512,29226,71856,34561,43889,52744,64889,68135,86701,25119,28095,55609,66514,35451,61870,50467,69670,69294,66801,40443,78180,34137,23912,97254,14353,20176,18606,94960,14226,56865,14428,42015,88999,64296,30634,86802,62526,54463,92178,20667,66247,75202,99638,48396,56648,45053,70049,62463,87900,55713,39887,65276,43387,84908,88559,57627,60768,27624,79787,20209,19625,51722,30541,11729,33419,43525,33967,25011,26196,69482,24393,82546,33821,79665,30374,13206,83032,27311,60052,66206,42165,84346,78218,81156,31378,60503,18275,57224,22097,78525,90257,38655,31531,70978,60638,39136,58058,99812,37719,70644,15642,34380,94932,88770,79494,57217,62374,20804,90936,54391,55670,66933,54741,86750,41212,16347,17516,15925,54337,89144,34440,54710,53948,46724,36807,33276,80176,74650,56086,93571,36086,31386,67047,86826,52749,92862,42983,64213,99351,88608,90432,31324,41517,82704,17224,31740,79792,63018,59261,37150,17649,54014,80343,54813,32321,69342,26114,40608,87362,82035,86920,37180,24965,90136,27185,16976,70420,15679,20747,83317,75982,73154,63168,90513,82942,20435,39244,61426,40308,75320,11582,31882,76526,60995,14455,80531,24477,96922,33707,38680,37320,27950,88760,54780,75824,97900,27540,20601,35835,73507,16018,98403,75807,23948,31066,30411,53158,52761,39105,24011,13982,13623,69908,95669,85193,23724,43875,81823,70893,66889,39065,50739,65690,26240,71084,96028,29315,18683,63339,87120,22261,70901,94102,81714,41728,54148,79420,80786,51646,19340,93773,60679,96187,12664,85371,18163,39110,26536,33920,72056,53860,94275,42540,36830,93419,39068,61673,21938,30919,12280,47627,27582,49007,69411,79653,76273,96833,38634,32473,42325,72314,27106,37351,44109,86955,31796,31224,56540,73486,96064,36880,45636,76507,87956,23183,61349,22140,33838,13267,11714,51711,75112,41405,29977,90744,19663,30630,43742,23299,37658,23449,28363,59620,24897,34601,56528,18782,93485,55910,19169,52619,74824,37872,84931,15551,12115,54689,74300,51254,71199,68076,25546,93756,49739,51417,58587,92615,25577,72689,98279,25146,13960,21102,10806,14049,56815,94592,52986,56623,31902,43147,29122,86170,11171,70414,17727,30593,84141,38406,95942,67568,92364,40442,36427,46164,59054,90391,40244,37896,93798,10969,46421,19691,68999,59578,40167,41434,16945,16745,55284,37356,85755,89774,54048,38934,88853,91280,65163,29009,89022,69998,55436,43651,52944,28416,10660,27568,15940,62387,84632,21869,21633,26934,35897,93231,98334,87943,40678,32192,66312,87941,16097,95653,56201,36236,19882,80082,64282,66481,48279,48220,84935,27758,67693,49085,56682,27271,91580,25084,51145,90362,70543,86210,26624,51074,61918,17037,26715,81335,70415,62205,91485,78849,53552,76853,95856,80265,89878,47744,87647,76910,74429,81270,45337,57552,97853,48375,34455,34757,72871,51699,87376,73761,17532,89339,72658,55636,27787,46235,96386,99097,82505,48105,50755,19611,27628,72861,58393,82827,48472,75573,30826,61246,74567,29109,36350,51045,54349,37310,65065,94913,45206,33598,51369,50782,54907,44168,75349,71038,58735,54085,15054,45064,51400,17480,53664,56663,19884,30131,32652,27219,58227,84371,82649,38505,29511,27516,56615,99121,62663,40616,40893,55764,85927,30646,68428,48167,58235,46556,50350,96787,89058,88291,28039,34046,69893,13188,29172,70191,17633,90815,13328,34085,74396,29126,21603,41143,17356,15775,76785,59917,15384,32928,41827,82055,54939,94619,75090,40932,45268,40056,12071,47020,21741,57513,96251,64959,31681,47351,77253,90126,60524,99176,95014,43405,63837,28696,30246,50447,79666,48116,98960,74278,40957,66052,28702,56283,70838,76448,88672,99444,89566,56281,49701,39229,84205,26229,89077,38433,33945,89792,23826,38182,66704,64060,31183,16135,79978,46216,84172,29547,46733,53826,91960,27577,49529,31940,52336,71907,92474,49458,20292,75686,48139,90063,15713,16151,19312,31528,81966,94709,12278,64028,20566,88060,16832,19268,59942,28639,56688,58794,29374,69913,62093,81678,80538,93672,40457,80982,30172,23276,77957,58899,63268,61928,36841,82344,12284,30515,51483,69034,31632,97072,59915,89531,62799,77133,41638,99901,62325,55227,74859,28666,76198,20401,11569,85842,68731,75055,64234,88885,43853,23649,63032,78348,73650,25571,92404,25413,32075,24010,26502,54754,75655,75642,68594,58300,42480,30720,83599,58800,98957,29504,36781,56576,77800,53518,99016,98143,92523,63426,38502,86094,59742,94038,35677,97380,38550,66191,66698,70938,76854,85073,49383,71483,30236,92379,59366,77152,77285,41822,62299,68400,69872,25510,89285,21582,74553,94501,62781,33975,86145,61198,62501,60035,89424,98979,53302,79049,70021,65903,57619,90482,62383,39655,19429,18196,86912,42729,78833,86322,83313,92496,44078,48281,84557,65160,73887,38777,94221,12737,34201,19005,14097,19948,22061,16303,21708,53477,45945,95470,35242,47875,23520,84188,28630,67009,95096,38806,16199,67791,21400,79956,22755,90145,99741,50477,19284,37855,95524,47461,92616,96556,78228,53068,43396,88448,44054,77669,86078,66728,75166,96398,77169,10839,50801,54918,73144,83372,43010,49492,41325,46517,31055,80081,82917,82234,73900,99147,40539,11247,35589,87813,79822,97130,53203,36214,47347,49944,24526,80746,46618,76875,85039,93680,74904,55158,48204,24481,39337,33479,82676,57867,14710,83596,57744,49944,47921,87154,99628,42048,19632,73019,37424,86808,19373,43350,83771,84584,19236,50878,15579,38081,84988,91343,23509,95644,37409,89554,75773,79031,46885,99092,75345,71828,70715,22651,70884,33799,83919,12278,68147,70402,48158,42873,19108,79040,80785,70163,43751,67302,22690,11701,95034,54483,50192,96543,67183,12811,13461,41168,46194,76109,22996,64269,65372,32522,91720,97068,57652,61057,42592,11540,17434,84151,80689,41795,27359,70515,24353,63622,28284,69731,64577,83423,61301,46020,18244,48776,17226,84207,81335,24050,37324,93523,23233,10016,28075,19989,89045,74451,38717,78822,58447,14033,57936,62168,78566,25054,88659,66528,28411,59062,60483,95899,61542,80057,84654,10308,98261,45395,58029,44008,83103,96534,26867,35279,97401,88456,34461,34010,18930,30013,11638,26640,51671,57927,87571,61911,61917,96139,76802,49135,55043,71512,25313,15363,93568,40083,53012,60328,18677,15577,78647,47342,97621,47482,59760,37818,85303,80035,63210,52016,10120,40815,33684,78797,36650,13466,47651,58321,65255,84441,13476,45613,25177,96887,67612,87165,29094,24722,99118,17289,30664,71089,52842,62011,25390,92647,91820,86799,76578,77456,31472,64230,52709,47221,24273,11293,65402,57738,65009,96626,64381,25257,10973,25409,86464,21640,47433,53896,16883,89954,47434,87609,36192,10822,40756,90645,61129,27974,82019,38447,96008,39929,37855,57784,17621,61942,71921,94307,45189,42314,50218,14077,55461,30148,20534,81190,99946,48040,10864,46230,44965,66584,56840,51670,70237,50452,40545,37663,20494,12150,37281,16966,18770,74058,65361,82124,72324,63837,82329,38139,79349,66829,22952,68425,17743,26492,69119,71241,69135,23865,55829,52493,27371,38731,24116,67441,61628,26740,90832,59623,12313,99414,24690,35643,40355,68947,20309,28628,27829,85132,97641,50300,42383,19447,60943,71219,14591,27714,45680,26017,75013,77235,26055,62193,14092,67168,60010,65371,98102,19561,66100,26441,42144,96298,36486,30909,29454,31963,46533,16148,35048,44366,92749,44872,93731,88354,15502,83173,82053,48863,84902,48563,53651,55684,12481,11013,75756,98641,13422,38398,35592,17287,19231,17735,39051,60560,30114,11605,21687,67977,94129,64623,62210,16621,87025,73163,48381,53027,27123,11946,27386,52912,57426,91321,50562,69058,35222,61386,54320,85667,75650,58076,76278,27305,73631,99538,97755,24925,32341,46262,29583,55896,54240,27497,38224,92732,93107,66964,62803,34528,91946,85888,87783,78009,28581,12867,36238,26266,28712,57134,45013,26424,19344,74154,89519,74135,72160,84045,60005,12508,75842,34835,61590,97312,11806,82738,21956,90482,26497,29630,42609,50180,85779,63948,45133,12602,20487,92317,48703,79210,40171,27759,38302,65140,79896,28530,35811,60350,41267,42125,73536,45474,67955,85056,40073,23862,67708,26039,10952,36663,21094,14527,20235,79180,54914,51756,81445,14842,43355,64428,60097,38419,86071,73232,58088,10929,11628,38370,50184,81080,62445,97511,41182,98616,83389,50009,37804,79159,38525,21633,49704,44502,25530,48785,80777,25719,74053,46908,53458,68019,83364,52909,13656,22310,87085,17015,59385,95113,18113,44490,63804,24897,83542,28507,78272,53570,66108,35654,10993,77077,52343,95898,61744,94186,75402,68100,29987,16086,28771,73440,49006,81477,78971,19328,96283,93468,93372,41657,88632,52802,37167,72961,55398,97976,29223,15677,87409,60755,72225,18473,89798,82361,76616,28577,11558,46457,45315,59795,98031,21839,22877,92763,75870,12116,56415,97006,71071,18300,93528,94029,22700,66172,21237,87956,65759,84907,32786,87666,95373,38968,56580,69901,83456,49773,61863,31095,45658,29773,67722,46007,12727,42715,24552,62621,35806,19394,76225,66264,27775,39854,59958,29934,64118,43395,29400,21264,19323,12954,72326,39701,94535,78497,92603,85203,46929,26170,47515,24237,42441,51199,51100,62546,32242,62940,83550,97149,60487,82774,29049,37687,93554,71348,50233,68337,92799,73975,76305,71520,70026,49667,90268,50156,67784,94983,18712,28066,94901,16628,53623,44229,37911,91687,97990,72940,24200,21299,37449,15508,39172,89320,67141,80580,72706,30523,65055,90971,85197,98281,72890,18130,37800,59382,75024,14347,72850,54732,44651,69855,79634,17383,55141,19860,12938,88906,82059,95256,54317,14472,26713,96661,46399,61683,16623,32118,85880,27166,55705,76123,28606,92754,68745,71952,52875,10053,18486,75025,11578,78312,89549,29744,42983,47372,19995,95793,51128,14648,75852,84041,72309,20392,37760,64748,75969,59459,64951,14659,58426,47491,99883,89587,18631,37791,71394,12475,95115,69994,20294,25312,89955,19324,88542,59612,93164,66304,99655,57232,49454,40469,41434,65610,70074,58095,32742,59290,88991,84728,75133,59306,98186,21528,22384,69483,59789,46408,85552,42104,55597,88863,22814,87118,13098,40797,38289,28070,49066,84971,60221,47962,25194,55740,32833,67544,85389,27605,21840,65001,99429,42987,23126,87025,39902,73161,67483,73869,20126,67142,74159,16569,81551,34693,93799,55231,37745,16630,62703,52305,25665,38145,34298,27237,84130,90231,45663,60646,85744,31306,71871,31319,92522,44416,15725,17218,71016,95713,24228,26763,62724,39349,31475,84012,52571,42763,49305,62981,81976,63227,54500,21904,20404,81690,96737,16221,95057,75098,70147,18079,57226,70097,83226,82378,22624,59834,83145,89571,54617,92024,54127,73447,41303,92333,23272,39585,12407,34960,68596,70775,44768,99932,41561,42284,28372,47372,45228,76545,75868,75776,89859,24359,51995,89049,27729,66552,40547,43901,98735,49449,57518,56904,43531,80351,56443,17915,18572,18768,82433,51772,20829,25413,72749,74008,87006,67426,54876,63928,41231,39672,53720,36898,75557,82062,43801,22645,31433,35128,38826,30067,85299,14467,42842,48598,48831,30639,54141,28745,75279,66351,35770,75175,11815,82409,33980,41798,11002,35702,66735,28806,97817,21481,85781,37254,61161,67524,72682,23939,52303,22725,74350,66647,40582,66073,19393,64653,12964,75243,76211,89416,23698,64311,90064,50734,49733,77334,70231,92925,14817,97992,17689,30489,26862,37798,26523,30314,42257,34281,96539,15185,38762,92403,54661,81347,62300,66930,32948,53618,37699,61425,60169,11354,91827,57720,43117,96514,95799,25323,29717,69113,72962,45910,27667,34296,65752,79559,18553,63538,51975,57659,63724,87778,44566,87291,27402,45813,74464,80605,56194,50432,61893,78927,80842,27954,86615,21987,88208,42385,56807,82780,38385,73441,94106,77114,93263,96699,92828,88042,65031,94980,65032,11584,35529,74772,80073,41377,68071,34898,36108,81230,54302,61945,21743,96240,61977,47842,59567,18982,18174,40603,83019,95416,25931,16502,85160,15930,61683,41400,94393,70555,82473,69907,54423,30716,26956,12732,60470,98888,91072,92540,16755,51096,80276,84836,58508,23180,82811,85695,14101,23431,49689,86701,51921,24989,32412,70773,80741,15673,19594,96171,93287,84763,90936,62334,56784,29289,86891,65848,15240,39788,82195,48958,44106,27021,66486,29020,87863,99141,38679,14690,29026,63887,70795,42947,71183,46315,18568,61414,72702,70168,49434,42618,25573,86567,25061,83258,19978,16827,14514,76441,75833,47905,72331,95836,64053,91977,77299,11928,98737,32194,67972,49168,25130,89023,35796,11637,31014,51944,46977,93737,79180,40773,50495,39149,79534,45907,47821,70531,62111,57261,42805,69375,70195,24085,65043,19850,34548,13442,97783,16156,46063,40294,23481,92434,24100,95512,41254,49142,98419,60316,78545,35563,70861,73184,90499,16237,71884,41858,36508,88770,28734,82512,37875,17012,32194,70573,70224,66767,27973,36865,42304,47334,87747,38341,66275,82842,29958,38836,94791,86354,83284,23756,36862,87214,88057,54749,79767,68002,80312,59916,78532,58871,13327,17307,19945,62059,41781,70338,20174,17261,75236,74598,70936,51146,10117,69180,35771,37992,29166,63414,42359,53422,63174,39764,59026,29705,73054,35381,87458,93297,83583,82606,29177,41652,30362,25150,92556,30289,44702,32121,70611,57100,84726,69695,17057,31653,54880,24942,58492,57504,40891,28370,56992,71599,73307,55282,67118,97850,42435,50890,10443,56954,67315,85058,33938,59885,56773,75922,21123,19097,28744,45785,81298,22481,41617,79240,92015,54138,38753,48092,32216,56024,65192,57187,25919,45779,38169,53255,96782,22206,34927,65063,43781,15771,70962,85117,52605,97789,15506,13992,84441,26665,90910,18104,55175,48917,63504,47643,59134,78570,98654,21637,35623,21727,41906,97652,63898,95231,89651,80735,46226,39339,22009,14918,57880,91184,62206,51679,12484,49051,69161,57658,44584,93419,47806,66712,95351,48541,36435,45228,29828,63410,10906,56678,67813,68925,93196,86081,96570,71100,90876,60037,20319,87334,83760,34965,76934,70081,13405,20082,18341,28681,87818,65667,46009,15044,12883,47381,95372,47130,37525,31898,19819,38854,63002,50543,81888,89355,62857,20548,65286,69766,52176,91719,38877,66430,97569,20466,90538,43578,15257,26789,49825,76721,73608,56492,91358,45368,64942,12863,32080,60782,52657,90778,29834,95215,78778,57913,92891,97299,45946,36284,75137,37315,87783,82105,38151,70971,49874,14296,39494,10007,17841,41922,97861,45467,63398,46390,49802,85181,94266,32374,53864,77395,93341,78783,17125,35164,55869,97673,45637,97305,78612,27294,37467,98940,22223,96978,17199,90602,92638,43575,97398,57070,38908,29222,26252,92980,96519,41976,14975,54983,98866,39134,10300,36594,29689,78733,73544,32164,35951,68511,80368,60049,41010,10853,56950,12023,66668,34347,34507,64094,30010,98202,40707,53951,27300,46642,51004,54636,19778,64200,70850,30163,82768,89109,58550,48760,30434,64075,92744,48685,92850,21065,25338,62945,68901,12194,33372,10728,49546,43873,92090,43350,65854,23739,47648,32384,84632,36481,34300,64489,78139,30984,58272,55420,41143,73137,26914,88084,26247,60160,57450,68513,57238,66583,45914,92192,59856,81260,91996,14119,91794,24040,35661,65119,40248,55280,82617,77404,37116,70748,69642,44314,11014,72502,86644,78179,29161,40295,52016,55083,32307,83232,38668,37999,29589,21735,54918,21941,87723,65708,14189,97463,30370,66742,81894,85157,83903,63131,99750,21394,61919,74638,73010,51014,79513,22990,86872,39163,13608,75935,92633,67337,51073,33173,24407,76451,53473,95952,25436,77934,53745,32096,30759,27596,74024,79490,99294,65092,92684,35139,28749,41532,34865,39115,24716,11988,68466,72104,64375,57377,92094,57657,56763,76258,62259,43655,28912,97514,58195,22076,38516,23200,58579,23075,98644,95290,98814,88804,73998,42978,39355,19303,65950,33415,54972,71376,83040,55800,16492,27532,12846,64578,61940,41232,53077,72189,46654,60201,68185,88409,62366,74209,88254,98718,64578,25588,61478,81450,34962,91728,52459,75020,82864,45198,90952,49925,17883,90731,58942,40476,10738,58396,27083,85519,38507,70797,71988,85929,98079,68130,19257,69307,80277,68609,24686,15212,22729,38200,45998,84374,50887,57550,12014,58993,60887,23493,57415,54828,51679,66599,37476,79407,17215,22469,10409,92497,36847,25635,83017,59706,52136,43951,69557,51534,87761,80896,23828,70880,40681,90536,91528,79683,54505,44385,30959,93501,52577,26925,33176,48002,78662,71015,63060,84563,31367,92090,88646,86370,77281,96185,60715,21659,26404,33833,43472,43175,48270,13810,75424,39876,39249,41985,89251,71911,82564,18994,48438,97992,48335,47454,30927,60366,24141,73290,17320,19839,60765,24416,95008,88828,11846,34292,92506,82572,88153,54697,63168,22730,21871,60262,60482,58494,96587,97411,11218,85093,55946,13497,55045,21635,17525,71998,77342,38200,95836,18552,27227,29291,28543,57510,51365,70207,41068,96639,35033,24874,83672,40049,83220,40056,47345,78345,38203,35846,28894,10481,56227,82476,22564,68341,45734,59783,73535,45882,39160,14909,53039,67255,12700,29616,61266,87897,28885,69408,63053,72427,57354,89248,63190,67017,75216,83961,17924,83055,56033,76755,32939,64394,54885,86273,69358,22626,44801,12182,56651,75817,93085,93813,17287,56384,23295,16275,38294,59531,77035,31923,79236,87131,50189,47813,27261,55298,36222,28033,54478,83129,53734,83559,85271,55623,71431,56474,24339,39183,23872,29521,65137,23186,44743,25174,23633,61980,50866,37796,35335,78411,43435,26352,57119,16380,76628,58342,15813,50187,31066,47508,96733,83100,11961,48616,41785,48774,33494,44425,73046,96458,11882,70765,60500,22608,31224,98976,38813,24471,44498,20586,52099,47096,97240,91669,62641,11037,84790,61177,69588,79232,82763,35162,85895,14270,85746,54574,79194,71729,67410,94801,95141,33319,22716,38306,95590,67210,64242,90509,78999,39736,58927,43444,63436,69553,14901,29560,62760,57686,57880,59148,21927,55155,15960,72777,21257,51802,91103,29763,90026,53082,73841,66682,62457,40305,25986,43283,99172,29730,36896,77204,70142,28798,33133,98846,68686,18255,42963,64723,95165,96186,62873,41865,99299,15239,91376,76509,49815,34131,25946,55476,17123,42404,78986,76785,92361,63480,76988,98851,41994,41483,46946,36922,47681,41620,85102,31936,62922,63024,47063,99921,25332,73514,78399,40990,68438,82606,68433,56631,77966,63110,58286,94002,28098,56817,56005,28729,30199,60566,70858,83485,70120,54295,40645,96953,52153,33828,52543,17625,35650,88423,34678,42330,96474,84604,12827,91920,90274,31781,17573,59858,10035,41587,28937,63392,34943,37998,65456,22948,34267,24696,91094,90284,54674,84409,20719,25337,50057,85235,35985,52729,47280,82641,33593,95256,48671,56569,39357,82589,67135,25166,53764,13464,46053,14765,34419,49715,34056,63519,14857,20815,60583,92331,28546,78837,61828,74979,91341,57996,63733,99231,87005,21082,40086,57195,47873,47401,26162,39914,26705,58417,65258,93624,26870,41241,90334,85051,59686,58753,15985,88906,15685,53215,41400,70153,47428,77312,46684,85995,97177,17888,11279,55428,22738,47812,90618,96285,17428,92635,53408,12400,21374,86262,26407,72777,82490,48784,55203,87522,54498,95402,51452,59177,52504,98705,49192,67339,82117,68656,37486,65626,22361,12121,68631,80654,99930,75024,30625,55212,21837,26338,82583,90605,86889,65726,13815,52455,64039,65809,69355,41100,92915,90510,24331,40310,75061,94650,32779,28079,77782,10663,67821,84119,42208,40454,35297,36144,81639,94449,59196,22503,18666,99797,71985,17754,61931,60317,35018,81815,60370,43368,26093,88482,97980,94165,29490,32260,54522,47277,61494,27210,45317,72867,46276,73256,35206,22509,57257,54206,30482,74821,78054,59764,58537,42036,20746,37808,93296,97310,70334,77908,64503,86975,82842,80042,98365,48998,72899,54818,77783,86351,76653,83742,20609,75006,83659,56090,34875,23705,36687,59258,70142,82137,54168,96034,69904,42641,55258,74089,35928,55387,33351,26299,33785,25046,90403,49910,38526,35936,64871,36702,71007,28060,56498,65420,47153,21132,70774,70239,71606,96488,53790,30434,91783,29895,81708,61159,21718,34927,45972,86423,23641,15162,51939,82457,28187,69549,77213,43386,26168,55196,93122,96902,94475,66562,17153,86974,24374,10325,50688,66453,87699,37375,79278,87980,74440,97485,33585,82456,86392,24037,23989,25927,12967,93502,63962,96198,97131,30047,90629,78043,28863,38734,79799,57779,26445,22875,43034,56599,51021,82307,63315,71193,29340,60843,54833,52442,62063,84622,72837,58583,70407,89314,31280,47705,41154,17410,71828,77364,17149,12329,82814,70973,75517,92857,33029,58398,42320,99028,24049,21342,70232,35694,34311,58750,89765,79565,63263,69495,47126,92617,40009,87873,51318,60790,30441,81612,77575,62650,69126,52178,20466,54034,82999,85983,83148,73438,23156,97555,77528,59762,49512,26298,19626,64255,28064,27116,23904,93272,95499,93174,19182,30679,71973,99346,63216,64591,45088,49688,80356,66690,85084,23298,20112,96922,33476,14317,27423,24257,17536,31620,10012,32525,15509,77205,19697,45450,52111,58018,22986,78568,84270,47547,32739,64358,88129,38171,92182,53403,70240,72826,52730,93269,40487,78030,15199,47862,27629,54426,69097,75207,80538,20475,73735,24631,36703,46559,12205,60020,51310,96730,46693,57402,93155,76020,27119,58047,69758,66552,48173,86990,93936,36271,81068,53912,84128,15046,27327,33758,10986,40871,54922,14807,48533,26507,55416,83936,31033,87287,18158,55749,92639,14431,43202,49247,94390,77812,81604,58492,94145,40479,30089,67338,75219,17147,23525,13528,65047,66931,43687,97358,58788,41635,22948,56314,94893,81858,31418,63951,88371,11426,32394,34492,80280,93278,68010,31806,38052,44650,58650,97658,47198,33902,17098,50274,20544,68285,89941,37380,40075,59955,13772,61346,87144,90590,77470,47272,28616,53979,26284,17353,27685,28060,64053,22283,75082,72895,54689,48546,42752,68217,83494,28463,18676,77909,71627,54493,36301,47935,37650,92463,99758,15765,51411,56780,35709,33406,93894,35167,62709,77996,17228,61502,43383,25839,76691,42367,66307,80121,47548,72049,16755,10032,56588,36303,61902,71737,20438,47683,66219,87530,59604,77926,32130,42631,82850,82624,49760,73966,99891,95896,81015,63219,43555,45758,43082,52333,15023,91286,79568,74989,51719,46603,25906,58861,51610,10985,23855,95959,82656,73622,26051,65535,12056,74138,51347,41291,86781,14688,98243,85857,14494,19873,53914,83886,82732,79256,88167,61741,92155,33867,90429,93802,66508,17226,88610,39933,63776,50045,50115,85282,56223,33482,73099,27106,80507,69739,25560,88708,24736,27410,64792,93066,41028,34546,70375,81884,63067,43644,48205,23104,22398,55338,17225,69015,76987,38772,38893,72152,15388,63075,40144,53779,65247,23099,89592,86123,96977,49678,41260,62350,23253,94341,58965,39667,96648,93833,18924,16594,21660,29868,11250,55512,53587,61480,31984,38355,89426,12574,51052,77233,66089,44895,41865,64282,20500,16429,83804,25510,15215,46673,37115,99594,71440,55895,35168,14585,78982,31035,68211,15495,54896,75257,50909,78513,59168,36440,54651,38933,41206,42210,60918,37308,87195,31005,18336,45030,48640,53845,53545,64287,61942,49962,47305,93811,52775,40885,62733,27664,73615,35993,77749,46098,48964,76933,17675,12684,69219,70323,15987,97190,89347,66218,96009,42710,27025,90298,38991,79872,21167,20333,36550,53199,91326,87622,79602,23524,21743,82185,54018,52782,65802,70701,54465,14184,43130,96694,79366,31466,52806,73206,53909,87384,94600,53817,32019,47907,55489,85387,53396,74314,18197,94062,21806,69111,16135,84887,71928,13601,18137,85897,23031,59100,59271,51508,42259,49153,41432,80722,43850,44790,88508,34421,62365,85080,99222,47921,96278,10648,35896,75410,38866,65517,20589,78330,53365,70962,19577,28412,80184,59317,95303,86873,25533,94015,89824,25243,68345,82230,87289,72208,60025,71349,71132,53503,43835,75078,50735,16668,15318,50850,53105,33079,68683,44883,40388,14801,81745,45033,32140,20055,54008,31906,40243,60984,99242,44604,66672,45683,29012,14955,66076,56660,39152,90824,72814,49318,37271,61452,57842,77255,85887,75509,70301,22452,65431,56217,54162,25091,36516,36356,40561,20303,89337,50963,40214,83235,13450,34586,10892,32543,39108,68131,34281,34220,29020,82972,60007,50306,88251,46284,17324,68495,56689,83472,10902,31840,83314,46633,83385,57104,23306,89530,61875,99251,60593,22336,31829,86007,38543,52122,68551,82719,18028,53674,26996,31733,60523,44365,13245,78204,75883,17526,70462,10868,35309,74300,30181,27357,89915,76821,70357,46599,63964,15607,81665,54470,34898,13638,80141,31520,99765,12852,90866,81131,71942,99056,58238,98718,75590,39810,86661,43730,59055,98768,41610,61041,91967,82742,82806,83904,26168,58816,48272,67884,35055,35891,85314,35644,43473,15526,38125,70844,13378,45732,41647,98252,24688,70987,81945,46429,43554,90159,44982,24174,85157,91503,59613,32066,51900,96651,32181,41911,29829,78915,54074,66968,70064,10117,78984,86364,14853,54734,46495,99554,19241,34353,91591,54310,97591,36795,82625,20842,83554,93619,28605,83275,31142,82228,25842,41321,91343,32143,81198,96241,74626,30020,93883,39160,53572,80468,70219,20387,68581,58448,41904,71797,21928,75480,96130,35025,77979,49544,54593,25534,85504,43764,88265,44362,67743,43394,84575,79988,89470,22185,30718,31693,12170,15266,30158,57614,14547,56340,90626,50251,21784,53983,32281,34320,94278,12209,38840,57822,17132,59949,73227,93044,76090,74483,61005,71024,26956,96545,92624,86147,48908,50030,87888,36524,29566,65237,37851,32328,92314,97549,11220,82958,28835,35316,53405,60352,13165,64584,96973,21225,24980,24235,96493,81361,45921,34007,55015,83544,21016,45000,92862,78646,58323,39459,42488,23307,64529,18773,97560,24821,69374,38736,85686,16862,52021,94679,95552,36337,58643,59157,67994,45857,20697,91557,12768,33109,31584,56087,49081,48417,85208,44012,59340,45225,18998,46666,41166,75011,41844,17320,18934,66271,81036,53855,51324,66266,56418,46924,53286,76771,51943,97227,80874,88797,24732,90964,27956,78283,45475,25187,90569,13447,83405,79693,52431,99893,69522,70367,75802,39695,62733,15268,84050,72377,15325,56290,98129,33692,82415,70673,72175,77541,61604,59572,20492,42178,24943,66164,11777,78655,65800,89224,57294,78714,22237,93737,15484,42796,45190,91960,95057,45400,40397,52447,62499,38013,88754,17029,17182,45804,43558,96934,49909,53513,38698,27905,12237,20360,96578,15218,91837,87061,11488,30024,44047,73862,44810,78200,16327,71705,29329,24280,58010,64287,61081,72657,35863,75851,76889,85928,11524,53943,32885,88744,48985,21957,29759,94938,22994,36228,11027,54005,62777,93054,17774,88011,35982,74517,30078,61935,67173,97285,89691,58432,25142,22439,30247,45954,64643,45607,52649,85915,37043,83916,88020,39185,96346,56343,51864,85100,56972,20177,46685,91897,81855,10975,87847,90454,11795,70021,52765,31303,85237,57138,27728,89655,43284,93043,18124,78598,36292,88020,70643,57082,37867,17041,29911,84208,68218,99959,40215,31440,61663,84729,90084,77378,23057,53599,25104,44512,22034,88950,13516,38464,39911,70816,61236,63614,36229,26156,93118,28723,82937,20762,81275,62888,36485,16942,26038,91469,63787,53702,79897,98175,91167,89111,56559,80046,19513,52175,30213,25853,14842,46753,52918,35199,95767,67502,91039,42727,96001,93061,46751,54400,43899,95824,19444,86050,78080,22579,28817,80045,68124,58395,86271,71763,62285,75407,40656,70534,11089,70196,30839,23924,97732,78757,78207,14740,96117,60279,27181,55848,55682,50378,85039,35457,57831,53926,45715,93040,34542,44669,67882,71936,59854,12806,44498,49930,57072,68845,93766,39799,55341,44239,21657,34797,72209,76468,55474,91870,17291,94040,45331,59591,76475,92163,69502,18212,28377,31052,37041,43572,13249,12238,74888,58348,40528,53543,61176,73317,35041,24242,17688,62803,21788,31252,20565,95304,25773,13058,12088,38682,16391,38327,89190,94182,45746,35999,99943,79171,79246,85899,24268,87479,91711,12235,90892,18493,78246,99136,92231,37982,71952,36700,23953,61387,75668,78081,20768,22472,97474,27636,24878,90006,88350,76649,33451,63140,51035,49833,36225,40110,46401,39561,60629,41211,57997,73063,73330,79906,83335,56969,50843,27958,49016,86250,84446,75303,82799,83468,18581,71353,53260,50144,68362,94276,65754,18491,88181,66849,59883,83749,64439,87340,44187,73656,26053,47723,38246,66636,37948,98892,75386,62029,88300,50920,55587,28238,32887,55617,71522,63042,30478,37708,78347,57609,44380,48502,98528,15633,27122,28248,77514,20100,26107,77506,72521,50492,69098,59479,64087,80442,23020,11805,70922,27222,43016,66734,21897,90304,10372,72999,67164,42997,77714,15543,23032,93081,51309,68488,13074,64886,52584,82743,62739,36991,88419,66613,68774,34297,72547,78548,33542,89907,30528,74895,28703,13610,70322,53274,11577,55480,48208,47246,30160,98238,85101,74629,81574,98208,96589,62044,35738,90434,60573,73853,94019,17441,10453,67738,12270,75049,98630,44553,10230,13030,88257,22635,62817,77466,55739,87801,64785,99791,19575,63702,41548,62646,41103,98545,48970,11657,44690,45670,35979,84542,40376,42323,21216,66510,71476,91024,67635,68604,57569,56821,24146,69930,59218,68292,12096,34198,66957,89764,81591,88059,44217,41231,77839,25432,39833,51262,97768,95521,48726,17983,11319,92911,28315,65088,14753,54850,66343,50102,15070,90499,54079,59455,74866,11575,10546,17744,22026,15221,15573,49505,88398,80783,74642,43537,36679,17623,34589,68004,41375,38026,84000,42609,38978,23373,63721,24778,67524,68415,91101,65761,18219,72695,29663,15520,55304,77097,98798,78658,32144,20704,13436,33062,11891,32104,63940,17366,99059,19676,54183,14995,25309,78263,49864,14607,83462,23024,57083,53127,77448,43779,85027,36427,32177,28621,72985,87106,58408,75057,41374,72998,71159,91590,29692,63217,39890,45998,44584,67836,41509,37561,22107,90317,35162,89970,43060,78150,75830,53825,38270,54108,88490,17620,29505,53689,32177,41643,68381,32147,70191,52883,22850,59486,20690,11525,33683,58100,28706,28664,42857,10746,57491,24361,44493,72501,11023,20515,30433,45203,68280,88754,52047,65934,81047,71880,11165,33879,57710,69786,25392,49959,99612,18126,10659,46575,79490,42026,13519,47908,89064,58763,29686,81518,37964,50480,18694,55141,20859,77491,43898,68346,95531,34567,22781,90905,66337,74188,60312,66581,13280,93049,45642,66734,82414,70483,22624,29426,71223,56619,27231,31014,99009,50414,73903,60480,90558,57175,28046,65895,17019,61072,64573,44219,56251,97943,49866,54107,36264,14739,25259,21502,20193,89370,64104,69646,81360,29495,98585,87359,17952,55526,69486,62307,64133,31984,31950,23837,29431,86102,35483,13967,54010,26759,91235,64620,19693,74723,14883,77942,54363,91049,17114,29447,11630,11114,38704,14146,54159,15091,37507,20477,32744,41526,83806,50371,36412,44648,58297,43669,35561,68832,14626,29828,17265,24764,33231,88002,38955,75890,76964,52220,18096,41185,50928,15320,15880,78615,47233,95596,99383,88841,55925,17892,87533,83537,30156,95009,48636,71150,31350,77818,85034,14527,65381,73373,96653,51009,18582,95806,63165,71517,89442,77677,70174,43850,84307,95958,90468,17763,36874,80436,15757,48894,30080,36507,29977,86131,28699,55248,79783,18900,20385,52205,93028,73988,50977,55216,54540,73905,75536,96937,44400,56037,24305,51728,83700,47614,70225,98298,68485,20487,74648,67547,24736,31108,90120,14350,94869,84130,44394,24286,32484,11867,90615,70840,48785,33905,21874,63797,46846,52832,39081,77451,53297,28921,59758,40468,55774,26164,23229,57928,54654,66879,90741,36171,36404,77797,18198,14358,18177,26052,77580,39158,73392,29307,83058,82468,31375,13403,98863,42306,56466,85528,77322,94165,12153,42202,95918,27630,71275,39687,50433,74867,32135,44511,30343,88661,15296,12153,30292,70409,14616,24514,19807,36484,81152,58480,85037,87143,67198,84604,26468,11181,39478,39448,81004,10113,51376,65944,93321,19063,17232,58178,42947,76842,29217,73482,32392,75402,20867,57211,99861,26980,59603,10179,81546,44727,38893,94512,63174,70779,88185,75612,94981,79540,45500,68517,31009,92633,35901,25147,23706,89038,72583,63542,68963,95094,98357,92406,69576,99752,82696,47975,41362,78564,30688,63823,52971,27357,63924,30047,88636,73899,95110,94188,96756,19915,55709,29460,85724,32197,39418,22605,57288,59132,93043,65178,73948,92101,75723,79588,90330,77937,40601,11734,48796,10557,62708,38871,38439,38047,34086,82084,75075,70888,33636,95587,60980,37056,50847,59241,44204,71462,32920,43954,23941,11111,53247,88835,65339,97999,89778,26626,47736,99177,68510,16845,84689,41190,80626,60969,24431,39755,15705,69897,72900,46897,95624,11465,81509,85255,74067,34815,25900,77148,96941,25376,56798,83904,64017,62988,10935,24959,97464,58842,59731,27248,27519,39963,17910,25647,79266,86366,29619,37430,73663,14802,71560,92864,61954,42800,21866,76396,33065,66201,73869,61190,81503,42539,32045,94880,22086,98122,46820,65466,69969,54416,90234,84945,19400,27087,86069,75379,99390,30673,27520,93219,64734,90596,84095,72203,82290,69977,48946,66952,78209,73759,72276,72058,52678,21680,79790,13008,14961,42609,47560,15502,60341,97609,32869,76070,17335,13315,72819,13671,83596,20559,13075,60827,19269,95406,46158,98870,62836,14989,16220,27332,94291,40910,48324,24228,57429,20710,42558,85273,39178,99112,59667,19906,42395,31340,42820,92031,40652,77454,74819,19582,84389,31695,63501,24332,14765,45392,89155,59905,95687,53691,21544,59720,48167,45823,62608,41666,13797,50419,42747,95944,24375,38241,89143,40958,28481,38696,94049,16496,74320,29407,91429,28530,58950,11279,83241,84130,79062,32355,30969,86370,22440,97668,96940,34157,36858,39850,94255,76110,65754,72474,82439,81757,42157,85890,92205,49605,90734,69052,77810,38141,86010,99256,29910,91883,77760,66348,99469,85150,69873,86655,90689,56098,28611,98166,13475,77904,92952,78850,35272,20155,40855,13243,75203,15084,92776,98530,76487,55593,73457,13248,60118,73650,98907,71801,58894,33111,71201,94268,12685,43792,10049,36599,18946,93676,28986,89748,28266,62595,60890,46970,17920,75582,78597,22800,35399,95410,17090,55502,93633,73704,61767,49597,43669,88877,40246,44390,88042,14160,75884,13115,73942,39950,49505,68846,42508,32154,34889,60053,79166,79698,15724,86433,68876,91485,59022,68175,61243,41812,41195,89583,35319,61486,37249,86428,98725,12650,30900,29553,81466,89471,13420,72505,77462,83166,75609,66395,81383,29644,67023,13363,87304,52893,93292,53195,58555,57684,83042,20473,23725,76312,66257,93154,83308,27705,23086,33995,48541,64196,10698,61275,15506,50684,92819,93590,22748,40541,44198,93781,78116,68492,48260,76199,84158,69288,86321,89669,91255,97683,65176,14676,77925,15483,41687,92521,46425,96817,16194,13346,29565,48629,17330,59347,57741,47809,17624,85562,84356,82776,99145,98679,26232,39604,33921,88239,78506,70237,96147,70972,53166,91770,71205,93547,27786,26290,67807,18564,20160,12094,15188,96834,13514,69982,78726,86052,45470,71800,87238,76341,77210,20727,73887,44386,27021,30988,67544,34063,87236,39445,30893,54483,58613,20322,31033,60039,46782,92378,12232,60073,84159,56218,73606,10482,10982,75936,24849,47941,44406,40848,46978,23149,64211,96552,89875,19008,55435,74852,50994,38907,68240,50261,26546,16377,66557,96084,18926,98433,80519,59973,48622,78891,69464,19983,23327,93559,16438,88635,98781,67726,55695,96615,33913,16857,40698,96137,41423,32845,24856,69640,40235,85628,20732,12246,26710,85213,87794,49606,45783,74850,43866,95259,33763,34189,51769,59179,78339,70757,83679,93489,21971,10136,58732,77765,90891,31272,54125,36791,37800,98075,85511,84464,40267,34895,59665,45210,42186,32639,63301,46759,40163,69463,18776,54954,76458,58157,89720,82923,27973,52261,74836,85390,60022,42607,29346,20504,87051,54722,94697,29398,88245,63622,72448,40863,26088,25188,22651,43281,65050,86276,37327,87969,99469,29531,68347,47179,72983,93527,30502,54670,73022,58532,72477,45039,55959,51620,66250,76408,25550,99319,96881,71103,68488,27967,63387,61572,59839,43623,61008,66441,29482,69469,94720,50770,82385,59315,75561,38023,90429,72293,68483,42255,60378,23095,54520,35214,19432,93933,46770,81644,66905,23687,52507,16330,31658,11532,87113,10124,15813,92861,64329,28153,90365,28287,71781,73683,17718,45405,49091,12940,80591,85016,11210,35695,82837,35800,37381,69578,69693,84042,94306,76945,87747,88497,60599,66730,65239,46017,90869,63177,45745,76289,23441,60958,31236,79045,54541,76069,38004,45247,52568,83565,42833,80354,70646,35241,56138,86557,80843,77831,14019,15783,43032,56176,72157,83045,63979,90857,58897,31916,78644,98795,95814,21335,37134,23375,33408,63901,31157,56148,57336,18586,80723,70579,36854,67520,84714,89333,81423,70931,38655,88349,96302,76647,85345,39472,23166,80963,70648,70313,79868,61258,89464,64471,64928,38115,59440,82412,44982,26324,40357,63647,12117,94772,49297,68148,28014,81241,64241,91800,85848,11321,68155,16552,94402,69034,67649,25268,94204,54155,21383,74827,16132,30017,62708,29072,31915,16478,93731,52496,16891,19167,52406,59150,39020,99225,58805,83624,79089,12396,73614,27341,16609,99107,67357,54156,63699,72894,46009,76051,26137,15169,43791,54307,94125,18410,61601,60207,46270,10486,62858,26362,95422,68324,83252,29762,51385,83023,41009,19134,93367,11376,71839,96211,72049,95235,88510,78752,18568,78576,69032,15248,93188,81179,97391,49336,33223,54525,78464,91008,48066,27812,51813,31738,49600,35529,63079,34742,59833,51212,51263,35301,42949,80206,32915,88545,25631,92606,67925,56405,55005,17649,53483,71466,92665,14772,58442,27176,13546,47000,55816,49218,79005,88043,62057,84497,88022,47070,11621,80795,40434,37047,98224,13463,70002,22943,58775,75077,16315,15065,77354,43436,47106,77384,36137,36768,21330,29181,99185,98943,55411,53060,17468,97396,19468,49966,40231,75528,36229,85801,80851,99414,49762,88696,10103,96691,98181,92525,11085,20705,69150,59474,37894,85576,80224,59709,76828,16572,32990,78820,85819,27933,14705,39147,33378,76838,59923,29383,69823,45588,94694,14571,10666,50393,37144,24930,70980,57537,13509,49582,43453,74738,90107,43081,49747,12953,59026,47408,81943,24476,87664,18124,48721,82089,49131,97760,21209,89492,48492,38426,86459,40990,98289,80980,72137,74248,78204,46735,30164,32572,66374,58622,95411,15612,96693,81779,54866,91727,57540,16084,48964,84878,67889,98096,32394,60952,72028,80514,29251,99367,21565,18038,57302,72286,80148,86033,53896,77782,27959,53171,84740,99932,81529,92597,91382,87259,33648,13660,68987,28385,50541,27651,28320,87498,13194,31863,56488,72701,68695,62383,37461,75806,64791,43100,98080,81707,66865,96342,48657,67647,77765,18661,47471,55019,96638,94294,21112,79819,56585,46607,67488,24103,98848,51218,59636,21458,56098,76239,63554,62871,45260,67892,74146,47071,79454,59195,28762,76578,81259,33118,91913,98839,33771,50040,77636,60212,82400,73390,32303,37377,24418,32185,99781,63889,64899,31071,45232,17283,11237,33676,53830,66337,93398,51036,39117,39478,89189,43372,13866,33546,41597,45648,73115,95083,40533,90547,74929,75026,27690,99055,94679,50626,41616,16281,61239,74605,69995,21847,84519,21506,87113,71281,73437,13157,72111,80865,25932,74234,26911,68307,42368,13013,27568,67463,93444,69967,42441,59753,64380,65554,65400,30095,15623,79081,31532,49940,44068,92771,23907,84901,48099,49935,66299,98730,35157,30680,83300,75046,30857,18172,72398,86705,16107,73474,80995,43191,92768,28219,40298,86336,52830,74886,28709,35835,50335,78614,21775,76280,14556,24042,13983,70951,38481,59070,92210,33068,14559,93961,70094,52015,16801,72811,85762,34656,80074,75063,29141,51657,54005,42975,97155,68666,69589,87241,99420,99134,38733,34708,25504,24311,87597,66334,95514,61649,50699,40897,10567,21322,58074,37909,73095,81941,76802,98414,68193,64096,41125,24354,96092,38998,80248,80860,39972,63984,89840,58234,40381,62103,43276,29664,99279,72355,54983,84396,57170,65429,64062,50426,87220,99027,81220,12864,11783,29893,68912,86819,75968,35768,64425,58763,90871,95824,22146,57451,70933,33944,91744,44126,62712,14258,18177,89790,99907,40676,76732,41390,71203,92138,54130,20675,39902,62506,81290,16997,10477,60902,63237,47742,25054,79323,56575,29962,69519,80396,94000,33396,93002,46208,60963,50320,17508,26840,88513,51510,27877,89657,46339,36146,52110,53019,97736,52777,90799,41637,77711,72892,78622,94109,19160,32818,19554,11485,53116,59611,97459,24577,19846,55006,85808,61906,86261,53303,62568,88040,94718,68325,31377,39034,23742,82520,41263,61334,49830,27206,68305,88067,94550,92687,87966,43639,92310,10322,76270,22087,46569,71380,35735,26460,13370,15471,40270,63834,81034,30191,68302,38927,98387,71652,62066,76828,92993,38281,14515,80244,38760,67221,51073,96200,17134,35077,19683,82049,61322,20707,26574,25967,18287,56235,86527,68364,81693,99526,62843,10411,47077,84229,88463,86887,46065,83971,11906,54865,65328,39996,25777,46882,98216,58548,46660,69446,42244,94832,50026,88786,72313,74633,47232,22000,21681,92911,18809,32865,13701,66917,16845,67586,63221,51509,98493,72696,31162,87219,76594,30235,69912,91962,27119,91132,29761,95528,15820,10844,72282,47957,12720,24169,36395,90001,96102,10958,88813,54897,21335,63401,34533,43865,18160,12287,61828,23897,41454,68700,59307,72560,39716,37978,44358,10331,67339,31092,35027,19352,94912,76996,77628,64233,22310,76395,68917,16288,56044,17272,62675,92811,57570,68465,96300,27697,67322,50362,13672,37633,74991,94843,76043,55077,29517,57969,19810,43394,67471,58728,31412,34616,35317,86050,70333,76726,19793,51433,28490,68953,10274,17513,74337,54796,84505,70692,93100,35748,88443,76277,63425,58015,13892,91561,80526,43964,41761,11318,67983,39040,89357,38056,46835,92673,21195,12515,30738,80004,55476,25973,47996,57210,45396,45715,67712,31540,97935,84106,62397,75876,69879,71832,36818,28825,12172,10691,56102,56059,10644,19305,89826,34361,31621,56298,97532,62761,13931,81868,91027,86648,81045,71325,87043,82494,99964,37683,71126,21600,10997,50846,86440,48526,23494,95597,66105,21619,42817,48636,98617,52073,14109,19557,84139,94645,17931,90674,29652,10150,68091,86209,83665,89584,53113,41690,34463,28208,71559,90075,64861,29695,80251,82536,61071,43038,34694,16696,67867,47066,24835,85264,98126,49447,59949,17016,33896,49604,61299,22058,84431,93927,75727,20511,87214,96958,11346,54927,38843,52139,58533,33916,95000,61302,12355,74649,36144,14395,58833,41948,32415,58690,74606,75474,15620,33263,22163,60376,28585,72676,71031,57849,46816,49204,12742,43908,36490,96822,16590,14738,51898,42750,18352,69158,33241,13164,51855,22316,45280,34250,50598,30598,17466,14825,52180,42349,29621,21429,74870,21663,57083,68160,37197,56453,85151,39742,38039,64286,58555,48581,17907,44826,90575,58304,86221,37187,52571,46748,10119,71864,98505,49332,29261,11853,22147,56344,69336,44512,44469,20651,90489,38190,60023,36618,62674,94822,73449,57445,37648,47904,96877,25810,51478,99915,77783,21398,30441,19996,38220,16437,91094,91494,62306,39136,73384,13233,74519,13151,32081,76782,99137,30527,83932,24657,50204,28002,30894,60887,21865,47629,73306,24066,77757,82941,37168,16117,69407,13907,20188,20376,57411,93371,78454,14308,59604,57065,66944,48087,48398,54321,57525,69712,17351,11698,33719,32269,30843,31361,39889,70509,94970,57707,66321,29627,11100,30947,95031,98811,67562,90804,27786,67476,76577,19068,46234,72903,63284,49353,62538,35447,33534,90004,33340,24746,19845,49990,29288,45430,82339,76708,77434,68031,27991,17816,92787,32538,29760,76702,15809,37679,74484,80999,75642,64848,51527,93113,44954,36222,96514,40621,24775,10395,91991,82048,11802,64919,76561,54520,19097,98119,91684,41816,24780,80131,74513,59260,22138,31392,50490,76048,42392,13097,34041,12126,32771,87229,89622,44661,43798,50828,15791,34199,55121,84624,68871,15843,40850,97699,70949,99785,42904,95839,95974,84803,50354,82188,81916,86027,21825,33286,21786,39408,88863,20179,55491,10321,94653,11432,61489,40440,20393,26030,92011,65048,59426,47488,77796,15231,22133,51948,64843,87192,53956,50018,80490,12128,93086,78156,73914,45581,35371,46997,35919,45327,36219,83620,28574,22619,91654,29518,73962,94564,41739,61591,48606,49954,81622,63536,52344,15430,61012,24148,85526,54912,13381,61087,73658,40324,31057,73355,25409,43138,36397,74023,41976,86292,83659,12932,74627,98634,32466,98774,33177,76947,54928,11523,61120,44100,88162,17686,46787,91001,60096,40704,18988,33211,83559,48043,88743,53548,44217,46501,47493,70789,33408,29606,38442,95574,95632,90074,29014,66582,96159,64114,83831,81180,88663,22110,66521,19564,26860,41753,21741,18585,19127,34746,37984,37121,18391,43814,31766,32621,46370,21994,46479,46175,39809,38803,83782,36807,23702,20473,34527,57094,26912,67078,90715,58246,80147,67482,99525,28476,94662,29747,40170,45785,29949,56757,16524,27078,39970,37270,45017,42448,85147,11127,84271,73588,86357,99364,87859,28356,60349,93549,52876,40320,92812,91371,10436,28277,76073,12165,70447,18686,67311,92824,14611,16099,46290,52395,67770,42495,26875,25576,75509,95827,17413,74248,41011,41881,53866,72421,85218,29940,28308,93918,44394,56125,29582,63752,33088,75224,15764,65830,11047,62374,87088,35773,84561,78337,79959,28326,90633,44384,16857,90643,39312,40863,76495,17323,30232,79323,34242,24540,66037,65373,15933,97859,28502,27496,64781,72846,51318,40655,36064,69762,83632,45871,74980,55924,16839,44894,58192,37722,49177,42901,19858,78915,25561,93461,22537,34136,11759,88000,57084,13891,79246,16888,53335,74257,10398,99231,42502,93608,42685,42645,35271,53880,45136,99885,78759,23778,27496,28110,11949,43541,48438,45132,90710,31442,55582,26061,64020,75098,55350,48739,67356,10139,36833,26820,99168,16689,64197,91226,99278,81565,51412,24715,38951,47544,46803,99883,66464,95769,80329,39675,62917,52680,45554,75450,43368,91504,48507,69773,32882,43040,97471,47082,24544,51517,43084,80358,88951,61583,41304,80402,52224,28759,45956,61628,53616,24637,81919,85418,95509,58018,34471,72836,16379,38175,64384,87168,71660,84102,54055,58614,98850,94678,24435,84395,75051,73834,75047,67723,90781,17654,79317,70664,90574,54732,13950,70341,59470,89081,10474,11208,80923,75887,29360,71715,88849,39212,40346,69089,32231,54608,29675,52559,41438,40229,32836,74893,47138,73672,65663,47365,83772,20621,89922,90318,53483,94499,50934,91394,87046,69359,12160,66072,16665,22720,73044,89939,73024,53200,48245,46282,69283,77383,42444,42345,37507,20426,76481,18694,30322,18176,52172,39536,61868,68283,37214,78344,96343,37998,52845,43227,55551,18475,24909,43977,73400,61497,39799,85520,83317,81879,79617,46563,70982,22086,46970,27194,34066,82254,27341,44851,98787,38061,87799,74132,56449,84048,59809,63528,29834,88793,80020,76952,84471,81282,66808,74277,52238,19970,90234,46106,36071,38205,24637,40617,68189,36576,56935,93051,47372,31066,45896,51288,70245,94340,62255,68917,98737,59859,79926,72085,67424,48322,17326,74334,50534,74275,33717,82430,13351,78364,26278,36018,37254,30577,42199,53316,63796,65745,77374,95290,86673,32771,63390,93654,49235,94691,36952,94904,24902,53451,52693,10166,16150,26677,71841,50564,68136,10696,65490,39103,10527,19680,79931,60855,85728,36169,86653,90931,88262,88833,13783,48799,71291,91108,60896,88193,83132,21508,68885,47879,49006,34616,86550,20437,93653,83630,18638,46889,99496,99705,86952,61629,20383,32584,50894,85346,48709,64432,62505,43678,64258,24070,90862,34788,57373,71704,34561,43815,51306,54727,66037,72481,39833,84707,43253,72805,82793,38236,82469,65978,19703,32428,81327,50804,50533,38531,43132,41021,50992,90882,41204,65355,86332,47737,11840,13661,32692,65638,33637,72616,59807,12566,41725,76143,78337,32295,89824,97243,15018,85719,20241,47042,24343,17124,94953,15304,50749,76766,51721,73515,66402,96830,18957,30360,33069,60378,18255,92681,23935,25680,21897,95702,78689,59082,87071,60802,53683,21452,20140,54618,10959,46830,58102,65658,45720,51963,28075,55990,48545,98737,55908,53554,28362,72488,28295,74882,29823,37388,49658,31467,88473,59655,91339,55166,52989,80393,32303,82469,69211,53608,55035,97421,83878,94878,41394,84849,99488,57964,85421,14139,11587,90579,54478,33185,46259,10277,13292,32303,87325,13580,29347,13489,38357,31651,72835,71582,70601,74980,57893,17831,15143,50527,76799,60153,74624,57787,93917,41227,44244,51062,90560,49314,29805,11315,84051,15644,25765,34001,90216,96107,44966,35773,77273,54791,38086,47729,45179,21289,24483,77047,61949,95006,34622,77975,69136,23398,73047,22817,68734,16433,38009,23931,35752,13832,22464,20233,21240,96727,73882,51719,35743,75391,57192,68635,97770,38391,84365,69403,81294,71571,47517,86458,53662,36336,94529,10826,56042,43254,48520,27567,42693,87109,62636,96455,40121,25271,29476,41873,69794,28675,43554,70893,56842,76153,15143,36819,19121,79552,81556,17820,97316,10612,33996,38994,20463,35111,65286,21268,70393,44693,63244,17726,18073,37116,63004,40926,51588,53769,82053,12400,17255,65385,69151,49162,19662,36478,53564,42657,74634,75448,61595,31842,35213,54328,93848,11392,93295,80636,27735,18844,88303,79497,79404,10587,73573,28599,93840,69312,11591,29416,38811,37722,51749,36529,41136,17332,39247,74131,64865,40877,50161,16276,11990,32762,47658,54174,10008,45670,53341,92072,96369,69374,53939,55338,70212,85053,94425,61298,99666,18003,45202,42140,58229,94831,78270,15817,54592,48859,11905,70356,54714,10151,23488,64979,21957,31273,66286,64747,48156,23991,56547,61923,53574,42697,30501,53752,25863,77575,15933,72533,12061,89919,63297,79667,20257,71514,62953,45712,98039,74664,90649,45416,40290,59532,22917,36798,56425,21422,35965,11228,74927,91711,48324,73316,10790,83156,44042,71993,65506,55064,14993,18584,68988,28844,77207,42837,53120,87472,66798,96604,74589,62707,64823,45047,45273,22036,33431,95565,51743,29521,84073,59084,51279,23530,28422,37888,97222,59683,17577,12544,81680,96772,80944,45727,20370,46482,27630,44768,86696,17084,56459,13241,51401,36353,38170,54636,53200,89063,61693,77668,87011,57224,23271,67668,70915,93841,66795,30624,15997,14637,84106,23904,48036,49556,67902,84108,93988,53149,60422,90391,45013,80881,59921,19575,84204,21820,18408,22345,76709,13285,48739,85354,27415,54031,44528,61357,76736,21177,99190,88235,46363,38616,24013,36792,64581,76371,28203,24817,35076,41185,59265,76930,63419,46549,96252,85603,13818,31484,44259,93525,42169,25478,33604,74625,68031,75560,71379,68664,36254,82251,45831,64066,96480,98737,91857,58295,90957,22165,34157,85596,58073,52529,30492,27559,58026,34891,99188,53694,79800,96943,69880,53510,77352,13932,30319,44198,56473,52889,28825,10334,77718,67159,19343,39404,59573,19518,13628,11404,72972,40860,48361,84315,17924,60929,18210,71284,31974,68731,64252,34972,13557,65461,33378,80119,64338,98180,65396,51338,20724,51394,61580,97712,27694,85337,59551,47988,59622,77135,46346,23408,48541,50370,24433,89473,57627,48707,41085,27934,85338,60365,73262,18404,53605,26705,25483,54360,61152,42359,78781,23787,30979,40037,37974,37014,47108,66824,50504,25702,25074,62016,14509,89135,30076,99914,45918,19308,27560,14036,82696,83400,86494,84934,81715,52358,77676,11281,15512,48361,75810,56458,99198,55229,18729,35648,84544,36637,32823,67672,51673,30718,26843,83803,99551,66010,16148,54920,25033,67255,99910,57450,66982,49335,43593,97162,78333,41310,19431,83187,66138,98240,91212,42819,36346,16007,30187,19395,41506,93128,75187,96706,99815,30730,22695,67395,17582,16020,37293,14303,30956,74796,83390,75001,15248,12795,46723,52634,57006,17453,92539,87989,90670,51644,27882,67622,40427,37289,80140,84790,91114,28171,64592,85681,36758,23516,39709,26474,86446,59524,12601,38461,12147,76645,35920,96067,67875,95364,56691,79415,61180,57387,68378,10389,13566,26965,44258,21422,75764,39501,18816,78144,82295,86969,11969,15851,91816,60172,91895,22510,57438,94481,73485,54300,42879,94605,29448,28546,59381,94023,13908,71195,12877,54095,46077,13629,68894,85418,33948,77440,31009,79471,39650,34237,17428,19684,90445,93383,74966,92392,78980,33602,91207,25573,58241,72130,17059,33282,45938,79812,12368,84171,79094,51420,40905,52371,61755,62114,81453,15696,89531,14611,10561,31635,44222,30802,19091,21870,61883,43958,44032,13987,19755,62206,46688,60766,20454,72172,11827,78625,71926,84761,99522,46592,26902,78855,19205,19874,41299,53715,35858,20397,60519,97836,56664,16067,47863,38933,57315,62470,87393,37587,78276,46271,24013,69737,49226,72075,77133,13707,75700,54105,73559,77229,38563,61077,19262,51718,88131,65458,37667,13231,34534,71487,51213,41512,77900,65008,28938,34179,25568,23488,68017,94704,95135,30561,87881,16080,25510,31718,31573,67349,76394,12108,79071,73731,74021,36702,13914,82791,74184,56916,74967,88116,58941,77095,57285,19204,72724,56684,53017,56523,70624,24868,19313,74848,15562,51316,33416,90959,16380,27810,63182,17560,44084,58975,37041,14555,15885,75708,83557,77607,34957,77715,22610,14312,44619,65030,57769,83802,57164,97405,70733,10888,98821,23637,88960,43562,18985,60957,97296,97104,73697,29129,22357,26839,80570,99774,62852,42418,34255,43600,91344,35973,73477,84205,32012,17523,91344,78112,88407,12555,87285,78698,69162,82334,37678,40681,35056,71174,91908,78265,14586,72633,26663,11783,36647,70567,92426,99501,97977,94388,76514,79189,93675,56630,64150,76628,51895,74939,65217,55575,73021,63682,59939,62282,77971,95384,29462,24726,17402,21068,57887,93872,74337,30240,48056,63303,38493,50609,77526,81656,69963,81425,14669,25146,45958,18002,86358,79890,67917,48810,93742,78272,51120,69091,64849,65497,53205,48482,99622,93447,17551,48866,80896,60531,30613,30121,43413,96123,73858,51441,46469,16536,68503,71788,34941,43717,60284,92077,44291,59250,51382,11082,65793,16495,71588,21421,48205,77139,79807,11904,73579,75856,45156,39960,91761,11014,92910,63751,46874,74798,16902,87026,29792,51052,11877,65278,83096,53908,26746,41179,47370,63994,46172,30149,75281,59884,13929,46572,20780,82669,19875,67979,60069,40072,42284,56791,21940,95977,83390,24456,87352,15683,97933,97627,83201,79430,81679,79596,67774,18689,14426,60382,94912,53108,97048,54728,25178,14981,15274,32616,85453,36010,47199,97105,57721,63999,19217,38325,66325,62909,41794,95768,69776,35709,16850,77645,22680,93024,62499,21928,18607,10874,87203,65273,49334,62266,89133,80782,81769,38400,91082,56834,74199,55137,60546,58798,28620,53079,58067,22747,80621,34808,21040,16072,50742,14483,87161,23785,83733,41492,46087,92091,47789,62140,52726,15736,14285,30333,19057,46989,22743,35583,13010,20064,11266,66843,58241,74940,53215,42946,76383,23463,34655,63524,10288,40296,58731,66862,32963,62908,44500,94800,22455,31175,68791,51558,53135,18949,72429,33158,15326,59994,67227,56752,91157,43542,17814,51234,41380,62681,60721,20920,99346,37840,30058,38900,70395,92884,65303,44906,47211,69289,89423,91498,80273,52807,76784,77666,88754,96182,54268,61712,44034,66338,50424,51534,12848,84291,62020,39200,97111,91320,73679,94167,47790,31768,76860,25475,26276,94254,63292,63728,33528,33954,30762,59343,88693,95951,25912,35821,81873,24180,89774,78221,38961,33772,27726,84565,13151,42475,82361,19038,48064,71646,93722,42931,88545,12530,53677,43650,87623,30430,30570,33578,23872,25483,25626,18124,97267,21287,65727,72058,21552,45960,71345,69136,84426,71664,28203,76073,99673,79386,40508,53171,62837,61007,90200,39658,12502,81472,89428,21805,12670,77738,15691,59146,52953,55043,75653,38019,78374,89556,43745,14409,51742,76805,42715,60483,92221,18643,51458,20251,53404,78323,32100,23663,90614,13238,79164,73401,23330,30183,29727,49487,77192,72908,59188,48486,90688,89647,94082,61837,66246,97861,29108,24503,20448,19024,78444,66215,56619,41348,34283,78654,50112,40453,81122,73700,44233,73176,67611,52461,24277,25260,51983,55379,26892,24147,44045,73052,83997,77334,46920,59825,16135,60155,93044,43487,24266,34764,41279,24997,35171,77383,30011,51779,97591,72663,73146,62154,43110,42889,28628,53531,71323,74146,47625,11860,76997,60132,93782,31350,16342,93843,81005,10180,49154,15715,51012,53358,76626,96153,43015,80011,71345,98017,97595,67375,37387,90781,64672,24145,14230,96629,93148,79363,30800,88558,38853,41996,69564,88629,61352,33540,98547,86346,47659,48075,65020,68185,74061,41903,78021,17470,13241,78289,96656,89682,38035,25752,66160,24922,51613,62114,73373,83243,59086,18611,59635,84097,71832,20409,35333,48809,56116,28854,78804,21404,17530,81732,29803,68758,89226,83857,84236,52834,72442,40739,93968,48338,16984,89362,20891,60240,88020,72464,51314,66511,91313,18152,15638,46630,77296,88926,80620,86940,85003,64932,84456,34755,70472,61993,71834,96688,37503,44154,47199,65819,36599,28232,64892,84979,77571,43952,75893,20198,80390,23631,69827,31523,97623,15985,31721,94876,66806,40337,17906,36330,51998,28703,80823,93687,87149,18349,20904,43099,51344,70283,42985,81489,30310,43892,67983,79754,53875,95714,15736,30035,28118,28853,18346,13646,54178,32982,36923,98264,99536,89081,23256,55733,41045,88948,44532,54521,27858,80902,15858,43007,80992,16393,40244,35236,69824,32277,56763,30375,11216,44496,23242,94191,17589,83979,77544,72891,67907,56127,74378,26187,55088,94216,19915,13242,26586,32341,71738,57177,30355,58923,88353,83799,37698,45931,39386,93800,85254,65467,90028,48681,15016,53385,56162,56047,68919,83448,38822,26534,54295,34127,47663,97992,42031,59166,76789,14726,45246,16056,42578,48051,70200,33801,25472,67330,58304,51180,41381,23940,79009,11074,97285,64902,49253,40569,27301,63087,86786,26931,63938,45759,46354,94928,90844,48916,60090,96924,73869,90895,48852,34748,50702,67890,35008,15521,60832,88276,65885,82102,21621,33161,54282,53543,88338,56184,86854,67684,12031,89973,30856,40463,85735,76848,72858,98418,23222,38252,74444,72957,83994,11549,54365,53772,50264,90216,19119,71410,73782,95123,90530,56589,55267,37450,22804,20237,66586,50551,42817,25310,30239,15663,20388,86145,71435,83616,61021,40500,90410,76330,20405,42618,19719,89157,48351,57404,45483,29139,53552,40409,46365,88920,43551,82788,41829,99880,65137,40240,15477,28955,63618,21002,38108,19710,54586,41731,39050,31385,52659,94894,27583,80665,17881,67367,89635,20813,66526,53310,12718,89118,53261,24798,60753,66718,64931,57220,38979,12326,98931,52027,30868,37717,82595,43075,70049,23750,87511,85284,56530,97006,68535,90133,12524,84906,32305,28988,53563,27495,37913,71184,31359,39729,88938,74015,82067,41257,89794,38908,68802,85657,79873,11719,28589,44042,82303,50122,65716,91227,48440,42563,39440,32824,95058,82527,26258,51019,15599,53739,16528,94572,51769,81944,96189,49410,54407,21061,44532,43104,23966,59447,89640,98809,47411,59999,23520,44246,87905,44307,10230,80954,30684,58422,62119,90528,13538,15761,15602,65990,56849,69658,81084,71057,64586,13730,92427,45917,77238,75019,34956,56613,13537,23187,94818,23756,51554,69450,71142,85596,16252,97589,38692,45562,87619,48253,25705,95261,52153,60834,49478,63075,11560,85349,81614,65371,12423,47606,90279,33889,78691,65124,82882,12006,67093,44091,47356,17807,46264,33349,22962,64145,45468,49846,90467,22287,80681,12676,12687,76782,81238,24865,36349,99209,45685,47620,70987,19581,41804,89250,17966,82187,97270,45347,94223,30215,43453,26251,83713,79667,22680,24150,57637,96490,77993,41903,72127,21449,76050,95353,53663,67552,31663,10936,30443,17832,68632,79134,99360,69722,24516,18774,62620,32750,81838,88266,92450,46840,55852,26157,15213,39828,70950,20010,44816,24849,29736,80409,85785,18236,12799,97486,29404,41028,34927,44988,48262,30555,50419,25056,17411,96008,16507,98373,21335,47702,33591,67440,40622,30026,97506,14030,78480,10854,11310,97770,45922,84119,45221,66557,83465,98860,63913,53829,90796,22635,24617,66354,98653,18324,62058,34838,12726,91800,84252,52102,53776,98836,92711,60707,38255,65296,37189,23044,17697,52305,54086,50677,50864,67075,11307,43126,24568,46933,30608,99472,94560,86338,85914,23536,14716,68882,38854,82655,16760,64919,81363,51392,12731,94042,10221,68096,22893,47796,17126,22016,24473,93810,19508,74275,23100,95238,95228,98226,80007,33358,64607,40644,77116,41075,83669,15900,44897,87686,19340,88868,56889,19002,81458,70412,54671,83103,76002,62759,26635,88178,42163,62628,16760,76665,51142,64521,27033,65418,45753,75275,30716,48800,98682,55895,69825,51621,71479,24150,56973,41439,26954,82442,10848,52364,28603,41801,13833,96455,28311,62709,40163,15755,55725,11429,16039,90531,83849,14149,55208,57696,58449,86035,84566,97509,89653,45225,13988,22159,65625,46702,90352,84160,15758,77728,82249,31041,12257,75612,62152,26214,26128,89700,72472,95670,47831,32166,79179,35156,73167,48529,84683,74943,43193,55191,58836,64308,89558,46147,21322,38433,81852,82405,99004,68489,84432,19250,76048,52821,39784,37740,32127,49552,72436,51272,21720,16621,98067,86601,94091,39661,64592,32425,97082,93964,93941,15881,93460,54061,63495,42302,12343,97978,18955,57489,11915,11798,31019,57605,68133,99092,31981,79348,78975,52711,95373,23622,84175,51717,92307,10235,82386,78243,37162,55979,15053,25314,46256,68438,91364,25276,16342,50287,73800,80341,55938,45668,56320,31693,46258,54236,95542,67867,61626,12116,18068,34759,34136,65558,71847,22632,30368,34529,41680,74806,95729,29960,77983,32915,27752,11752,13549,94089,98132,38459,94191,90660,19969,37063,15638,47511,33206,73204,75675,96677,11842,53328,73299,87383,48524,20052,93222,88506,40128,12547,10414,96803,90675,52790,77732,48136,31462,47010,34655,45127,68678,25976,98815,32901,10630,65441,17103,84959,65152,84137,87897,52840,29382,83668,53120,40637,81010,17316,14704,44828,33791,22466,33899,28924,91494,89391,63747,23476,82421,89326,70623,41617,80485,68717,30718,45391,40765,36292,71074,52386,87710,19486,91440,62235,34267,14576,82384,38569,49180,89247,24839,97460,91854,13701,16695,16442,96912,70052,48789,80980,91626,39014,19199,32462,78357,16731,13682,98686,27923,90817,56635,94963,24643,19887,15395,78085,42869,11916,16949,29011,44523,25302,61001,92917,79747,35423,89925,98062,37497,23443,23673,43003,71940,28734,17152,59561,80176,60799,28849,28106,44080,74995,41457,36582,44399,45202,64900,59265,52229,81691,69100,24990,76717,63132,26790,55981,58491,87745,75937,69094,45863,61360,28510,23820,82443,21391,39179,51416,89727,55384,78732,95956,32119,51382,68999,62525,91653,67758,50123,54875,20639,59281,86156,26861,85015,41606,78346,48668,92098,14305,98069,41541,92634,84299,65045,73948,37854,86468,22685,59888,89353,18594,20493,66503,12141,29249,43284,33446,80321,77618,54572,25458,14404,68567,63120,40245,32898,98730,38985,27378,41435,46740,36742,18533,75830,40070,97077,39793,25557,31943,87486,56594,29089,84622,22138,91491,75946,22650,66718,93412,93559,33454,77720,39268,86174,90850,81634,51559,36416,85488,73090,55909,19917,60970,85360,33709,70436,62474,70716,29323,58609,45453,29398,37123,40492,80240,83661,39422,10252,73910,32276,10203,58818,59331,46666,57769,93148,56781,62285,40959,89112,68254,41560,83484,53999,31726,73679,97318,65224,43176,59809,43385,49391,35032,79897,28721,57457,65736,82537,15209,90885,40347,33442,32158,45301,68493,58478,14756,64181,10254,85499,17458,77591,82313,99310,10816,16084,28436,15922,18201,20638,48514,21836,32098,53280,26300,92309,74696,22227,32496,52076,47012,36633,16857,34946,16348,78952,53381,73050,56515,37408,23072,96049,42461,82717,90282,93281,37905,76079,74714,91074,84834,86131,37601,92239,34530,98937,46417,73195,85608,16665,13488,47286,52218,21371,57876,49510,96306,44980,67114,10936,87151,97248,59311,53404,99241,28854,38946,92507,16602,18114,42911,35836,70776,62279,11793,48412,27359,23373,17976,54247,18200,98759,37681,90551,25008,22096,16388,81112,94919,65589,47858,54786,20829,55492,51073,27766,17359,31688,88331,47650,61389,27274,23319,98042,39002,31308,64545,81346,53608,97396,79260,19718,42380,49469,66660,23376,36985,98964,27961,76254,79949,30057,46902,99948,38709,65673,70616,21067,90224,41027,94268,13071,73815,26228,99101,12559,11008,20148,27854,19414,84792,98989,29975,14576,32899,97633,94153,35099,11109,60681,92123,13127,48061,15192,62481,23603,39682,24753,99388,95955,95219,75229,84243,42325,42774,48845,88497,70919,81951,18633,57711,38388,47245,96837,81489,90131,64834,49404,45380,36545,36729,53319,69628,87806,16978,32991,59866,76449,91256,75682,64805,18340,37224,42908,27694,25381,39271,19573,97476,89073,77760,85080,69359,82505,99241,11171,99930,79076,56489,85636,39356,75042,87383,79760,24529,45957,88566,83927,90569,82057,18237,57420,70839,36606,56749,56370,62419,45576,79760,28598,77084,10980,81696,64464,56640,92648,46876,60926,86561,89664,70664,65947,34392,38781,48188,61025,85696,66173,83043,81072,91006,82644,50991,37484,17931,79765,65759,98807,72802,39734,60987,20432,38945,29747,90106,43172,72188,43813,92770,19029,83647,73260,14228,13902,41273,92832,58063,21047,10476,35707,79244,17422,19358,52961,91658,23500,91615,20158,49631,30820,98461,58242,59606,82587,10493,25924,89864,80885,39469,22498,58181,72785,39690,13192,81529,84308,40791,89952,72473,61084,68893,51948,91365,84157,82222,85762,27789,39894,96951,14731,16588,93233,12059,57620,55899,80080,19314,59629,67322,59847,26202,80430,65832,61471,95682,23795,68044,41236,85243,71733,28874,53753,84401,30911,82813,79257,80523,32133,47702,74594,69320,23752,13448,14460,61981,18255,76896,28284,30868,23859,99824,54861,35144,83140,81014,48793,81831,63621,85620,68893,99050,35179,31100,24504,83487,94757,84381,63721,25296,64311,29923,72305,46135,29599,11592,92032,18411,10700,11703,19222,61493,86648,47648,49155,19223,58617,70790,82040,30418,52438,20688,85953,29635,19944,34579,45568,69774,11002,48897,90898,90414,22688,73532,51094,23647,33322,65660,29071,54534,60097,34954,22368,79942,77430,43664,16921,25096,40439,70565,56160,87384,85256,45034,33429,72166,42911,84413,31343,76437,28395,57689,58436,41750,81269,19158,29635,10544,12037,19874,25300,73255,21310,96244,27860,40988,90377,97547,26084,98534,14256,73765,28430,97000,69613,77813,18198,51234,44227,90240,97839,78611,97789,99795,69597,64394,28077,74534,72161,72920,23511,67275,62823,22593,60160,29198,81985,14681,21565,24436,58757,91823,60096,60295,69452,65879,75615,81995,48719,41779,71929,72908,47116,96291,95302,66241,81855,42021,36666,57759,65546,85524,35534,52408,36774,79473,70634,58989,56365,12639,19306,35787,21573,38107,99705,32967,16419,94089,40134,54532,91898,64748,11299,23910,43615,85282,21761,60186,38837,82330,44228,33995,38032,55897,22162,59580,38905,14232,79881,65791,57254,22833,70178,44116,80022,74097,59333,30835,84920,41942,48848,31081,99169,16428,98244,84761,29859,16556,87808,19361,46814,38639,26532,46535,16057,21456,11514,29588,61818,54709,85525,62311,21117,71683,71586,16199,54336,76447,48637,56832,76160,85691,52377,87125,90134,40478,26185,56340,74725,82639,37332,59621,58291,37874,55289,54275,65611,30960,25380,22697,68538,96441,62175,92461,27332,40948,16813,17541,12845,57589,25154,74880,65446,15736,70883,61058,28416,55787,49086,94892,97529,60374,67307,83229,51317,28724,62605,57036,69983,76520,60714,67343,32484,13933,61180,78896,98731,30890,33012,85028,22008,24625,55384,51843,39348,33781,46784,61685,28136,92566,62919,80331,28152,29534,88747,29488,28591,80826,57524,78835,86937,31454,25305,88186,12131,51914,59267,96761,25289,99798,38697,87714,51971,55635,19062,28691,83880,71703,43365,66623,97332,74333,99821,70031,38439,76638,30602,14117,75558,71176,23805,30468,78348,52812,82786,72816,59501,74057,21547,50906,82120,92813,68238,21848,57045,15539,52071,70415,82436,99228,93184,31949,66068,79269,51507,46260,78343,26000,81685,11743,56566,13424,81852,63179,79579,65843,57046,60286,20750,83062,98034,88074,24930,48863,51577,61968,20959,19014,97022,34786,95590,42703,70152,91405,58131,63023,16993,42481,72296,62279,98956,51062,65246,88506,70352,76807,76546,48145,12201,72919,79727,58924,71101,23920,80993,80197,69560,41937,49139,59567,33264,45326,95741,44305,47770,40560,56147,15462,58728,36489,20569,16568,96885,23641,92029,78310,71896,88783,71985,55012,89196,69580,40030,10720,34556,39964,26883,15583,12735,65095,55447,15081,87886,83601,60783,90185,39862,26821,80893,43244,81016,40795,40339,62779,65239,51854,45358,65926,31253,15899,46315,92058,55357,86209,56103,54346,64858,18282,30131,42934,64054,22706,95742,86320,41292,22179,65275,75735,56001,73861,27304,48401,29240,19547,28734,97542,38726,25754,73452,81543,36424,22807,50486,29923,34457,82498,93002,12975,48748,14697,34700,51612,25076,38592,13329,84351,63377,81799,12744,80289,58333,53238,56005,52678,16082,85301,82313,12353,96439,97561,27230,55689,28280,84842,49522,94799,32954,65620,88356,85324,92769,36353,62368,60379,34830,67455,50941,80623,33960,68611,60010,97052,75103,28533,49146,70964,56395,61363,58478,43723,84895,53794,64719,33201,47117,89480,77470,10625,66704,29653,85214,98534,68952,68262,90462,38538,28333,12351,55028,91088,76090,25828,32987,68028,58721,37361,86435,67532,59489,12889,45951,46966,73616,96182,29426,14719,60248,46064,18792,18232,65065,26591,53457,19574,89190,87617,70191,88030,66246,67411,38991,60195,30680,34486,99987,97546,43466,50325,62021,99250,80726,39230,75153,84565,58953,32178,68264,44386,63359,68227,26102,52821,48369,67227,36789,62702,66777,92164,65205,76569,53167,68243,90752,39780,58134,29492,83239,53790,12803,80796,67080,69620,56338,87726,21129,90684,62421,97596,74203,34481,73885,95917,69418,66726,81164,42169,33102,44725,10796,12486,23557,26437,63504,91013,77050,17364,83100,61098,39515,12827,20510,48884,10854,94580,74480,18734,81491,22982,48603,91440,91554,11742,56883,18299,82191,75285,24003,81696,50611,70069,64633,28875,67922,60561,51364,64105,24302,28143,37717,78361,11149,42617,43038,66813,11667,28642,90110,19127,30164,45552,38618,82827,48435,78049,26218,93265,16431,60257,70016,16962,88430,24709,75892,68833,78342,90487,16015,66337,31283,35112,44639,80842,93077,16164,52645,47561,44071,24365,82123,72868,62069,61878,63593,46397,63864,57788,84727,92280,34193,37455,87592,67767,79999,75620,53438,99362,22861,16164,62835,96698,34732,19121,39715,50553,59236,61374,64223,23215,65433,75502,92888,71604,56667,62238,17367,14197,83508,53122,97099,46250,85161,83075,78782,52825,66515,64877,30221,84660,14523,15130,95991,43394,25773,29552,67699,67386,82902,88677,63247,30214,98750,42691,59996,26718,40940,13059,88097,77446,93352,19494,40572,26382,95495,59392,44371,57330,95615,80397,45738,34017,41140,74030,66094,29739,88481,26806,81429,16622,88897,97055,61319,35731,90639,77777,59574,25254,80708,10756,75345,85488,68371,51125,28907,51015,10160,62322,79699,29437,17757,22009,94133,78366,98754,13119,72232,70795,10403,72748,93068,56745,61078,71501,24279,87243,74294,85481,44280,56683,48518,93960,51841,11209,92827,43390,23410,34532,81978,39589,95660,72413,26795,32994,48268,70449,14511,71013,63849,89365,53581,97063,93900,20374,83530,63898,57251,72185,72606,30104,44858,12284,67803,15678,12467,10686,96875,39559,93018,79388,30718,87779,39555,74403,64198,36060,30428,30266,11448,62844,18509,48723,60004,15903,99971,77526,63512,85124,27516,88390,97704,54075,23466,32271,12052,66724,71891,49887,22885,66749,47130,72903,29207,47283,14451,99842,14850,91920,97633,94779,73315,42692,91745,23919,25505,49396,39184,38636,60545,68982,29003,48343,22949,43122,61715,45962,48208,78510,29445,55386,21979,40083,94495,78913,81606,25869,11337,73835,77438,43677,22970,17410,57597,47150,55721,40216,50216,90688,96246,75146,98723,40651,67161,45710,20397,47369,90927,28027,51990,58198,88471,70621,10119,59566,77640,84312,27132,99002,20088,46474,48174,30723,88808,58779,56159,24580,56424,21658,79611,91268,33931,34197,66733,90322,31830,32097,51595,26118,45446,94568,65925,30216,80374,99321,91447,37119,95367,27694,35233,71932,27240,46706,59287,54234,83016,79306,41591,86963,21578,23349,63192,14699,53715,99401,11697,48402,44196,56850,53442,76450,42954,89182,32597,33808,40010,95324,48439,77817,19055,64400,30825,36935,10831,11138,88777,73062,28036,42668,36925,25890,31473,12016,25323,15917,81063,67152,91254,62333,59789,13980,74739,39803,74086,52990,24120,67356,32876,57806,47176,75604,26828,64963,36073,78922,35041,74014,94663,82391,52225,48450,75489,43766,49804,44923,51518,73582,92499,88459,84132,77532,66336,29055,34651,94855,25195,53557,89365,54751,99356,63099,45207,99808,68033,73662,26946,25530,96486,41650,25602,17769,28791,78444,18756,73698,87513,39944,77020,43949,42082,26175,98477,41470,49027,27402,27131,72950,59610,59071,52746,71853,56179,93618,56604,58627,46815,56643,91336,44398,40571,47660,22016,69952,69341,34156,61789,11182,71703,23138,13054,70717,51179,59981,62095,19467,76122,32426,27600,31535,53520,91488,49363,83267,35700,32975,71358,93467,95449,15601,91814,47198,22885,78797,44903,92028,24994,39995,42152,47056,88113,88950,14534,54542,43036,39576,99933,47441,46035,63932,69525,62403,24643,13610,34781,87275,15839,90901,23498,93991,79022,15819,77928,59421,21645,98394,72498,49380,39194,78628,42688,24190,81268,62767,71950,63224,95901,34515,24074,94685,31081,15724,87566,94440,58258,38864,27163,20486,48282,69961,93382,50283,36999,21526,95432,18196,13698,92311,74198,89374,51654,78825,59634,50403,32971,57061,78012,21337,15933,64676,32284,25727,65019,96900,35544,83259,48215,78096,72493,12331,24024,80539,36204,43405,32616,38407,93490,37258,23256,21838,83945,51847,33858,66135,84341,43453,68320,99574,43288,59152,45065,78736,30294,13019,85529,68917,71776,81457,72559,17216,70507,89738,70221,52257,67507,98339,65694,25803,90509,59065,68045,96600,94927,35234,38045,62575,76524,72548,68628,71860,21745,74216,45382,84045,16575,26813,43098,98383,86360,86150,92162,11034,33472,85149,21662,38295,29623,47950,92032,62111,60808,44161,72841,45299,37761,95669,12217,94704,78187,13924,24932,48818,31552,61290,22199,95993,14097,18246,29572,25298,33473,20444,51697,42681,87418,26337,95555,55534,96046,51477,10906,54883,98795,16962,79997,36154,86456,68892,60078,15909,41473,86203,84652,71620,95345,10284,10003,29212,47039,91397,27243,54092,67772,46932,26405,46967,56669,49005,75080,61141,65081,19053,69975,44046,50162,97221,17515,44739,47055,49236,55399,29263,95668,45066,50962,54079,43590,84283,75871,39946,46091,78328,28289,89215,43236,15336,30497,66311,77282,39522,84547,62776,89913,12395,84483,43237,42341,65385,50521,98098,12169,17715,35435,53751,58809,42042,30525,87304,26587,39378,10416,44800,63947,86436,59506,71760,68425,30436,65014,55898,33716,15387,20745,41832,21222,35613,56173,65645,41752,13244,37549,49623,32414,23375,85537,61963,15331,31522,45471,35821,97781,82141,71702,89125,93896,59844,32592,55672,77722,29808,40684,31816,68792,92786,34663,12587,91572,94709,53746,54429,85042,49620,95154,86865,55314,48439,58416,42196,49815,40947,25875,73157,27794,50716,70174,19799,15899,67900,55948,25727,89911,26245,18607,97783,32757,36691,50150,10280,49793,44734,85152,16004,79955,48622,78829,50516,47110,51679,40912,85344,47240,20848,55480,96246,82530,80638,95407,80046,68559,11945,26201,49851,25206,28161,30598,99305,64084,50200,94859,38550,30882,35289,17459,29830,46977,63586,19431,86732,58277,53985,31403,67994,96583,92626,37646,36660,77834,94487,62581,88312,74492,86170,48654,71605,57675,53916,76632,49949,15919,41730,68271,66666,21942,66297,85097,51039,55257,39288,68895,28333,76454,17569,78483,89701,17826,23770,51118,67962,90012,54699,79375,96026,68051,45074,19404,77875,40660,94807,99339,69786,43745,97139,38354,28670,21123,41332,30843,31601,57334,81514,17696,57251,55901,48629,14827,40494,52362,18274,91295,78929,15701,85217,37577,56883,97047,21210,48109,11144,26648,17664,70434,10306,57579,15130,24006,43530,71673,81063,45341,32093,14294,89322,20686,68165,16860,47729,12310,96045,71541,70807,91383,61576,98373,15586,27178,39667,45799,21646,61885,21724,55587,43967,12196,17900,15094,32877,47111,32057,81844,51794,13188,75079,84282,83325,20603,69379,37984,77282,93605,85279,75181,83559,91187,57121,20391,70778,54157,84580,65231,42928,90562,79627,43232,86603,77332,55816,62582,62596,37805,93137,84395,68002,96213,63170,64052,52099,77271,80070,35054,58508,63139,76447,29675,38823,93093,20383,32446,69175,82868,89058,84092,60774,22505,52504,77567,19037,47528,53986,97676,63875,99581,29895,43559,21326,43592,32126,90780,68929,55588,16769,63345,12613,96118,48170,30541,74753,53982,94126,82892,23582,35044,27377,86629,59923,78730,81608,97856,74420,82836,44038,36183,57583,21402,52271,15050,55167,21894,51080,86368,98308,59423,82320,82357,48550,86152,34034,22481,90760,52820,85227,97781,64657,93124,19082,89956,11854,29275,88383,62958,72832,86443,29554,49015,20643,87044,88533,60314,30149,79422,11063,49575,22880,97090,36876,51184,29962,49953,22828,38845,98143,35092,86294,10076,83366,36812,93107,78146,47073,41228,95610,99840,85668,44932,37044,60610,21815,14488,56210,24208,59262,49206,17350,98086,86539,99734,15171,13115,91637,64487,19915,57767,52544,98059,43885,59843,55998,15723,17171,28655,91187,48254,23109,68105,24614,11423,32736,45638,35410,33450,40925,88906,24428,90849,76166,66837,58899,88330,45528,25716,57930,63718,50820,87561,98402,12348,79646,84926,18437,61234,22533,66667,40649,75973,16238,61634,65256,68779,84666,57176,15393,51050,35283,88584,74836,15120,97690,37937,44545,97585,48771,97237,27804,10833,86218,85468,61965,64419,74607,61158,65764,76019,98020,12193,18537,48383,94399,23387,40341,84842,12081,58902,96451,69544,90351,89334,74700,94569,87393,51057,75012,69931,48012,24036,65822,54712,61113,13897,78245,74417,24022,30741,73352,20945,90786,27649,88124,62720,54640,70971,18330,22225,80546,27361,30804,90451,44236,35278,58661,36027,80422,12810,19447,34069,60983,69109,17377,54289,29185,40135,55636,87013,91448,69300,31531,77046,74707,65666,27480,13515,39982,60845,52148,80821,79952,52724,20601,43249,46236,12633,12172,53032,15698,96624,22883,66153,62109,41530,68174,45889,69403,14903,92059,72835,39987,72079,72142,64037,97088,22124,39727,43968,76457,82209,94939,67699,96746,25981,43506,59034,97577,24512,90337,13403,48115,43745,89592,68704,39609,46307,24410,54920,84205,23666,16687,12537,96832,85914,16907,15405,67342,91423,85164,29074,73399,47081,10223,98549,98378,60415,94815,84206,79152,43186,26274,91991,28221,37792,40222,64907,96001,30742,84186,85967,37238,75386,50052,96800,90152,71012,13801,55018,50984,16537,99285,84465,33167,74490,52970,80828,53712,85616,33230,73503,63479,78803,69664,92112,73125,21463,22546,23009,20801,57324,53262,43923,65387,11563,64494,99258,38006,39509,88010,43932,20977,73207,58862,36479,66225,92153,34635,76098,55840,39748,61256,91826,33834,90494,58221,71515,29690,25498,17227,54426,33068,54449,78577,32479,87445,47958,31563,90809,37777,24085,59795,33921,37356,60148,13134,97369,43988,23773,59321,14064,57880,20437,37673,18798,54455,94871,93208,55709,98338,94203,42273,37275,15201,17035,79996,40861,19832,98362,34703,50653,60191,77925,94926,74693,44440,24905,72703,96632,37337,80501,99452,81644,42426,29443,13415,15108,60122,95747,90979,77041,13614,46424,38761,94022,28271,12051,17608,14319,51301,65998,23436,72371,56197,49289,98987,91913,55510,61161,31854,11727,78902,93677,74468,15786,89294,47933,75042,29379,99936,85467,69128,97401,25729,64367,82165,49667,79268,85940,78725,77557,36990,46181,67814,62771,43249,73528,82764,45974,24258,95186,40553,70380,40577,28053,64852,39949,95049,18391,54547,51557,10484,85012,28609,80827,22794,31687,69705,70385,51256,34928,12648,54311,49063,23949,70802,79108,51152,44585,25758,15136,35093,60958,80507,48352,77163,99184,21314,16113,60317,28671,88568,75566,88207,34540,39677,26715,54374,70413,35606,85865,98305,88793,86442,50490,46699,10046,24207,84253,33304,89875,50530,13375,15193,98358,62042,26598,41913,59502,50474,31926,79009,42459,83953,67224,23355,60211,79695,50037,70482,89028,82517,71734,92839,76938,91414,14830,99967,86264,83806,57302,39783,42367,45611,98607,11793,73470,10692,40076,90523,13543,30123,61250,63946,37513,67183,60569,21691,73930,57441,82969,19625,67861,76679,35432,85591,11949,55506,90339,26519,97890,30804,93751,96979,99708,49333,21737,72346,38837,41407,84446,13930,28143,50314,29913,44624,88689,73985,14445,67526,21932,12090,19024,19885,83772,19353,14708,90258,17836,50043,88597,76999,51158,92854,46572,32312,12022,63166,60171,25126,81307,51733,36413,32743,69718,88990,21118,71933,16318,35236,69835,54562,79887,65187,91256,57766,24431,15546,99836,94301,20328,53691,27317,50754,37854,87309,19587,40711,84853,42690,17078,11987,35887,61027,21453,88323,53717,99397,19573,55031,47356,48989,50575,71394,55958,10184,22603,17228,98689,54953,99575,96002,19863,54031,90425,41036,61601,11538,87698,91160,56052,94959,25366,42768,78084,22238,79296,29177,86569,24677,70164,92241,19428,33206,80263,15919,23542,60966,19647,22405,47813,23180,24045,72746,82211,34915,70652,50109,61286,38599,21108,27116,76803,88760,78056,69377,59596,12115,87709,77770,48718,89292,37708,14105,22700,24263,95555,34898,69180,39524,19856,13878,74722,63901,10359,97400,84064,64321,92315,63265,42403,30305,30138,96880,54638,41344,71571,58310,63543,77342,74089,91748,39745,81322,25432,84772,18041,78774,58037,11851,96394,82881,32233,26642,85405,24120,12988,18121,67249,46054,35505,19983,75290,81690,11509,99459,99147,57192,78236,57909,48640,59996,13105,45453,27563,98198,58414,34715,65367,60586,59411,96534,12860,69834,74194,66302,19543,75008,26771,69671,92892,66672,77812,63525,88250,78584,15204,52204,59982,49639,72374,38203,47574,49909,82744,37126,45565,32525,38795,83090,66398,79507,61698,62323,39655,75120,81342,65512,56628,24430,18178,77066,39690,30850,20178,67774,62602,47647,10465,95728,97989,95132,26878,33501,96618,61730,88818,55938,52072,86241,87059,57196,93988,68062,71881,10756,92274,91859,29399,17628,53193,53550,96275,80798,85015,86016,76572,42720,79114,23638,38651,32200,37312,27165,26124,53180,47588,14400,84590,36927,96564,50396,10069,12224,49156,50618,77733,45804,12535,21196,60125,70537,90951,87999,57108,45391,67790,12689,23175,51958,69507,33383,77572,64787,72733,74764,96014,34947,83060,71596,75447,46829,48178,20125,75648,32214,30378,41813,55503,59891,54947,94888,52348,26207,63784,98370,96278,77007,86109,16937,59471,46511,46563,77904,86127,87810,66486,82729,88979,46088,33841,67365,62812,83109,79459,96809,96324,49070,49507,25130,87441,92665,39235,19575,83467,34853,87051,45888,75886,73403,82979,38945,29973,65876,27616,74436,97265,73460,24161,20622,80493,69639,14442,79259,63346,55456,71899,70663,81988,39328,78773,73778,76944,62887,27858,79335,49606,85219,69001,87569,16625,86448,28587,38441,67987,58872,46038,68478,76877,58094,43469,76911,37867,46154,83157,84351,16149,66684,88088,74713,28612,51530,20596,53175,27625,44549,66429,77058,86873,71983,53425,30463,23725,67900,13380,19267,31610,11717,77289,97926,78096,95055,20722,91951,28173,49566,37536,58390,94874,84827,77598,24647,39311,32260,83224,89666,78314,68751,93307,25966,50900,51857,79721,77150,71758,72485,49655,26809,23028,97435,18308,74824,46680,23541,75180,93268,53177,81590,55445,62148,30394,82896,86767,77889,77644,90668,82867,64437,70819,53801,71386,84950,38589,43247,23416,39205,83897,77244,14714,33254,85684,58162,41660,32036,27191,11479,71544,75275,36145,32708,42958,10031,33284,12353,68779,13624,86738,41719,36557,51916,42945,49433,25047,25712,31579,76717,23192,82207,17283,91978,60285,56308,77347,45506,44645,58460,87974,69688,67971,10617,94254,14504,14259,54983,23451,43274,16121,17432,22141,65488,46488,16999,42548,28708,90363,22887,86737,47680,72250,50681,39277,40967,41819,72268,25053,66517,63257,32567,60300,84914,35837,19654,35710,18709,69698,16218,11228,92653,93560,92100,10200,60711,84022,16698,69466,81358,53665,83311,70615,73322,22450,92003,26594,24303,62257,57002,57221,37858,60777,50844,46330,15351,70139,46140,49310,84926,61789,20868,28573,74828,69262,83494,24302,39984,31400,49066,63120,77190,48912,79974,55004,15219,34464,79224,63035,51444,88253,61070,64204,52168,39824,21121,72932,27030,86044,60890,62557,25636,71921,92224,92558,71303,88396,20695,89821,43285,16847,60626,92272,33580,34149,61465,94899,61197,49711,58312,52473,99336,92364,45787,33175,49965,14469,45184,26187,13927,88349,59556,54398,69545,33784,91052,31145,84942,18899,13786,49236,14295,84526,27676,31792,91140,86559,99930,41553,56102,89087,77499,89047,70578,35784,53731,89976,11348,99032,21980,60028,12158,68879,40957,21834,92250,60333,82426,23097,15008,92830,29512,39445,28859,61878,50272,99374,72748,47538,39483,42717,62130,47955,45148,85837,15634,41368,63470,47256,29687,77305,94053,31778,89379,81989,59907,99148,75387,71333,67509,80193,23862,85317,45572,67571,64029,35323,77457,52371,22008,22133,75944,14494,10422,38494,70165,15201,45313,20449,16622,34941,87937,78558,41432,18125,30745,80187,11966,41820,83148,95477,29621,53080,15208,66571,89622,24197,47961,33725,35681,86467,62901,44410,85955,54835,22899,97239,78956,46492,45136,61932,21209,89381,23877,63573,42378,96583,17251,61235,80808,88122,30511,49586,49067,38013,81484,65013,88967,18131,78697,31108,77030,50039,95677,61692,75966,87283,99826,12738,74738,67938,52280,32134,48036,27086,73952,83089,69335,37126,58196,82967,69542,43059,26508,61149,13082,69202,20502,66701,54792,19512,73466,43702,17412,44529,77810,19365,59957,21745,32776,65172,39847,64398,52255,79966,81432,37374,13561,82549,79939,49664,74050,94427,15765,20028,63243,23042,28131,50954,36540,44951,85460,37636,21237,64475,41359,66264,87814,65689,30245,44444,90029,38935,82320,61474,68418,79734,56291,68201,90867,47057,58843,18900,66979,33033,12985,83036,65960,29280,25449,17160,71686,46220,43971,60942,86940,19914,63227,33508,99518,76668,99393,28703,15261,40449,40012,76083,46317,78546,79328,23770,48422,98003,12136,61866,82480,29972,15914,84965,69038,59659,12243,33358,84680,43444,54872,60465,19103,75635,67852,96313,66514,11474,60371,67874,87143,60904,21892,75434,56080,95984,42204,67166,43966,80389,13687,29289,70295,36606,68358,40941,89050,44581,26632,86250,61997,49484,56763,25392,75237,76838,13995,63424,34786,99623,91438,75499,12642,46714,41245,18536,65145,52921,84726,42323,23251,46947,20475,90763,60384,93372,43090,69200,40549,18369,18690,56730,82091,34456,67099,50882,53123,86453,25281,49529,53355,65464,29917,66007,62259,16712,99874,16531,14394,35085,97564,63453,62232,20144,74409,24477,11333,88507,24606,36276,33081,47065,59947,93927,42330,81378,84934,57684,79124,94280,40479,20175,55042,72053,77180,59651,38170,81195,25768,44727,91176,90346,34593,57849,83362,37204,64607,84208,82680,93649,97678,43827,51752,86214,63323,59061,85529,40054,38529,46979,38500,27994,26398,94853,39412,39713,70071,65681,89606,18411,91378,30243,84570,71953,13557,20733,20706,58853,20665,85676,24503,23979,60396,83027,76691,18160,41754,45789,92482,89415,36936,28057,37491,28190,79817,22244,38324,82353,20946,58107,95153,37414,32478,50833,80819,37411,87986,37863,88792,50044,99216,17018,10624,68614,33003,36602,17509,98365,24868,23667,16058,81175,87794,76247,57208,18627,68129,62794,32610,37829,19730,17720,90238,61099,40537,16254,16736,93106,66161,33170,20562,82330,13505,14700,87535,94690,28536,97070,89543,88574,86918,15233,96161,62781,53849,69873,97962,54228,63621,61610,60654,42500,30215,19841,48816,82224,30994,78505,46680,60960,99910,57501,41100,34302,49808,12209,34104,42832,48460,43171,77142,24142,34816,41569,71491,62911,45220,81722,74748,11508,70075,50404,29576,27008,54704,36172,21921,66518,56580,98251,80351,68150,21287,59203,18148,84809,96043,12628,49040,87835,16820,14353,81697,42336,69669,90536,25500,63611,51108,30992,62582,21165,44054,45635,89043,45443,17840,52924,76973,84304,12131,38456,17616,54222,84143,14611,79838,30756,86903,48272,81729,69823,36286,90556,20576,32533,26205,19544,14885,70198,90950,41649,93508,71979,94032,18737,36494,92802,23287,51098,18878,29226,22742,24722,18110,91533,75185,25798,80518,45983,37163,43569,92154,39492,41929,33001,37422,59806,85117,48983,25712,56259,87538,67851,68823,68307,37265,37570,26288,41208,95582,81338,15267,33639,70639,57586,16260,19858,65335,49215,86027,94453,60673,12859,85766,38771,90201,45633,16317,65208,35757,92179,39208,63752,77534,93450,42271,53382,69285,80616,92771,28011,94511,45734,76100,60408,24961,73278,70206,44881,38436,72914,51619,44977,14346,21357,52543,72430,91252,25285,34574,65742,87785,22464,10143,22771,16106,51405,24375,50480,18390,78405,45760,50900,40703,81146,30820,65707,19424,75504,52630,18856,60493,87278,36771,77116,56037,58024,83411,70736,42767,75573,56238,67399,30951,10728,43621,46470,97420,61232,24847,41979,91714,31989,12052,84924,46776,99491,29631,55715,58603,27295,51642,70293,69920,97378,78903,20001,42754,94469,63455,38500,95113,88555,56633,77332,43355,31594,97747,24609,34966,61157,14111,75502,21960,70868,21101,43458,15614,81509,69286,48122,38828,87518,42243,19309,56038,17754,50295,67787,15923,41652,13466,28772,52082,46727,89174,15112,88925,55245,58081,92224,36315,12823,71830,47845,83973,96637,95674,63048,69905,68541,95988,66014,37864,94131,33076,95912,11782,39776,61789,51748,13081,54189,62847,26056,27160,15828,12321,64683,40419,69996,16452,63138,33138,39475,56802,66439,27467,53367,87873,79205,58027,37813,11192,58271,38001,45064,86926,17236,95812,16575,75079,49836,62368,17385,62505,15125,46788,76336,59902,94064,11631,60934,91561,82798,57693,38339,60774,91513,20985,92420,37299,94549,33271,83521,46983,63542,92322,81156,49268,54222,80374,41194,70616,32747,86746,36046,11545,70399,97213,30151,49403,19484,24492,43377,94217,61711,34892,35242,72803,79248,87729,45625,72152,22077,87503,44348,74696,21868,22172,88136,22077,32277,94044,14626,96980,39478,24710,50506,63757,50800,94084,11747,92545,14732,86737,40014,36521,55210,41721,91545,45594,51159,45184,89071,29616,10576,50586,37539,36057,36053,57123,63987,44842,68691,84964,50881,41300,55597,33254,33361,31737,78774,41076,92143,69318,29204,50017,58108,97628,44017,46193,22752,82901,72618,62215,91051,50065,16846,84057,60229,80716,10192,36550,38191,52118,78685,61126,68503,10872,61320,43424,34674,49477,94265,27367,71437,14486,74649,23114,10750,71175,16642,84441,86277,63886,17598,80172,64135,97741,84290,71574,23104,39893,52027,92114,52456,78042,46254,82416,49703,48734,18937,35201,80978,91195,93442,63525,40643,36398,78483,75535,19477,47025,24663,84125,41920,79460,63552,43371,65705,56416,31796,15303,24412,95316,49169,32038,72426,50055,54432,55836,31707,15586,35825,20527,90108,87725,27798,51892,82155,49724,11191,29841,18041,84281,91010,23661,27742,82055,69742,36415,97552,25648,22984,30107,45727,86131,43380,80310,77884,42014,77458,99011,34272,55194,37334,30646,87021,91161,81334,22493,97695,72862,81966,77198,53969,42551,93350,93173,61473,81511,82159,91372,98103,46780,89632,16521,90636,92334,70981,85613,81802,98334,70707,45520,33996,50772,76609,85720,20949,82740,89843,10543,91292,61674,33774,65440,90328,53914,87727,21311,47108,33059,11682,43934,13946,12350,30663,73958,80454,45849,60262,89093,72151,86021,95014,82452,91848,35290,40476,24015,95620,85487,98479,69198,41715,49266,85543,57825,99640,98353,94871,88840,53755,21681,73140,23046,11442,37817,53753,65355,25870,91742,98608,16286,42442,67673,57825,43299,97563,99005,40555,72616,17433,67843,43663,97497,70560,47186,75623,31478,71160,59881,38527,54244,54346,11909,34306,18183,11480,29364,98747,41538,87756,30490,61667,52699,75816,63101,49424,75733,34147,64658,43709,39657,20266,73897,75509,37914,56429,71737,28385,37955,94442,12263,87247,82620,99299,84348,89826,82046,59620,38924,74372,47764,86489,22116,10707,14737,81176,30395,29637,79719,27075,86793,42087,15394,42483,29754,77663,85551,84906,71349,53104,78578,79657,35088,48221,18213,83070,61852,15117,20560,76513,15939,13930,15009,18870,33579,43156,21843,28875,31494,99200,31874,16351,43728,48307,97490,70895,96136,59143,37697,76744,65093,38992,53681,58779,76174,75430,87033,89078,57670,71615,15750,37679,88092,36529,18958,25706,74603,61081,87389,94489,54250,24054,23937,79964,17349,73135,85197,40227,26074,33097,62058,65481,61261,12631,79724,46550,92052,96173,86263,39249,17453,81478,86217,66055,45132,37575,35708,10970,88800,96704,90342,40291,62513,18486,58970,82714,26939,91257,74336,87025,14530,67232,26531,75778,82340,93476,35836,92482,51840,35907,22466,18800,31640,63906,19630,19066,97170,23856,15378,55195,86675,30272,74701,21948,65516,11423,53571,90575,49443,37777,65459,90183,87272,26303,91065,45957,82346,15334,85847,40661,47198,21652,32876,46677,30241,74165,87707,76314,56272,44113,52987,49444,60931,91169,44380,78528,71610,33784,27476,95449,13766,92977,86788,43589,50167,15828,71829,47758,91818,73530,16934,37825,84835,86459,21956,19091,77710,72325,38642,15932,36379,38644,34085,71560,27282,96022,63424,78407,92039,90246,87196,92063,31452,17389,97890,39250,63030,85208,49636,56266,19885,98557,44334,11552,17469,82520,93764,91977,20382,89719,76437,14194,20054,27551,41872,59522,75446,81915,33978,79501,39715,33212,48828,88278,41858,31662,91092,92664,94023,33476,57535,62213,91104,63510,97303,99960,30646,36744,29815,43258,81693,11567,28724,32019,98828,61870,97647,17700,73773,51925,83356,83449,52264,90310,67154,72919,57678,48800,69435,24441,90242,80269,22665,88708,20783,55176,92199,76275,85077,17357,46496,52052,25993,79445,11774,65601,77481,78777,53520,70419,92913,61050,60363,66851,50000,97130,11659,20474,94118,57032,51218,81901,11114,61110,19824,46973,83980,23461,64299,44553,33251,87510,84379,44675,77241,44677,30327,87577,35039,55359,59965,65110,67919,20860,47075,34131,92304,53840,80091,48933,13289,99029,33548,82090,33116,78799,68712,85268,61072,50549,28034,40558,21598,17490,50413,36046,67399,46294,82906,89195,89515,31493,23317,13369,45006,63600,52032,35672,58377,21439,64872,65436,74831,16041,37755,29755,65654,51393,19500,64594,12111,13387,30739,91438,44519,16671,28731,88671,79882,46203,92421,92765,47285,90352,27587,76114,20202,66827,94454,42368,13058,87672,48094,43570,85767,63486,88208,82879,25784,32895,41018,24616,36401,91028,84283,26472,55896,78230,76039,63138,68626,76478,94002,68948,62465,61660,72758,89079,72601,53742,84410,47489,94735,75889,80535,68271,18956,92683,50060,44750,54175,90323,88336,94378,96295,26692,20088,35356,77722,51501,18424,92541,47494,23560,76512,51735,20070,46058,25169,99703,59022,37663,78572,21001,80732,61645,75693,34397,90707,50229,84138,14318,18298,28963,71642,59190,66060,41485,59156,82251,31403,45053,68923,96767,92116,84702,16385,69796,39559,47003,88654,52794,97430,75430,95104,32319,73702,21903,98368,71159,81907,81715,90996,24308,39919,34961,59442,54374,31577,10627,30628,99328,31591,11693,87433,17932,39078,82076,35975,10050,62200,81141,82670,75060,86151,73484,88585,85999,37739,31173,80649,83713,77022,67531,68752,64942,38327,54423,63844,77747,18779,53908,82005,48524,95073,92644,23869,65973,77603,36145,37347,22109,48903,57458,42800,93444,87511,78960,77731,56755,13635,23004,19556,75449,67690,18787,83077,99977,92933,50208,91303,74183,96313,26593,86815,23163,39646,47293,77925,51281,56462,15355,16303,33985,60744,67281,61262,24197,17039,22032,70249,59589,16508,66167,52392,68762,90652,52972,85005,74175,53073,58537,72538,64037,38420,51241,91804,19575,32095,46574,34310,96471,15653,68946,28789,84521,39628,91672,20077,53592,59137,67273,26966,24562,38709,37775,96174,75990,40169,50695,68985,92471,51090,36016,31151,24452,55586,56733,25903,29907,67402,97074,99395,77479,74596,83572,78335,14834,68459,91956,33922,84768,85976,14992,23219,23911,83261,61337,87056,25449,68620,40144,97640,29978,96540,42012,91827,53695,98160,89620,65740,90382,33151,69122,19454,70419,14324,34932,85414,14944,43991,18266,69455,66755,46206,32439,40000,52688,67780,35181,69614,77953,21555,27409,89248,28435,63635,64690,99945,30122,81068,37048,70534,14838,76203,79807,56610,63441,85021,89261,33335,19860,33853,31818,60002,56221,37046,81261,31149,30532,94531,50423,11555,26808,32192,69178,36894,52826,34673,40805,16777,32651,12949,14516,97749,54878,18862,61321,11763,80689,52743,38581,18789,25313,44323,71642,39471,26657,37263,99162,19155,19418,98691,81184,52998,25583,62039,58895,72505,13851,35664,45842,55921,20725,27558,18856,37896,29441,45799,28093,59850,15617,62215,33235,37334,79187,77114,87730,53924,88059,77414,97935,58152,69767,89887,66434,93437,71010,15134,11478,73327,77674,15280,51746,83369,45243,75075,74786,55381,43105,31136,63907,85381,79329,69721,15957,49731,71706,52073,47237,11061,73601,33156,15461,37167,45789,18794,58952,14499,85193,21661,40729,27332,24931,16819,87180,39654,36139,21120,42806,48666,32399,53331,55225,76499,31710,50111,19888,84387,65655,22269,82631,37568,63323,29636,67671,91231,55685,49923,16361,89936,83219,12076,86899,73815,70208,23434,77389,29813,65164,88877,53598,36313,32175,53755,87168,32169,56454,66903,52845,30617,89604,82846,60041,52467,84735,19344,36650,12908,89563,89869,42070,77080,41461,73299,27811,87891,38075,92099,50739,57290,47631,41716,62145,25830,20147,59125,84197,36501,17371,97214,32044,96559,76912,46310,45108,39113,21285,64348,69739,75165,85011,34883,14154,96139,67267,55978,95965,72314,40731,56148,94160,18787,56483,71929,24878,17590,14607,92449,85284,62979,85793,95068,29519,24646,61912,89834,79442,72847,24054,91963,76556,37069,38047,37138,39258,10853,26978,71726,82299,57872,51654,78835,39756,97613,12140,71732,76270,68379,53974,50163,10574,78212,45069,50845,72099,22235,72888,60485,94009,66756,15353,72620,13771,85126,66108,13028,41148,83778,84986,71572,17419,19015,33026,44012,43866,99511,82063,43354,66347,84256,48817,77971,42554,73428,90245,79633,72823,92185,55748,80193,27173,40293,22215,33616,77149,28823,60953,79774,55777,34828,50543,84571,61625,17747,24156,43746,93553,41666,44132,20486,88608,67961,45247,51638,74815,61677,47959,96236,19213,23957,43337,37352,53756,19427,64974,39933,91776,77243,13007,34426,37886,19383,89595,93868,91048,18438,10454,38018,89573,48736,45978,34879,71350,12570,50035,79154,47482,70620,40701,75874,31001,88764,63603,64653,30434,42548,17716,49503,97468,84358,86961,79825,63042,40555,65063,27237,71986,44084,79969,14854,86338,54338,53647,88389,31969,52177,33052,44520,78063,89145,87310,88045,13046,70933,34949,35850,96264,67528,64221,48699,64157,47677,36559,41897,31703,99146,74665,33956,48060,80222,36671,11384,26712,20418,93970,71448,27354,71369,15321,18518,46728,50326,23102,50829,28784,11760,51358,47075,63545,21508,25293,18284,17943,53143,52936,40564,19079,47593,86283,96983,89948,92215,61733,31997,37330,59662,24852,11982,96485,51128,52794,13737,39912,74656,71291,18896,74030,27532,88617,46747,12715,24921,40746,82612,37224,31567,98707,26312,37643,28655,50521,38942,71764,74737,15742,55294,44792,94357,18726,11979,44418,90812,69714,47032,30764,92755,50401,97434,78615,93604,87255,89451,94668,13912,47136,37788,80974,10255,66584,79850,90194,26266,43848,76956,20079,21029,17685,10628,58923,63476,97898,20834,75804,47484,54612,18061,10055,48401,77866,69677,69582,35630,19622,10830,33251,27422,97654,14329,43056,80901,87129,18004,10806,36104,22773,16507,48975,43792,30043,15168,97304,53722,38935,67349,58754,42064,11062,85366,94430,80374,79897,21639,49605,76546,44358,45603,47657,63127,40569,88554,78757,41962,81985,21843,41280,35052,78704,50085,72765,57734,60046,43012,28220,51061,41228,43775,29263,62962,34656,42622,30272,82132,64835,60804,42952,58941,32821,53987,82290,22990,83942,38576,61815,64403,96026,65273,75862,16604,89796,82859,74893,69205,37344,62732,78034,52339,42857,19784,47650,57201,36564,71472,32273,94127,36794,53669,67865,87421,82761,78105,81370,79397,92840,63473,83100,90247,97769,75539,89878,77207,50517,52681,26816,53198,19438,55008,69387,12289,45721,97861,43941,82958,74088,20657,39409,76918,24344,28177,61751,38334,58369,70850,28030,86502,95606,34293,30609,95835,15029,64905,68907,90362,29253,20272,32167,28966,42961,26009,67928,90802,37577,84339,91062,80149,48766,78338,53193,27293,81324,11033,47003,41067,71839,78623,32844,43590,50611,21591,11679,16991,68586,92097,48873,20090,70357,92634,40483,36270,49187,16915,51415,56606,64521,35653,93131,30755,50515,22241,83441,56208,61128,94522,63276,63683,40502,28969,65502,19489,20226,25507,71705,29534,10705,26918,29596,17412,35657,27665,62919,88373,54477,15140,11758,35863,54107,89430,70281,26376,36317,11212,89463,64365,90283,89942,79505,29782,84339,14416,42570,43893,11654,15165,78460,60009,38600,82829,83959,25939,77123,63831,41088,79984,17510,40377,73303,74796,78098,49350,20028,98970,81987,66223,42711,45309,18471,24631,96411,87895,69100,50246,68979,51462,52241,88789,54000,39459,59218,78853,39284,77469,17034,11572,74186,59094,98414,84728,83648,39844,45237,78232,93607,84263,37277,41754,92616,62214,74087,14292,39348,21470,99699,56346,81176,93193,70420,44088,53461,28129,11381,70360,18649,92629,15070,42232,73391,55152,27044,58926,73481,73024,83558,42532,47918,88253,17132,34715,92396,93403,89717,21365,49003,82320,26020,91817,54416,69969,41282,94228,60313,20430,64155,15107,67982,48899,11409,29665,93139,61285,44779,93315,39715,41354,73231,38652,83538,13648,52168,27418,22374,64502,38155,26866,47877,48403,63585,86868,75165,18477,18709,96290,81812,72775,10178,52222,13115,92438,21535,71800,47078,92577,87820,82065,60944,62849,37279,34755,40671,69237,11439,13263,78341,69643,99616,76914,97548,99479,10628,11465,29828,23953,78502,37930,48552,59319,15011,36096,58251,40625,77708,43097,71902,63260,59186,92835,72593,94926,44461,22074,96849,15491,12779,79790,43281,81700,11517,96005,27963,97416,71820,54738,90393,14277,59679,76145,96904,29276,10437,43517,88495,12013,81980,90405,27066,20534,33181,40176,19588,20020,73069,61275,69651,62962,29686,56980,57037,70658,35484,27869,99829,98066,24177,37010,27932,82325,78122,58596,90786,37587,72856,18132,59422,14625,34347,74577,10263,98289,47078,73868,48774,95334,65040,11277,48989,82172,80418,48550,91319,45768,59125,96893,62421,32690,95618,18283,89130,39775,22992,11519,60995,77374,70895,37696,39205,42133,79372,90693,29718,29180,67599,91685,41802,46587,31057,58931,39114,89211,20116,43910,19252,91758,19876,40541,83921,62701,18592,10969,41538,65184,62740,75533,83106,98489,66761,54650,37270,69215,98785,93013,37606,24352,30072,72045,53520,39546,46032,53701,11973,19786,95813,94059,52327,73765,76493,15347,39212,41632,80739,84022,54631,59841,50575,89705,19241,52863,10971,31397,98356,17710,20547,97466,66753,96847,61099,91435,72569,51003,71427,85329,58865,89867,62809,89680,24029,84363,49959,13759,21567,36518,71163,45758,20559,72572,56785,72081,22767,32948,21445,56638,72596,93190,89885,79273,29546,36042,42680,92269,37335,31894,59066,90206,13828,18658,32985,19090,60421,84576,39018,52144,70223,43959,37315,38239,35800,85006,80560,38930,85598,37588,33731,71917,27716,41835,76225,58943,25558,82253,61493,54533,26170,30783,98358,35733,69164,50345,97683,92731,97922,84868,34496,56596,68694,77448,77514,78424,38659,59949,56944,67500,38292,25913,37515,37712,86382,84348,75235,70893,17300,74327,84719,12194,82196,82262,94489,44212,93852,36176,58025,81775,19139,74750,43865,12864,19274,93449,70836,61700,97396,15861,82392,40276,42550,76561,85068,24169,42591,40851,47874,10723,26456,16248,35188,35550,63097,26855,62602,71407,83099,35483,93389,91140,25216,34363,42570,50322,34966,15178,34657,28407,92670,23579,22789,15141,80849,75967,66313,46581,72896,23581,74942,86284,68175,27708,14481,57598,85073,60163,57741,38610,11616,94654,33830,64177,61115,10502,12335,58256,93606,42809,98143,16531,97826,11737,72961,20254,34794,38507,10390,49556,71656,59029,78176,81937,73440,63930,72149,50746,65370,86345,15286,78880,32197,88637,32202,81082,37652,65585,71030,99772,29628,50596,38682,60935,53603,91724,65045,66851,90151,42977,98167,88934,76515,11416,96191,31982,52348,53710,67114,63349,38059,70853,14889,80927,31777,76325,45320,62063,29885,58330,40361,72409,35384,90486,87324,78104,56296,25140,28480,95139,38872,39194,46274,54799,95884,57645,92109,68710,30525,95903,89712,23739,64168,46990,73457,57880,82358,23991,21548,60937,46384,41804,42966,71957,18726,23084,78688,63486,63390,24812,14733,56289,29851,97709,35152,79251,88167,57483,57926,47478,54646,73523,69937,16096,72944,57704,12859,62663,57889,16822,20799,39827,10600,49133,82104,82989,24855,34717,76879,91447,96423,46272,42665,86499,25617,16822,74616,54351,13467,52540,84792,59548,22604,26599,20611,65910,43739,78722,12605,51394,86607,81245,66551,89093,66165,89077,84172,73364,48060,76340,67290,74705,18397,78642,61780,28925,77807,27733,46965,39599,43258,57016,17902,23898,62097,10915,12694,25614,27338,89838,89989,72609,53860,27456,30169,42711,20503,74128,85681,51583,61156,93042,58260,35593,19190,73205,21403,25859,59382,56643,10581,93966,84451,71524,25861,75701,41061,14498,30831,82183,80388,27848,72821,96623,61989,10229,35229,71027,65381,99198,28049,81367,17140,51469,53980,88738,29663,72961,78005,92966,52088,31833,86155,97231,10331,25693,59276,87013,58090,78344,33213,19915,53742,54583,91376,98899,95090,38382,14063,71527,36004,21243,79637,36919,88501,58672,33513,81995,40345,80679,66568,67785,18878,13277,60110,94505,83360,10845,23880,69160,90580,81623,68967,11350,80708,30491,94373,59983,22541,17115,29288,64956,67151,73268,22512,32202,43384,90583,26961,44407,38433,78892,72360,32636,28240,74067,53054,58462,82135,40687,24278,89791,62070,50957,20512,60757,40919,61979,46446,58308,49810,72365,25246,61257,74935,73177,44843,46821,98106,52639,32080,57888,66002,31364,16440,25592,98462,81368,45564,43123,85045,94648,63733,76861,44956,24724,19209,16631,66590,30107,97846,34255,52892,16566,44634,85468,69489,86539,12653,17239,45839,27831,55729,52028,62687,79486,33521,21604,16513,25747,65462,80908,67554,98939,27367,77227,23782,22105,15085,38847,17654,74527,75746,29386,28517,39162,86705,46963,10475,10742,54023,26161,15023,54056,20575,64939,52319,67719,44877,43974,46846,42506,92902,51088,21146,29587,59263,30867,85225,34343,76335,17892,19146,72017,20545,45972,87936,55289,52485,41260,41130,82294,65882,74026,88102,17159,82089,51832,29848,69321,37549,53339,19829,47784,85484,19856,21290,39657,35273,62165,29056,23989,96911,46512,44081,89811,90148,38392,25297,57280,72312,80254,82764,28608,53995,65533,78156,96426,24265,56048,27420,92673,23283,86195,70973,66594,87080,64171,59064,53613,18349,67937,55286,15263,92016,65897,16488,10578,61634,79489,65369,16419,32984,38430,76263,18700,59132,90795,54455,12871,61842,12994,46786,62132,29938,46019,60407,93537,72343,44523,43766,39744,54246,41686,33058,91747,89222,14614,15444,57132,56434,76422,41526,44205,27462,49892,63375,88165,31871,13944,55166,37073,19878,66718,44595,66433,36603,65207,87111,57503,30747,62771,28040,39443,93179,19711,28895,71970,47451,53422,17045,40215,92366,75566,44029,74526,18203,51832,51274,28097,25356,18504,81125,12533,91536,65701,60843,49195,61450,82403,33069,98965,30427,31246,64704,63532,98055,28092,44305,83814,75231,57319,49072,95798,23697,74692,54666,74508,25890,81764,85163,95896,35384,84730,49606,16912,79731,54169,13372,94619,38289,44268,37673,12236,18792,97046,65154,44888,52950,30268,19095,42380,11666,57299,19332,66081,13891,72459,51384,78380,42786,66496,92336,72940,55298,54858,91865,25731,36758,24743,83132,16384,97366,62242,25534,89125,45606,89276,40337,93842,68285,61764,68397,17170,39181,78839,57060,84607,34601,76148,39762,85515,28943,65471,47456,90919,68912,23851,37334,48282,42018,86737,98735,98110,74196,84867,91316,64644,86561,28168,90173,77317,63396,38026,40118,94650,69974,83315,70250,50816,81228,41189,97959,78864,26309,56425,97291,86358,94047,21639,37882,28775,89023,59324,10589,74479,58432,73362,74806,64987,61648,52291,29421,94242,76050,68628,92131,10741,31560,56141,87091,85909,55527,51331,16244,39490,67819,93460,50930,83857,63141,60826,65519,60984,85021,93881,97390,70099,86433,13752,53599,14664,59976,91588,35518,53915,75388,40971,43037,66912,94538,28002,85717,37393,73758,18663,29802,53374,36696,67778,56157,74089,32779,25855,34288,55651,78602,13206,81022,63190,76620,51718,60732,67519,98861,13238,33612,39521,31066,75327,53501,81676,49277,68271,75347,83814,41737,52171,23393,59074,69890,49647,58215,68515,30918,30365,10365,72425,59392,96582,10072,67049,99308,98251,36829,39801,17817,14848,93961,57525,26249,39560,40190,96250,61604,82216,42620,93771,88245,86163,59578,43081,48056,22651,47318,29934,82357,19171,55116,24350,98324,46383,89180,34924,80348,97902,54068,46991,61310,10240,28127,81638,71293,63069,90696,99222,14923,37979,20693,82930,38597,62645,12109,33470,87979,29968,21087,57973,89156,85457,43606,95754,90027,56111,61401,42275,31040,19791,95171,13141,95747,81637,56203,15964,66859,12475,14840,44921,93382,40416,57282,62841,92899,38173,40023,62020,76352,50359,55698,38268,42666,70750,93299,83908,76208,91486,31909,38324,33301,74267,50501,39029,72671,92958,58911,58518,27719,10396,99366,58537,30548,17886,25682,25699,72706,97419,93245,10633,50063,39635,28506,24752,31418,89416,73904,67742,28134,49403,73049,92894,82521,66178,40607,86550,40697,69458,36449,86263,78087,88491,79014,89062,28753,89068,58005,84472,48251,12245,43052,85881,54210,79748,71779,56418,87912,59077,50263,33911,69078,45019,81183,33069,41942,78990,24899,32130,94795,85114,70594,13855,59220,86571,75943,37219,25983,63369,15969,10683,65485,61220,31976,54327,18260,87807,55749,41648,72449,86651,32890,40117,80696,26422,78167,67122,77397,64046,30646,38566,63511,44835,36641,39661,50926,87962,73957,98171,94765,86635,34388,37147,95280,62591,97259,51030,57668,51310,83900,89172,33324,71379,42373,42711,93510,47639,55660,89218,83197,22676,28502,22429,69753,89021,40159,15182,30209,58600,28437,74468,96292,58092,49178,38996,80644,12770,35891,31366,73389,40834,79815,24557,83313,20206,29663,48146,10410,72911,82339,24179,28342,51167,68906,16658,22911,48608,52102,17556,75409,14916,87485,89819,13196,63805,92644,52644,73800,68340,71845,70737,90932,12681,24192,68607,63711,63323,84645,49799,54009,62066,95688,97193,54847,55136,86687,15409,20925,65015,82707,48290,36256,24030,59376,20175,12241,70450,53850,14907,37321,94240,26702,73881,20137,51411,12886,85337,66677,61238,24024,99459,10821,83536,53481,70102,54326,21707,13867,64266,83748,91096,94498,35776,96288,97220,65592,30912,55540,28192,36347,84395,73747,54899,71433,45954,17484,87370,46938,25900,67405,21113,15874,26252,27725,42516,74790,31269,75294,98556,34801,63988,71924,19665,13982,35145,97938,58759,64931,46393,41186,97453,78014,98080,29133,69961,88185,81965,44516,12887,56141,88075,43700,33362,84556,16188,16100,99593,88696,73465,21706,37262,47256,96097,92638,35573,66467,41987,88377,94690,40603,78304,30658,95304,99506,51586,79878,72789,29722,38826,14870,99302,52667,55146,34283,97758,83499,35928,33721,50669,99179,42218,22557,66030,20015,65945,64565,94832,50340,63875,76901,59784,69153,83214,47527,95566,24362,39303,22729,59891,26419,98907,18263,62919,54993,11594,69114,40523,52640,61107,26516,94319,38768,54530,55657,44753,21729,61270,26632,73057,81608,27553,37866,16054,50902,98056,13913,56126,95692,86531,41337,60911,25599,30613,93807,70565,49957,94717,74335,21620,13304,78744,78505,86136,14047,96630,50531,96157,85506,86045,48629,88408,93782,80832,72575,68586,63610,59532,56945,34396,12359,24334,52124,33465,96040,97320,95790,92528,21241,69047,60613,18857,50571,97073,21650,58588,95434,47794,49201,83181,44132,33855,30597,87726,90315,33232,48781,49734,74950,50960,67570,34402,24075,54320,18766,73447,83628,88254,35577,83319,90517,66450,44097,90093,28413,12071,49803,18611,55587,28670,73187,79292,26122,70926,75227,22014,88343,28458,95227,52422,88480,66724,87137,51725,77934,41845,57006,18442,46504,91112,34472,66926,22295,82775,62742,22625,55730,53818,43815,53390,96108,93939,14514,48651,59779,47436,43700,56014,34165,61913,87041,30600,12982,52455,51588,43859,63655,11226,29209,25996,91045,64627,67246,90362,60807,12579,18746,52063,33913,12325,77083,18351,23437,17763,51597,77330,29133,21671,87243,13238,46553,61448,17495,75488,67727,25058,29246,85823,29695,89468,17508,40251,71251,78914,53780,24504,28134,67477,87624,76345,32460,79251,69598,82166,71195,81335,83889,75973,50381,84366,47088,19152,71681,43428,60569,55251,86705,62877,86820,82156,13074,40721,26535,12353,70380,24603,32301,55964,67956,19466,53180,44662,93144,91915,94806,84471,50940,76206,78741,30617,57946,63894,51311,96035,17505,94361,63484,80557,67727,12894,82737,51333,29251,45903,58033,55725,14789,39578,98817,76115,20109,75503,21548,59821,95006,85013,44385,85390,24181,67225,56119,75741,81888,49113,26722,67659,91104,25646,38743,64995,34081,89682,46332,24067,17504,53146,58042,84895,76594,39015,78513,36556,69074,69855,33687,79958,50426,99086,46862,41730,92096,67694,28793,79432,70957,30818,49915,42296,73386,19023,31154,66022,84104,32408,95384,53337,43019,82635,93037,78545,94265,13752,40717,61548,50751,34124,49385,89513,49952,62470,60041,77306,89550,69889,71592,83570,97764,31268,38546,26587,32061,91104,91804,17952,37667,22605,62659,57122,67904,27690,84892,95537,11396,23072,36812,10407,14577,92968,69850,93301,59885,75055,92123,64975,13387,84993,20770,33724,72627,32559,27804,32594,66791,91375,83109,23470,92611,44962,71745,26251,71288,34372,94942,52086,30531,81802,43298,56778,52641,59946,49795,86693,14069,22843,90598,20481,63067,93320,90747,64128,56672,96430,67569,76925,51412,58106,89927,41247,42968,38967,20061,34063,39388,55593,58396,50215,62186,61918,16358,25677,21604,32696,69862,27535,92517,70592,67622,26561,57412,96595,64235,17130,83751,26705,82040,49406,65817,78173,92265,91970,81598,76256,93121,49038,34764,12849,82421,88446,44069,11986,35873,72089,88498,86326,90488,51959,31125,88639,78980,59915,32216,94520,34448,37535,67246,97192,87131,69178,69128,72674,73407,53779,56213,80274,28779,58325,45725,51528,33068,35746,57071,37291,46798,56106,15708,79693,53464,78543,22792,72955,96043,18932,61773,33392,99900,64286,46023,65142,47431,31570,11488,17726,45957,40018,80379,44427,61183,44528,45504,51272,27114,46208,78826,85350,84874,78510,67807,62777,13940,39511,24087,71858,52710,92018,13581,84290,48099,54716,74092,92722,93543,69186,62320,22019,39276,31913,39508,72054,70894,12587,24435,85016,86198,71913,78738,59262,83849,47700,23606,68884,24084,28589,92561,92044,54801,37013,73839,84907,93118,22897,49051,66552,64620,98040,91010,63968,80720,86221,62629,72978,56191,38919,95314,74284,66113,18319,79129,49451,24793,59520,33967,62809,39968,40568,63708,67610,67771,18365,41141,15006,18467,31028,40275,66093,47157,40827,32004,84268,68165,86683,43365,64139,16416,97717,77656,97755,34923,72322,79079,24043,47522,39841,14419,71674,98930,80575,82541,87984,70673,29358,55486,52939,14460,50175,52489,15639,14858,22024,13121,49127,73817,43954,10618,83068,74898,78983,62857,93141,95923,63007,79415,51749,26703,30965,59897,77375,83877,55507,63576,25657,70155,44479,30821,75766,35734,90069,51618,61639,18710,24371,43382,37101,68013,20081,83213,58299,16008,47807,35258,64811,84751,44492,49607,72413,65196,59583,47253,22816,43650,93547,38213,47462,71900,68447,86777,25460,19876,82915,98304,12403,38812,86687,68231,60738,78793,74548,80804,43254,61146,58198,50691,65815,18639,80010,97014,29252,87548,52724,23471,64384,37208,89561,21445,21385,74451,81017,90336,53418,44556,13239,83755,40782,48541,62131,87745,97943,92229,53316,86862,83806,53399,54075,42452,87686,83381,18995,98213,71851,48001,59648,84372,17568,50642,66426,10767,72325,37627,55493,42114,55498,75365,20395,92771,27237,24113,66041,95892,70699,11824,62056,93827,85915,80464,11352,60418,30114,15169,14064,63156,50962,19764,24660,48385,11661,62028,11315,87858,47008,55025,25898,92685,98052,26756,62793,93338,45473,24958,65437,55421,70066,73238,99468,23167,19874,96422,19702,59592,52515,11302,76497,98309,64875,43297,16767,85392,38848,95639,32067,44818,62921,11837,33045,59654,70087,17881,56432,93700,38090,22859,93833,28552,42163,11426,45727,68641,78905,71344,81751,18683,41105,88601,51856,28379,81324,71382,84634,92681,63679,21192,63049,19229,99011,67226,48122,58808,85533,30742,71852,35284,57175,75196,14720,79842,10086,48846,62821,66649,79721,68659,26749,34030,18353,63612,57492,56379,55381,62723,78368,64284,58085,52776,61917,11095,14154,32782,80784,38019,50086,24947,77144,92571,18500,80040,90466,30089,74760,35044,68871,43557,69768,23741,72795,94424,85584,65102,75495,93780,18969,25625,40612,25079,47813,21042,91216,85240,92149,43298,54817,77135,25029,21248,75505,48527,23762,58355,32512,92599,81465,53904,36067,31444,63670,69818,18811,39388,33126,17431,17491,17491,71674,42028,94628,73872,90323,11527,87273,61804,20238,15586,21779,82850,17918,92792,36682,63166,15075,77093,39661,73507,73871,56877,21740,21503,51387,19764,23727,67763,12766,22808,83539,89394,75054,11403,34189,31352,62624,87378,71252,51472,10594,49640,58269,10472,30693,71236,63405,87783,36378,90292,84760,69898,72976,54418,15740,36006,50488,14325,84009,19241,28925,69044,16744,56102,17587,98115,48002,73404,95937,24864,97605,34654,74074,65454,61371,38557,49964,24390,74197,68491,33195,46051,24308,86096,85781,36834,98511,21332,48191,18946,76109,78106,78114,21161,69261,75520,23806,78385,57665,28961,55170,36018,40085,79751,48469,16583,58538,15997,39174,45534,35964,54433,56549,63813,57097,88994,91807,56182,51690,25612,52171,70017,53267,32213,20883,94511,84712,29233,29176,47495,18141,18041,13744,32615,18965,99843,78771,11135,40000,20671,43552,93166,17421,68304,32032,70846,10104,77711,87918,22447,84776,73667,13977,63566,13384,44234,35552,95188,26602,75228,19881,14114,11658,46816,94279,66140,86916,89403,52058,70271,27234,45093,91308,31557,36804,27727,68024,77492,96264,18881,84596,93356,18949,41528,14513,75668,59771,10735,27360,38633,72922,42214,69906,50040,38301,90353,46540,17633,51434,35197,97908,94416,28702,11019,22875,53110,87200,90706,21658,34232,54175,18050,21360,12213,80842,97958,57418,95352,75386,21173,32447,11651,98100,92754,61185,62589,49481,55747,18961,22835,15937,85110,96272,45987,76521,12331,90142,62187,49434,50052,35223,32827,84328,95110,56560,58901,25136,47719,99156,16779,62447,56755,64700,26217,61271,93916,57070,39431,94556,27338,39427,95178,10532,93919,79837,23010,39271,36350,81004,69905,72179,41700,84322,45655,24871,56076,39199,47263,28274,38087,69476,45197,76703,99775,47177,64370,57720,92060,67011,94139,42627,42696,10751,41232,30187,44579,80594,85131,59081,17864,83835,35740,61965,64140,75769,84213,67362,35646,13964,84196,48259,11758,95152,40427,12178,20576,73861,54902,84056,40732,66738,99825,13102,47669,23127,61389,22097,65427,38398,12051,44689,87956,37498,30732,23157,89909,16207,42139,95554,92804,18060,92410,63336,14845,15772,30946,74709,76073,41287,17028,99189,22276,90479,54168,95505,71821,90607,51636,39039,90273,19281,88113,46919,77165,64715,12567,23750,45311,32173,66819,91003,34567,76436,51914,40951,59242,40525,10929,69727,59368,86451,42258,61350,91069,22821,14242,12567,99717,53005,84593,73646,25504,92023,16927,65657,89324,71068,95082,45128,11010,11333,60924,45846,39287,72272,50252,52490,97984,62204,67218,24876,34695,36098,11554,79198,35529,92215,73927,63496,18398,41215,18389,13002,17196,36619,49610,18046,56389,92899,11229,41684,63325,44065,19662,93779,66426,29008,78557,36627,38496,39886,46247,68583,72159,25125,14300,99636,62812,97878,74532,14812,74208,35365,71212,73302,53719,31743,62218,43215,87828,90894,19930,67010,13586,16016,41485,83738,67816,63174,44691,60709,19735,45517,57242,56361,33639,45154,62082,78839,68837,84717,25840,25072,66579,52011,60922,42990,27739,42274,45121,91001,38102,55055,47230,30390,83576,90407,55902,41218,58413,46747,34929,22572,88200,65446,46384,52097,75374,98778,58290,39427,48021,43112,44378,88970,89672,16336,89286,17129,71371,80218,74964,39773,90002,37956,74055,26521,51937,47636,88783,66355,17311,56273,72584,99683,75955,25339,77877,30823,99604,25562,25099,42899,31399,58619,62443,93932,56275,49135,62614,30604,80974,22768,26307,50599,57512,59679,20929,22978,57895,45427,52522,46726,37669,78686,95064,76186,61085,72215,66171,10965,93029,15153,81323,20566,17042,11831,58132,17328,73759,83511,93562,16729,24246,61219,49958,30517,58999,67972,80468,87115,91663,41558,75700,31653,19316,99749,41777,28957,61130,78897,81759,38938,65977,28115,55194,19049,36061,41392,60425,18638,49846,92009,73519,49086,46174,77420,10630,39418,69626,53472,31999,83610,74149,17168,35310,33034,91145,16187,33988,13060,17647,51480,79777,32368,77342,87709,72461,29413,70059,30628,10902,60710,96476,96377,29730,58704,96092,74148,94053,14876,26734,65391,81181,73854,69761,53828,79860,46662,59339,70285,10545,56125,99794,94537,33742,51531,98158,78173,54191,95361,94755,24639,41372,95043,67288,20024,99627,93709,38486,26198,53830,87781,95776,75629,10400,55822,84396,18031,33447,26582,47829,46633,41574,58533,14716,87991,46381,80475,51562,67037,40743,60388,58519,55129,81323,72397,54903,74407,95470,24275,37603,38898,96478,75393,85570,60514,37213,18640,17509,68256,64595,36822,34464,95941,69431,32998,17831,60609,44418,31291,31744,88745,48948,87528,59443,12639,49716,37459,53990,75868,31928,30939,11884,83166,35722,33584,47055,60813,80943,51373,96327,21021,18777,93212,94038,60550,11109,94168,24829,80877,85210,50841,93189,21664,96224,80192,54110,76947,62522,57162,68356,24155,11108,67298,61302,82315,40641,10801,15963,41463,23497,85004,48283,28475,83075,20301,51907,42499,18188,96171,50409,56116,83221,63586,98326,59901,35299,35387,20613,39065,43422,99909,55643,72855,17407,82832,24593,52991,41155,85124,35741,92378,21685,15065,39263,65987,13155,92640,30814,83005,46159,83726,31562,45565,80039,31499,31177,37575,50819,90105,60243,32404,10993,73364,55455,82861,38115,28945,74746,49718,51308,92342,31871,33088,80948,95207,20388,32652,10961,68255,80227,86846,75160,90970,79364,61117,90933,92682,27504,66847,65976,63913,29407,19258,98653,50468,47488,27256,91096,67175,78873,98809,57226,47914,74965,50734,36497,37042,91923,53724,19991,61226,88920,23113,55517,59543,98886,72298,35855,42450,35628,86438,22648,62185,97927,26016,27484,87387,51564,46757,57802,35498,44937,26142,20435,92443,57450,91703,41493,96277,37454,63427,89666,71988,32030,86602,45202,29914,79393,16208,26317,57456,72730,83594,40386,40834,18060,57183,92935,29144,90005,90837,78961,73861,57898,87562,95173,73523,87236,85606,33504,39737,58052,59855,89601,30460,84842,19450,27992,62377,41128,76757,94837,47647,92211,37791,80034,39662,54236,31410,55194,26610,62967,78170,22010,12183,36833,37021,52961,88473,40389,67604,68011,41673,34548,50796,62901,63158,13442,57193,73561,28069,35589,84015,20370,96224,60938,78834,71403,31380,22072,72620,18166,75151,37006,61413,99995,51387,94202,27450,71386,98849,56815,18471,52152,35745,56973,23421,54259,91893,87699,31181,93319,17255,87183,61524,51040,51136,68358,75626,18228,57732,47396,43500,69515,13372,75674,72002,92707,14569,71113,51937,34702,77968,63207,66618,85217,28559,51559,89516,24768,57828,49118,23549,90915,18517,23127,48885,35626,88813,42100,71189,25824,95742,83447,46835,80336,58318,42393,69687,57238,60265,92894,88371,78113,88732,28080,83016,69387,52609,74792,23944,97601,39227,18556,99647,22131,96379,81148,60080,95276,31909,14321,91610,21544,50385,43865,71068,21439,98790,92778,45956,37290,13096,69180,40115,30462,16861,40672,22159,21841,19428,92896,52279,16828,89422,39485,42086,19773,86539,36312,79138,16041,21690,13696,22231,93010,31753,36919,50207,38517,56889,50084,74869,29815,87754,27918,32136,69268,15250,74943,26796,15276,72496,82389,34782,43326,16274,23217,45528,33358,38611,31503,15154,86130,19890,41311,72458,86373,44437,14340,27600,88645,70423,21077,52120,50310,47118,14783,12728,83386,83088,50480,20376,46707,17987,77362,66084,22361,15451,66547,69304,30919,82017,15523,53656,34231,78728,18930,83937,30746,17832,80340,79311,25814,43973,92574,52250,24681,11954,13791,70332,31236,43407,62480,44556,39277,21076,95425,56191,74001,11194,11735,65307,48244,96542,26799,50780,75446,57919,19580,77901,66791,49494,90465,76838,88717,98918,67500,79300,15324,38579,19106,73286,53694,95775,25952,50572,57301,28156,27010,90571,38019,96357,26440,21196,43826,80606,79204,27554,24808,96938,37513,75061,39930,18781,57235,97143,63690,64673,23355,30839,85502,56702,50526,70435,11398,33842,61303,94078,37807,71693,22870,98380,25372,51055,42655,51544,38094,20443,66495,72116,18404,65398,60932,55118,88369,80647,18992,14795,42751,41412,49098,31567,93576,33251,90556,68398,22598,54859,73222,38784,49573,86264,40225,88676,97542,57419,78171,41684,85302,48874,61762,60275,85188,75553,82474,51242,16167,91871,52455,26909,55342,90000,21713,47435,29356,71677,75028,95534,76974,99265,84483,69537,12986,15370,25520,45997,21043,13554,31604,44568,87049,34643,38045,89909,96555,17605,41057,42635,91124,59767,91873,93304,54481,23679,46851,54945,76346,48873,71227,18440,99544,93712,68843,64286,53395,99984,66042,93782,80735,42241,70364,22931,36714,36942,25188,83335,96370,18560,27253,89263,75161,40659,47028,93215,64517,76196,18039,97448,45275,59509,87149,70686,38207,65547,33404,89105,16750,30411,94606,21127,98085,52125,58453,45428,35653,78065,32055,57096,74807,49065,61002,46241,15538,33035,90954,51508,44905,32760,72544,68315,43111,41929,22171,31183,26971,55889,64527,14403,95070,89735,21490,87385,15616,62724,75403,48436,94428,83464,97889,22255,19357,80072,20539,14211,83165,60784,83478,76218,92703,50601,39272,86593,91380,91913,96196,17626,61488,88347,10723,49230,43071,44710,94208,18832,47532,95573,43293,20446,45329,87428,71221,77516,85794,18505,69485,25633,16061,39038,78293,54335,49626,67901,99728,42477,80958,85740,66809,57823,11460,47720,64254,61495,85928,63808,33886,95462,12351,76864,14610,25302,18169,81695,63883,23127,35893,76662,78424,39241,78970,54048,77319,33623,52351,60508,59832,98027,65619,97941,36460,91004,37416,16332,96949,77220,95957,33479,80128,46042,78884,29486,31600,75931,74799,80843,57062,29683,44051,93774,93750,86694,47587,50013,17028,15115,43001,60134,17012,78569,27085,13431,26737,65783,81665,17327,68455,91553,15056,16455,92430,48688,60393,78305,55247,15334,65780,83496,10083,23586,55708,88665,17656,95954,11771,47864,69140,29492,99818,65084,46823,37493,87641,51900,38720,16854,85846,43475,39300,74162,19656,56402,88893,98561,52591,57142,62439,57861,43808,12461,67875,65468,41297,69321,52657,65032,14872,10913,99321,25100,51873,28811,26199,34430,61298,71305,70054,16045,66416,70712,95869,13594,88734,56770,37997,22166,83270,77090,79723,94831,19778,44269,20818,48188,22748,86628,66006,40276,74976,97037,47304,52145,76320,12162,32650,85444,71961,98678,83750,49107,32754,56722,95002,20174,77559,42214,92153,20489,57211,78375,47501,69433,42568,83966,71276,38304,14138,89878,71817,29943,50926,53727,46830,41419,57577,24916,45585,75363,65032,63493,83499,65301,42906,51632,85059,84848,70924,39240,24079,91319,36386,99299,29999,15698,78443,65779,90213,90549,18401,78291,10006,65966,13172,29464,86027,76612,72953,78823,52633,65481,53181,75947,47330,93597,53182,81996,64839,83423,44105,29583,32822,88888,65308,18135,64741,58877,87459,47531,66585,19519,67653,48515,78212,65890,17395,68442,36022,91603,89991,91443,49535,14042,24641,21740,39203,94177,13862,76589,17153,19192,99177,38913,48897,33650,60077,93920,11181,83577,76338,29109,40773,48544,33592,54337,96545,27514,98495,35138,61584,41701,29449,56540,39373,12897,71070,23862,69893,11787,34500,78076,26384,29984,13982,25947,20174,33798,29714,80598,50975,10953,12805,89091,85129,73307,90512,11463,58994,27259,57761,84386,71093,24196,66299,44007,78865,57369,36104,86399,35376,41848,94742,39571,96212,84452,49652,80855,38575,78533,89636,40048,24086,75732,69335,94780,62955,94940,47482,52029,43804,57746,47156,33754,50192,48059,55347,91275,36919,90817,48019,84603,87195,71945,43067,35924,81516,18367,56077,44922,10523,19873,47927,68938,10373,28738,28864,68034,65159,88990,27634,10021,30120,18407,86125,74071,78642,69572,97299,53656,50708,10322,56894,36180,45917,18592,54662,97915,56963,59673,62791,71429,87301,25758,49411,40427,43822,20671,41654,86099,19745,72839,64490,39606,11957,52233,10105,93111,46031,47580,50305,98345,78330,76328,55646,88291,95838,18212,24998,10817,56493,80825,85966,89983,41850,26576,51532,24748,83943,47908,15318,32042,25904,64286,52837,96785,80266,38146,42893,69668,63088,27711,38771,62992,89415,45141,50158,23564,93041,20898,26140,32196,51497,15568,62692,90148,94568,52534,61123,35219,12661,88727,44573,28014,65720,87260,70227,39438,90881,43224,28586,96463,98733,88882,50056,18686,92812,30650,84795,40578,53245,83539,53145,96825,24625,91562,15925,74176,17831,47772,86763,44016,95061,23839,92766,31827,26258,52171,71548,84395,15548,34933,25605,40736,18313,85964,75286,83016,18268,31930,11058,27514,59466,57362,79260,52859,80228,96089,94965,60556,18571,17127,89786,82410,64837,16137,66574,47128,98891,79869,75877,88727,80914,64175,16546,37949,72293,89238,73162,48897,69890,91912,41209,97847,64813,81452,59233,12917,52770,59592,14805,20012,89393,33006,64849,34378,21914,22536,11623,76683,11578,22354,85692,14129,35633,26835,64187,12103,79018,28948,44449,41192,94058,81275,85773,83510,28539,63631,58084,72368,33759,48240,45132,21757,64460,43852,31470,84699,18013,23768,86087,35749,66614,72975,57398,96380,33213,66183,22259,57048,71328,90158,36476,86811,44644,67466,69909,53781,58462,25860,79666,56794,16106,13137,50570,73632,20184,27872,70923,54016,95744,51158,70599,54415,85733,70789,34551,81831,65068,60139,77805,18852,87517,25852,73681,80464,86537,88208,69546,89084,93312,76318,27607,88849,10154,12909,12654,69175,12930,27478,29127,26032,57215,30737,40916,58296,27530,41219,47111,85125,73898,91546,39131,78816,54911,81760,35416,50114,77659,13231,17452,52957,94438,19173,32233,33104,85104,78562,60888,25095,50527,52615,82994,15685,25373,65689,93983,57424,41693,44178,38195,29289,23108,85342,90045,28346,48521,95290,84526,93588,80337,17159,75199,52370,69475,16347,79239,51478,99008,36089,85870,73981,80427,54953,15075,54267,91262,92782,43199,26531,77534,62541,68105,50535,93491,65102,42784,97343,59192,59523,74488,92253,88795,86258,12688,85212,10786,37931,22185,70118,11522,28562,26184,82214,81387,84689,94090,47087,40868,59359,60331,51334,47541,25258,48539,59147,69040,61716,41334,29527,32806,56049,60847,27270,51698,81923,67234,26813,56002,67617,99973,10946,15386,70148,19476,60633,96217,31783,43302,18449,98126,23498,85513,33248,25082,35494,52136,56030,43078,58324,99901,74177,62114,52231,96076,92169,18701,26676,76380,90548,14787,10269,35686,13110,46993,94195,52671,85606,83870,69412,93961,17529,29839,54295,22252,47880,18174,67684,36821,39805,62033,99678,13871,28795,85670,46112,56188,61843,14992,86833,29575,40828,35103,23293,33543,48399,76969,37936,81055,13915,58367,19502,46958,90716,38157,81315,98788,39087,32315,42404,48300,37548,17187,15402,39045,85053,25776,70752,69302,91268,44121,48874,42498,38642,81218,23631,89156,13588,93602,82739,41912,34737,91274,62934,92278,17757,81509,30084,49497,86902,13045,95327,20986,63848,47065,97241,27951,58744,45266,86954,48354,94424,99978,63683,35525,88953,44887,21416,58956,36639,10816,65644,85396,51895,33656,34945,57030,99493,54120,53713,74881,21777,29358,39310,75779,50439,56729,58096,62258,86892,18096,14912,21066,67159,41611,46021,92822,92742,28693,72424,19274,84483,91206,27294,20554,42022,98387,30232,23726,68285,69412,83169,21591,45963,66973,93924,47940,27459,30579,69074,69619,64474,38751,54889,40966,22627,46883,74793,34872,71565,96103,26531,39890,41899,74769,90661,34203,33703,22550,97249,59108,94215,97159,89477,97843,83403,81400,86780,85225,56439,54530,95948,81133,54227,15163,24231,51608,13126,54203,10244,10848,80461,97947,99255,96710,47951,18778,37733,49552,46763,12809,41921,53293,98797,75547,35654,64203,54230,70729,33551,19844,85266,71091,30576,26788,16685,75789,33992,49864,17344,69601,96479,82707,89917,80871,95404,37600,42510,97543,65749,68824,93852,98388,67271,27785,27220,90618,28031,19307,55448,93967,60890,26881,55581,10525,84655,23488,84004,13175,51446,58456,85439,80926,71687,37316,64422,44918,75576,85650,75677,91622,73894,98462,17796,26095,50887,91842,26045,38080,28767,58027,82728,28412,47828,83793,65334,92013,83022,16266,62343,42145,69059,30008,96570,40487,99718,52034,21961,64651,24726,31014,16805,67349,26846,17275,79262,66516,68457,65384,58183,48400,95545,75493,98547,77114,34170,69946,41094,40208,15475,91128,39737,88292,50716,31827,13995,30994,21505,72752,18242,30347,44742,21081,14486,35077,75609,14879,63663,97633,99900,41412,48962,71726,74425,40614,86813,79451,62405,55267,31270,83353,41924,45245,72324,85484,43328,19005,32901,49519,33860,75605,21347,98515,11793,53793,64739,91279,37346,11881,31355,26784,14691,99006,69264,25941,26344,76849,19741,21071,40695,75458,46320,35997,96208,65836,95574,92231,25933,40236,92575,36197,78301,37747,87525,17798,89478,67833,10060,11292,69144,22147,45218,22008,71463,47732,80601,32630,39190,29404,75876,96163,11511,36072,19836,66058,82142,12700,59050,95888,91752,94291,76496,17893,86527,13619,84294,90569,69662,11902,66042,26627,91147,99152,94503,56543,34189,22571,84752,94184,10632,18073,93834,43370,38326,12383,23760,55920,42420,44813,84822,88247,80703,17145,12789,20805,80453,61497,80416,56281,98899,54483,45555,44990,67695,92517,12372,84748,89462,70927,42788,61153,49991,95077,70722,47324,64584,87493,11058,70534,46227,32465,47409,69260,85766,40187,13665,23956,86402,49339,12911,57593,42829,11883,12085,83141,48358,79435,18279,32025,46254,50470,27697,32826,52451,81400,28711,44209,79328,38352,38925,20271,13775,48402,16990,59795,80127,52696,62924,70878,77126,93107,27260,11736,27083,82430,10685,44565,79697,33660,17107,98630,59052,93365,10624,59507,96497,32013,15664,87447,15459,78283,12436,45333,87575,93865,82713,75881,65543,60773,70005,75250,84679,88999,64398,26795,82593,64084,40721,60829,10509,20757,11392,30609,42210,98096,12639,42939,41802,89601,80660,17080,40290,17845,49180,57940,63896,57832,87902,22033,48238,52329,89536,64380,87912,55568,55202,76349,79649,30560,61635,28617,54422,62557,64977,69773,38012,55041,79422,59856,63511,38425,85297,38726,60945,59431,40913,72149,69536,31066,40523,23634,17622,58106,41846,78231,48051,47799,41023,37268,82542,26835,57197,63022,26483,33844,85912,32376,88314,46033,54981,20867,30226,66769,51247,39764,15795,95324,25721,78448,23186,35189,93663,35032,17230,19327,42530,90251,88765,60733,11053,31732,46750,27558,48050,24470,21787,56984,36168,65348,37237,78066,14086,67261,61841,92203,40959,91028,79472,69601,76380,83372,75207,56450,67733,39899,65326,34833,35022,31750,59872,46270,12916,23034,19701,42223,90341,91950,99831,37112,85575,75036,76200,57481,49132,59176,31229,19856,36497,10653,85995,90253,23683,82165,60510,25052,64625,88771,43038,60242,83526,97469,28734,14327,84703,30141,48730,95719,39041,59293,78352,96050,53554,64089,37384,23337,35738,70866,50813,94143,84350,90640,43652,42003,72594,94129,21024,27951,29085,42552,90953,94712,12879,21753,69125,95112,58683,73676,33474,79398,37471,26348,45363,14796,77539,18059,85558,30255,21917,34305,87501,70135,55253,46563,56550,97953,92115,92464,88325,31792,91455,83313,81876,21803,13642,63904,14721,97826,49447,36197,72986,92901,52565,51561,81368,12246,93364,91727,78089,95078,43548,41519,14777,67069,70696,31753,34748,20403,81504,64628,30573,18517,35214,80699,36463,73434,14291,43613,46300,51694,55681,31697,60546,12909,78844,64514,58587,84788,56868,69076,79971,82433,45616,45936,75803,28315,38373,27560,48606,62542,65561,95710,69335,72348,67627,27062,47788,74443,77415,31266,83345,90854,31662,55578,12045,13590,80047,69818,37107,61651,41970,56132,34981,31524,86487,16302,71139,29113,58041,87159,93112,59580,58932,47410,71559,32713,33435,50195,26626,68776,52623,70975,66845,65910,43365,27196,94588,25607,40455,98700,18223,88388,88585,51787,34051,22302,13419,12483,96174,31486,39966,85298,40630,58967,94464,63869,25061,43345,42517,15514,12453,13734,85464,59433,68335,93932,10336,83155,21566,54488,45964,46893,95027,35641,58242,92603,31056,69535,13509,10537,13751,71010,34161,60899,95566,70491,84720,80230,22086,23723,21884,31344,60569,29322,37380,82785,22574,13217,46128,27274,16374,10992,83588,53857,61647,55912,35339,63415,23350,44483,86738,75285,22720,82148,72933,14126,17617,16844,45296,67867,95819,98634,71256,48470,89312,14630,81822,97991,28930,41359,62569,98741,29458,96038,37582,85282,57578,17219,94576,61537,34557,72574,94711,96888,92061,59881,13799,96634,14086,39468,39109,28286,24986,74673,97281,57900,25708,43120,80072,92241,45863,91226,55667,22723,15325,71472,32034,30274,52082,91606,96636,86462,90289,74035,67832,82623,87856,97983,86831,90322,56150,24949,11972,61227,40541,87190,73028,82935,62409,78849,65751,19589,25888,57630,37171,89545,30060,64028,93655,10305,84553,79724,33455,35676,51012,98587,73365,14915,45267,20238,77098,86805,16576,21902,55089,26057,68595,88755,59474,88016,63470,73739,85230,64515,94554,91868,34315,52154,99914,70874,90953,19689,89759,85539,23223,98535,18736,58860,97759,75907,13070,52694,30070,33386,44679,83936,20260,42558,77730,71903,60841,39608,21785,18548,84819,27057,46814,63494,60320,30185,54756,91073,23567,73110,84848,68616,95493,43757,51707,42702,91442,82109,26259,32481,52540,12406,90513,41916,29772,90636,29667,52535,13796,97032,31240,70613,80497,32865,56597,45927,91511,92256,23285,34460,31108,46084,16909,37105,85293,62410,36855,95136,25004,72182,38051,14264,90170,39755,63124,65828,97951,84638,84984,29477,44055,85020,21079,77044,59244,99297,67760,20772,67566,41575,40993,22939,15514,65304,59681,31314,88309,77775,66172,52238,54866,58184,80957,25439,94704,14522,48093,98142,59728,85234,78669,72905,31380,35460,25617,50619,41773,99918,24885,22560,34332,68043,24538,35635,48323,18430,42846,38785,70171,33747,24059,40029,35401,12325,80331,93071,46287,44481,66704,62015,45108,54302,57370,51627,24427,32709,72208,40270,39034,37924,34434,42961,49762,11333,12469,14218,33655,42809,96961,54392,68501,79677,70164,29296,62486,22990,61668,99982,19927,70332,70992,41728,28529,77063,99960,52126,21835,13078,84380,17065,24102,29431,80347,70837,35666,86712,52315,31745,86058,75996,46885,56434,39258,77288,39868,54621,56513,23213,71875,85741,47854,85775,63438,37209,31407,80569,94628,21311,54126,79566,80022,14422,37548,95710,66815,15705,91784,24794,34767,14936,65709,93707,76195,11621,24333,21175,54043,73849,13753,58935,81767,22466,91781,94569,65892,23964,67298,37343,34234,27163,64985,58354,56523,24405,37040,50996,55403,55638,85379,75292,98535,71390,15507,34458,43894,43863,28752,34655,25653,39067,93950,75969,58172,39984,58746,58826,81549,40789,46410,55401,78116,61716,29196,98870,45317,69682,18139,87252,41064,43833,68172,12780,35504,84726,89494,31347,67484,27421,24710,83427,34294,72990,39894,15006,36548,88102,88540,24997,26049,72885,99799,56855,86785,10023,13467,55458,71217,37935,86329,29594,52091,71213,27537,56055,57788,49550,76094,57131,86693,68459,38062,39592,92572,59548,11862,49845,58060,45712,40439,87314,86900,76961,61936,16427,57559,46202,41220,81069,51299,98543,16225,67255,99305,42073,27406,97027,66046,76597,66994,79994,23691,83379,79160,28536,45882,56357,89848,52119,40993,63152,24759,66549,88619,35121,70093,90923,94528,99694,67181,95370,78029,80818,16340,31294,44059,26711,90438,48893,51437,11974,44523,41124,64365,23872,64374,88837,23950,97368,93486,41204,90067,84559,20207,10562,49438,79096,67643,44685,63972,48685,58120,76313,14166,50079,52292,34751,35819,32492,23943,38336,40054,75664,55129,23513,82755,56726,80178,60091,46936,30072,58625,95616,76010,59599,37757,14454,48211,42096,16411,45547,88237,25337,69816,64936,30619,31799,41329,35664,24603,83885,13201,26567,46566,55666,41901,84195,39080,39236,24924,85610,62808,57058,79203,34056,81831,38634,47124,57556,83704,37502,26133,82611,57134,92402,73028,70351,76441,61748,67414,13525,93031,88709,35798,87660,91089,81000,17612,41916,99224,32096,68326,17255,34147,30223,41365,39419,12198,49746,95885,31949,60777,85832,93931,84737,21224,29864,70459,19360,11853,31023,93099,45308,59052,64376,25583,16437,23913,90615,23177,21268,57959,97747,38896,95759,19035,46451,16157,57655,91261,76209,89577,56457,82142,16220,35123,50602,65626,42641,16737,31243,44253,14580,18973,85767,40281,63775,14331,90365,31467,39577,50854,24300,99296,88305,16277,33874,10229,60615,24016,70074,54826,33601,52154,84634,55493,68722,70903,40037,47582,65964,73107,33540,43338,65618,83778,18206,89661,77119,54114,21224,26903,35959,36829,86383,50848,34006,26706,43451,66844,49207,33766,54724,38691,50875,80162,33354,80501,96291,99844,30850,38856,75750,30466,65482,19086,21042,74053,73092,31735,21496,34442,11506,87557,98043,37145,30644,94834,70125,15323,82172,51308,66585,71932,95732,39882,74482,74467,99726,17316,62647,87388,89670,71421,14693,45930,15976,75186,62385,80346,44367,62281,44912,96849,34248,95694,44648,56709,99791,50046,58120,72471,41968,99466,26656,40796,32757,34576,64310,93456,67496,44223,83280,29300,42198,60217,18001,27991,34894,21080,27499,84742,74710,93957,96784,43963,74221,87334,51394,80338,42024,64846,60261,91070,87016,55287,63774,14661,11567,32181,80154,85698,84222,76014,79456,92931,27980,58904,17891,90628,20117,76952,13395,72489,13190,40187,61469,22516,83336,94881,96443,64013,63744,89259,73575,99797,42187,87269,53197,31587,79022,83893,63258,25457,62178,36733,30721,64724,77103,16524,38189,69119,61308,79444,21321,55831,21111,43523,41958,63057,53285,36626,79226,10313,54131,89258,89731,34437,12474,89710,14002,16901,70970,63022,90551,58649,93290,24745,83748,96057,94092,52277,51094,63921,71959,25072,18909,49338,49959,13248,37815,46567,76356,61695,74012,50088,10533,41308,40601,24953,49960,57169,19242,89075,36844,22059,64619,88873,43671,44989,79181,78121,92532,52233,59546,58753,57130,76549,48305,82851,22233,96475,37959,37323,27109,16223,95030,71381,83354,54446,14184,75230,92882,61592,76706,32043,78939,23906,37662,28210,37149,51331,96559,22165,39624,43491,69461,93976,96826,55443,54456,71800,41693,21600,75828,83778,98268,32254,35048,48707,42930,24828,45638,25498,23019,87303,11623,97118,22919,57015,64293,31876,97353,80875,13644,28057,33673,80188,42123,17811,88139,33504,59985,74104,50144,43952,98038,89976,46782,63211,33632,99567,32086,68215,39209,96388,53188,99368,93848,86281,57297,87275,51731,12776,43193,78361,82001,41575,75781,47217,98564,64043,11844,36126,17191,46710,73319,30779,97080,57207,76868,63125,76342,78873,32491,86425,56786,99884,22359,63967,98912,93431,75126,87347,51846,51595,31430,27184,76074,12346,12216,62250,44500,52792,28239,91849,38762,93205,88768,74189,31263,64995,89461,57591,34981,29015,24823,62227,21717,99010,57693,20830,74822,71875,28033,11606,63943,64192,66628,97143,92138,89245,74549,64802,47405,99892,54077,76306,91799,36309,21204,52520,43146,35793,33747,74258,19394,49730,16461,20690,59389,83088,35336,77628,50184,57901,99676,29496,25795,56680,87916,82881,18731,42524,57871,72197,26421,22635,69496,97692,17741,85860,32898,71976,96313,74826,73509,73069,64392,34891,31631,90124,34297,31584,76463,85159,62891,78903,23219,11680,85494,13917,28128,88131,64489,81775,90472,82778,44157,65614,95210,41802,95353,26297,30079,47086,28252,94061,52264,37953,55437,54297,50250,99890,57376,23217,70225,47248,64470,31856,74993,47537,29635,61059,92825,21015,28457,96787,19332,45460,42883,56163,99023,55056,94745,53047,92575,88254,41919,18167,92034,74249,47851,66032,54516,91035,28617,68269,22842,10099,79190,50214,98617,74866,73553,85906,51196,36500,62300,29042,91359,88081,53803,82291,52917,67568,92491,91340,63437,74923,68026,77850,57488,83599,67719,15337,11390,87151,97962,79026,84537,58515,15908,44030,59576,13877,40864,20662,10617,56931,31567,99530,48495,38920,30881,77314,81089,66349,76432,31183,12337,47436,85420,86278,91048,21225,96434,58409,52858,65289,54257,79878,90758,22320,20533,54430,11885,75056,54692,36678,95693,16358,34451,36948,37534,68732,12979,99650,30722,61368,98105,63775,70576,81533,52308,87076,20159,84451,50189,70220,93823,54373,72263,57693,31537,15322,75591,42542,15698,23398,12482,70310,39101,27236,53497,47923,82125,65199,59257,66494,56129,98156,35267,23453,65949,90489,98819,63190,22192,11640,67151,69234,53469,19703,34024,85420,75498,48527,64932,18471,51531,93340,26771,79843,10317,14759,53796,68955,96880,74304,13541,87576,12875,43414,22687,34599,61596,35596,27816,29173,33134,20609,22129,25128,50095,34948,75669,16706,37418,92140,79671,74293,61621,67193,96297,56359,80863,53586,88996,97440,81375,65285,42444,73683,51002,36300,26580,67994,54363,30482,27566,91964,49008,64222,47771,90680,95090,73830,76122,17337,76508,63090,92714,19176,70988,66327,99242,66785,36834,56676,19552,57503,33984,20838,34979,63204,91600,93137,33301,54641,76524,88035,14614,25672,27790,28185,91591,44116,55626,36554,96627,65685,12934,85732,35377,49350,39694,52849,29917,68919,21093,46970,24309,30595,64454,11067,34456,10980,32015,46939,59765,71731,98876,98302,10694,94838,33646,26970,31081,77039,54969,78612,79610,59712,52732,70324,42429,27405,32193,69892,75492,68784,99207,26579,50212,90654,88685,81824,17925,71511,65129,30036,23791,56849,88024,13901,72359,87332,48444,91160,67319,33710,29330,85478,96830,13312,80854,64867,68946,14445,85165,57393,13211,22585,47629,24512,31196,59923,94368,91026,50379,43529,76608,54583,24955,32376,52909,89274,57435,33970,33329,59205,79823,99070,93510,26639,65164,29856,83650,63486,90706,43333,64601,72157,75223,33136,80494,56563,50400,43748,57601,53410,38674,60211,32977,12481,14380,22199,25014,25530,57584,56223,10407,23961,38784,55110,59189,72924,33564,42785,18028,94314,28122,42823,63973,51381,75812,59353,78054,14014,83545,49993,30734,18281,89282,35259,41592,67689,12610,32244,78877,71405,14818,28610,80689,60647,99885,41850,17452,23393,68111,47978,60291,73606,99980,37892,90654,29874,88122,16822,12102,83055,19614,33555,85830,16372,83203,73037,78501,19504,49497,39905,98199,68966,51368,16677,87695,70784,25937,11947,34527,65086,12667,98445,57356,19787,63057,50616,25424,25583,94295,52184,94577,37231,83247,83208,79600,89044,48750,39901,70262,53564,50023,41620,94908,42620,17427,73156,35054,83246,31925,87410,68711,40357,47339,97032,77423,82408,99548,38779,66220,55879,24559,44378,20860,78828,67685,77772,70126,81830,19551,37846,15032,23861,66281,50148,47336,66531,71223,91771,22370,28634,42916,92733,98846,12177,55514,72230,38089,82227,94105,20042,39251,83194,91255,93830,75019,76449,72632,60999,26787,70705,50856,56639,89802,29916,78358,17373,39984,74069,94477,49939,60366,53828,34856,39337,76680,62580,92037,78875,22799,65709,14224,27957,67201,24495,32745,14563,45971,29951,18129,89181,76576,13357,12497,43396,66463,44198,55663,72696,67962,27277,53028,50283,63258,35055,47697,54654,96162,14154,71043,63175,21844,18378,83966,56560,82448,67090,96816,19396,32616,35178,37197,16331,91167,33736,56086,36020,70322,61579,92771,61828,11940,79629,72965,95291,96068,82471,61457,42577,96990,80404,63541,60360,76855,14324,23499,28477,46253,46331,99698,87369,14309,58011,90343,62438,27755,40088,92719,68560,80620,59566,11632,46252,15730,65645,80668,70561,59483,23132,85444,22492,25314,31281,74121,12842,16705,57803,96669,79493,64180,76116,14598,28755,25423,39388,45346,77908,72149,40804,34029,71255,43858,96505,55960,65710,80786,28377,48503,76346,75438,86091,87680,29663,56009,71525,22842,30588,31019,94473,30083,54752,66493,92941,84759,39124,39892,27407,88239,86603,21826,39794,23293,72163,71348,88607,68746,84335,43913,95055,66227,77442,50603,19423,31975,95240,44844,62627,12314,78833,80110,65336,22566,35034,21042,79829,79159,34434,48122,33116,48571,91401,69173,44105,56010,62214,85390,59395,35310,71678,67332,87689,42846,73399,63824,60647,61205,44062,35860,59394,59194,69819,20199,93887,92041,16463,46395,14923,81973,95554,43099,53479,98473,12945,79847,78014,26103,99772,46412,82853,71892,63071,32397,49711,36257,74949,24706,93864,56892,55391,44397,45803,12334,52084,98358,96724,18714,51099,66852,24875,88964,81827,37405,91087,16805,24360,57670,43241,19337,10942,41146,96432,27773,89372,40706,18923,89222,47458,55580,59909,27106,15088,99698,67791,86867,83869,21645,29727,92304,93334,99566,96788,75867,63519,12481,76356,41034,13679,92888,55996,62840,60889,39390,18247,52612,58109,17486,68178,62295,55406,66897,50438,65147,21379,61538,67903,72940,76258,62063,21911,27742,96795,89992,17147,34168,48127,36323,10839,43828,35436,39526,32336,29759,72249,69284,58057,28394,52580,74271,13361,58776,44551,44488,23864,22608,37838,41552,64727,16914,64540,93400,24235,78055,75248,51567,43002,45416,78051,51083,28832,45164,94960,98600,56560,59249,90517,33102,82398,45857,24568,55922,17428,53294,41321,98612,23056,51912,15323,84320,54498,51578,63822,69884,98587,26775,50404,49459,27996,76004,60555,88768,67917,92700,41602,26636,43361,78290,24562,10428,23356,59340,36663,52591,24222,93651,45131,74804,74403,86423,58119,76937,66756,39586,92854,86463,21973,12394,30686,60162,52520,56039,99496,13083,62744,27060,96688,36711,46194,22535,49241,81696,90196,49436,72221,49812,96641,96474,90341,91322,75553,41254,90808,50044,41162,85502,19873,28122,55178,39055,47484,25517,72226,99191,71695,98433,96801,53456,43982,57733,97685,94516,91947,72476,97955,36181,67283,60456,51259,88459,99947,76450,69429,28689,56107,15860,23713,89049,51553,55877,97916,74932,54445,92353,23180,82763,76276,20693,86690,63821,74655,78627,73876,58414,18034,43253,76349,96577,94225,95176,70693,87015,10251,47318,89005,30066,12635,31037,11170,98576,22202,13089,55305,56201,74763,14759,83627,44105,53468,19469,56883,12218,93564,71359,12292,82836,62246,15636,57282,66964,36234,36310,96048,49639,30371,45927,86575,28433,19580,96850,80956,88848,71279,59669,97545,20271,73646,39571,49921,60296,15814,35689,43561,62120,30835,94426,28086,49071,65684,21712,97028,95518,64514,67388,93490,15106,87864,62639,63554,94435,64011,15623,44600,26365,54454,47121,86386,20287,41700,92423,10648,12492,13263,99098,59875,19448,44555,79147,89483,89266,68683,42969,95639,48259,92939,60557,83613,26228,57514,14680,59073,83484,34524,88424,63973,48149,22275,38559,72003,52587,65729,41168,67694,63419,58810,66157,28030,83017,67949,12054,70950,61114,18371,99088,45436,72224,81731,33188,15018,46570,79001,75231,63258,33836,88460,42327,11764,42360,96664,37146,16599,65117,42061,72741,68385,75478,63240,42479,71663,28074,88640,57563,22377,95244,86290,16182,24744,23742,17020,86672,44341,60917,87322,37595,84220,53244,91395,16155,39424,71234,81632,85338,17789,63391,24766,39565,47724,21088,19819,82989,31753,17326,16372,22192,78552,35156,73889,25779,89589,98235,58527,42975,10424,67335,85040,10261,82925,43761,53285,49072,57025,85909,44431,64075,27290,43783,42884,80188,49627,63554,27150,17413,30124,53418,38875,43060,70491,74511,77909,90361,76896,16729,67466,18117,95680,51882,77729,36597,11824,97806,75281,29909,22680,59693,49389,37966,99240,10670,71901,90940,62298,21896,41252,17670,16392,90735,89059,45384,70033,74656,54341,15529,15095,99264,15815,99248,71375,15881,44255,44157,39072,63520,99107,47508,48666,22356,20651,97713,48493,93284,96562,12253,87408,42574,24923,80833,91897,82557,47642,24053,99789,54410,11045,91823,83306,74604,41629,46285,33699,65393,84298,38734,33328,88466,69398,64835,66163,84447,10121,55664,62705,64178,71496,42069,55907,60944,12858,45106,42340,50298,52178,25799,28971,93660,80214,68836,99365,39148,17729,22514,54498,14531,55839,92653,59343,69108,53648,47837,50914,19788,21922,99169,77658,83429,58061,69502,74499,38075,57413,16053,71715,90187,36389,97221,29559,43973,12633,17330,68478,64297,36752,83121,45014,26023,64764,63409,80700,48179,94412,56610,60696,28168,97765,79833,46213,89910,99961,19406,45011,20557,41183,41672,29970,59716,18468,56935,80995,77115,90661,79171,41832,69137,58681,44493,28334,53027,71738,56871,33638,95027,45744,92938,87970,13099,25843,23976,80143,21427,33160,83491,67100,25951,16222,74594,13026,45491,75358,67930,31636,28511,27473,71882,72955,12509,83363,82995,19716,91371,60117,35056,42177,10287,92474,28133,64174,32726,28934,50795,15928,65858,17139,81854,45267,57321,90888,21559,92218,70562,25707,70336,92948,18212,15547,11605,42619,92576,36611,44933,62393,15719,21642,85446,86175,53002,64287,55722,75202,59363,54814,42522,87352,26704,99538,10399,27671,61641,26687,66774,76129,41833,62977,81277,27678,35617,22471,99018,47300,41356,93411,89338,64340,30517,21034,85495,37375,92965,12356,91575,38849,92091,45872,49045,17233,85033,25698,75696,15264,67863,78676,91045,30328,48960,96010,71618,27068,68938,37320,65576,11618,14155,20995,60830,27048,56332,80469,75484,24821,25568,10539,20418,13063,37475,97827,13146,29035,29640,86475,54168,63763,69533,38983,14515,11542,72224,66972,36904,63728,54339,57897,15856,41637,66842,96818,45635,79044,86881,84554,53017,16481,98429,24148,70568,65396,82182,34370,32521,68218,95244,15564,18569,78556,74271,92604,64342,51404,13647,73784,59131,15782,63682,28533,46483,59292,38757,68232,39067,61715,46928,10199,34395,71277,26082,81145,45328,24645,92479,85601,56541,42896,74943,23107,87098,19389,38532,34392,89628,76173,69149,38797,82368,18131,54298,94867,66414,36496,80827,85387,32268,60218,40091,46470,92293,77414,38283,98729,90696,31717,94906,89220,82944,38422,61882,39748,81587,60570,25233,44356,17862,99705,98640,53801,66388,51709,35390,56772,45053,17482,55617,28247,37739,56317,79457,79681,13077,82001,16295,92768,40168,56709,58413,78198,62175,83198,49982,87736,28167,92294,78444,64778,22511,47870,73526,83558,39504,10189,51589,25121,76109,21510,79363,40574,14341,43012,19220,48253,24173,88851,87282,12198,70897,54441,95857,84477,50150,81919,29613,63607,54380,43678,97263,96968,17707,74533,76256,48855,72832,49865,85861,33678,46098,80053,40847,67781,91298,50491,12362,67038,65402,99802,70888,97988,35800,66330,86096,82475,17286,96677,46376,32907,26048,31152,48410,14022,50082,67865,74634,38129,59475,32578,84816,79382,50461,90666,42063,63592,83316,68819,97732,27046,31558,38131,55947,67340,48220,65958,48302,48622,68646,62356,90690,55395,94271,94090,49812,47342,73050,81976,74739,69656,29397,60735,24517,99559,90948,30343,54406,20728,67239,26193,74691,73970,66757,37921,30887,99195,75140,32215,15859,46932,37574,63662,75233,77625,82499,58701,86266,68935,89980,50085,87961,20666,65893,19546,38972,54871,59936,51810,36665,84152,51508,15263,74486,16743,95829,63253,43355,98330,53206,44677,81866,49238,53139,79808,81396,60645,59917,60840,98761,93854,83973,81546,36948,52822,84326,65312,20069,21299,66468,33440,29353,50249,26003,69136,44518,37011,30715,95747,18836,64439,37365,63360,68696,12877,43291,64208,32392,82105,16030,33825,40269,67122,91041,83853,35879,29211,95914,78404,85133,43973,82221,84804,75629,47516,71602,35301,27058,74459,84214,10848,91631,52525,88350,96830,17217,33553,20594,47407,80171,65081,20004,29064,43182,17997,56905,40920,50733,29174,53514,22704,55261,31665,64418,69000,45553,30085,57232,77498,31911,53450,98361,96938,24844,13089,94208,17865,66610,74019,95733,47913,27613,45262,48622,91602,43565,40553,23342,63915,21372,59873,74745,17706,39880,74690,31469,36435,49690,54014,61915,24597,53786,83717,50137,81173,80695,29686,80855,70252,55917,32596,58232,97099,86508,33788,80075,31621,88560,74895,39039,30780,57546,79942,58410,57814,42489,75405,62327,65334,38691,60133,43760,78392,44805,41760,76502,31135,24326,73920,65729,57474,32118,26738,30254,17784,91447,75190,15584,30835,63503,97341,13538,30643,71585,48586,42068,62868,98692,34698,56415,91229,94645,59777,70791,11767,73216,35583,65796,77980,34154,10519,87408,35054,21376,22467,80432,56087,75918,60685,84636,50699,62661,74092,78137,55121,57359,82656,45346,91408,72928,98857,52627,81411,46561,94540,39555,85005,54911,33649,64445,35770,41736,40915,53107,84005,14420,90652,81118,29235,99367,52431,47191,90637,83535,93275,56843,50301,13725,28147,71999,11574,71031,76195,80469,62413,85810,92537,35371,90953,15764,61115,96086,24384,69206,56195,44364,40951,10313,88380,46726,81614,15453,41128,83564,35910,41254,66101,47166,80835,64287,26777,87811,84588,87003,50391,40008,75301,69050,45359,70390,17592,43793,10390,26376,43081,24949,87269,64100,81006,64241,10377,30243,71125,22442,74899,68563,19734,37091,72491,60921,93265,39790,55833,39957,22939,77968,10835,83527,10870,73607,27583,32334,92940,61490,36960,21162,27118,85701,50465,95814,35724,17851,22855,64625,48273,57579,71842,43912,30178,29004,18346,66087,26670,94825,34016,38805,41129,55906,49632,24476,83758,19157,62420,37156,23567,64006,12424,20112,44334,53723,50794,35962,79943,37380,97911,22462,66964,91617,34069,91390,76628,86156,35049,47016,18500,80800,80598,85897,40006,34694,34364,37357,72540,65595,14177,59895,17523,75568,70799,95247,75425,36682,54884,78748,26104,22844,64176,95091,39307,57098,80347,99015,34424,64147,48458,90608,23473,32401,64776,74585,49737,70093,29339,19048,70540,82430,97119,52619,13906,98097,18743,29326,23141,36195,93873,96339,61084,86225,62315,60483,13266,10701,67474,60793,82963,13884,51261,43180,48538,47756,50443,62309,21572,54188,78925,27884,53382,58005,79455,17902,52032,54032,33406,43245,80121,37689,25572,84939,17814,74546,22685,20306,26829,69603,44626,61102,82491,48447,42038,26483,60804,37211,45973,12432,98443,95231,16133,37882,96903,77876,74969,26462,91820,94127,25819,50116,64060,86016,42978,73220,34220,45154,77101,49365,27236,82635,16596,49953,61274,76733,46412,90943,20826,95135,12052,69994,75298,57173,93772,41884,75067,73019,84324,19164,36916,85475,90274,69036,42247,57481,26058,39087,11530,50015,47335,22401,87931,21313,66583,81692,85768,75963,64996,70042,35955,47183,27789,64775,43536,77979,79894,60753,44382,70097,15463,16244,17590,64119,81924,99629,23948,93616,32568,33452,58750,86158,77189,27183,84918,16232,23206,55197,50918,58425,33030,41441,51267,40117,18369,58263,33235,23068,55816,33322,80697,98960,17914,98950,98617,21576,43447,86999,69553,34118,88206,33077,60960,23092,24553,39624,65657,58039,96063,92678,51542,49137,97051,33718,30057,32294,37092,60859,71703,95105,89644,85878,24671,11585,31778,67144,25571,49047,63899,78195,86390,47119,70955,59509,36334,19605,96804,99416,22544,47084,56787,14532,83746,15213,47221,90627,65554,26127,52130,19207,12346,13987,87737,80050,15469,29664,69451,58030,66311,30308,58933,12206,81882,16970,27481,60943,34519,92397,69718,52355,27260,70077,44007,91484,38104,73234,40693,36586,61360,55505,87750,28207,95309,91762,96138,89893,34943,15898,57704,79067,91065,60616,68814,34398,31869,18557,61627,58998,60697,21240,12030,72076,26291,21340,16503,91085,83169,51761,34633,59833,37825,52667,41208,88046,80933,18844,17694,46560,71395,70777,34946,96272,10648,34159,60038,57208,54471,52593,53977,43770,90568,35239,37512,67594,80284,11709,73596,53906,28396,82002,68996,21267,48201,35459,85727,42172,73009,33430,84495,37425,33363,20800,73714,92583,27847,16856,40831,97345,39611,16356,44303,64445,53020,73641,60559,68208,73468,90764,64608,71335,42268,78188,96142,58993,14098,53179,65732,88413,54884,65166,51254,90390,53685,61747,36340,59414,13155,52695,29650,76777,22438,30774,14216,46690,10271,67656,55509,88180,60737,65094,31980,57225,94992,84353,43613,52778,54972,57137,38855,88306,89360,28348,65131,47754,57707,80482,48774,47489,92531,29834,21542,80898,93368,65437,90798,72425,82585,72903,62297,58946,39450,57751,50064,33818,49273,49689,51649,72244,19734,65809,13479,26756,14420,67113,50490,75617,66645,92824,82561,74917,21344,82653,49644,76505,20361,41107,55270,49694,92015,55458,99390,55209,76975,33370,61701,65265,82215,74884,60599,50710,19268,85181,48179,31640,71862,16165,72501,47984,70485,92451,81682,27333,99933,73742,22883,55477,88238,83983,69814,75682,31527,20188,95167,16896,21084,67768,11024,36446,60660,92412,58489,56664,39420,86330,42361,66134,28306,92459,46755,23203,10541,74221,53241,51333,11989,48953,61461,21379,63775,33975,95440,31950,73942,30341,62235,81002,32034,72837,70847,72712,82599,29821,87830,51581,43358,66546,96934,13647,66114,46463,72246,13890,83802,42012,20007,11260,56570,37769,59900,67968,23474,78570,78834,47762,43097,17383,27720,61525,52506,83918,85378,52988,20639,38439,71832,33031,68297,13806,47726,80250,94461,70351,88590,55397,36828,66800,94997,65801,10654,73831,13270,69725,43195,89712,67880,43953,32889,43660,24958,78390,84449,24618,28835,25621,76504,20792,38918,20587,60130,45020,77007,50321,48742,47436,16154,50142,91187,34943,27169,18007,56968,54708,50566,67268,32142,94269,22103,20978,96459,96047,48301,34607,72196,89437,63028,30789,66512,77190,13982,55817,68171,93851,60551,29713,74163,50892,48247,83236,76504,14788,58452,97989,70593,56542,13497,57203,67535,57137,41490,47744,96215,53351,70820,28482,84723,69590,95861,21609,17075,66086,71354,41743,80662,31338,96128,33655,53516,32805,20383,83398,46840,72397,55157,25946,65266,46735,89577,72044,65321,94216,54439,65594,40348,71036,43675,75952,46265,79427,85187,31576,82364,46635,17797,27567,15113,92288,52118,85163,96892,92530,74590,70702,90223,82033,35680,97850,23596,78722,59001,89281,76669,46782,78154,98240,86012,47985,96662,60371,56768,96164,39224,77089,72978,30321,59849,74954,61185,91162,24315,71166,57490,12378,33428,38926,46844,70005,53205,25141,61575,68568,76089,30477,48265,84767,17354,32252,42480,15055,13861,66846,58691,89005,79321,31142,46076,27996,18165,72399,96067,85642,31136,97132,32135,94288,98219,74559,44074,37297,35138,18605,70812,38350,93840,46513,46971,24827,31530,52692,80151,69972,64323,13070,40881,64088,61655,50587,39320,27271,86403,58015,19325,91877,50315,69730,95225,34188,52516,73531,61498,92086,80435,88065,18303,25112,84930,30824,22681,98697,84881,16528,22789,43554,75799,67504,87050,32663,20429,51331,95809,98157,70962,33041,84672,51092,60075,87851,91856,12870,28017,13012,13669,44087,31930,68120,23451,47600,14329,56537,15533,94395,19078,82220,45223,90502,69540,71015,39976,47049,21019,28442,72982,79564,24113,72134,40843,66538,68695,93807,79382,24128,33851,47280,13515,77702,53291,95459,78072,56607,12169,12741,44618,61755,64170,58899,77107,82978,47342,19507,35542,45660,16618,56914,77733,64155,30204,81889,34123,29043,29998,40910,76551,95613,36079,63318,43128,18018,95468,95236,34757,58749,82320,38917,33355,92326,11821,30924,25802,99954,19755,29884,91301,40131,23844,10169,60066,17527,37766,45328,30456,76922,87228,32290,44296,33300,27787,26014,24569,60155,95533,95425,36610,82686,96071,39983,59112,49796,80354,13482,76006,74331,72267,17599,38538,57939,33090,31695,81473,19570,55353,27180,92774,71030,15859,20790,68779,51406,55205,34940,22795,77374,48288,37903,84041,48314,15549,92348,18761,69929,11372,21491,25800,51015,60292,32110,36031,36595,66608,28645,80594,17649,58893,15665,69460,14569,25749,22934,12500,93799,35070,16361,25332,31750,16043,31352,56035,15418,46903,88083,70656,43042,76628,44542,68752,61533,23494,17104,73683,60244,83492,38420,99480,68523,76865,82913,76465,62747,85652,53771,44015,39332,86730,84634,52405,76712,39952,46951,14427,95973,94051,58646,76882,77306,70935,61474,66913,78093,56116,15669,61341,13862,30416,57986,42948,96054,11879,76438,56051,11111,86523,20889,54534,41548,83877,83485,75538,56204,32730,95102,86005,86193,76268,22877,92966,58329,35159,60769,53169,30850,18010,53008,99157,24267,27627,95461,28881,31286,70843,95665,88403,60235,89986,69491,55552,22354,34951,39332,92132,91427,25524,74481,28023,82513,68818,11101,65343,43911,69015,51633,33015,36416,74453,45207,11405,96533,68718,79523,48250,63551,75352,16909,56087,47226,28097,16773,45660,77137,25200,43189,44348,42479,57172,55322,69433,87576,51122,38071,39117,22572,85867,29368,90521,23823,59349,68730,12630,34939,89027,53453,44190,38401,43613,11610,78345,30304,10219,24013,13132,36166,47368,84420,81639,83305,96878,89983,78993,73645,68499,35604,88739,71037,30156,90422,64475,81286,12801,65072,10471,92413,73924,42991,26478,15611,81421,92877,81171,91230,33171,35095,38750,84033,47384,28157,36668,52760,98407,12084,32336,65009,58684,80340,35912,16246,70245,32987,83411,57777,87313,11417,35265,57894,44708,30673,26127,52753,31415,43819,12179,23137,81222,19455,88935,57849,77555,39558,29013,36240,33526,83200,45517,64729,51410,37306,98531,67080,78670,15628,33761,47358,58490,93520,92750,63984,19014,93357,13461,35901,84448,65061,13275,11036,42920,74169,82872,59117,89356,95241,71492,55816,84645,11527,55101,13614,57073,15198,91374,54100,54129,73932,48803,36065,73236,53033,53241,57335,54920,54797,26124,82716,71609,63025,79584,37865,14838,44605,55217,96196,12449,20771,78543,85792,37922,87310,26418,74674,56301,12345,21935,89356,63696,91872,15641,36062,68492,46405,19040,84317,11528,54995,12830,67285,14695,53914,94108,19589,15263,31635,90785,44338,74269,51013,27157,84611,38676,59509,53708,74373,91375,24798,87473,34589,51097,13985,36406,44195,13097,52228,72871,52735,52501,14867,96850,52916,44791,21059,81427,51161,63713,19769,88692,48753,48916,98853,23956,88076,33210,14473,26878,14813,33093,16231,35384,70541,92182,13693,57122,27627,17986,83680,33732,73039,62713,49295,40976,29702,77927,79339,54237,49396,47606,17745,32017,42587,42639,79554,64754,62330,13597,25635,21902,86536,42800,47279,42549,87218,13165,31850,98206,12152,60505,64425,90716,26661,22813,46640,76631,19038,53905,98069,65558,86415,21139,37332,91920,60952,20360,60032,78414,47689,34681,24974,26198,35486,63964,60243,37775,92943,71579,29374,28596,39345,94243,15467,36644,32335,41321,93336,37342,49716,89724,51647,62117,59849,48410,28063,80212,32806,25451,27581,92947,18315,69144,25202,64741,49257,23355,21228,63868,33206,32288,68785,28540,58469,13949,16400,17700,91438,90680,39583,45519,25135,72540,19259,30061,97473,41327,20697,98363,28282,95372,13971,87783,78892,49315,98046,13443,25455,22544,78027,93784,68881,68068,43775,81557,18806,29613,22250,51028,21891,13363,10593,17260,57396,52981,61103,72842,10327,69150,22734,72962,82109,53264,40085,53832,95507,16319,15199,78460,37407,87053,87057,85818,95493,90033,50962,41315,77898,31623,14643,88444,48770,70699,20897,49109,49416,87423,67897,63460,53674,46271,21457,91342,34797,10277,40144,27322,14569,22538,48081,95065,24240,62287,55772,77015,63254,51288,15233,20024,61264,36983,23705,99537,83959,14108,25036,55159,77601,26775,83480,27749,12045,42995,79084,90790,59466,51813,20280,59430,80697,87045,18209,29298,20235,40435,72839,69294,20785,36784,35504,24913,43143,78591,30398,47662,96616,73354,68715,80278,57016,61738,94962,85903,94939,72504,91959,15712,34046,24069,87312,91317,86776,74214,82193,16804,90115,14558,97100,69310,25844,65356,29031,46850,62243,84377,95085,26298,94263,78160,44659,60916,75030,75241,39003,77554,96766,84979,65659,83319,65964,38432,93389,34497,14174,32777,66828,48953,85027,66242,51647,68102,65404,70052,57296,72664,99489,90012,79642,43980,67554,66483,55815,21435,41257,35502,81919,41850,21771,27971,85677,96525,83731,75194,68698,91340,59790,23599,48035,16240,52494,98258,12931,25171,55778,90307,74156,33381,31112,85837,71646,12250,84137,81190,94149,32279,38613,50209,51959,87172,70188,44893,28231,33064,28604,48753,87705,89581,98592,66483,57681,45958,12915,32256,60010,52111,50024,53262,71239,43931,35054,14625,40198,89281,71751,74949,90863,81236,93939,65561,16604,32560,82193,49061,77860,15898,24625,50655,86702,34326,54736,81166,23716,92091,43128,20874,58255,28099,19095,70939,74748,79950,11609,84490,60749,96680,86255,83627,11450,68313,23025,44365,57039,66488,32448,21055,71057,72395,10705,49774,42806,70505,36777,47558,73976,33734,38402,43802,14489,44061,85140,88606,74813,91499,60268,68558,13882,74007,57553,65761,31652,94494,81092,10743,75717,87835,64553,38506,24514,18657,62665,70283,44383,33113,72938,80783,50033,84665,42345,52610,82096,29795,72572,96245,35500,62319,44559,32556,74140,78560,59557,56229,27403,70374,15197,44027,35151,25172,74779,69846,81129,92627,42765,64767,51087,97392,42194,91483,79688,58154,43148,44539,73544,12021,97562,63015,11350,67139,92331,39542,56838,29283,21293,53925,39684,76318,83818,88997,43740,61803,75996,64256,87159,22694,14065,87920,46739,52744,53792,95497,25072,11017,88430,84503,22122,47699,87635,84849,98321,14680,86332,29915,18856,77159,61395,97673,81574,89260,61372,64598,52687,16512,76435,21715,85318,45369,51843,98085,62836,94084,96207,24892,39145,97597,16583,52829,56008,32178,65730,61001,26587,13283,38575,91544,94385,57947,41514,76751,75136,15543,64338,23147,86001,53207,87847,43812,76376,56596,70173,39404,65374,27946,21965,92950,64904,54929,68849,61525,99653,62632,35929,18567,19817,39270,27455,90046,66125,88037,85742,57476,10875,36698,62196,81192,74741,49411,94108,29710,27287,66630,25375,20110,89620,13229,38637,15110,21255,89279,97832,20448,51826,62459,93459,29155,63201,36863,49535,50651,56994,41077,79134,66543,37563,87447,16566,96574,89571,31448,99798,59479,75415,67786,59029,21330,36724,23531,31224,40930,10802,81226,11016,70339,10435,20512,46336,26846,62548,33673,76870,71680,57902,88395,92941,21798,85499,84409,34315,52511,75626,52834,94410,55983,95257,74148,54347,62856,43296,87452,50953,63490,34217,27978,84035,51189,10316,73581,39587,82581,24715,22151,68000,79546,12748,54304,36391,74989,53833,38979,43991,92957,52914,99370,13316,85345,64876,37334,31901,95132,13136,83149,44523,34439,75296,28307,43494,10366,10149,45102,54117,30559,82948,17709,50545,49327,38101,76830,72135,28345,81332,95395,66814,60328,29069,63801,94371,89444,76784,32352,85559,16600,83470,20462,57836,51608,49987,59970,50473,10097,47852,61148,53495,23340,62197,70382,74451,59605,48487,76317,44473,53993,30406,90035,20317,47781,33996,82028,23072,80520,21875,77189,62658,62312,41814,10596,70037,65544,88373,42269,45275,71242,49564,68665,98950,30372,98375,91283,14733,61482,31404,16227,11429,63136,87231,24766,57923,30098,91409,32467,25737,23052,74193,56661,79640,27126,20366,46352,70214,34817,35446,13567,38616,29210,30762,89610,12514,30991,72234,48459,54279,56210,87435,31531,90395,15942,31419,95478,22569,79867,71275,41697,93441,43579,75171,24174,52262,23839,56233,79366,23691,45609,27307,66087,77084,94907,48153,52572,55451,13213,79397,47810,50885,51511,78158,93989,66839,54067,93714,19911,91334,26199,89937,96630,50089,58712,44067,10560,95489,23076,58453,75492,62614,73915,31717,76432,67598,39441,91629,86604,74814,29937,21542,74538,56901,81256,35521,66018,96376,18933,56363,83136,41452,12222,27480,70046,24875,87106,16368,76632,78004,77167,99117,71515,62111,39907,55030,76071,17128,30105,96985,25450,52742,45731,59104,57174,14525,87361,93429,50026,61799,60633,67579,70227,41626,62314,35669,68175,43047,44807,40574,42512,86103,32732,21958,24485,82310,46792,35024,27796,92172,34672,80975,42956,65866,49733,43334,90295,65158,64866,94028,99133,29951,27588,50342,44550,12277,37837,48685,31158,60086,33382,89570,20512,38816,97421,62386,23148,76705,94097,64645,53012,79972,92917,20435,90144,22033,33570,60692,57000,97061,48895,69629,60307,43672,41240,82666,70018,62961,49582,73708,91165,93598,95688,48182,92465,11593,50782,75533,78713,14143,14320,42485,41463,65005,41033,92324,91370,95280,43556,49722,66786,17721,87801,12587,51158,92761,21294,40516,75275,39760,68086,31336,28120,17389,79709,50806,85257,92207,96644,76926,81341,36593,27460,31325,90831,53628,93117,80522,76189,87280,16033,90858,80968,60278,40817,90173,78426,97696,75464,32913,36564,87398,98742,96434,94701,42787,15575,34059,61814,92947,19323,26143,70230,96522,83377,58923,98163,83218,13722,14234,92733,68855,93758,66156,18091,50129,88413,21167,60796,88920,56464,36589,86945,84560,53924,15888,55809,76762,90124,10016,91668,59191,85301,98112,81081,30718,50019,77319,65271,70038,91698,20557,40104,82008,15685,99998,87237,19351,14417,85817,80832,68330,37487,54029,40307,92691,45316,33569,62717,29104,40628,69147,20809,26830,69605,96586,85992,71869,13452,26319,39617,96103,70929,49992,32849,82233,90818,79688,10758,48221,44429,18576,34419,65964,87897,99003,35772,68235,49724,91623,78202,70189,71932,20080,32671,49627,68475,27651,91046,99612,27452,88953,87224,26627,74667,20064,69251,31502,28261,55330,98627,90547,97068,49215,59031,99871,90631,67408,56043,32713,15733,87358,59183,55726,99024,98518,73200,76227,57511,47139,28360,15937,25349,69395,34918,62054,26333,85145,18051,54317,52654,77968,71765,52219,98388,24746,37995,20444,11847,10519,64183,85460,21280,47164,45615,37432,58664,32374,46270,75645,50396,73781,76838,36614,82078,67609,24122,43781,77772,47718,41704,62259,39890,72242,58803,78203,43085,83109,66776,44009,95343,90639,53531,56936,48946,29374,72347,74343,40337,51367,16367,48108,99122,61616,88133,51761,60639,69505,98120,39554,95872,97512,45530,36240,77459,25814,65615,36605,67675,52817,80908,46137,28739,88983,48450,16319,82712,77093,82770,39188,86919,11099,92419,16633,45905,14334,85480,29478,62946,74856,46786,58017,80430,28167,16457,75738,88341,92632,63327,65095,65712,16778,34297,19467,21006,81002,43328,35536,37037,51998,77336,67631,10676,20422,15272,23556,34091,13413,33942,20841,32303,68759,80274,45819,22083,41219,70952,79763,88968,22098,60150,62552,60901,77775,42271,39492,73060,21277,62663,72322,65412,24720,95778,32547,36622,15549,90029,97580,70819,66449,12588,44596,53703,82808,96742,28065,13319,29320,61801,34134,48673,45822,71730,30720,92189,53369,62032,28761,63635,47893,28397,16207,29482,55024,37777,50838,50108,27659,97643,37665,48832,90385,26510,97216,15310,73323,10593,28044,31329,13697,81792,65199,51542,39050,48593,65962,89573,80148,48527,27755,36428,14389,38227,78736,79562,46779,30071,98166,11198,71938,40667,71063,42636,91692,26997,38103,83764,26072,38028,35907,60964,88623,77218,19068,57606,24924,25821,21418,86915,78021,11120,44916,50387,37430,54278,64504,54278,33943,88940,73908,49942,26757,90255,38002,21214,84834,43457,45771,25133,52033,74538,51258,69979,37003,79655,44632,80654,88757,11489,45942,73329,37196,47940,95456,57265,73532,57692,73701,67379,84352,95166,14147,21803,79567,88182,32843,39623,33114,66425,20632,31299,63224,10990,10438,68095,85588,34059,55930,70594,62194,55715,18369,27680,27044,72038,10075,23026,31195,53291,95390,72876,11636,27196,14718,16222,37918,57523,38456,74850,27022,23553,93519,98503,92102,73285,40803,10563,61690,27341,94139,94142,92874,52069,80711,95134,63005,49225,76827,38754,72634,69303,50394,61667,83396,97831,63228,79374,28392,73475,74512,35777,65257,63961,11163,62369,99908,61383,53589,57567,92009,20130,45563,85981,95498,54977,23225,89309,95390,84163,79018,13719,23938,20868,91408,19502,71121,40600,45365,38186,15047,94480,23280,63367,31770,97363,67636,67359,76599,47821,15646,54517,46476,15718,60759,77275,79639,65396,73811,97099,17024,42784,88738,38138,63199,86334,93731,35848,26811,63529,44193,62097,77875,46410,60777,80732,64159,64257,30254,96761,19060,32939,93373,69230,83652,15355,57549,11946,62714,18421,34289,61542,22948,52200,60740,43654,71038,47176,82082,65517,81815,15662,16232,46332,18747,91423,73033,34746,61329,93502,39395,43041,30560,61601,24840,44614,18249,52964,62416,95664,25946,32394,32742,68698,51731,85568,68418,59605,36659,22061,92098,72215,97236,93119,93050,11811,98282,81364,57006,64526,58908,87850,30080,32531,21317,73163,89558,56370,54504,85271,28160,41556,48128,55473,14462,47415,45697,38784,64426,82551,83447,81808,96683,21122,33457,11250,57986,22821,95912,86618,39423,71926,72312,52310,27239,46521,87122,48346,20466,30345,51553,20395,29746,91039,40095,95360,33384,18236,39069,55294,73573,18636,73174,23238,56621,13921,61325,67484,27395,30755,59347,21497,82779,39000,42463,46363,52698,92793,82840,21124,30095,87055,78076,90699,42571,46506,45103,64411,12833,45023,46987,37989,42163,39695,33524,46756,95809,53600,96262,16165,47514,22708,75413,20957,21254,13518,83138,28519,90298,15315,73334,50159,34579,88713,83785,13343,68002,63170,36127,40934,68769,41328,42957,69793,21196,51041,73486,58285,36068,76088,76645,32317,72814,33351,24605,82800,67778,68390,42078,39206,18806,77959,47015,52646,13595,33353,73990,73017,63100,36424,58604,31109,51795,24399,17329,68019,42754,34836,70875,88890,72874,23656,29689,57474,15670,87380,40373,35035,30462,71470,67255,84973,74814,89097,31916,79524,70300,61034,12946,42968,70774,96209,70748,72521,48158,86495,50404,28279,55957,46906,45600,22222,25359,26624,91430,66512,26625,12685,38546,22816,32060,93428,14594,66935,52130,56129,16349,22514,16937,56968,89354,78684,70336,91955,80059,80344,67941,70011,36757,12924,19803,42233,50045,16503,61980,27031,22298,51698,23636,18357,38283,36059,59448,13919,42905,88112,78058,52950,45356,31442,25734,25053,70624,60856,78472,67980,43171,16602,30254,53191,56529,26260,39166,26803,87270,18919,64972,43782,94974,32902,66896,97395,89386,70857,25908,75563,13733,92843,39112,53297,36977,80659,58205,65648,97166,65488,34000,32332,47037,43690,20325,14264,97102,24230,87746,74925,58742,23317,46190,34474,12546,40943,33730,31605,51580,25732,44657,11362,61586,30525,93742,87348,37751,73716,65730,56185,98886,94935,49934,97933,41867,25543,38439,52488,33408,60314,62439,55177,67819,63168,68971,76591,75981,82645,94467,19310,71444,19369,56309,46830,86558,41001,93803,31990,60187,40601,12751,70547,77797,42173,17357,50990,52756,78811,51977,59898,89323,53653,66437,68912,83740,54171,50437,96695,75118,41202,10741,26194,58790,51542,83870,92588,97861,17033,29370,15811,62892,99620,54147,89071,30779,64935,20193,30268,50661,98908,38370,61740,43470,70754,70292,73557,68278,97425,90220,48104,28481,23832,88957,83028,94024,72001,36883,70675,40135,56256,66499,80030,21207,56977,22135,74559,61760,71168,90402,45347,31072,68020,33098,46113,25172,98625,48326,71229,39541,27446,89740,85599,72243,20906,37697,10736,47092,37372,28090,23998,76830,78561,19365,60826,68484,28117,35144,17045,24712,17953,99907,64280,11268,41956,50043,86101,79109,26441,77370,25775,37894,12407,28317,57124,13116,73830,10712,74782,20112,28852,47183,10723,33714,55551,33877,37438,91563,40972,56627,77239,38722,66496,51749,49860,89724,50741,32119,92682,38994,16973,12547,79531,79272,70224,90753,16925,87093,68387,32732,95829,47575,16406,41559,97356,97038,54073,91211,64669,53986,50638,59757,75067,84125,19837,46464,33308,81151,48604,46657,52058,18593,95832,80332,44742,80863,35872,37572,88687,48835,24890,45593,65105,72591,70171,13475,35628,93115,21505,56811,32868,75839,85037,46068,40613,30046,52222,72523,44158,62382,97400,29528,29621,33463,14284,77078,81663,48859,96358,75039,56111,37921,40665,19313,87617,61456,79153,31140,18500,55684,42541,76992,10074,56007,46222,98657,69176,12123,73338,38969,56000,90351,88303,75265,63728,48077,30043,61030,91231,66510,51168,26814,99409,75130,46685,23744,77692,64766,62892,60484,40806,80206,66132,64070,88844,98789,87609,33037,62938,44050,79498,63930,58158,34917,18878,50980,35439,25024,34556,63357,23666,87645,24114,53069,21654,12641,16416,26639,97785,18829,56053,48864,59641,24899,60115,70068,88055,72146,10401,49821,64576,29912,50016,71239,22174,83753,50943,95441,38033,79230,30645,85926,77689,43947,26896,98286,69608,17961,66558,50737,31495,17189,76281,37546,38266,64384,96725,85609,77095,84577,55578,87487,18426,99144,50561,41878,23044,38771,28240,74168,60299,51622,91118,62283,99922,30769,50160,68261,73834,60999,64447,62158,43748,46675,82540,35415,81293,29486,11203,89732,15136,53853,99857,86790,18590,79944,45899,85860,33198,96019,10231,63278,45113,66174,37416,14435,25828,57232,30076,11504,17753,42068,43361,31707,82288,20787,46941,37219,33394,30176,20688,52537,85919,72081,73315,25456,39967,57227,83670,37908,18566,84768,41007,55545,94501,90175,51542,20282,91199,32976,86028,46461,41590,30632,71504,49741,22183,25642,21153,12835,74002,96053,56090,14392,47027,67636,50299,85309,30594,95573,92247,82254,30553,95492,44383,71350,53747,23901,90389,87015,68363,32651,55418,22795,87201,68259,18290,48966,14930,22941,97038,28775,56833,40385,24151,98117,56245,18691,34924,71730,23632,69844,55036,29336,27323,81433,23081,81626,64057,60081,66470,28130,93450,34150,65299,97434,98338,38094,78145,99005,76916,75919,61859,50493,10000,98403,96447,17979,72805,11251,90740,63444,84288,69362,83864,32977,15537,57914,28638,57988,25677,38075,24790,24585,32011,46693,30808,66636,79550,32162,78789,31158,44599,94998,37739,30092,54944,48859,44181,97264,20186,51219,47420,71462,78493,65692,30315,61207,54573,69242,31776,20401,57943,34603,31524,43880,73090,36726,48750,99438,54326,99279,45624,19428,91764,71592,34678,78873,63415,58015,96536,78139,89691,64711,46282,53966,97201,23729,26160,12291,60053,24824,86585,20541,49032,18844,20972,51119,83531,52597,80638,57827,47762,53960,99271,80005,36051,51764,71054,89777,22295,78445,98066,84181,98177,61877,97182,51588,10810,90742,21763,79838,44541,68975,17986,13738,26467,14665,15379,12040,36060,26365,58460,68928,23934,94856,15382,79237,35473,52013,38137,83899,71132,29351,92633,29169,17476,66584,28759,68230,58383,40748,93201,79211,63187,70985,56087,40628,34355,53973,80711,92073,98895,20316,53047,67310,42962,58703,33840,41967,17105,52570,74139,16820,87135,71586,17777,90668,84092,92527,16885,32799,61817,74485,13222,66714,84537,69818,82425,42616,54658,24744,85110,11557,93048,72353,48805,65021,91653,48734,87118,17060,23287,53572,60516,46562,14963,44982,26588,58601,78323,24576,29384,63371,16492,86217,12574,93403,55788,51880,39409,52511,26939,49763,34766,43192,84681,12842,82196,91297,51607,66472,20250,22673,80389,16112,84157,93952,41846,15416,57093,81782,98105,11089,13062,87501,16492,61636,32631,20970,57186,66211,33656,41545,92243,43971,19231,70545,10289,11392,82199,92126,84614,32053,30025,45929,62896,95267,77323,25109,48786,98240,42509,93685,97140,18885,29826,90292,10298,13185,42682,96048,85994,83614,32076,52383,97861,22850,46134,38448,17661,29482,19556,93740,62813,54353,91852,47314,27661,79098,87968,61178,63695,74549,39018,68166,17305,93956,50566,92247,13692,26933,52329,14683,29141,73547,96317,70071,95712,48823,37250,61614,77730,87445,50901,24910,39121,46077,67269,88959,60010,87585,85320,46566,79362,85553,88480,81038,28276,45675,61951,64532,37944,64252,45065,32234,23747,26066,13452,19267,61412,27497,16669,16784,62096,36543,92969,69697,53093,90411,91392,63288,98909,87321,54113,85743,39180,37107,75808,90316,72555,49241,84121,22454,29371,26744,10923,98139,60694,54699,66791,89429,38177,96380,87553,46902,45644,21430,90366,92925,85412,51113,30383,80249,69092,88406,35736,75366,46624,36670,75826,26238,14744,34320,46907,29821,22867,85157,31921,86229,12437,77748,80035,49008,13094,29745,10420,92784,13880,75212,82315,74381,59067,75397,51599,65593,90002,25379,21486,33381,34063,75638,60972,97232,91039,36535,50766,28079,93223,96311,51896,95792,40484,14323,33931,61367,60539,86243,92879,11246,19577,50645,50053,25460,12956,31762,68591,67134,39536,20846,30707,35566,46437,72406,24014,38496,86401,41315,47695,87916,18924,48548,79634,58468,25719,69267,58244,53874,22303,57578,53017,20639,33043,97727,40898,68257,53496,54779,65666,19302,45128,51077,75203,67942,39307,68265,14262,93189,88663,58046,28604,44634,94084,10437,56156,77389,72807,57936,51498,20459,23967,15250,36398,35356,77792,20335,76661,25543,65672,21795,71895,71277,72717,46804,91188,57196,30606,84070,32457,88018,82557,38333,15659,28549,52732,65135,45191,65166,96105,87242,66601,14499,91238,65964,64236,46175,66562,16158,75775,74513,12326,99049,64502,13226,90146,20889,96436,19383,87349,92859,26808,99312,14286,18920,56799,57496,31391,54316,90674,70483,16802,57094,31029,70888,33860,50571,57376,47653,67215,17751,88973,79997,38365,74484,11784,80849,11120,28399,23115,80563,42217,45761,40615,89627,13280,59770,71114,66447,89977,84696,52716,58917,53621,55153,28528,40520,29227,41963,96698,56455,75364,91632,44269,11038,10434,84553,22441,41956,92373,67549,70741,38828,27604,62374,82148,46231,75110,30604,51831,33190,56500,95666,86578,16855,98638,47687,22957,55056,10190,16945,66798,18139,93165,88573,58383,34819,66499,51593,74028,58818,41870,38670,75933,37586,25321,77074,33189,37666,64667,76393,40030,56684,77237,73742,41123,75538,11785,39100,54222,92301,70627,44366,42330,33851,22681,80446,23258,25423,80944,21687,54555,21870,30819,50020,67445,98967,85770,16868,52583,18213,66264,33116,84791,52996,30101,21894,99841,50309,17887,63793,49468,51626,72842,32535,16979,46363,88183,22994,62481,94120,49727,92095,63371,27982,91765,31129,18641,58265,57670,62747,65617,84817,37845,68279,36988,28024,70631,98022,55767,86333,33907,79913,47298,46188,31265,74492,76547,91855,83645,12279,30156,65742,37020,41558,28720,45708,34909,44897,29680,16898,85298,19677,75074,40769,32650,29880,35442,60760,46643,50592,27934,41158,78898,55648,16443,95502,75788,63661,62749,17370,45142,94229,63206,51143,12607,24863,35467,33888,15714,47549,54742,91543,54831,47717,10947,89900,97887,32731,12130,60847,39064,73137,27873,91716,92961,63942,65251,32532,92472,27246,24604,72126,29279,21524,52748,15463,44004,74856,87248,56407,53198,41876,27003,23397,77398,98881,91648,23588,15769,21258,47574,74195,19336,66602,80812,69752,99983,27884,79837,56026,73777,80269,44263,66724,94052,69568,88074,67904,36567,49403,84278,20287,42247,50796,54109,61327,61171,60418,83212,88224,67513,58321,37035,82398,48729,12177,63854,22537,22752,93838,31317,91294,98838,78318,34586,17070,56012,62485,51939,18757,13098,49463,31536,88497,48392,99642,58684,48745,44573,90014,59151,85766,25971,85088,30001,13435,93937,30883,91616,82999,64172,50561,77559,79929,10820,82918,51960,84296,63045,47976,94561,82788,72078,79562,35044,64979,29149,94488,77535,15107,39458,30930,32519,47165,16218,24107,50878,18775,10990,78487,40455,93927,92495,30309,85293,10281,86096,62037,53864,23727,19955,21797,72126,19852,86705,88199,62683,45535,33036,38128,54663,31856,41872,66705,32022,19059,38655,83091,82764,26522,42933,69395,56181,10633,29243,99502,18182,33247,62026,38960,99359,79561,14304,52823,62303,61626,25908,39565,90218,16923,88217,16770,26912,59399,97634,24550,75229,22656,76112,65343,64757,32154,22795,68182,90511,93512,76462,37433,16049,84390,29411,33705,64477,41846,83452,41851,41243,76479,40090,80376,24504,69314,97216,50069,25898,72060,31256,28714,38540,32014,85974,23977,23973,40650,20817,79781,92167,59878,49334,91514,40489,21952,78872,16215,13760,35469,97436,61913,61076,92080,16612,80683,98346,44665,74990,71255,92329,18202,89593,58616,45781,88480,41604,29048,15280,47348,44448,61386,79474,83396,21549,86839,22132,23819,98443,83932,15704,58604,38445,15761,50355,97768,74447,93457,79220,24311,25653,30738,15161,30420,98984,21120,84670,21242,36351,52853,27676,43450,17850,16550,22973,52547,66216,88784,17004,12711,94086,98363,54085,45128,32838,41291,27970,61215,41163,98892,31978,27524,87177,20772,12161,84698,48697,59229,72185,79018,14730,46890,90459,10355,30170,31190,11387,15815,28598,99993,45376,96578,75318,95800,40541,50285,60655,95664,26973,56967,59008,59216,83263,28865,32528,11769,63157,19225,12370,49674,87695,27754,18747,91071,69853,76270,16556,38413,76592,47830,46249,33681,87826,51311,53916,10517,37707,70769,81228,22157,19069,10946,60298,10134,97137,24765,81693,87690,58090,10908,58545,25867,80970,54157,94063,95613,70888,11983,16464,81358,95474,77999,94510,45477,13104,71570,80265,36516,96562,30621,17529,35123,58477,35419,52477,52900,26684,30434,26491,86440,19347,39288,24338,29776,11644,53584,68347,55456,57086,96347,41504,24693,78634,55188,18013,10250,89792,92106,30237,69962,19490,18343,93830,82249,83299,81860,47419,68218,64781,26965,10743,54733,11905,87565,45059,36334,37015,18713,98631,88878,60677,58864,55583,85022,86241,52101,52708,88137,11795,24663,52003,91020,96677,72301,69254,25400,34132,49953,49176,69270,94867,49117,78254,62962,80851,58371,44423,48127,81016,61538,63628,36011,12941,47070,11172,80916,53891,10647,14213,63282,72981,54458,47971,93969,98414,69129,75761,38861,14618,89442,20694,20490,87209,42432,72299,77458,73091,56274,43828,21625,48166,55562,90459,16094,20735,67795,35385,36867,14902,35240,19468,62904,89059,95775,59842,11532,37438,18946,73114,62991,58225,51310,83655,26640,59980,98171,34262,96359,38842,52118,58780,66795,47156,38074,87825,82322,38834,28583,36269,90936,78547,18615,19621,85581,68071,49105,69402,48576,88743,28626,96256,37254,53968,49904,29405,85114,92492,29414,28124,68692,22768,68153,31315,48887,88499,23489,38008,25370,68902,57459,95232,58323,81711,52112,36702,30916,48000,40931,84071,88266,15733,79167,68940,94280,21663,17892,98982,55713,95641,93353,83629,90286,15176,11897,65062,37476,24548,38856,77321,65312,36899,90204,12452,60618,32144,81831,64465,45490,36954,78760,65949,25241,14389,64133,55869,96483,94934,70626,65614,76836,72597,81415,78553,20619,85354,18309,17826,54781,19412,78910,36579,16149,68331,63698,14662,76785,97894,61545,68693,32088,60873,90504,53487,51145,25980,94428,96447,11659,81008,94014,78927,96072,29989,41703,89339,95739,27555,33780,92602,40701,99685,87907,11768,57385,25593,27682,86713,96408,98352,78291,51394,48596,84242,50973,15370,30272,65574,84895,19030,79841,97591,33390,16139,25583,73542,37448,65986,92369,14560,91253,67572,45666,55193,38215,37373,86931,62632,37043,38014,48629,78388,35240,29780,22146,42386,76008,38165,45993,49740,38439,71784,85996,80777,78952,93837,31124,28588,65730,92881,86400,51156,97046,14973,76434,36960,57350,96848,65903,93806,97793,32330,86910,72975,69327,63047,53417,31708,37916,21833,54645,62701,18441,28198,41236,49098,34390,57321,30402,70791,55214,87435,85566,17380,19480,34576,64016,29961,33630,14986,13129,87585,65042,95036,85078,13947,51322,36280,58905,41552,66204,34745,25084,39852,65097,71769,56336,74383,28088,80468,53275,69436,24147,41821,39214,95718,20279,74782,39373,45026,38006,88362,43145,46977,53934,35519,84160,13036,81022,52111,88102,64043,35664,52900,83646,14744,93443,56225,90960,67218,91551,15289,23694,97439,50997,70589,43787,77559,87574,49539,65102,32224,12934,62456,79505,23987,84534,93753,58247,89041,34878,58705,95471,46025,57941,48097,23514,62830,81868,96472,72920,34712,73934,67083,37018,48745,63540,95673,93869,29483,62581,26872,25220,14773,99661,56221,92574,67547,59214,99648,16790,28804,70552,65773,13015,76093,80834,64207,40329,18923,20181,80536,28827,82875,17190,90591,92214,51712,54272,65638,60749,51629,67554,46099,33120,27289,89632,73306,68338,16058,84572,57997,77996,13823,96597,22384,24034,97334,82857,78006,77872,11936,19146,86093,50023,54759,54216,56319,48002,69375,59494,52325,24249,90336,75078,80439,49715,51004,95260,61542,21336,32015,25858,15106,98142,13640,27089,78371,41365,91598,69353,51725,53556,98202,19205,73962,64857,19127,16979,71598,43895,65228,38603,65956,85111,35156,61208,43543,29553,10006,41168,74193,28101,12706,62968,28102,63588,93381,65297,41601,42505,79025,87957,87178,75194,40808,55712,79113,13870,38125,54940,21016,74706,23662,92788,73577,93368,38393,53923,10242,53685,17547,24708,10231,78151,18201,70221,69064,90849,14452,49734,22451,58685,55238,55825,95336,32176,35409,34168,90246,65467,65131,14737,68185,90853,98729,33542,16543,84974,85659,81199,25081,12026,49288,63033,96706,60992,34293,56279,14334,98140,70160,32667,60972,63711,23217,79329,56804,84330,32644,65527,70385,49998,62321,52770,43860,79125,33505,32838,90372,67678,68951,66636,37195,14992,73360,82106,50311,14860,27373,79262,90835,68229,68531,81000,65870,68475,70247,98897,49503,48276,36696,80814,86243,54758,73631,10989,62672,86271,26963,37504,20493,24407,50361,39634,38896,64860,38481,52731,48390,22753,41681,95800,90684,24569,94930,51873,87745,67729,12478,53007,67021,97905,54160,58014,47656,63112,22157,46968,48661,73198,69866,86966,48974,95055,50749,90068,34041,71940,76166,56086,80026,44556,36078,80802,24070,37957,31719,10059,86746,12568,15957,29076,41119,27071,87764,83889,63276,57069,88522,44515,64939,20572,34378,45640,23230,89373,91767,40998,87577,65878,10617,57812,80815,35011,18085,55682,62565,21702,44482,76009,97467,69705,27672,15072,46109,58087,41323,22017,69873,70776,27007,74068,71548,22630,10125,19221,67235,76021,44324,53659,53254,48392,87397,80953,76051,75395,16732,25905,79111,92481,29360,72334,60771,37415,82944,34044,40892,56922,22742,10121,43358,26057,42205,43510,28841,57610,70430,27710,31043,97356,22102,66596,69425,65937,13982,65438,57375,57693,77778,18445,61355,11415,86624,32290,28064,39568,23323,76528,79129,73624,46968,43263,93574,84731,26376,21299,80847,74238,73463,21748,41237,64372,64105,70664,87229,37831,75973,73836,43624,84575,91184,40816,32919,86841,21432,68105,97261,90983,17323,84787,53893,71656,46074,87418,67102,64293,78838,37167,48232,70812,61231,84149,92580,65913,72199,28913,91123,41959,16348,26358,31180,90679,29457,86240,88826,77166,36232,34603,32929,94285,76004,89676,55526,32619,67226,13532,36807,78054,23539,70149,30093,82710,96552,20444,14790,36353,76191,13416,42225,18394,89062,49851,92664,93584,18243,60951,64774,32749,78603,18773,15693,47110,15445,59424,95386,76076,70144,66592,28610,36477,19779,83567,58806,87878,31933,31417,32416,59192,78483,62338,43659,50194,69483,66164,70252,72973,41922,66776,77614,52349,76754,83666,66290,20449,99097,50283,55301,40482,36618,92246,57158,66289,55875,87962,75031,54001,78946,53210,10261,44328,57466,71791,41873,68683,20825,20620,86499,19899,87836,79294,34504,75635,17728,53183,11417,91877,48470,75533,48399,41469,67903,57192,82159,83485,38320,71934,53686,39807,64733,43887,46679,68435,37883,25710,57256,23669,55792,31555,83541,34259,54120,80664,57082,43330,13134,17686,37065,92827,25156,18930,63956,37211,96617,70745,64600,38016,42997,77118,92358,41980,98680,31880,23068,13613,25234,49844,49998,91979,84271,55817,93514,91696,84118,36829,25435,97635,55924,11494,83646,59990,86868,71098,74410,62316,98761,55185,29505,55803,25581,68734,20288,58164,32989,69959,24612,76202,50405,90402,43936,65329,23301,43883,40502,26184,57471,89150,67061,79868,31569,45086,14394,66318,59730,46467,86149,76809,55722,12694,70632,37846,90996,66074,66937,79770,80016,43682,48358,63350,22225,15998,90107,49010,99505,20410,59785,26919,36462,83728,72671,52753,37569,56083,18853,19009,77863,47258,36389,23032,44180,48138,86752,50743,90944,76402,32749,26548,65160,13074,53944,39463,56190,64819,63787,29554,71422,28840,69284,73671,20137,21977,91950,68668,54733,46687,82718,67337,54404,49456,99363,21216,32457,83363,85218,27923,85678,79992,24698,29299,72435,85120,31635,19831,61027,87548,17866,15193,39889,45546,73522,30064,87830,80919,74101,60786,70795,57238,85736,49206,31400,48163,34607,35222,35368,47084,45166,56101,93487,38997,76361,60352,30046,25982,74106,68487,94762,73323,66820,91055,44086,63442,89761,59415,78626,41321,91037,90159,73998,10576,52043,31445,22567,94562,48312,37703,85148,72936,34902,40752,43809,92557,18196,43813,36198,10529,32688,17830,46051,78620,36477,50658,94861,47235,74076,21187,42860,77430,52138,89858,12452,15992,81683,84113,45330,68091,97622,48023,78006,19721,40923,67582,86429,40268,82736,30699,26010,44668,60734,61323,57213,47658,93031,92525,57323,10380,19846,58976,18476,62402,97638,56134,17386,86749,91729,63576,71806,66723,68370,10842,27130,27406,16003,61060,74941,41857,95643,68664,70880,73177,44997,14144,15568,99713,64181,14124,63241,53591,32441,94834,73905,21068,92970,88783,82331,56629,87162,15752,59743,78007,28279,48798,79402,95250,51145,76693,65643,31803,17198,77249,80154,14577,52923,14814,73961,31373,13663,41834,50559,97660,66383,20371,72916,94446,85744,57122,13036,17993,91322,83786,30380,25574,11809,17150,91442,61917,54324,32062,68157,27176,18264,67794,48948,26097,38614,85522,61669,70795,15288,76652,74198,97704,88791,43217,27624,31974,81157,79918,67745,21163,95076,29636,47553,14526,92235,69914,50987,53352,39646,72118,24099,47064,43074,10862,69920,48825,15668,71885,83872,28769,20234,33468,38558,51997,88890,88050,89498,67128,48590,31183,78788,66300,82240,69130,62559,37697,93479,37492,16269,37054,48398,68308,96922,36927,17495,28541,97608,33548,92740,61223,90087,74189,85403,96053,68567,67866,72222,59281,86656,88775,67194,12690,54874,53950,35753,58178,56931,47919,73745,62369,57981,66788,37783,62314,40693,93159,29863,96804,76246,20942,79264,73914,87960,65133,73312,45146,39423,35891,85059,50822,75545,18151,91159,11007,20135,22829,97743,49880,13574,52460,61409,95572,13499,17617,71217,10134,98738,22216,41183,37724,90822,38831,82503,39128,81459,49491,92728,61222,59517,82988,81005,31763,41685,26729,98373,26461,74861,20229,14579,63448,81594,39871,73796,65947,66956,97862,68776,90258,18217,91217,21563,87547,67017,34592,96848,15720,60772,95975,21493,90845,68473,35966,98267,40729,36210,97097,43928,65385,99286,67109,76226,32117,12130,28470,41600,66409,27674,98711,71141,24363,52293,94054,16561,35724,33984,61940,86453,49361,54622,93631,38735,67991,80061,39372,63966,33321,88647,19083,71899,80702,99378,83442,11374,50246,95758,63853,31972,62817,38558,48120,38267,45524,64140,26692,65579,85493,66859,20812,18867,43654,49429,70902,42262,90575,16821,67736,21689,26270,45514,78574,93327,53266,14374,88486,40874,35824,44980,62362,94395,93578,75333,80264,89051,89933,22585,42395,71297,13634,37275,95610,33091,56297,95952,81963,64083,80128,62742,70110,39399,65341,94194,16628,74673,87814,97733,71166,75592,20665,76111,45246,11794,61417,22455,89016,27587,89545,57986,17082,80071,34287,51805,67906,46496,25971,51916,82154,51159,14281,48795,82342,28779,58355,41144,91984,36731,89780,16638,28825,38928,69400,77176,22745,87942,72785,58199,16210,36444,94381,54684,59331,93629,59608,95599,21118,77496,20376,29419,49342,67314,67059,32044,53048,85138,90649,86978,66661,61488,39461,89271,53397,23190,71902,27816,11130,21041,72225,82196,60792,89169,29475,10464,10191,60473,70234,22720,98492,52735,13733,37786,40292,56423,67078,15233,67902,17820,83472,49357,77421,80075,93677,21386,32051,21242,18587,14168,49327,65626,92286,52558,15697,80390,54633,76545,51057,17816,39457,99822,53673,52751,10269,47209,90867,50334,69425,24505,94459,95968,82186,11494,49091,38038,41039,50056,55155,69593,43793,46788,46332,71517,51520,80765,54030,54559,82840,31410,47770,78149,61551,35625,65624,20586,76661,50792,72659,78484,46527,51161,45017,72281,74976,56775,11189,74885,54696,55847,24305,86884,79185,69216,91642,86703,41745,39372,74662,95742,30851,37961,48993,88245,83527,97912,96235,27187,74942,54455,43942,13410,75690,18927,88081,28843,48408,25162,64970,36200,15668,82178,54991,54839,58834,13365,11640,78333,47670,33275,93859,57071,98632,74877,47772,81221,58043,42804,51478,79020,25872,98956,28541,25577,30088,47593,85416,50585,35757,42303,58015,54861,27186,57863,15799,82227,71604,70863,68674,97892,62842,69127,58074,94132,40966,31765,69302,13305,18360,38267,21214,65610,14983,53323,46968,62666,87530,29618,48023,30958,38349,89785,70633,28769,25342,53827,46925,49184,36217,60061,76278,34952,26214,46688,73500,23394,24528,28957,18668,30283,63919,98799,82368,47874,64435,33571,73715,83863,60209,48571,41312,10502,38101,97066,37333,52986,97811,96825,66612,27554,37917,60753,92069,70970,26645,21557,43465,22203,58444,38812,69585,67296,58736,14284,52530,11206,51548,16332,17120,47588,84699,82078,67777,32777,44663,33865,91618,81749,55396,59441,79054,72688,20078,22810,73595,29784,39342,23125,84043,47127,67261,51804,93964,30195,73880,10094,29252,98060,39608,60141,60905,78255,63024,71924,93929,71852,39890,60164,53719,46328,55277,53787,22988,15928,27357,59731,54516,68255,81572,91181,46340,80680,75424,73362,29515,36484,36846,87641,70196,71319,80872,85337,14015,95955,57877,24147,26691,96697,12786,72370,81893,41926,98564,21512,65847,35644,83179,68039,81699,59039,80919,48803,53850,72441,36161,71625,21983,70847,99743,54074,72195,55242,29304,94741,54885,60031,23202,89245,72081,82486,85382,43515,92889,41399,38751,82973,46483,79342,36143,44271,79647,58816,11229,70795,36497,60014,80410,40864,39162,87376,74072,47460,64870,83152,29792,87424,23799,39862,69945,40463,17684,60511,55211,46923,22665,64689,53721,57683,94017,53958,11132,96687,37219,76408,30545,21912,68913,87661,50263,94560,91375,49093,52495,13716,35748,85086,27369,29486,87097,82055,50169,33005,51391,30749,67477,61470,23682,98186,58718,51147,20757,32212,39303,23464,67111,38112,77380,49406,31369,58431,29441,24985,27063,26842,40127,15338,12768,72727,37490,22490,20567,64960,75302,31437,47207,75660,49382,24736,19020,36588,24246,53401,24309,33504,44343,12832,58136,17440,92772,32820,37717,65670,17353,29366,47825,11651,52922,31279,86282,19736,56195,57906,99950,10638,44710,67816,69837,23022,98088,23318,52650,91105,68461,88774,77602,67423,55052,60966,23882,71827,97803,28165,96997,41347,51956,55863,26844,81893,90940,45297,43854,24660,80930,11853,32072,87221,56924,84211,34132,27938,82457,63878,82629,94308,47221,55801,71396,58366,36346,87070,97594,47909,43435,13415,27629,39090,81156,98259,85638,58622,33861,30633,39492,91348,57794,20878,50345,17992,39907,52122,29399,35480,62373,85058,50698,68027,85853,31415,85109,24199,63949,83259,72537,48342,60924,88790,28898,41240,83623,42026,10278,37398,73867,37987,90794,26322,57448,98863,43230,23864,65422,68891,54444,51128,83017,24684,40985,60212,86210,71885,89790,96214,88871,63549,43298,30609,71342,25558,38085,27647,81782,52323,74283,98138,66916,25234,51325,98258,71608,10373,28570,16688,89250,43393,29792,34922,30892,51863,62264,65957,94862,60443,54566,32820,81474,39438,54016,80286,96898,96327,88003,80410,47792,80562,65603,53527,19152,97827,79075,13243,29140,51852,62942,99520,34352,31861,40446,12050,31139,38463,81985,62745,36202,89175,51435,73107,79708,40546,91871,86927,55539,23288,87770,35679,90075,14243,97339,57367,95844,36695,64419,67949,27880,47537,99322,18546,69915,70174,68060,64780,81852,51115,69237,65049,65834,90252,87471,90237,13034,71616,50575,99186,51359,98090,85088,54594,80732,17141,74129,52144,32739,68812,19751,35320,44673,62903,57499,32372,81332,25919,19033,89783,81405,52044,24529,83404,17086,83700,13136,17198,47874,86701,12539,32887,66923,24706,67644,13110,71874,94724,33430,59695,77427,93977,37408,36034,97765,31552,67875,43101,47288,46521,96592,63688,62204,37787,96674,52663,92351,70397,58269,13894,33417,81305,90426,47014,36436,46620,90353,80419,96989,46523,74203,12065,91917,15582,85895,24518,39154,38364,75904,39235,24799,20864,11781,33863,39464,50551,33792,67522,42585,79680,45518,45768,81258,78050,93802,91701,13756,73469,73837,37950,20116,18874,77384,73223,24102,32133,18669,40872,19893,54151,77732,76985,13558,90453,95249,19624,13530,83356,41245,97841,59933,37426,94685,54479,33240,64827,53696,41381,68689,97810,57449,15429,61550,46533,47991,92307,20187,51895,75142,85856,24360,37173,80635,94000,82449,27098,19338,84378,82204,46164,89304,42653,42457,10107,21702,24759,66434,75783,78212,56429,24527,51583,41096,33310,68574,69458,79010,99298,92097,65669,69950,65034,74850,43084,79300,69746,17730,94582,95359,37842,75496,38795,30520,63657,17424,68200,68975,30426,11176,61928,61674,25843,67750,59951,29263,30316,28335,62934,98518,79486,68628,19555,63598,83025,72546,74425,34492,46416,54907,94776,59435,99280,15619,38098,26183,73651,76412,44907,29050,57524,28509,29137,91149,48543,35612,12826,18532,97748,13638,22895,94593,40211,69310,22697,44853,16893,17878,24638,50225,91935,99944,29392,55569,18367,83714,74776,98216,61610,28318,92880,27928,38709,48490,67201,57242,18700,72809,83258,71241,22050,83194,27839,85283,79420,43303,78697,92656,25522,81781,95974,58257,58834,28815,48729,16557,12344,60102,97588,62422,56939,82978,64729,38178,24780,15390,40424,16650,19479,12314,46365,85705,81268,23835,55491,13089,58385,66110,27935,75054,54789,57561,86983,51866,41454,95771,54633,24413,70728,35540,55654,67527,46927,28727,11494,42007,91418,23171,26133,77758,40490,30088,86324,33058,65696,38425,45961,52091,84015,49102,28208,98233,30338,44714,68255,79084,88338,27515,48381,74590,82421,32994,13500,59347,87291,98186,74421,60339,20225,70844,40971,49929,99285,75331,77056,73734,85329,31710,64179,15876,24969,16880,57467,55862,40343,20289,46186,71652,26631,60076,43031,11173,49679,78064,37055,66690,54604,83905,76113,35268,37927,28895,11777,36355,90763,63805,84337,23678,76148,63883,49652,61379,44152,57349,41527,97642,49963,75783,36504,21007,37739,81397,67685,82025,80079,94017,31799,22539,65311,54622,48080,97205,83987,45421,10395,41023,87069,10366,67799,95852,95333,12591,67343,58239,98417,24094,56757,86704,83128,91207,97627,89744,76890,39864,99087,32851,65327,66871,52246,26589,86955,76657,18920,28846,59888,17303,88526,89866,30557,21914,19162,99996,57559,21722,69648,29060,88325,25899,37362,72060,82146,15205,54703,38584,44289,15191,94043,33820,62604,42653,69687,77693,67494,40912,48823,17288,36339,46756,97024,34964,63947,47426,57618,51630,97267,32503,65373,11520,31374,88118,79521,27841,51503,96625,51079,42206,24503,28499,72405,53693,56410,34855,47736,81784,51241,14896,27314,78408,24481,65489,49463,63001,88434,56649,30442,54302,15498,67456,53305,43933,30978,48987,46599,87551,24651,83400,72429,94730,61414,56050,18922,47882,43049,34867,57592,79959,71874,77221,93592,34450,44968,51976,39365,98919,23103,38337,63268,52731,63944,11607,59183,34853,46635,84762,90597,76264,83064,81144,72913,10718,86719,83133,37009,93263,17741,64939,22955,52355,59601,57185,29711,19823,67380,11854,34002,46454,85722,60506,23571,11208,48866,27270,72628,91526,54182,18754,74470,73268,91073,68454,28600,87241,69068,95295,13021,90013,22774,41889,33879,88951,96792,75299,52448,52120,32185,92297,92456,14086,45342,30656,82424,14708,82731,11773,33324,14312,93690,92498,60578,36382,82800,56978,22749,94942,28222,62576,48506,44766,76617,32801,51295,79310,45826,48616,67084,35006,63471,18816,92271,39848,79568,92829,38672,86165,25994,10653,59742,94295,43576,84963,59386,54040,42927,77240,52777,98898,88770,86359,72642,68253,61638,12510,20203,74095,84697,15259,50564,16002,94988,30526,82546,21374,89397,27180,16749,12425,29384,55551,60922,37165,31693,18014,49446,13356,34492,76954,10867,51772,69250,38027,63438,91097,36400,83068,88052,23730,12727,48286,83078,55418,81653,34899,98619,23255,13726,97927,97833,39756,11369,66823,47071,12914,66232,27042,24237,21514,12568,83016,22724,44958,87723,84489,84831,70607,43621,78478,94641,24778,13462,70306,44322,54583,26897,25474,14312,66811,72110,24199,12822,35784,96746,26048,77245,61460,45738,74630,40363,43659,20119,11146,45050,80178,60420,14293,40322,97084,86819,51179,20793,32593,38097,26647,47246,47208,69374,59100,93795,41140,27499,16669,71097,98580,84217,58703,69536,19262,83516,47617,63132,29637,43581,20771,27717,10759,46470,79963,38273,72936,13571,16534,51532,56833,95272,35258,92764,64517,31479,10576,88703,83142,80876,18532,56804,80436,18515,31551,16578,27166,93186,58530,87788,87604,69995,45333,50937,55972,64992,74247,18168,90393,17383,72371,84367,30229,15753,10582,65345,87644,74533,91117,74398,46332,18074,40469,98748,50721,97811,55467,24925,84723,62933,69098,96751,85695,13952,75584,21826,61572,12981,36798,56741,21341,51240,91778,34733,83143,91896,93932,75575,58241,18593,52903,83942,36420,44564,56327,60359,57974,46267,20728,85551,14425,43482,17778,40543,62409,36183,65859,46504,81561,53722,43825,25130,91158,34972,79191,15958,74801,38710,44005,79540,39416,38787,70660,78368,50019,91304,48776,12410,79860,85445,88562,10940,33777,55292,19768,94253,80218,27094,12877,87318,71029,77180,82931,97509,46697,90630,80454,34454,54547,94439,26345,44696,70740,20596,36747,27993,62172,74292,91384,61785,40871,19305,60951,48496,28582,89842,91388,54972,10072,88300,38194,95341,39244,99223,85529,33933,82464,36617,80232,49992,91412,55424,86701,99412,75614,29423,76054,89693,98294,50085,71163,59519,51015,56361,94456,77595,52500,93531,24142,84798,43657,90616,44793,79282,53881,14976,83915,77486,73670,82881,16033,64848,30959,31307,92339,15532,23869,87868,72486,96380,73727,42872,31398,91635,72619,39439,97471,21722,79578,17728,78236,85167,22861,91632,30473,56576,89687,80945,70808,90398,14830,79574,24985,22763,55221,60290,16480,15904,22075,56027,96025,28378,97148,55016,83326,21528,10942,65191,83245,73890,13732,48007,44108,33603,43176,63508,94341,24098,98159,90245,65929,57538,47331,68009,93483,72060,48283,45664,65754,48112,32887,83599,85147,54621,47649,97907,82253,29243,82432,37474,33406,10057,52425,88700,71514,15195,30047,72973,59349,51856,18807,24720,17123,49376,71721,84129,34455,25161,77808,39351,24811,41559,26025,77133,30113,22569,50056,71439,48931,19717,82039,89158,80158,45947,60973,82689,12535,87019,15303,46091,93512,85350,72501,67972,60370,47249,13784,98922,52035,79460,22415,24942,48024,92066,91973,25147,11096,18740,64067,96839,61682,71651,95624,25387,18400,65869,46138,84636,34207,22133,21867,99874,99116,73280,36307,87223,13163,78851,45776,42394,25412,55840,83749,24877,66726,66358,83254,26931,23422,98628,51201,66446,82460,45901,72860,78139,15643,15709,65426,83378,93626,91607,90246,69284,11303,61027,23968,65737,80524,18215,43019,72913,47762,89104,48506,36758,34559,32679,78930,23955,18501,66468,83962,51960,58501,22803,50655,18235,88922,88022,77791,82645,97041,12496,44915,79886,61204,86821,15646,79864,19481,39844,67803,92804,67156,72578,50310,83267,46137,10873,30658,15289,74684,91971,47984,38740,70834,50158,95261,93264,96103,79843,35995,24797,88931,12791,46940,62096,32889,62464,68164,99842,35321,43744,32977,18508,29277,51053,17417,93706,84015,72412,11615,79741,89312,14610,22689,80331,74542,96286,22654,90725,57710,98845,40531,46779,25951,21648,86983,16345,71743,32279,67658,11949,79096,28102,20567,61162,68571,97450,57936,56380,97032,22803,15249,35039,76029,97271,16034,60036,99378,19291,94351,23660,87834,42987,36778,98158,87748,44650,38008,76539,78005,93041,28494,89567,58368,75320,54480,13933,81264,14479,42343,98484,95527,13803,92315,60608,30183,58975,23385,97526,32216,45256,63074,93430,84124,70639,92657,27891,20500,58620,97597,28755,27693,77384,53973,32232,41991,89512,60622,44115,63937,29882,47363,98091,40341,37014,31627,15923,23542,61072,85458,34913,10410,42200,96579,79479,84257,47009,72263,85756,30563,31726,15335,47243,42338,85701,77449,95508,93235,88642,83797,58050,77768,12071,24496,57673,39275,20443,62044,93689,78717,76186,36215,36008,19131,57130,41985,55210,25034,14169,55611,20996,13819,11983,64254,81393,70142,61339,66345,76757,57005,39503,12867,60399,15977,56356,93058,68499,85166,55011,14815,84037,46657,15118,16523,65300,36296,44320,36642,31262,89742,74983,23222,28499,75422,75965,64666,49031,27876,64097,59111,16866,17893,93756,82465,52084,43344,93539,68098,59398,82272,83019,97089,85934,61476,98072,66450,55309,38091,34874,51716,95217,53689,22215,95361,98458,77400,83977,53998,50116,86889,75433,18691,74364,89803,66874,28297,61571,50463,99564,39270,50707,89695,54169,80442,25173,91461,62546,72021,96819,30150,66436,86004,94726,78235,63429,92078,36667,21757,26095,48834,22691,10310,37136,66366,90840,32826,59833,59625,58582,56349,64732,17958,64293,11970,59385,67442,91692,43725,97951,26593,13041,50323,15012,15573,85689,53744,29393,57766,60080,15447,22418,91786,35920,53655,95443,94688,13687,74430,52235,31498,92130,78244,45146,62527,13059,48102,93924,57999,80481,55196,10929,18214,69287,41110,23588,84960,64790,35527,70714,30306,82540,51507,26444,30956,11766,74344,63534,48219,51359,63155,45606,92042,78296,92064,58609,47726,43652,75236,98338,33341,30546,58651,90196,91997,10396,40511,47782,77212,96227,80947,42698,74993,11568,57979,75813,29765,96824,66263,99549,82775,23475,49749,66989,94038,67221,45913,42307,46596,92134,70798,43895,97609,14886,86226,53694,65161,68223,48527,94885,54987,47788,87155,38775,11818,76305,51749,86149,13752,21209,57905,17864,78776,22819,54963,48460,50382,91814,79065,34908,23806,14682,29867,58714,23219,96110,52355,72699,72561,45514,28809,65361,16221,94264,53264,94576,13332,28665,34302,13768,35311,14396,61033,49724,31009,26190,90878,14290,63458,23218,21675,75045,16642,79817,49752,15124,35667,57860,39824,37842,14158,67396,15152,88613,14541,89641,46611,50852,47901,43151,81491,26210,28418,90476,38896,91045,33559,30470,58715,28600,52366,42725,57557,93153,51607,42334,22210,20080,36647,86641,92738,98967,15086,26185,45996,58229,63895,59961,45496,64182,77050,22106,63335,38814,30928,29308,45074,30929,84970,21555,78478,70700,11735,36403,28617,35172,31521,74541,66861,95035,14086,54636,97392,50162,35721,43624,62091,34269,37901,93185,40712,33977,50373,52977,87841,91649,84262,95008,13439,82652,71846,45405,81160,44784,24151,56977,61676,69922,14121,99034,47470,21816,92236,97341,23522,23223,25405,44773,57971,72553,50419,60361,75682,21891,63574,89318,60823,42267,22856,45159,91217,86777,56089,92994,88078,95764,43125,73718,56855,70499,25683,96767,77303,97475,47095,63595,12586,15238,47258,24859,16971,48881,82600,45635,70343,38315,56245,32842,93069,76379,51804,19573,40760,25370,14699,92771,34780,12554,42041,20098,16878,39750,24090,62011,57760,58750,60381,25243,47915,98320,74157,12257,13883,18559,46403,37424,63318,44879,37195,68266,40231,76884,93313,36854,38425,23065,43870,80434,34973,12148,19621,95478,15426,30976,75098,72232,73435,27876,88646,65784,71686,77809,20269,99849,74705,28437,74648,13043,65477,93593,45487,74939,18465,76208,33891,23563,99149,81445,62287,41914,64646,12433,82491,34348,84432,66561,71690,91130,85974,32346,74457,27766,94451,66347,72649,79342,44570,98356,31970,41550,57992,59396,13899,29892,70104,39916,92970,19319,77021,83272,29728,73375,29399,73750,46072,52617,34478,40628,58210,27362,99713,35762,25082,19813,87462,45260,33818,77957,60455,41429,10201,13408,18240,39926,18345,41188,92509,53649,14476,24229,68037,97655,27661,44269,54645,81831,10416,84446,12699,36378,91555,33273,39310,56696,33824,46532,36904,75567,46290,47001,35284,18200,30736,35068,78933,54313,33014,80499,76632,57561,94392,94099,15167,70311,52155,89525,58439,48924,14239,30843,93827,57070,86453,58467,62151,92084,42341,61917,76328,86764,22814,98574,36381,56368,80015,98328,59129,73116,51465,35510,62416,35594,87514,14765,97785,23006,10441,78522,14195,35077,18228,43873,98042,78526,87083,19214,74253,79920,83750,63674,50230,78003,82782,93853,52937,63477,86038,87840,88796,92955,66649,24737,72509,84726,75703,68292,59078,39329,71214,81457,23314,44335,95934,74720,37783,40155,58135,36351,82981,56073,88640,58551,92406,39828,34170,72949,19376,79151,49593,58092,49926,48822,96080,21739,77658,65863,75365,42269,63945,46239,55159,12504,90784,85685,58311,67029,20937,40922,32295,64346,67652,61990,35669,94451,19076,61997,74400,50980,49971,72399,85559,71929,13854,28371,39664,84401,27416,98857,48150,93908,19534,33708,65526,99259,58623,18584,63142,76661,15134,95993,60220,41372,99491,10741,43271,27626,35735,10151,94626,74540,49239,42783,73672,32330,41706,83263,68186,30802,24328,44886,93233,60437,79042,56426,63848,57741,90297,30207,91141,52628,15269,71844,58991,68199,54902,64821,96975,62414,49187,36790,42830,36385,82968,29791,57798,85788,95666,20986,35227,56506,37538,65385,96044,67139,68835,64118,32241,96699,42344,37514,32162,43604,80252,90326,51724,82291,30829,85596,17601,29384,96169,51609,84431,30410,76477,74600,84838,94794,43638,20998,24309,28961,26107,26990,78217,53995,16661,32616,64271,39531,22264,98377,46981,85756,96747,75909,52690,26819,37661,40614,14939,18105,21280,84499,42667,35913,82556,45070,45066,93404,74037,43867,14671,22991,40521,40282,65542,16887,52701,10315,89941,42759,10851,96819,88908,88533,75225,96879,47349,96225,68624,73175,47686,96099,15216,62339,34583,46880,36988,79839,20313,52325,13509,83980,35620,84075,29721,52179,14874,20870,96564,79846,36206,68488,25199,13495,44585,78569,76635,29019,73136,30935,13031,20904,72637,73764,46573,10376,24012,58689,76808,70497,63488,90559,22486,66756,34646,45483,70743,51125,86593,52471,21728,12135,68505,75866,74329,98085,20227,34204,25998,61025,85981,47875,56646,46858,68753,99266,56607,88442,94352,83892,39564,34378,58137,61491,40033,50031,13379,34953,20795,62749,30690,74870,22891,10170,67707,42663,66909,44201,51829,24498,88677,36248,70971,86410,90357,75968,78360,12836,29929,39778,92621,90613,63068,35444,90413,60418,73192,98620,47829,62141,51512,45440,29032,13023,28903,40090,65086,80021,84621,52041,81383,79828,99679,68487,18768,78116,64709,98887,39740,50491,81320,21091,66109,80112,29698,38619,44171,81943,82275,63300,13412,97122,63507,47267,48605,53481,13683,55076,48937,75587,20336,28381,47018,44768,20412,62725,32338,20374,48369,16795,20528,92139,60093,39773,50154,16005,61118,59360,10018,84193,30973,60057,23411,90155,27490,24863,69325,53716,44302,22430,84112,89036,38614,72022,22076,83776,88952,25103,32578,97137,61499,33345,17212,76370,46387,96817,82749,53686,34359,87710,72633,61358,85728,27726,99686,89995,98211,63489,44243,38709,10596,85093,91163,48530,35269,86526,52411,79476,79888,57488,83217,50151,98552,14622,57472,97261,10543,96950,87250,54911,44375,69019,30734,10394,69739,27654,95739,42716,34249,94171,50736,86568,22648,86770,71635,33043,70739,84145,48465,39507,64100,75788,65817,88415,35652,34067,85429,32380,29230,26258,56978,32963,63331,87533,48178,44705,42800,33527,81156,43343,49097,98360,91661,53274,31304,98920,78947,59260,68331,32418,81705,40534,28578,58144,24889,41180,27333,11115,60729,79027,84988,83263,21342,98747,48658,73977,10430,37779,97717,81718,71862,79600,50810,40318,48021,43163,79372,68371,61979,58327,10154,36010,53556,31342,17783,22426,35239,28207,59479,65214,27786,38302,65014,64044,23560,61503,25337,91694,82496,64408,85043,74036,49212,36987,24489,47168,68932,18577,73932,89254,29744,56206,91016,86737,75781,75412,89863,93995,97148,44318,86210,24770,12272,36174,47797,65835,95762,48081,16652,52356,40992,71605,78953,16094,33727,98443,47570,23850,87663,39612,93850,28728,87372,67352,39511,13008,20800,35497,51024,61465,11779,95393,71090,59885,45979,51284,93877,10791,10127,40200,16802,47399,25983,20555,21900,87208,86848,97619,76066,32478,27806,11534,31988,41413,80552,15123,80991,86319,94675,87448,27689,37503,61256,63992,16022,60567,93219,58529,62387,38948,32161,39254,24500,32939,26683,38889,57531,81258,17274,25368,46009,14906,31086,44982,21585,95182,81942,21724,44262,93620,46124,28619,68421,12559,56351,48255,45940,56874,59572,90575,11910,71160,20754,38553,32935,25021,31284,53153,21385,64328,36869,56845,96112,61680,44412,44830,12055,37107,98021,38665,88536,77455,66682,96556,19144,81163,33705,80570,76693,78343,70898,84236,72348,74799,32608,96511,82939,49097,50485,81071,37312,40415,34386,73994,11776,10215,46234,35468,87555,88131,98561,74596,94797,19434,27921,74133,29687,70512,38962,18059,12756,87136,72067,27244,55896,46987,16841,91976,57858,68488,83851,49876,18952,72354,37578,77044,32247,18066,26990,70546,82165,83461,62269,10069,90400,58214,87205,82455,31969,51076,40285,47948,28437,39430,99708,58356,79251,99230,18071,83275,10503,96678,32585,23962,56142,72340,71913,42954,24229,78892,61463,76552,27702,67441,88572,30766,44031,33105,81412,57574,34037,50472,13296,15412,41795,41355,79532,95549,56654,57714,62617,74265,88706,55620,28214,40915,36861,31926,26843,37022,62071,54567,34059,61019,22368,54224,52679,45762,71409,23208,85803,60902,99673,64433,63365,29736,81100,63475,90205,76174,67286,72022,18994,44146,73833,13287,42322,96407,74083,87828,78161,47127,80331,58315,87449,12906,84755,92833,46997,98953,77943,23657,85348,11972,61203,24721,16803,99102,91453,39935,90421,25788,14724,79755,44518,59717,97037,37420,47356,73229,76183,84646,70298,81455,57166,87996,46500,96778,59112,23051,34926,77088,14054,93073,18781,15477,89432,34793,42913,68602,71786,75258,28277,72577,10427,11601,75161,46413,64364,30552,62672,48742,80954,80771,26676,34348,34040,11375,20963,57010,92640,46752,11797,11741,46318,46136,78737,61394,49672,70919,96286,38591,46515,71537,86431,69601,93519,12194,38346,44060,90235,12530,83136,68153,70499,22637,79237,98291,90327,13081,52163,76892,52414,25227,50760,68017,87511,37667,85982,85336,43500,98445,31572,29812,17967,29627,39190,58812,41377,56553,79971,37332,84435,58886,91781,21263,40119,13792,55891,54371,56406,50846,46421,65251,60187,40301,70731,45159,26269,73452,90837,65167,52246,91864,59586,56681,66239,13886,95861,81514,47725,83258,92918,40138,52420,67440,35895,57609,11762,31511,69916,75966,12050,37176,62860,60817,15025,79293,27693,29504,43597,51628,33557,70204,35305,71197,27229,92962,63640,26069,68335,79286,52128,17269,77508,65514,63727,79637,18136,21014,31929,45785,75816,15244,82896,50507,49768,23728,72466,75817,70335,31820,73096,37582,62249,44388,76255,91494,97407,17331,14642,16984,54481,87384,49006,84349,76722,82469,83524,13573,79578,73006,58977,18724,66897,95014,57181,99287,19188,57948,80004,44125,61166,42539,75571,42628,78093,96164,70726,56993,25296,59196,55228,85202,87811,59064,53969,18041,41212,69460,52073,84387,21129,80214,99791,81334,97867,80371,50894,65592,87676,91204,88723,69007,75394,27455,88626,34285,70210,72252,69247,53416,12338,39183,84166,53779,56010,78706,65269,91106,23366,98406,80767,83022,21584,44113,46983,49360,26731,28323,34106,25741,59372,75863,43806,46182,33706,76489,52107,79916,65690,97137,60521,23570,55744,18918,91161,45746,36987,57577,83314,49258,42742,93387,36372,98957,31940,45138,91400,77894,57952,79130,34778,74438,67034,75182,85085,51208,20416,57418,97001,23179,90614,24755,78588,91096,25467,22013,73355,74371,33835,81516,66840,30272,74337,28954,74166,78583,19200,43855,57599,68359,66887,92219,73200,12174,56855,72615,68599,99954,48174,67504,29127,71865,25604,39518,91456,39262,80277,18741,84437,65655,49787,86789,42466,81416,19579,35048,57690,41317,92457,29004,22229,13876,38993,37747,97031,73197,83802,50881,86333,27047,85640,10161,64646,78042,73265,67828,69839,26683,22496,59657,94330,51819,20355,96084,54149,35530,49898,72788,67446,46621,50472,45364,37559,68721,37454,15867,81753,88867,15867,35792,72791,12656,58817,61979,65146,61224,33731,24859,41619,34077,17132,69289,59386,62785,69038,31772,58812,21725,85607,16893,23536,48973,13159,54657,91190,59907,83617,21038,72290,82513,41851,50986,77195,44131,92226,26200,47744,37825,46764,20186,79731,59530,18447,49331,24232,44071,34680,28816,15728,59848,35651,47515,84456,82841,70710,76742,65814,93241,40145,59244,77843,85373,36116,71282,96002,19183,35871,21281,85649,97219,57040,12225,74227,12496,53138,64673,16065,99605,84064,91251,92719,63076,83773,10614,75448,96329,86565,73683,54340,67167,93523,27010,57173,99169,67090,48604,59257,49052,60230,72231,59484,24788,51490,59548,99852,28798,50008,34902,58269,37098,73279,49461,94922,43287,83554,27658,80860,28144,34127,44689,73371,12715,94902,85345,64576,73558,72797,51791,25567,38100,33023,83598,36350,12622,67993,86473,41271,96553,33775,18107,78920,24137,97380,22235,46488,27375,28115,24870,21949,46772,97916,66428,37901,24610,25447,25240,51548,65067,56178,84150,92701,50054,85237,37199,77395,92370,44186,16116,88063,25500,76149,73055,96365,27054,88387,41927,85641,21224,82024,37915,43393,80925,22252,79590,18729,26832,62684,42378,97718,23641,59731,45498,61400,94918,81507,35785,64644,47552,33882,77244,24971,91285,43305,27454,12023,94473,35780,55857,36314,83684,73725,51016,73178,87438,58575,93870,98841,51915,36221,52155,86190,16534,55836,33927,50197,48342,41447,35607,24139,59006,12743,33285,12360,43154,85358,74618,66908,40407,21565,63320,45286,68945,82106,38345,13935,62902,47459,31988,50401,93212,85024,66871,58213,84343,82667,32435,56396,41528,48348,76842,79170,12814,79062,50697,87582,29101,10663,95295,30492,44845,82824,30270,87037,63029,43170,70261,54675,57463,67538,24683,22418,16877,10503,95224,49605,66123,26794,60533,75422,14880,59922,32631,81619,16033,48221,41262,92270,85761,46221,39811,42084,24560,11632,28710,55530,93555,48660,92353,48508,24428,61131,63969,69928,37768,63203,57702,71816,26608,23810,72709,38289,35693,70532,90081,89635,98977,12581,72513,75648,64529,59714,76218,56638,47133,27655,30135,43081,16565,69490,93245,32548,80966,74734,33525,89779,94702,41760,48386,67899,39838,70174,84740,11422,70653,45362,16944,30784,55558,19188,52797,14739,44825,73953,93259,59753,74616,36937,80829,45027,29127,84422,84058,96600,37622,67172,90856,55123,28104,48680,24542,67231,71439,93520,71497,58479,35671,22481,14996,72818,96053,53492,83472,19313,78773,16909,57756,11185,54767,31647,41824,61104,70959,74059,44185,52004,50124,63829,97587,86260,25013,75309,82368,90930,73345,97697,87856,70592,51873,69257,79031,13592,47855,23692,29735,67357,16100,91596,99902,51630,99456,92338,71376,39474,48932,88183,25087,96387,10220,41310,55502,46698,51090,99996,77055,12634,95666,31091,98300,64550,13943,57052,71300,60403,10195,56205,84913,95773,50101,49895,78086,92008,89176,59486,22866,61595,34520,61184,93635,26125,98389,85181,50998,71198,42319,72605,13294,78803,35340,30915,86823,98280,77342,13490,58662,58961,83043,43420,24829,67573,88081,40891,35256,25678,37010,60630,96323,85765,78901,55184,93518,63450,73160,33033,53984,45722,13586,64547,69630,95884,58685,94514,48609,18282,40570,21325,57932,18945,13933,32692,56435,73724,53417,45493,13140,30398,55640,24292,81107,22484,84144,79596,42742,10236,62543,91686,22116,75062,56201,28553,87354,73705,39701,44658,20602,70562,73708,92147,66356,39015,48198,12957,10630,51868,56416,36215,42668,83482,56361,86779,95775,36040,71211,96181,81810,92486,80165,97375,49204,68151,82130,17259,57645,50474,31719,10749,29027,88398,63340,87448,29896,48980,57726,71146,30875,69339,55386,70101,30497,23645,79885,18488,17425,93364,78250,95268,52571,37978,11421,95768,66745,83342,26188,79156,60168,19003,95452,36632,94631,23469,18487,70276,77647,67925,99094,55961,18468,45633,12724,55039,81347,80073,50390,80538,94865,12476,76338,95382,10992,24387,98560,77223,95896,66231,49424,13687,36473,10007,65357,23827,48199,29579,82723,88211,88859,67102,74665,79879,41923,94290,67590,61535,69607,26013,95307,19281,99168,14357,55639,42056,79274,50758,52736,78065,36253,70986,27703,96564,74516,24051,87634,91547,18927,45042,54163,56588,65828,66315,87991,75876,57248,54183,75389,57811,20914,96952,43543,71479,13819,88956,66211,94149,52620,20709,16316,64058,98242,43832,31747,99522,19651,20363,49345,20418,57426,15095,70979,72557,80983,12425,71718,68758,47132,55767,11913,23895,90117,22116,59261,91591,65179,67995,38139,30922,62338,73564,80509,84223,88387,36459,57271,50882,14496,31831,12645,79556,51428,17049,38575,12144,71249,43754,22119,72349,90280,16129,90407,54961,45437,37743,29087,64124,65499,80329,78157,74186,73738,82156,57426,97338,48359,78036,27287,17185,25151,85891,18489,90210,58421,11378,93040,88264,45213,74987,54896,69460,17255,79921,44297,92281,93134,99276,23592,26661,51474,86638,13739,51643,54969,66404,85710,28877,19466,48432,15673,72667,49302,59418,28517,74655,80700,58959,26653,29919,47758,13092,82720,68231,86299,73319,19892,64846,47291,40960,42775,73370,58168,47329,29882,98295,36420,37954,87034,73983,69000,36806,87538,93992,70912,67880,80904,88156,68895,82779,28288,23986,48273,64810,96098,32152,77654,73854,90417,92898,41866,89468,60058,25548,19611,48066,30748,64173,69152,54248,84471,32160,76368,85223,92608,33820,38168,84885,16490,72296,86778,11838,22333,35588,20335,19179,97329,55310,41923,69143,63722,56156,62412,75179,33331,71739,88274,58891,26598,16959,56078,41035,34696,89565,95481,83859,77416,78882,34076,25463,17558,13092,57060,86720,59534,48738,28630,25013,73801,91762,58295,93652,77788,13800,20137,99941,21383,16719,81701,81824,60196,59592,28751,81949,50717,65936,68917,94761,73166,14367,89134,82608,80214,64818,89643,46768,16774,70483,87976,43949,78548,13660,56360,35169,73368,47376,78665,89254,18127,55917,58609,60625,85984,46925,84852,27785,10163,92357,46738,37785,92779,41000,51650,58380,43312,34399,87678,21236,88691,28299,12039,66302,36568,57218,47105,40971,72215,79696,60110,85935,30608,54599,24415,44039,77286,93667,19961,48423,98771,36158,73784,94253,51929,68622,58021,93056,95511,78970,81671,11276,67717,48973,48334,65135,82333,28322,57387,87261,13720,62114,39563,31022,12303,20083,57113,89558,31379,35028,73220,95492,10136,42791,67593,65740,34910,47972,84189,84334,12358,10288,48439,95379,56220,57135,25009,90442,53347,93659,31098,98436,48163,66725,19003,55927,23728,35746,90285,37958,43679,80419,80401,55318,63355,16740,97161,93133,25719,72154,77903,32353,60120,81791,43350,45999,14333,89446,57899,32399,65453,25685,59379,45058,33000,28512,90555,25893,37626,50212,68631,41477,45260,68872,64459,97372,37900,18929,32965,44506,74204,86994,34302,59837,15612,61605,40781,10683,73525,61204,21016,61866,88183,12125,39201,88911,44701,63211,57374,98763,13086,88101,42598,21257,88044,89363,21875,27686,35642,83751,93835,83039,43714,25446,30469,45589,45089,56986,99061,23263,20641,21271,95710,70511,19444,46524,38326,60374,62869,28862,17778,19906,95122,32105,38873,92345,98540,56056,10385,85388,25054,85405,44936,62220,70652,91890,34443,15527,53021,76324,48696,18667,66163,73509,20707,98002,66515,62395,26027,89651,69142,24389,58466,92699,91876,37836,24387,15344,84811,63602,26638,95269,14219,45748,10978,58044,41037,83085,87175,61165,17849,82859,54011,93217,84862,15087,91278,24971,19995,76726,36990,65097,48123,97584,86859,75905,15134,57333,49176,98759,58762,59694,25768,93151,93201,19629,99328,61886,77142,92847,86628,58590,14746,79008,90656,18797,48901,79429,75342,24104,13844,99422,88346,88085,12091,97063,37082,84878,69917,53182,64354,28913,56379,59811,42891,76811,32036,97678,33980,32303,24947,91919,37421,88797,50683,35855,65118,95574,57769,27586,99106,63324,38844,98112,50634,38277,54763,34239,81999,78332,77190,44272,79334,76874,88797,16161,65058,77550,19151,20253,96287,86605,71550,20856,55387,51307,51144,86818,13866,28768,59077,37372,45855,75757,15028,79879,31021,66088,89443,23695,92171,39814,61276,89849,79983,23561,93349,12893,89510,56986,14114,30659,62429,74624,81851,13712,77969,49517,95483,40211,38398,92912,35902,91708,82303,79033,28741,17009,78325,66392,12754,45315,88908,53537,56435,51719,80879,76532,48973,80230,75456,57455,58852,99347,48573,52146,69248,67022,50668,15066,95865,93570,50976,56014,40613,53716,84987,65155,99145,76821,63090,80838,73436,18590,43207,65721,15208,81315,27311,13245,82169,54165,56219,13574,46670,25097,38647,35982,14782,89349,51008,72596,48545,91262,42467,95610,63856,45677,21992,20594,92841,97639,30211,23958,96541,45849,70925,23586,73206,48085,17005,53793,25566,25855,22548,17320,27746,61732,39900,59167,73490,95151,55231,93433,51630,54332,56162,85715,79863,89310,18674,21375,73220,45719,89183,23605,10571,91314,21795,33315,34917,99361,30853,94263,50585,64484,91078,32782,97141,56631,26861,41477,61847,28701,51954,14430,36520,17388,68913,20794,56533,35882,67519,79900,15908,34292,80241,56607,12150,69339,75805,19583,28784,93562,65999,90302,22418,75219,96723,28017,47935,59325,24436,32136,16297,22650,34813,63208,42014,71085,30320,98327,71754,87416,40748,11937,73276,52337,20722,43860,12052,39656,49612,60479,26201,68657,41654,64504,56340,42842,84056,58124,81662,35598,31774,88585,64159,73582,38797,23290,13644,14803,75185,34853,77749,42251,90085,80138,63064,86283,80885,68142,89153,62595,69979,79639,33098,32439,92032,93375,54271,92967,76747,95989,37695,73199,50859,29814,40125,68980,13636,80378,52497,95626,39851,87321,39900,42438,97710,56729,64765,42068,50924,90719,27655,37049,83068,64292,79330,22617,66462,53473,65911,47471,43323,84327,44865,24279,63252,15331,99160,77911,91022,36019,61282,35781,44492,45192,10770,84987,86396,72834,43266,35164,92021,21862,44245,13004,87603,89699,25389,99724,51723,86312,60185,23820,70307,97134,27707,20177,62726,42770,83217,87432,62678,54487,98281,16311,72260,46816,46159,34261,63167,42133,37038,84188,38496,65672,88040,27555,67048,73048,18714,27776,52611,80678,10956,50507,68818,99739,52206,37691,27778,50685,18266,48711,86616,47329,50558,21023,88194,53827,19222,39084,97472,65475,31934,50932,65830,22606,60092,24378,25040,91722,48825,39568,79352,60845,19807,83370,79396,80100,71672,77429,27137,23199,53424,79304,35488,33166,11265,72508,81485,10548,12570,36514,16735,15201,12127,28430,66748,31228,48921,21925,40501,40760,76712,64895,89473,76472,16221,27302,88706,79514,64426,55967,33335,10699,93386,23520,26186,22184,58945,21878,26393,26791,55898,97375,79676,47279,78378,54780,12871,76910,76980,54409,98247,81995,75177,45688,89957,19249,85799,65786,90019,50454,91369,47869,46475,47531,46312,99178,41766,42923,84128,64396,19011,77899,48574,25014,72592,92900,93230,21765,96192,91885,30570,52266,17898,20743,96262,53916,57680,37599,72867,21407,78038,37394,21723,89591,79116,85256,61002,50070,31742,52012,84788,42813,31769,65720,10336,14040,69789,36731,74871,15278,99466,23070,79295,76521,53040,29985,86382,41466,37960,10296,64325,64112,28592,19832,51410,98149,89126,28937,76458,80855,19827,21277,22406,70112,14327,78444,62781,91217,28466,36695,11977,93944,11605,41340,11180,57132,44433,70277,48859,35330,43514,29241,95219,27353,50686,32587,96589,26578,19142,57558,77164,16719,63502,56583,30843,41094,64177,79345,22956,48623,98379,98365,99424,50611,28181,40762,41338,63864,99637,46096,80743,91515,46337,62252,19510,76807,18397,49944,81794,54941,37657,87738,88207,86700,90180,19670,96646,87569,78882,73803,13204,44935,88440,11786,73785,47568,35650,56644,81719,72794,43071,41070,64933,50197,94938,97315,12475,79593,38574,28797,80734,19633,13186,88839,95196,86301,31266,51455,35264,34377,13659,69796,82935,10440,28603,38740,20083,99387,98347,33980,65656,33211,13627,22027,22716,10147,15184,25745,47140,22683,77414,52904,95771,55063,99034,39604,64582,91115,90267,66305,61417,61148,84516,82069,17916,86503,65205,33655,39853,72392,94595,21395,85433,22602,99168,42864,62403,22239,11864,96394,37790,14909,81592,52914,15372,88146,29901,89273,65860,20829,11933,79128,41140,26371,26774,67049,53047,32177,49903,29305,11224,65346,13337,65722,98534,73088,69377,19519,70381,68326,67602,45675,56426,74297,39965,89546,19664,35690,32705,22046,38170,80219,63801,89133,82871,85089,15604,24071,97820,98123,17521,26071,28627,45648,94896,38038,70051,17807,80809,46226,77754,92228,98693,79064,75952,82971,37736,39974,96632,89098,11837,30220,54041,51410,70360,15079,64787,94268,36614,48895,39617,42517,34457,12763,28558,10585,86564,21709,27416,97955,49325,44416,22889,88285,54672,81249,29047,14997,38924,93363,86626,27202,70534,12419,21300,83571,73865,87347,34659,95353,70295,92466,42938,49448,37624,61691,18318,95518,99464,86717,16929,60941,16127,10119,24319,25205,65501,45040,29227,11370,54331,95680,99654,29308,89053,31034,17898,98925,53600,38249,25687,77667,23555,61784,25191,79646,43657,52898,77120,93899,66616,46181,44782,62647,53226,61223,66778,34517,32589,13331,40215,86732,96662,85445,39355,19793,21865,33909,67435,88668,64614,73153,77950,90306,51898,65734,69017,10554,79125,42200,71545,74150,63960,31768,81432,60463,60435,48358,50274,32621,40739,16655,13158,48938,98299,16097,78840,45756,54905,94188,99074,41048,70997,10113,63990,97211,10990,26953,88813,26567,28285,95535,27560,58985,42751,33661,52787,33742,70066,18920,85646,66448,38302,41938,23122,48236,78412,97904,97880,66390,89177,88554,72998,12732,90973,56360,81349,96305,94844,44032,64247,58805,97793,21539,58471,68056,57979,28680,55198,64760,36065,92085,19542,44780,96905,10245,31048,92062,62736,53047,23623,30508,72003,75306,24847,59009,49174,36822,41899,39284,92191,46457,53003,56316,51011,89335,80264,79275,52870,91235,67172,57361,43347,69548,41819,73105,14439,93834,80416,35894,85943,36143,87373,49882,55228,30469,21794,65057,29252,35315,19995,95848,13372,84185,19024,80313,26603,14215,89458,98927,33702,76175,79454,77032,35377,79204,53565,63559,88966,77189,47705,18721,98334,83510,62414,36665,27291,62338,19586,49851,61669,73315,15087,94368,36020,49058,14874,11007,91313,16483,89722,31419,50162,68003,90478,44105,55980,36719,98562,15171,84209,73432,63927,91494,25672,99957,73566,91562,57842,89544,15104,20076,36700,96267,22368,88479,90392,45747,55276,41490,14568,91731,37868,65934,91706,81585,25842,22292,93688,19546,61363,54170,23456,43603,67354,90823,79728,60798,67221,67495,36625,67123,62028,13360,23628,57842,96583,71012,26607,85035,81134,77748,45742,98134,32357,26755,21047,74545,24658,80740,29823,83106,89612,74436,65545,46368,30677,39682,33049,95543,19223,65101,41970,25096,35467,15684,68509,59314,65860,73086,18968,32073,31402,36329,56345,20738,70161,23408,44508,11001,24909,66793,18494,63773,86323,75974,15942,62264,42135,10773,57216,77479,34543,67268,51548,30521,64675,49967,33282,85528,92565,34075,57992,46821,41250,94100,74166,17038,11740,89658,65355,47117,91721,13195,45285,40607,90039,62500,71728,89656,47971,70638,66720,80102,79037,65192,41624,60134,42642,52968,87321,98878,29113,12803,23764,25470,23570,58732,37742,68913,67487,41490,40065,58407,63217,13769,42882,63981,35727,13064,37925,22587,17205,33216,12147,44326,17697,43945,13764,84053,27297,77973,41218,71477,51479,82304,65853,56168,54202,75028,52735,69592,62753,43811,94432,71378,15778,11871,48622,49184,48816,17378,51711,64716,33402,36554,35822,61039,77514,38688,40004,80990,20330,97971,65970,53125,68767,76777,49055,60359,69173,98120,66209,95182,38630,18591,45025,26186,38102,98928,89908,17397,40777,27141,45435,68829,37672,30870,97839,75356,56050,72117,93647,44097,59408,79883,20291,79894,28184,93436,25664,31577,61407,49245,49617,61750,66189,87958,86496,81501,78857,13774,57267,11110,92632,33992,27268,67522,69064,19966,77896,89499,94626,47169,51581,93660,69785,24829,66586,78139,70950,22280,93732,74526,87450,70723,55911,31826,18761,99301,51770,40516,59766,78454,40520,93047,50673,68272,66938,23113,94714,44663,92791,36742,20880,64820,75882,39434,34414,51995,75200,22238,33017,60786,97266,10170,18370,20950,90791,10565,86207,70119,13288,48155,22541,62572,21201,77797,88731,38649,33144,40092,30780,61785,57316,15312,85543,70074,32866,83436,55351,23377,47988,33245,71090,59204,58298,37482,16218,94416,61730,30334,23118,80185,21094,89692,88341,83912,10177,44109,35377,78457,56800,96748,95106,75157,94341,74847,57038,97589,29742,17421,16619,10688,82167,60926,48624,86252,59589,96839,65378,40721,97147,58212,84157,74768,38900,67559,86501,63327,23891,76127,39311,60727,80192,69638,40174,47667,19430,49172,75364,67278,85805,59639,88750,90439,10059,50960,74768,28355,52231,56336,74740,26920,35729,88367,80948,75080,24101,47569,95638,50288,78960,33188,68385,39043,42291,96836,50855,79319,92025,66155,73036,60425,46156,40266,88999,86194,12404,67570,59812,18596,59807,14858,28282,52687,12895,67832,86962,58857,48703,90909,91051,78786,72985,12712,31402,63933,22500,10911,26419,30644,33417,46427,93684,25072,31745,63160,91378,64811,60979,52149,52025,53346,44383,26056,86083,10327,98638,43402,95272,63772,86898,51822,64455,12485,82430,45811,93231,50033,54006,32943,49527,69453,86318,52109,47701,97297,94106,46869,83520,37115,25814,64579,65062,82516,61052,18792,52420,78941,26394,70071,88194,19579,66102,69452,67197,79891,28065,59367,71343,51357,90987,44226,67964,44824,27825,70734,90483,42726,53198,35336,54390,48065,27730,54490,16813,54340,88832,48399,31955,85120,52666,20506,42029,12620,50787,26469,78756,64491,23732,34301,57697,31711,40381,85922,21279,82461,62077,41713,32366,95209,82082,40758,12540,15604,41122,99457,22083,58926,79965,93023,43977,38771,95119,37571,96969,86579,82645,26862,72594,80699,90816,70625,93826,99939,49196,99094,29548,12847,64877,85019,17989,73217,89265,92913,61435,69063,66319,68320,69551,17574,54111,50847,49622,51178,65757,19407,87191,95638,40003,13911,15420,96725,38352,64960,72980,80643,97989,29878,90076,17107,97418,77191,21010,10482,42814,21313,50554,43847,54513,48635,36217,72862,33011,99602,70936,98660,72967,64443,39217,30417,65226,40953,29948,30640,79811,70415,97980,63259,73559,37910,91968,57510,85352,63209,87899,30361,11895,41694,85640,77505,95163,11342,57284,28165,42587,16590,10111,76006,26513,26612,61638,69353,21207,71391,27113,71481,92297,42225,81382,64409,13919,16399,15875,78323,70594,61317,12277,25473,12112,12117,49907,80036,58834,35470,32306,38937,99304,87009,21364,13281,84100,54933,33036,18170,76662,61298,96810,78860,27611,43274,84053,71997,18962,77866,33638,33805,60478,84646,80728,12006,17530,76846,33714,16504,93179,96269,51443,13072,33319,99946,61092,82384,95353,66599,76172,50220,86701,69591,15795,58641,41328,69701,20185,99407,48212,82983,66403,34312,76948,98181,27473,48641,63175,12675,64086,58847,54203,30467,88404,99755,37841,77016,20895,46088,12086,76706,33439,26419,73895,38661,68677,83223,72971,81523,81117,33266,96655,58076,17115,63513,95664,95887,92029,61908,78384,59519,41940,67598,46462,26398,56715,51655,56391,89491,32168,12561,54647,56538,45966,41168,54228,51787,12601,21584,59445,11405,19216,25103,82761,59928,49167,16716,73472,44188,51209,17996,90199,96641,22284,78520,92450,32625,79200,57924,69231,65741,85498,46398,56446,17600,69703,95878,88919,57384,63993,76978,70754,88385,62313,16044,71149,89225,60922,20288,29205,38137,64983,26384,24060,59333,41410,87085,76004,66858,19375,70087,29532,42517,90002,30294,41732,69457,23602,47956,40672,29911,80384,26205,14571,71443,12544,43339,18712,80535,82591,93161,23519,635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,11081,58873,49200,29311,77039,29667,96218,71164,93155,33781,92247,14950,16000,69296,33620,77121,29511,25728,53467,95044,19015,89805,14868,16923,46410,13894,86245,50037,35744,82136,19515,89740,13631,68282,76921,80291,66884,81903,82330,97658,40227,85729,29704,16102,23489,60183,78238,15397,61277,40613,67847,10216,88612,25507,78538,14802,38920,49073,87443,31611,22213,12762,35254,62719,13237,69261,59742,18649,63330,18571,48028,22471,46080,20552,82735,29661,20019,59580,61041,43315,11670,98063,92073,25924,20842,82884,38522,32851,14126,46402,69068,14754,17204,16499,13272,42203,34722,58200,29287,75060,32447,96656,39203,71344,74798,66207,12706,15725,14069,72522,80139,56732,13789,95633,57136,31448,61725,21236,53638,29295,11361,21620,69032,31438,99649,16717,76203,90102,66827,22965,18037,67380,70988,53615,20385,10423,68677,48231,74020,51460,79053,25272,47953,82862,35785,54753,14555,74498,92915,80679,40793,49527,92951,38711,68364,27321,17656,45001,61399,22815,32336,50164,78189,76564,52769,26964,49956,85944,89164,89728,35804,80652,63199,21726,71965,38676,88501,86847,84226,90069,54004,40949,68817,68564,65006,91438,73722,29341,22875,45099,27805,88893,84984,67598,50010,26078,10972,72249,75184,48414,57170,30212,58141,92087,98841,13685,70696,70030,77193,15169,18990,66501,25123,84823,96892,71243,56709,49630,54514,68359,71244,36086,88009,29790,39222,41777,15368,53774,11667,38772,38695,85277,34148,51575,61868,13264,62389,62382,99245,20917,21972,52607,71641,93640,69868,33892,97699,25873,90339,46382,56538,53912,75039,24871,65116,81996,49033,38484,28655,95431,10115,92393,64749,95158,72688,35312,81936,93448,39130,85232,84262,10425,18898,90477,39739,70253,37905,99389,85889,34118,96713,35110,38630,85481,71424,84510,70486,81777,43097,55894,77455,60222,17237,48245,34716,97712,43108,13715,32668,87473,42683,81599,62283,51188,87581,99625,61325,53495,99467,75052,39058,24383,38967,80075,10616,56854,83409,89067,80988,78732,72260,85093,80651,42798,21763,20226,91195,60955,50166,28426,66050,29818,21358,49882,81454,84570,29085,41815,25168,17795,30679,84739,81747,51772,64710,52894,64492,81406,68409,13683,51974,44808,26868,96210,46951,53426,89285,98416,12125,80175,33923,30320,66564,98781,43303,39290,18767,51313,97934,24155,13447,89228,19338,14521,68998,25165,39662,53951,78043,59772,71619,23358,59540,42031,53201,32683,14452,97543,66864,64440,99061,51222,54935,10783,87733,74817,93990,19545,96234,90769,82301,40378,38259,80533,61212,70336,97741,49004,88542,40802,83677,93501,62768,17663,57247,77555,22439,61114,73474,15220,47592,90144,51123,59363,42249,65560,14795,51245,89167,91582,79443,27547,24330,50598,57646,85610,85997,94526,64891,20688,55759,95352,54127,95760,33957,65467,88399,87172,75411,65960,40885,80127,55981,57087,38353,14797,11383,49565,47276,73473,33322,59017,25933,75231,32870,34443,82193,45602,29421,72667,34785,36063,30030,91828,26371,52580,73785,58051,45893,46630,89887,31988,33743,84603,52054,91846,92537,59807,69596,50905,13120,44391,99005,27643,99099,67469,12982,75414,19441,10725,54285,51495,68036,16521,94982,54232,97185,93814,76425,71959,17916,42751,56833,48878,86893,57958,79035,63833,67894,56133,12267,70368,91731,82505,65319,55286,17906,60578,20177,16705,18613,10357,39958,32704,58071,62783,26759,63545,30875,82893,46923,94770,18322,80100,95353,42167,77938,54610,89678,17879,85125,27008,53411,46530,28524,44512,82018,13885,32838,20429,38181,85531,70232,40209,46083,24756,98117,81393,30922,13520,76259,64599,93903,19364,41130,89946,94766,42519,53560,29855,16340,29228,23390,83746,58850,63895,88199,74932,11892,33558,36287,72478,44529,90097,79136,50323,91703,87047,42988,94885,88504,77663,17578,79601,62971,96985,29410,84886,61952,79059,10653,37874,49290,22843,21551,54236,38693,21707,63692,51325,22884,74153,85044,97732,77196,76019,96409,88336,28749,36820,19620,93108,17976,71447,10368,47547,19743,52243,58860,73651,79721,94673,98730,46811,61839,23418,63145,39190,62539,96639,89604,18230,25032,15028,94378,21894,53357,29328,95009,74171,36822,35557,81444,81824,70729,14118,58573,38473,61246,80542,95201,98280,42185,56804,28234,74818,60977,63444,32432,76247,64973,47075,16742,89843,40766,74876,34712,10774,21029,55195,39266,24751,41138,85084,13475,96356,79579,29605,98233,68642,22960,22487,58818,41404,83320,88385,91739,54880,40526,74559,16528,86652,85199,92386,13083,48103,40745,38904,10082,97045,64832,90178,76037,50546,88634,95885,91638,36073,57174,95813,22807,82484,82135,36639,28362,95183,55983,67933,81875,28702,38673,59232,85472,62242,43130,48911,12608,20938,40373,59142,61748,99261,92647,97496,53041,90018,44558,47416,43902,88562,80643,60465,96641,73360,47333,74218,87517,32655,24909,87690,63798,36285,72025,76200,41805,74695,17884,65485,90315,25731,93247,96966,11739,65336,39971,19820,42852,68294,28856,60824,42236,95498,73630,80597,65926,51474,99904,54033,72881,71802,15243,16408,53204,66795,14618,16243,16193,61114,58813,74712,92536,25559,27989,85601,81768,55358,74093,72672,77441,81543,34088,96336,67656,62193,39816,69316,36799,46809,41439,78020,21473,32080,43685,39613,73613,78367,98513,23447,90043,43050,82076,24851,90266,51100,84319,33086,59017,26854,33103,60156,18228,56622,37788,87516,65087,21220,80834,62874,40400,44217,13043,42580,70350,85010,20049,12722,12195,48354,32539,57242,75215,83488,70841,66960,86485,10234,55405,37192,60434,58555,66381,11493,86408,64605,63649,40291,27867,90218,87853,36789,19395,93220,34960,16135,10959,28944,45732,82555,67728,80506,43179,24123,31722,67080,71263,50817,48753,38782,11721,70487,89351,41322,73543,61977,16576,12344,94706,94924,92851,38173,64025,58043,72414,41367,96309,45816,65157,88833,94578,17668,74690,57088,91293,48815,29765,27252,62094,88626,82953,58902,70657,53566,29408,83169,13185,82084,78282,79779,36776,11656,11184,81052,77790,55270,99409,77540,86887,73818,94245,45822,34777,82666,11418,70481,23855,69975,17264,42373,82841,25414,41484,57795,30265,50717,64149,33708,15212,75550,72153,85396,85116,99008,23737,31953,89949,73882,75668,65719,40402,96070,22399,24899,77530,69669,49784,92354,62048,42338,35145,22889,85517,58759,13128,62415,71003,56960,97691,99458,33452,17763,66868,32675,74053,69075,13855,10393,81021,24398,54162,31125,31416,81117,49565,90644,12134,23576,21077,27308,30993,33524,67287,63533,35966,66984,15709,56072,17650,14370,72566,44828,68403,21144,11510,58900,55330,69336,15874,91523,46659,71824,99193,57798,94836,69353,27211,38018,57598,99196,23430,68325,79579,45092,58923,73091,60053,54267,74306,73186,11555,76719,85901,76983,31654,53130,23464,66464,65285,26211,38058,81252,18038,52171,30592,17356,55488,67532,27102,13217,20253,83475,13011,73363,28817,78719,17563,37884,21857,92858,70659,41139,29558,10494,27837,31289,76193,31704,61161,66877,91390,71916,34085,78282,82915,40712,10165,69678,41560,26002,35767,22967,17573,20811,53886,77250,57031,16745,40173,34488,41150,63270,16652,62480,14387,84884,28658,62434,61726,11829,28858,39868,40759,50650,46302,79242,60219,74003,44292,53393,91239,75735,88799,64531,57981,99344,51207,83813,23508,87975,57813,82452,18433,60587,57904,61195,68843,90889,71557,83227,34469,44576,80488,24886,59315,66992,24798,55967,72202,60514,56474,36732,29730,80838,42923,85896,23988,51795,24658,66838,73266,22991,61792,90186,21656,36197,23149,42135,43658,35715,37552,29994,98517,54777,51225,24029,92226,45022,92148,81132,52997,11974,50363,94813,50471,61658,68751,99545,40238,53796,12037,15302,48919,24625,60633,28994,70541,32179,57878,15170,64240,98888,76588,28787,35622,42119,45916,14344,10809,65372,30108,65291,46639,80694,30951,70686,68121,39238,22559,84634,56767,46924,11857,95132,10262,64946,86897,14168,66506,87840,14642,25418,12511,54526,52585,45519,29949,80109,42033,38616,22463,56556,38922,82333,12251,73028,18056,71035,77191,88453,38928,81170,71093,75499,51904,37317,99320,95856,21054,33948,64934,50421,66987,38906,74050,84204,14787,86936,97732,62189,56318,32359,46378,14926,58507,31183,63171,58170,75517,95381,52483,12968,91531,16698,50786,74033,45342,62022,14309,86179,75736,39944,45035,27034,90574,94390,46364,57179,52156,25111,47207,99757,23059,27442,95768,36623,26727,29889,63270,56902,60811,31582,48107,40998,40329,63021,96922,81037,17716,43076,50845,18630,58521,63317,77296,87277,83123,23194,31253,92672,51121,17034,52715,34425,56303,61203,71911,13378,28752,74780,14580,75117,77524,62310,98059,47734,37414,55614,95162,28570,83553,69421,20319,43641,20963,66295,21082,54680,22110,57421,12393,85046,32201,72697,67986,83665,64575,15997,99289,19583,43595,49344,94925,32751,74006,39555,20651,91751,59091,28459,93532,46959,52904,78845,57648,72406,34553,59154,86476,53991,10048,72482,33705,26833,52652,89760,67649,76099,27387,46715,28545,60609,37154,42755,68025,23538,60463,98410,49937,17599,90484,95870,50439,21997,86407,68327,31071,91027,91523,56549,55165,57786,66770,90788,38117,75057,29323,18245,23598,41017,61525,18277,41245,46615,43652,71034,43081,39265,65187,88070,55665,62095,35178,92374,17657,47226,58549,64298,89361,92912,35778,71806,37785,48662,58476,45023,14922,49039,37712,34307,85704,54229,10157,69621,87474,19981,73697,12732,54932,28766,70487,85976,39550,39063,70978,42046,55084,56845,66968,17908,77138,57972,68749,11244,19018,99511,24938,43718,80364,77064,95440,19794,59893,15957,66516,98248,50742,27072,20390,25903,23491,41431,39120,60379,96176,99968,24375,98613,29770,19612,70861,87349,63854,27033,25134,75143,95168,30980,88170,33373,87329,32981,79201,77440,37879,26226,44017,25044,68700,26224,79261,98523,30029,60712,27492,17238,90143,38894,94205,95893,64580,15577,83204,63867,99100,20291,31751,61612,34897,40856,99901,62409,88192,75347,27091,49605,60189,57829,28925,38755,57256,39075,60483,78534,82301,18159,27433,49907,37296,71611,69622,49462,94456,34687,23755,60072,58154,87337,71414,58341,54614,26033,84807,30181,28570,19439,74796,68374,65269,95169,49104,76290,29295,85857,83287,68588,69610,77367,79239,89937,51594,63189,28203,43061,73495,32764,26782,25611,97349,74588,23558,51622,67951,92374,82090,32128,48341,63021,99549,35053,46633,78124,34161,64564,37297,62782,97205,11326,98644,36536,61746,21747,48167,56846,73623,98661,97864,73826,11024,84499,61226,11937,55654,56515,91942,27090,67232,51273,94923,52956,45875,45572,50662,73954,92860,43883,95056,90722,49716,66278,15035,36957,60696,12039,51898,94272,20082,55823,39266,99806,14608,56812,63611,82626,21882,75674,50680,21129,25313,16671,79826,47571,67460,31420,65773,36350,47636,50184,34859,65377,49521,61935,50389,14936,43847,66354,29982,76917,58429,49544,88457,61943,38670,42238,21210,93263,48297,93795,81892,38811,21129,69048,93374,76967,78004,78993,39214,62066,71800,80120,95407,78220,66137,95927,82390,45364,44166,23858,98605,73870,76108,39684,52331,46988,40536,84048,68209,30802,77982,76023,37641,21483,86318,17463,17226,65213,97471,76615,86454,47869,37674,59789,10261,86849,74158,37210,15331,41151,51826,57058,47985,15406,76246,94505,65275,40524,45867,71224,63372,38020,95745,76411,33024,15213,19606,63596,26035,19970,92309,58202,75166,36131,99527,10142,16379,25401,75140,67294,24503,99752,33276,36643,17054,68689,68740,20313,57433,43408,74906,20843,65180,53345,94928,20107,48006,55655,44108,67276,62271,56046,44022,43992,80887,18569,68271,18851,16103,36522,99332,86393,91934,24679,99847,89660,45688,74346,55026,51526,71210,85697,65770,15280,41620,75654,32343,29698,57767,47025,90629,41184,73256,93034,95704,28226,80651,33606,43098,18831,92523,46570,32873,46225,53986,54215,63634,60247,87929,38880,18032,71481,44762,37441,99906,13017,48702,66269,83611,88706,78490,46891,73175,98423,55525,44547,45652,32496,12104,15797,68798,34324,93198,93801,32685,17592,64576,39327,47594,90887,91105,13129,16866,91116,73961,28983,47307,13986,82231,99337,77203,90787,99026,46757,80827,41941,82124,32306,80623,79978,71007,92648,56519,54969,67091,11324,71287,76836,32479,24561,64869,87960,87833,72967,48860,10786,60584,17348,75767,18105,25716,23266,48237,90062,13329,43536,73052,18576,80202,21039,86464,35701,72070,63861,15512,71739,66591,43790,95541,63995,83024,64625,96243,35183,49955,39134,41857,16343,21111,24465,72726,80005,87496,78091,93471,78106,53059,17508,73786,39168,83560,78648,15292,56968,87453,86207,16797,79347,10589,74429,77968,91789,34242,17780,42005,15581,28553,94828,71546,61996,75750,47795,68966,61497,50374,23008,72104,81317,29608,61657,77542,39870,92285,79183,41263,97244,25738,54802,75254,87106,22468,65772,95655,67057,46043,77744,15253,74108,42277,30562,54911,93669,50011,22042,22696,17640,83812,91199,81358,40882,46360,63887,49908,11480,69733,73448,72488,38732,90167,15759,91167,31566,25855,98644,13348,34592,30248,16834,21234,69003,13689,54256,53593,96114,55007,56442,74792,47126,53222,19644,41940,76953,53122,28752,43538,18747,30632,51873,78369,96707,85613,38571,77579,51338,58735,75234,78886,80512,38060,47774,77567,39234,13506,66220,80420,93823,82572,76064,73820,47257,75570,48469,12160,48674,57137,16923,95468,79899,64681,18769,50802,41556,81318,59315,50220,11025,58433,95503,96033,86468,41346,17852,84694,14593,75101,40598,35716,39085,78025,68929,16513,57750,71477,81582,27295,40127,21610,23603,40331,86526,56421,73046,19023,43698,74982,93670,76475,86025,44581,27314,56414,72179,93071,35882,13804,86092,79191,62096,90516,35332,29180,70510,65789,69128,83908,29933,87212,57239,63083,80231,76986,34331,62898,98351,83838,52900,50517,99314,19873,99920,42909,52535,18680,20387,57311,36620,75960,29718,74511,47657,80640,59084,44563,27885,63653,85601,51425,30469,25153,67849,31561,92116,60400,89720,38746,52798,23061,61944,65181,56904,29821,83887,65857,56423,15005,94849,64194,27077,25060,46446,83233,27194,30858,99338,63283,86906,76411,99644,77428,30838,54680,11542,74282,73384,55070,38818,58081,63312,95033,97792,16786,79674,72847,45244,98074,61833,85653,23765,35789,25406,52856,16366,61223,68265,10995,34117,47297,45834,48344,36541,20928,44332,12580,74609,38001,79132,63097,89218,75831,92855,52484,27188,13937,88576,16323,55087,83218,67896,70492,35136,28955,81001,16945,13121,12613,63583,88421,83192,65631,57923,22480,58691,16860,77520,89570,36483,71225,13600,96459,31867,88801,25776,82873,37282,54904,53121,11115,10828,38114,82023,91144,19477,86477,26420,63136,16996,63152,17077,84560,13908,88448,98395,23452,68037,26315,40176,50401,55576,14719,73060,54854,18871,31091,31677,91045,44352,22935,68652,52604,78510,80478,16632,71014,80332,30541,29282,26165,63230,10621,90417,40904,85228,80529,89250,54214,98051,21946,65013,27494,90817,38956,43347,27012,19935,59212,55699,32471,17764,39620,55702,47827,28720,53728,81495,46773,10205,29377,41066,80489,36895,79829,77334,33898,66493,20591,86506,83472,81357,29661,70120,18366,95425,86152,57693,96023,93004,72405,33884,63911,25916,62708,17953,65046,76070,61708,25519,91089,15943,22279,48394,89259,43808,72145,70432,66869,51507,58586,31038,42410,97894,54114,42256,73667,79044,52775,25713,22411,31618,19285,67908,33043,40331,13771,53118,90907,80007,30401,87760,65628,67933,50171,97408,71565,15018,36780,53526,29881,50355,55009,47284,22809,68909,91960,67891,40419,17955,88033,60786,68215,93361,13183,17319,42023,85244,35485,18747,39547,45159,52178,44432,28612,65567,73475,66010,53545,36423,45506,30870,59246,33417,79603,45370,20288,55041,94591,20539,65206,57721,89928,48983,29755,99432,88528,59067,49915,12021,66492,72745,42285,75921,71163,40892,76570,78029,24502,61401,17038,28248,35760,80627,85325,56935,60750,27093,54259,90449,94855,25318,36286,41630,17527,16604,44935,65578,25771,26739,44172,88919,47029,98132,40645,81302,52074,76640,54206,86792,78105,91857,14697,97945,35003,17001,96500,47302,84661,56350,83041,45515,43351,12859,81751,25319,23684,54277,57520,31762,45685,39042,88164,17998,80259,55197,89657,78670,93785,12779,26579,26300,71903,87417,58710,94665,23315,80745,44340,11569,22343,54334,21353,21800,27870,41672,10767,50995,60934,96126,34884,31395,75456,99334,42010,76027,11282,71859,89841,90835,50015,56474,73663,55808,81978,89488,22824,40700,90394,33018,66367,82893,94344,57716,99911,90812,13435,91120,39030,88210,36776,22531,21466,22422,34940,81710,96329,30317,56655,97044,67691,22126,91305,55384,49623,54999,24739,66349,77503,14179,21150,53786,19455,78586,29715,79245,15065,92490,66997,95848,89847,40321,80764,82748,41119,70084,80709,29114,40882,24484,66742,78244,36001,21692,35818,61216,92287,71563,69831,17146,25281,84966,68461,91787,66175,30427,96439,34661,91427,98875,44153,28025,27908,65227,74572,85689,42702,52536,72984,88083,30313,60709,16408,34899,89624,19230,33728,86269,87316,49020,95969,27475,33549,81163,81809,95651,80139,70664,97526,81321,75023,39297,44063,19197,94120,77796,76446,75052,93110,48990,90671,36661,14330,55142,24215,12529,58076,79442,73906,15669,98089,60937,48148,57624,23624,98772,80326,33932,77140,14318,73964,89082,88752,15869,88470,66154,38693,20028,64030,54606,38880,11842,70491,89348,47158,61723,79121,31543,20038,91828,47425,86169,93537,55306,13640,62173,69650,38636,89971,42510,75363,45077,34460,48777,28732,54641,20890,93071,48380,40848,15702,58952,75608,14462,77646,33152,73348,84394,21998,46820,58480,37421,97148,12455,24385,57253,81488,12891,21786,54755,19505,85952,17264,46478,62420,11370,80343,63436,60746,90878,86782,83938,27818,54565,71685,83419,83318,16812,16823,92489,91753,81378,48569,90809,95582,13734,34564,41104,18230,73234,56000,20229,71727,72590,37168,61166,16877,60641,31822,35548,29314,65634,49950,57140,96536,23774,42444,52993,80935,35143,57550,60206,91046,92763,82751,67661,20568,44165,25790,56215,91269,38914,12968,79073,86887,33773,41671,85073,86041,71255,87950,53512,16194,58779,42952,93430,88030,70955,49589,50734,66917,14979,50630,54910,63009,58639,10143,34969,78433,90746,91757,15898,63403,61169,47002,10161,42238,80445,39987,86011,76234,98861,21974,17984,25532,65281,71585,50907,96583,81379,12479,69541,12076,62014,76203,19385,96923,69841,16972,53430,65945,82237,67299,50305,30598,76693,52686,59883,73906,23521,94081,52223,87220,39796,10992,39770,49197,58476,70073,27642,55620,94721,91329,47502,26310,50068,98820,29582,20696,26630,86210,21568,21861,58851,18013,88899,65304,91017,66246,75910,67100,77937,69655,32766,58193,11888,37618,16177,55512,78982,15963,85221,44884,74425,18938,18597,69272,56904,69595,54819,21305,98915,25516,24704,64373,11147,70454,19426,60234,89916,72999,70062,35610,55455,69474,61616,51267,54687,74316,95443,26913,46925,63414,75711,71667,95074,56650,29865,58341,67925,41247,80691,80409,60367,72736,23708,19280,19681,99021,17920,27383,57297,36903,46787,57568,76209,16423,20027,92889,55712,81914,51641,15114,41000,63972,36055,12179,34225,89780,86307,72593,19494,66445,92952,33982,17793,14551,50361,29638,44531,19200,91949,83945,94050,97366,55542,89691,13170,17742,46778,85653,47826,88658,75242,16905,55452,49472,51764,44912,48458,26146,62174,29316,15606,36713,90840,52685,69724,74345,10351,26966,27283,19125,85025,96528,60183,43438,96757,60652,40018,10642,40292,49797,96097,97728,97965,28667,53787,23348,72422,21328,54919,71549,46793,93871,54260,94333,49957,79057,33144,46211,25182,10142,30996,80791,38598,32062,25359,15242,89760,98189,64387,89973,90670,36358,99276,72482,65618,55785,55086,91973,99902,27185,61176,79229,71460,46070,88470,98399,47042,71372,16185,89360,36212,60160,56004,74408,11739,76554,14328,32487,62806,68783,34454,69895,59630,71247,19643,88253,13371,88497,40024,67835,52885,37581,46846,77240,12461,18117,70626,92835,84043,56967,66079,97482,30745,83007,58962,17674,78836,34860,87200,10821,49064,37035,88380,16334,97736,35044,11399,89555,71003,33852,39627,59420,78092,42608,86553,76657,66268,60976,82331,20310,74281,21501,30856,64372,94028,24609,22943,20244,36556,20559,62568,58170,63774,97358,33281,83998,70009,59062,58098,63352,24065,51578,15314,66147,83635,55583,23222,83910,13287,38635,75869,79108,91767,45962,68284,81147,43398,38218,53383,57957,95016,75067,81825,87496,58251,31005,75385,68281,31823,58568,48687,36038,50800,24324,60036,98551,98178,88422,40041,67321,90230,40783,81617,34117,10245,60150,41901,98508,79970,12915,29823,60844,72342,93543,36679,72963,22907,75228,18802,28055,63493,38942,75866,88665,82525,75511,26702,47235,72391,28689,13533,67792,15871,22446,31417,30455,25272,85429,60792,16118,80276,71255,37963,47276,27923,26777,96544,57996,75142,77436,95196,81132,46235,94731,76522,80181,41071,55011,90973,54836,38660,96624,45052,79050,82384,86234,51145,29262,94793,58268,75027,45776,15922,14178,25690,88878,18450,66090,19813,29339,62520,41544,92709,55801,30798,55933,40128,93294,89133,22132,18944,26608,26933,33729,82103,92371,66752,13517,99262,29730,47391,58603,51700,42025,38892,50857,50867,84424,37568,99553,88677,79335,13624,25135,31422,96697,82817,31590,70640,40021,17851,57870,81107,94236,86789,31822,23531,26024,31419,67170,50563,37029,50024,52139,57395,57519,74138,79398,74742,54403,10161,97998,47476,11419,48689,64123,12549,19270,71339,36245,10629,77187,49355,98996,26185,11974,56353,43608,11176,78370,57144,59143,72096,10919,22765,34968,35338,68080,62637,38856,33405,70266,91537,15979,52648,77662,12190,97619,34166,98382,89391,55567,13778,95363,31353,76529,51889,20547,64517,20685,43704,79149,78897,85853,36106,70459,18172,10089,38172,76305,17019,87723,13896,46838,10771,23366,89707,18185,41498,14220,83997,28260,61273,83947,98627,12053,48472,75369,38897,96623,32570,42853,70003,87897,62569,63244,49146,83901,44092,75437,63791,89674,46021,62210,61800,41088,21903,18744,30438,12682,19963,58359,65980,30164,87571,25216,95280,13387,89479,74500,68545,93104,33434,92411,87467,40532,78130,29738,38973,70440,33142,22748,34398,79276,26845,90837,31369,31369,84480,53253,47450,89458,27199,57122,63041,30003,37786,72945,49770,35571,97799,90338,37343,31388,76227,69452,57597,42851,11576,94859,55784,71118,31467,58337,32519,14180,65499,48934,47310,85426,47058,10003,56338,65449,26283,88250,70663,36991,74040,79055,85375,13645,47759,92491,95163,19299,47478,59663,48914,91076,78079,95693,66430,94436,68824,44044,54897,81257,74533,78152,30988,93255,44467,46684,62070,28362,36460,82168,24227,68715,17265,42501,94595,66795,39354,50141,78627,63893,71671,46405,68968,45698,77046,21906,66179,40227,45565,89255,14520,31468,44587,37663,78040,29354,63980,25105,37163,13335,44625,64102,44245,48377,12986,47030,82869,20078,31093,87813,26582,86355,43473,71941,40174,22529,57652,79918,90110,66859,28076,30720,24677,95496,73258,80092,85578,51638,92273,22509,48878,63099,87314,83141,73325,18913,73813,66049,62589,96444,53898,64763,84339,13833,64356,42840,28914,25103,56159,20981,37296,82444,53372,41274,96894,92219,91904,18350,51997,67191,92619,46556,13286,89434,57760,33318,53499,96125,32450,42594,38178,31773,17091,78505,50809,35177,64505,53477,10670,88731,25858,99347,86354,35289,75081,39598,39184,68017,88200,12787,86512,13626,38859,44549,87948,73282,34026,59875,92144,83915,82597,23897,46744,95840,30224,11248,32800,98468,67700,84475,71443,61489,21928,82587,38034,81121,73358,23474,22573,96647,94869,49223,48541,70937,76091,48992,11229,18404,72510,92840,88828,89790,63030,42234,73166,69958,45699,28731,46370,66349,46928,86519,85704,48330,96863,66068,41555,39735,92581,25707,91255,48096,80644,70099,23114,96217,40379,18652,79432,50246,96148,89354,90987,21063,27849,79423,54364,18838,58556,88932,78081,65955,22207,62772,84494,19157,72752,67718,75312,75980,17177,64958,86382,12302,39641,21055,22092,98481,94165,21487,24947,11742,48185,12589,26188,92686,72506,67610,59902,21125,73831,23134,54641,77337,97522,31289,68797,41525,61590,99573,16123,38770,67164,44276,86641,94680,20010,51543,71335,71256,39404,11034,84363,17407,56199,61827,85420,15850,33649,19229,14442,69846,90825,16569,94930,42288,72785,56438,61607,16736,78961,14740,36957,41520,90551,36234,86439,63845,97764,50765,43157,12484,23768,58183,75164,73907,57406,66296,99145,47178,36312,29261,31373,74766,39073,49781,33133,14634,58502,82258,28064,34296,78074,14919,51066,73371,99379,89160,90296,47994,25573,37177,65066,47046,28656,50279,47627,63443,89335,48202,11809,32998,22914,50090,63706,45377,67249,23583,86280,32324,59292,53703,70005,27096,25104,96027,45260,38503,51313,85568,94195,83755,30543,42134,71534,68595,19685,90033,89684,93602,97356,35322,50103,44426,69186,30301,85189,87084,25241,97106,32920,74508,29177,20298,49360,57552,73222,77592,54083,61010,35274,20759,45528,28513,17536,76907,99242,99824,38178,80030,31855,74236,61399,70846,73708,92540,59458,60895,85098,11667,40651,84822,38195,81320,35357,16846,70070,29683,89985,76043,53190,79071,61835,41286,46786,35627,51161,60996,52994,39502,43913,70695,96134,52892,65516,32448,61278,85713,98711,48597,84140,27830,31228,17814,57067,46778,21326,39558,82572,68542,38856,13504,19229,41047,93748,95632,12646,63619,58573,80147,50971,41689,80963,59161,20392,78811,81350,63783,38686,58999,59008,33801,78357,56058,43627,47783,55353,42505,75710,15835,78110,48002,30868,99445,70934,98670,98071,58544,28517,92829,69527,86891,26837,76654,47034,28693,65661,98532,84163,86138,37627,76511,15762,22227,61324,12121,33815,36720,56659,78730,78626,31430,73649,73982,18297,75372,28614,66403,29663,81872,79811,12620,17291,28136,16085,11484,93936,62361,71046,23933,39647,11700,23590,19737,52896,86138,72464,69292,37859,94455,85472,35926,44674,72520,11918,16552,65644,10714,76530,30870,54347,72631,95087,10961,73234,67638,31065,79033,89938,87221,53820,68700,26462,75362,24035,87199,31688,64604,57694,69711,94305,43573,91061,61972,27879,88960,36923,94855,11687,88359,67282,19093,47131,92135,57001,97364,67667,79317,52718,60226,63046,23966,90647,83515,39353,14433,90519,80975,96567,19723,74527,35735,27005,96041,46189,89702,26829,68615,48859,33189,43327,79813,62700,83484,26160,31939,51815,99829,23518,76447,61466,35325,98265,19233,44469,66521,28038,19432,40123,22228,61630,26740,92637,33135,54018,78970,43042,45520,84938,43274,40716,44266,62940,62455,15987,38170,74935,90805,74712,73398,84645,22905,53467,35012,83953,48826,64908,64488,36358,41106,30439,52825,20381,39308,57467,63391,72570,40193,25324,80541,92876,58024,73123,67319,44042,89909,89698,29686,71909,94584,45748,70997,29708,35262,41210,49174,52946,79660,61252,66753,38108,23197,34793,55161,75743,28195,62403,61595,70968,82869,67073,95886,21851,44521,72016,52890,38946,40105,58382,47587,89881,35687,86786,65396,75687,42560,52607,80694,60218,73155,25696,54724,53107,11466,67229,11558,83494,57756,43630,84641,69632,16039,47064,96055,14569,37133,32917,11091,59516,93495,70372,90692,73952,84202,83868,44116,96007,19843,86693,41438,48405,62178,80222,73019,27761,82958,26295,12608,23164,93756,93101,33321,63412,90221,30315,24314,88217,30079,49937,43037,58488,57080,20406,63803,88774,23868,86604,55890,92340,86722,67967,15732,95103,80743,98770,76225,94080,72918,52854,19843,61830,70472,73622,52732,18083,26349,42487,99548,92981,77376,13389,18560,19515,38198,41363,72499,80046,81390,31543,69545,83741,49524,99146,75235,25763,36029,40083,29019,60237,78737,63878,33882,45856,74419,11461,98651,74164,91120,25571,56660,69065,20778,60135,94631,95051,36838,91164,70408,22989,89012,17083,31864,34404,69433,48863,87990,41904,20976,47097,89704,62168,71745,89316,87194,87952,57728,23635,93025,52749,22800,85262,53469,17417,44879,21746,53425,55779,10235,68544,92787,44340,87195,21603,69067,48707,65948,94002,90924,26081,97606,36307,70789,43092,16134,54513,20505,57362,26762,78982,14450,44821,58929,25848,68649,62036,95305,19189,85604,99859,63607,46308,63293,43205,82951,90081,57514,76018,78186,14353,98062,16529,64198,84526,96901,25235,91005,54241,86337,24174,42370,67117,62435,14970,33027,45032,87298,59143,41276,93460,63710,35907,65339,95794,12452,89128,83236,80830,31461,47456,89664,38795,50625,22446,56051,99763,91299,56056,87110,84967,32829,19463,82600,80368,88780,20557,45809,78334,55945,97670,11814,59083,97250,88393,74746,38631,24107,85676,72974,96684,50192,64516,13928,93025,31796,75613,63322,22535,52641,87400,87824,49050,62820,83056,17864,42913,14334,92391,12205,29602,69399,18245,96929,56923,71400,85729,28950,94723,86709,70829,91270,85943,30862,68995,91505,91708,92048,35052,86220,12461,49613,78479,83835,22121,27308,63259,90874,92869,55880,28781,53320,46850,33945,19016,56819,99209,67564,88176,43736,48149,68360,67511,52359,94594,74839,49478,86161,91843,19570,64912,94898,10977,26365,23010,29766,12007,18977,56716,82101,48869,17694,25487,11257,17893,41087,43088,53277,63513,35315,45831,87850,72470,74924,87928,84085,62155,87649,89527,18863,32622,85267,74272,68120,63420,87035,71125,90886,75882,43497,99147,61312,74563,23008,28294,82000,76587,49872,84244,19404,22330,71187,92058,80397,35807,39661,61197,81408,12467,15270,78007,95386,27215,40985,44970,10048,62321,22592,15661,67172,10811,53975,58258,60823,16911,13460,68162,37947,86672,90243,33876,93086,21559,34786,28998,66124,57825,80573,45487,67940,17903,35994,57530,23849,38017,73876,66690,69130,94754,60496,92432,35600,84751,30045,71247,72027,90715,14862,53921,36112,47439,66425,10445,29780,74908,95106,50442,75634,23260,20202,90409,11212,72246,69649,73915,38070,61635,82488,72855,61910,57128,17842,78286,80040,48517,74584,15367,39666,67729,52354,75255,64558,65163,63176,23075,15920,55659,75853,90884,23182,39469,74318,69900,58883,86178,89226,52973,56470,85563,10699,69178,64160,22780,49505,31269,52252,40300,43616,88722,63307,35271,22575,32116,85042,88084,23364,58046,61536,25508,63158,83961,78689,27397,22067,84104,85762,23801,61653,66173,46303,38095,82703,40650,75501,19419,30554,13878,12469,48099,35163,76808,99194,14904,13641,17369,86448,52651,20944,16997,41027,88469,50315,55749,76319,86709,92598,49308,80156,77056,81480,42296,54984,53617,26473,16528,32532,15787,14332,75761,77726,75711,75352,89055,22095,21785,87296,91883,85740,74302,66547,74171,34412,72661,39499,63913,81587,89777,93714,57472,33888,61844,67788,19721,46091,37376,76612,16201,54671,36534,19699,42990,52266,14075,16194,21917,76264,66528,28881,63287,66578,30887,55686,92181,19542,51921,21141,29309,83474,90104,65891,60097,24045,77367,47099,99186,22956,41837,43728,60202,24759,88073,48733,75998,66162,85735,15679,94114,63905,59160,92770,15748,43543,95361,77375,91558,33986,78925,24162,65355,98473,47559,36126,99097,86649,32507,23891,79968,28951,17277,68211,83306,15899,73526,76178,10250,43304,38830,88726,89060,46002,14477,37378,76880,30876,52058,26934,19887,95170,42569,90364,73712,91950,57545,34374,23523,48490,15372,84960,30813,55461,71813,93000,65113,24100,51325,24084,80825,54941,48265,17039,51153,59883,19539,61954,53767,16609,88691,42710,50566,45510,22340,44147,91809,22823,24889,42968,95392,98530,34661,88150,23072,17295,84727,90448,34477,95863,40135,84724,85097,50780,91816,24499,93810,91353,92716,82655,98466,46651,27433,20351,84090,10490,19456,26051,39432,33030,28178,77239,84425,66812,23732,31547,36990,30100,59994,79755,23020,39476,80775,88629,53582,66061,21764,40072,49897,46178,98793,36236,98506,75479,46431,34376,28556,23446,32682,49482,36921,29099,94225,20853,88020,68970,64242,15893,66849,45114,45726,15215,38736,37791,38468,51602,95992,19083,88493,87236,35880,85019,80950,75740,56155,62592,25702,24145,18133,88041,31695,72408,88663,81181,27289,55498,92699,17213,75461,82344,73262,35601,24734,94219,18424,44649,80383,15839,64271,91888,42418,51500,17706,62104,14233,26499,93957,32772,69973,94300,51713,88576,49095,53799,74004,80239,84324,10508,80417,21822,21954,92362,12093,96105,89221,74514,21124,63863,67216,49087,67713,87659,32526,78800,98692,34710,23654,38491,20241,84672,94173,37054,64336,75178,72844,18387,80540,41288,61045,75377,33853,94010,13094,17412,79221,24925,60639,91328,10722,71091,37622,35607,89615,59703,42669,28496,38474,85267,94285,73371,14606,99309,19357,19893,82600,42750,64901,98067,86766,34615,78023,97822,50698,33024,79159,95655,95524,69234,70007,64965,88114,26196,32624,96428,68835,41559,41534,93553,13003,61735,67811,18704,69349,11383,44835,56512,94320,98674,13817,24318,38059,89630,34906,69921,61692,49750,90666,47884,20595,57545,78052,97350,83270,43448,13636,77832,78446,90433,83094,99423,31257,23655,24645,68273,10675,31561,89915,66180,19514,87617,82821,60435,59403,94855,75059,76894,68899,31660,26145,58068,25347,47644,72428,96510,98271,26067,13246,54663,43269,71851,91124,52209,27448,80131,15562,65792,83116,22090,32072,74354,92512,70626,75051,96083,99550,65563,52925,89524,88815,86649,59134,94177,33771,67878,77301,76321,31393,43700,69058,48749,14059,19117,27573,59937,23776,54346,97259,67526,71622,84305,40551,28937,37826,60513,32121,57692,91384,65976,92576,18037,87329,51355,73372,67855,38710,36743,42941,30087,69862,49827,78358,66968,94321,28504,30836,58042,36347,93175,32726,28821,79528,69013,97305,34853,41087,28230,22741,99223,70073,57644,96638,97640,97051,46874,67516,71887,96353,60930,17779,91561,20958,99369,24207,34570,26672,39517,84732,70561,98477,55970,51973,37900,61733,90020,46441,87290,18514,52184,29718,48284,97181,82998,38014,58521,59593,25715,16790,31346,49649,39027,35179,95812,35910,68936,85730,71221,22224,32015,39695,48138,60738,73483,86459,60488,68081,44543,21054,83545,43046,66463,19000,53527,30469,11669,27999,36277,43465,79283,50970,71631,95428,72694,22038,96057,97068,67942,88511,82636,16728,92206,75998,44790,78842,16940,87180,73926,69649,34513,18417,85961,61457,72207,15148,28785,31090,78846,65848,89433,19725,29495,23798,78607,80813,32861,67108,74049,28670,40450,46666,36567,56369,64428,34268,55942,78598,67005,87594,56590,79621,69530,74287,49140,56244,82346,18437,30177,70837,93047,26275,75025,42190,15351,33151,96294,39223,90300,44045,69278,29773,56370,17282,50824,16857,32659,66516,80537,98117,78836,37823,25723,14258,76431,81108,86663,95368,25778,86310,56025,54473,68469,62416,77874,50167,44536,26295,24686,24319,84991,76615,66908,84015,10678,57327,64055,53584,95268,13949,41659,86759,28690,66478,69112,19384,28679,87902,93552,64470,59730,20326,31080,94936,75279,65238,97691,90203,92045,31740,73916,36003,41775,19795,52716,42413,83449,67178,82744,19630,55439,69920,50983,76131,11037,43118,74046,58740,67795,51947,15732,50416,97319,39269,50364,22686,22251,82161,21615,85135,65854,71899,58011,80441,93010,54624,93386,24801,39445,75019,33911,90404,14315,55798,19661,54288,31507,18898,34535,77946,47936,64450,51016,83301,28489,69688,82766,20006,62725,27176,68072,88998,81786,74315,98297,59596,19322,57154,98023,92876,55057,23106,61764,59833,46340,15246,36997,72644,73963,62036,87070,37919,80831,60705,51692,71627,16168,38822,23650,51406,60537,58913,67855,17168,36485,19492,27785,47000,45373,59583,18758,29371,85575,93107,65442,65787,77793,71391,71879,50594,79070,26475,18795,37929,65563,61175,94864,89257,94212,54997,80864,45140,78118,57159,22562,40235,41871,71403,40410,84681,87659,51979,41971,95723,89220,83452,58006,70769,67093,13855,73211,86115,25714,51843,63753,11871,42568,28427,32360,82417,63215,97936,11517,52043,62191,18749,44476,84103,24908,12194,24745,99992,27149,26377,96047,42411,27850,96291,65576,44148,30167,10190,42497,84793,48383,78632,67276,62313,77274,25395,61997,53814,66800,13029,81634,56199,15354,56692,13487,55248,35303,82318,65255,68480,46663,95484,79297,34843,47222,84911,58736,82760,46756,80161,24931,14969,11342,51532,25711,57997,19728,94359,49638,83789,67816,72462,80076,40961,23820,78031,95310,79506,74278,59115,89415,85080,94809,81095,67176,77263,60198,56660,96142,80288,80424,30501,37604,60824,60128,75491,74886,17046,75554,95208,75787,65691,53125,94386,95317,18385,56421,67703,89756,96905,19434,17195,82176,82100,81375,86807,13770,13067,80576,18348,91891,34307,70102,16135,21964,78233,68842,40053,51910,52625,72013,17841,74088,74251,94898,12547,29749,30698,11782,77371,31259,34988,33383,70375,54382,75907,93613,69475,77118,31515,79055,52797,17824,65459,89367,24220,88716,10404,26925,81575,52715,86428,76121,20205,27701,22218,68876,64071,93118,68732,74493,80744,18332,96007,50582,68637,60572,56340,43242,21120,22054,43278,40477,26788,62065,88644,67011,32672,59514,23895,72373,97707,25285,52650,90945,13589,58207,31694,23210,98612,24956,24440,30756,98022,84538,78743,69710,90023,36257,53062,89516,21639,26836,61475,88546,56432,14292,54605,84778,50790,77579,44717,12839,68912,17321,77703,11694,87147,74268,32790,50508,35291,43514,89617,42723,62372,47201,58143,67658,70494,36592,78328,84559,15888,27459,49646,97233,75544,59574,60391,74122,28559,85245,25381,70263,29575,70350,50285,69150,32388,15840,21592,42916,13961,35191,90119,49113,58974,46184,14107,80325,13098,66893,98928,14230,21716,76640,99066,59802,20941,22331,59880,22403,30695,87665,37769,98408,82041,60402,98025,17167,48503,50808,64338,11698,71926,87570,40309,13775,60605,87706,97430,12705,56801,76111,45640,49331,12782,36163,55233,19366,93598,12535,22032,65653,79274,17963,78935,12382,62912,70452,32188,26569,80709,35149,91873,64582,30732,32544,55706,62830,54615,11433,90544,13734,11970,43261,89659,35946,27175,85152,81658,16780,55289,76012,81981,54510,47695,30125,20145,87992,63756,74354,18075,84061,99108,31320,11166,29354,39577,12421,11191,45644,14041,17897,20509,44918,88718,41929,51548,83840,87246,63469,25646,22020,83402,50277,29093,96835,50948,21169,56920,45110,15747,93665,46762,74411,58821,73508,54188,22534,28453,69585,81679,22298,57500,35076,58687,65350,93811,17090,83248,98526,35901,32294,46741,53418,73147,56671,53049,77903,95360,65897,25491,29154,33680,63547,64677,33684,59886,81254,62243,46054,58943,16249,56138,44457,91100,91758,92678,95381,50384,61507,83466,44012,18399,11873,39290,30583,76150,48815,33178,52672,26815,57163,54455,30445,11810,96111,10493,61955,34266,19594,68780,76001,59073,85910,76042,84120,95253,14107,22472,10447,90927,94789,57395,54456,85025,37216,69470,53418,44398,75662,38439,45041,34269,85004,79554,90532,34369,64991,27170,23240,50403,48152,91458,25979,44968,95193,68442,41012,72874,43066,83430,49529,65651,80934,69496,27034,76331,98965,72191,68396,28816,82566,97959,15079,74474,74104,54411,98964,26358,44411,93720,89145,48330,96415,16196,75645,13797,51437,95772,88068,18426,63395,26496,77404,75575,80877,80106,57597,96880,22086,37623,53701,82297,20044,72963,16121,87071,18785,95814,39032,20559,25082,70185,59384,61792,47723,87538,57656,24313,70252,65438,77605,25376,75058,11620,33550,97632,59454,74423,65944,20786,31516,28192,90673,99121,82083,75149,59447,17835,85524,19036,67085,64804,52040,64015,58483,92470,26369,39931,42045,34634,87141,32784,71015,82470,91742,48578,85846,65558,39904,87752,77615,48942,55344,53337,87445,30863,47829,66804,32640,51925,14114,75168,78336,18582,73523,99650,74176,63218,61239,84193,29567,82934,12095,51903,27209,26084,95103,17753,14337,25167,72147,26725,25105,49352,60203,84650,18565,81816,33257,99620,95994,32838,95881,25563,97448,77841,22997,59039,29600,18529,18541,44340,96018,46498,32725,56823,41237,38701,17889,81430,60962,43266,11000,18135,72546,26415,64120,88294,15947,20079,67768,91277,22567,79035,68098,40666,25819,99029,93822,91493,77969,24695,33835,13654,12262,31022,86996,44712,64482,33237,53184,52235,90498,87326,86644,44458,91954,12624,31378,57313,29185,98778,47673,77679,75701,77821,69533,79412,99897,50268,42920,51046,75350,93561,82719,55975,64652,63350,32280,98006,50052,10298,14359,31479,73634,38797,68483,87155,33920,69037,86632,33653,43795,73902,66794,49418,85838,45302,89098,92068,37804,32829,69307,98733,69597,74940,11440,82490,16445,26611,39725,55087,12814,13456,89917,99084,28578,32570,75026,10084,61237,82475,65376,14591,69530,49169,24169,69816,10942,12582,26796,69977,35314,93768,35781,79921,30256,19088,46663,88128,87676,76720,15407,24128,93188,30354,88641,58393,37063,53622,37918,77817,23788,38318,94665,91363,32579,19110,45643,79040,30128,91845,73353,16304,92276,40584,93220,36626,31186,99540,91977,35860,17016,97348,42207,46167,48627,86739,91158,22405,65663,43730,38678,39236,65592,90589,98186,21571,87067,95441,11193,29565,45577,44900,32522,87802,40011,95432,83506,10599,14914,79051,18573,44866,16786,74063,20217,48971,16669,86085,27405,59049,16648,47888,12432,49822,19191,17806,51402,47057,98775,39036,35827,93140,84301,66944,63336,64401,12841,22706,36852,48965,70951,89338,24914,59440,29220,18721,82418,41115,85245,11155,19178,98857,85841,31347,38216,91816,23923,35260,76897,50342,50525,56378,82258,53214,46296,36714,24010,50116,35312,77248,46645,57291,95065,98850,36938,43633,91469,94986,17545,43452,89155,38555,52504,25563,73926,31874,46735,66447,26280,66199,24805,90687,95927,58750,57592,97559,45810,31402,33010,59805,81661,91795,18043,83045,36231,54888,59210,39341,69007,52663,16587,40165,39487,67026,38930,54626,48512,65282,89258,53602,29181,97206,75052,86710,38634,98060,11724,93882,81556,39049,94394,41435,36968,61017,43587,55326,89330,15575,57629,56663,48576,52968,31601,39596,49016,81544,72960,50647,98219,66524,52627,26525,77547,52901,24303,65359,35170,49291,42301,70488,28221,10963,45891,49837,43502,89354,93292,61263,87694,16597,46100,93012,86369,84843,16746,45901,38495,32069,63585,38839,76449,91408,39049,76243,66960,95265,95735,47167,28188,18469,27009,21646,90617,10500,91858,93769,37270,85880,35617,67625,25875,61535,61583,87409,97559,93057,62616,66589,79161,94045,91191,25410,57106,52847,36922,26465,11766,57180,51883,25323,63663,24628,33470,63799,55465,46468,44760,38266,97632,72707,62498,68859,67015,92277,27355,89665,77432,30458,35554,57813,45438,37030,79387,66517,31710,94488,17460,42022,89657,57460,58258,72755,34910,94228,55403,23075,26464,96581,77965,31105,89672,74168,18016,64424,71461,13354,92407,21261,14619,33599,33243,51390,20595,98457,42923,37115,72361,41508,67052,15227,95494,21502,14627,23018,81350,18107,42180,73290,61891,23337,76716,44641,41059,24433,31823,27538,79227,39351,58577,55237,42523,24158,64393,34597,97014,91133,18560,43923,32498,48704,85601,68545,82648,32970,42170,55837,26213,16547,61547,55316,51951,54172,74002,52262,58235,29783,30176,78219,61645,36676,56569,29099,93102,19440,40849,67947,62447,58741,14105,15492,57718,51349,29534,80992,94178,12245,93416,22237,36576,58633,91079,13648,24346,65386,82552,70605,52199,52755,75508,78123,74996,40464,75397,12575,67654,67771,80917,79095,39058,58371,32128,43460,95983,58100,13386,25157,97422,84768,93642,57732,46385,50100,72813,15344,43179,68155,71416,57871,87128,81191,15664,68486,70805,40231,34310,33330,86212,88084,78795,14829,46671,71492,91183,61821,15975,74077,52945,18606,19456,20573,87489,90179,74435,40916,64718,51053,41687,14270,82800,39999,64024,38292,24803,83511,49322,89772,37332,75534,74317,29509,65901,45830,96824,46289,92113,64441,72772,57260,33308,94879,32469,34356,86646,69548,38800,27859,77511,75833,15171,37499,28364,51085,76762,41467,54948,39591,82549,80670,76909,42145,83191,58284,93614,44122,60909,45487,58518,93110,12882,61070,86597,16631,42237,49132,59081,84907,11700,74957,98646,92136,86496,68031,18102,89392,44764,27922,25930,41780,47742,67286,84919,60833,98408,86235,56425,77235,96494,14130,31282,61110,11742,22724,32317,12997,27216,84680,88979,97420,77884,88422,56964,31225,27903,13615,81071,16477,56396,25812,60620,79921,61168,45435,46138,79200,63406,40501,62106,29693,56326,40883,56940,67922,20270,96439,28345,50293,54226,65401,58558,93945,47688,60546,61598,76775,39440,25152,54526,39189,54780,89441,66692,54726,23123,51161,34540,43879,92646,74606,41714,40662,72902,73275,65307,85021,29250,76842,28029,86357,45858,82229,28041,50968,23073,70525,19501,98738,26751,26975,64242,88780,12024,81171,87360,12610,92815,86660,28708,20952,90391,46228,48803,37199,24025,70745,45468,64157,39672,17244,27647,93406,20994,73595,99724,93865,53086,24825,86727,93670,24120,87442,59614,84880,21829,30740,27310,33284,52386,80201,25596,83352,15207,52438,86625,27028,78277,56369,91935,79504,60625,21351,55800,23647,35518,50646,41868,91784,27340,18803,36450,25420,43420,82488,21016,80122,11684,61473,64962,92535,97126,50076,12898,91885,92908,14026,63738,70477,97757,71896,58944,29420,96324,40245,12662,84907,36036,95100,13494,77182,32500,37427,32540,55924,71463,57303,86009,91388,17819,29685,25593,93315,66984,33245,96245,90225,24432,47739,92574,75283,39987,54177,83331,61782,38433,65018,57398,10429,11578,51296,31377,73137,11716,63948,27394,81401,94028,25800,44672,61805,47560,90751,68992,98217,80853,31718,17965,50112,60824,98074,47655,66844,59188,77984,62786,69137,30451,77927,73341,39465,81094,53005,74999,74531,38098,25368,62461,18613,44700,74675,84978,38431,28137,24360,66137,69104,57460,36508,12080,25410,58609,69496,89057,70906,32865,56591,56261,86895,37993,89672,33166,43625,17155,86883,85923,53003,55388,43787,28579,47322,82574,88863,86658,64710,46156,54721,26622,46797,84769,10875,81447,97714,69707,47690,43348,91281,42810,54490,99460,14476,69808,27651,93914,36882,86878,81211,87799,21896,20615,65333,23265,35251,66397,40626,51155,39681,89440,98523,71548,32803,96123,36146,77568,40345,60781,17479,64210,89704,99682,76305,13307,87509,74139,93482,59290,44784,13790,59455,43612,72276,44007,72768,97105,37395,43163,51278,35375,15971,42560,41350,64836,96176,69788,52933,17484,75637,71189,56941,56030,52654,67170,21328,78214,68667,42126,35864,66440,62673,35942,94805,72422,57663,22614,15424,23967,30909,46291,82532,65693,66997,54739,69833,95897,43780,88767,19390,18592,41822,26070,59163,71208,58871,57965,38399,79128,40671,95572,89804,45279,38597,55881,47596,61681,62414,41647,98806,74686,57976,87513,39697,77565,60058,35226,77748,61126,30695,94908,87367,59984,25751,40708,56038,86849,67695,26989,63730,56571,30940,47172,34479,89742,65676,49826,78984,31373,81328,27897,28231,42138,50898,25092,39302,29828,54028,90496,85211,73544,22228,73493,74443,87521,65624,25078,78133,51218,84186,22129,69299,74387,49973,16807,39650,88248,64716,69333,33215,13947,53507,84273,52276,25532,43584,48570,39353,47398,99743,88250,76672,28708,83033,77852,76438,76462,81778,14094,64283,53371,85209,24399,58409,44494,21050,75893,20052,74754,81081,51504,38193,71713,65228,90144,92329,31871,58442,68702,51931,67340,52255,49986,11604,12177,61199,85504,77652,53558,73317,48082,22466,15023,54685,62457,94158,86171,22797,74796,93697,10701,83783,25616,42955,15821,40213,81383,46114,12178,35758,49317,21294,16396,52475,43379,77898,95483,23572,98604,77996,66923,97524,30152,74194,16957,69470,13721,10177,12858,72671,50174,87955,80515,29767,82617,54540,26595,59817,31074,97109,62583,96020,51480,65196,28667,53125,65977,77413,34218,79720,89841,72374,17503,38300,31675,36672,87182,99884,13685,31677,64537,20752,10119,27347,94477,28362,83525,81674,71750,97049,81254,72968,80350,53805,22794,17764,89397,93159,95436,77785,84408,79897,45898,95119,40938,63269,30584,57872,22843,55193,78050,41853,53049,11504,72733,77110,88022,31899,11438,72926,69258,59711,71477,63728,67397,55535,39332,77085,42330,73109,58644,53685,76580,92063,78065,10869,48465,41901,46002,46751,96887,74382,75054,82464,26712,43679,51421,83953,24801,53581,31843,21791,77050,40857,71368,78895,94089,53705,67157,43633,85637,99784,42163,90773,76802,99287,24798,43611,58829,18057,24839,49037,27914,20206,27253,50399,12643,44578,14125,33333,14505,59036,29072,78865,83023,98852,91160,69400,69167,69113,63876,99177,27428,93688,30680,27160,83146,67917,73882,74174,53382,67521,88787,27386,18989,34613,35787,78072,63887,80288,94420,97422,44224,71290,60526,98078,99248,85661,41448,55625,19579,44150,84544,28709,82729,22422,21829,33039,10683,10374,56548,34400,43418,73049,37247,39486,76781,44832,82047,25181,24708,44674,36797,98713,27538,64294,26070,62612,86524,46162,41837,61116,67006,33150,31944,85859,56405,45660,49665,52638,99789,79920,52956,61158,48530,86507,67407,87333,16628,37683,37124,16421,74966,99858,92660,41071,16804,15841,65390,33966,17722,57691,50843,70110,75743,31366,96344,76627,96872,76214,38955,28361,35943,90157,37503,37233,93745,80253,43341,16450,15351,61861,10627,70308,22705,43925,23974,57162,68793,82445,86733,19496,85288,58913,42956,46400,89070,96688,83109,90301,80794,52793,20563,50144,62862,25154,25762,36109,75992,81465,30439,63459,13118,93052,67542,43503,20579,83131,58393,91285,74510,61934,49091,16939,97439,98744,86199,25155,60671,70203,86012,18601,68562,13880,62697,15798,28416,54420,41504,15714,50797,42010,97393,33268,93695,72349,92652,73029,84052,69103,62907,67155,40869,13311,35766,75778,77657,42408,16501,88871,99560,79687,87361,36802,76659,21168,19529,49227,83164,21656,21837,38288,96912,12773,68865,79876,46916,34087,16127,95413,87958,12784,63241,84833,56071,87279,96513,61856,97174,19288,60551,20704,41118,47573,83166,79917,70840,21412,81442,60861,91200,97223,83621,91326,94730,30669,88556,78249,22687,64306,31283,28449,63591,97010,97407,71936,87997,79378,20783,93732,72859,20836,35032,28685,25773,37835,10374,78034,56811,45189,81493,55380,33383,27496,61815,94809,68157,73573,38948,44552,54742,71848,12033,80966,28935,31367,57767,32045,40437,70928,70162,27450,86566,90579,52746,51561,57385,24309,50512,68408,68418,98782,74947,25583,74517,72914,51191,39107,85468,48137,29899,14589,32884,89356,96708,55509,14852,71821,71085,73598,98780,32748,10726,36782,78227,24149,59786,95345,95041,40735,28423,47764,66727,86226,75810,44735,93967,79165,64357,33190,55012,92027,16970,40987,31276,64139,73098,10264,84534,98352,63340,97518,91791,48808,62093,69642,74957,50190,62066,99904,49791,81900,62302,56493,79007,41338,44072,38999,33116,84196,47896,93262,69542,98287,46222,67321,82313,49423,95712,67904,13040,17411,91156,73965,24812,86457,37579,83591,25703,44876,99662,40625,95421,57995,83557,25350,14274,44515,28384,64674,41564,61839,42660,94108,86996,97924,89798,59898,66810,47233,12135,64894,30904,43855,21674,86874,82500,92802,75956,45889,90540,12823,48356,55013,74022,43114,48015,10627,55995,39930,21822,56711,74050,26226,20704,36754,67760,22857,48613,51019,10721,48879,48681,35693,51251,61189,62589,45101,27420,66948,23314,98200,41563,11943,44397,76770,31125,75875,69687,23885,55404,41760,71705,48337,80295,87178,13324,92725,39982,19614,17515,36050,16016,42758,75392,26657,36817,18073,69638,66587,36230,85454,93881,98916,49016,69448,94743,55574,63290,75317,53064,14699,62478,51095,55443,12130,66438,71692,71590,46409,21442,72081,56274,78043,68771,20756,90904,90560,67969,40278,81428,20077,41643,26692,12660,23694,54581,67619,94381,69547,22194,46141,56074,15078,91485,93237,11971,57538,86447,70862,16645,18067,71982,21568,56481,22304,69728,23698,54526,43030,25315,89000,64202,48164,98880,27841,98825,19142,67643,30999,93849,49372,19076,23721,85901,50509,68729,47713,63960,59046,46248,49861,58706,64059,95759,41031,79991,89620,72111,47274,17401,61897,94442,90353,68519,47594,55783,52945,65657,76694,34988,44188,98799,11673,37419,56462,86850,35402,91746,16886,32015,73363,50623,27925,80738,45969,21357,28036,85826,55349,53484,23697,41859,52436,19589,73330,85899,47349,52956,63099,50322,51878,87023,81983,50478,56021,39177,94473,87859,25957,36742,49759,27039,16846,97067,13135,44229,85844,71157,87025,21319,83527,23657,21216,74771,32854,63919,50928,70892,84487,93684,71885,83622,41246,42731,48726,25318,33412,83950,31350,58421,27347,44057,54207,30626,62487,14232,60434,31428,22264,16058,80010,14471,66052,80473,28854,36773,66473,11343,52518,32769,28673,56623,59490,19111,79705,16030,62279,41039,56113,63796,87361,63723,96638,71933,43323,67000,77389,65221,50216,19160,94528,21100,26208,19801,33010,50962,69721,71636,26542,46437,78124,24851,13109,33532,61566,94841,64115,67103,33550,51201,17649,43116,39021,73740,43938,20930,23563,71634,87822,29437,98576,36345,31839,86592,95019,52607,85702,49384,53696,37875,12581,77886,63271,34431,52932,21206,18893,82907,33002,63262,64247,96331,83456,13251,74893,98320,23605,45717,47979,39851,41831,15829,28487,39254,65717,99237,95398,35150,23735,86511,68135,68037,61797,77910,64906,38563,33115,33115,57554,34948,62062,99161,88352,12802,19944,13844,88350,82594,77446,85290,33387,96194,36208,68445,76199,84211,41810,54872,67370,91437,85172,94466,32802,77329,68034,26613,53666,71896,44731,88159,92139,12059,40559,74491,37644,72672,59567,43352,63068,81850,86662,31410,13456,16654,33947,54006,64175,23375,26112,33282,91440,89812,65293,68276,89160,93425,96703,41000,39464,78228,17941,58956,11914,20174,87081,21969,49649,92360,76094,41966,57941,34456,56384,62400,70629,58262,67803,23658,75240,44003,49305,84992,21580,71230,17313,59808,53126,35775,89146,29005,38760,13159,34160,47713,32260,10331,77520,99877,73989,80948,15779,84482,68619,17127,12089,22519,93118,89470,70858,59416,22903,91835,55270,12246,79270,34549,66909,55985,42899,33823,37232,68094,39521,16873,15873,49851,24362,32312,67097,66250,78314,13123,31813,87515,80552,68859,88891,32396,89328,92330,28243,39285,28266,21057,32050,79813,97743,55794,84531,73887,57508,98401,89185,67319,75135,67493,48810,14273,30215,53368,42885,37784,14918,28402,12287,16171,80564,99847,92913,98340,19449,26091,34735,50331,90157,15714,20703,89797,23631,33801,92631,47442,11315,52918,18808,72208,16025,48435,50877,63548,22648,67363,15111,46400,91883,90303,86000,79281,79399,63588,31092,19193,71464,62665,97963,46941,60184,42806,91629,53403,86088,48364,53036,78567,47953,99491,44745,69864,68758,46409,98504,58137,48356,71269,35170,51600,46494,97533,51940,13562,54318,84627,42352,26208,93503,89213,18258,79928,39095,52544,83187,51969,22706,96668,65016,20423,29346,49107,23414,28022,71720,29547,15237,43646,40790,39210,94524,87375,29347,87077,61910,19836,83443,23108,68999,29524,95349,80138,41124,56126,25429,40326,92747,47877,90633,75511,60039,13010,47990,71718,58777,68623,43083,10996,97616,59755,95639,75497,10106,40555,28305,53194,97620,53596,44857,41608,17603,88425,85626,53626,20815,18618,19399,78502,13792,61376,16461,71824,13849,23497,20760,66762,83597,55332,70077,34722,59065,34798,98885,62871,82307,58644,78671,65009,18544,59202,88346,33833,40573,86125,77931,15225,22681,98113,41730,77848,43185,44326,13989,55803,73685,94491,47379,49861,73913,99138,44017,42911,89816,47339,24384,63146,99015,32845,72547,90641,55697,27521,22705,33521,15541,18809,29809,56288,72635,93688,89503,73486,87845,67322,33581,51524,20529,43021,10887,32188,81572,27573,45482,30711,59082,75344,73650,37960,61345,30081,25202,64923,13558,37521,23420,26518,91625,40310,86227,64907,77866,71740,11373,50585,27278,79148,65474,53560,22989,25127,54082,99278,40293,48579,60359,50723,35792,41248,93268,91388,50059,99178,70852,61151,49531,20659,55503,68928,43728,92360,39055,81719,92234,62205,35243,33508,54905,89400,65523,10308,68712,46510,26218,15549,89318,93270,74511,55548,23495,86570,15647,33902,26249,32627,40928,81157,99456,75147,31662,94217,31024,43916,17875,97442,13399,35684,96053,93312,59786,84182,23856,35436,27977,71537,95359,91499,83518,21978,16676,33475,79674,32489,89291,27383,50600,56352,57654,55445,41127,34186,88197,81175,71780,75446,83162,80264,98915,65389,56118,63249,17894,24313,92583,16504,48574,35351,91685,53210,48866,85283,17316,45481,46763,47834,70323,96156,93858,65945,58824,26511,19699,15008,38974,38677,79426,60452,39216,59097,44726,69558,54152,48517,57618,73328,15456,20436,41360,66832,56597,97852,32703,52486,24882,86331,35802,46939,37380,25088,18394,99747,74513,18879,85128,56632,61060,12083,94661,20407,52373,92535,81065,97909,56491,76367,95272,36454,32055,45663,22499,12336,19847,16623,69506,49809,68954,28651,30765,91617,96721,44097,36234,43288,76271,33517,48933,38471,63683,29693,67865,20052,27109,74762,65523,20842,84450,46533,95821,15717,68370,55641,97474,42429,78513,48984,41760,23649,15517,82631,57659,96033,39133,90476,13522,63069,62774,38414,36838,72292,63577,97869,19685,32268,74643,23222,92976,79266,37655,90484,55037,54457,19950,72286,80889,49709,42701,81045,33501,97943,60362,51937,47798,90942,35770,99108,57686,68695,37918,78069,34755,37017,63489,75608,12572,51129,32491,12238,97331,29511,43240,82164,35618,76389,34269,29756,38006,89880,20057,97105,13906,26048,16221,79330,49630,96720,56695,12801,31711,65536,38921,30423,48922,56072,67667,47413,45721,48606,84821,11932,92192,85723,99069,62540,52120,84351,95198,57721,92031,80050,15642,86155,29924,96476,59926,76732,60605,76473,47704,38221,74089,63438,61687,99970,12800,68996,78529,84942,28439,24986,71779,89233,42022,15522,51911,15708,17559,98781,21421,57579,12552,26678,40500,37506,93160,71750,18459,18688,10795,44701,98386,78614,29817,63738,30133,49006,36252,87089,30126,86591,22738,84713,86747,20464,75635,56892,54818,56647,65142,61296,78274,32321,74085,26272,75943,77891,22606,37660,53844,70724,44240,62289,82765,12329,45344,21388,50847,32307,73725,67004,54635,32944,42843,59687,91149,33708,25147,75464,22541,48771,68089,57049,79453,71241,20202,56064,72543,36945,66458,51735,94088,11036,73245,52972,93625,99853,51227,65650,74278,30789,28235,35542,76756,45117,15898,26027,10441,38662,72760,60827,42213,86088,84160,10261,73178,11648,92993,36435,16063,25617,45472,61449,34196,21556,34841,44629,11021,92025,92615,83996,20996,84272,15552,31612,70808,79457,92702,63315,84001,67977,34709,80413,19871,46015,85484,55966,55782,81933,91629,73999,37891,46575,63326,84674,95866,70556,91547,98070,28266,49718,79744,41053,23214,62354,37070,50958,83120,63983,30803,11202,81981,98170,52592,52028,38044,82010,46195,76832,31053,96676,91850,79304,65382,60857,93784,71910,42123,37094,78975,15938,92710,65796,25783,75415,67530,50813,29118,36238,53681,58106,93776,77600,75350,88702,21974,52228,28421,54088,88807,74100,53361,51832,12968,96662,55870,98855,97753,63414,94714,63720,81587,98394,88767,32039,22671,78676,26802,67012,10491,31523,48748,26999,81545,25357,69703,32465,21050,56785,52737,20001,93924,43057,31137,92424,71260,92048,52088,49012,39067,94865,21740,32859,53666,30020,97756,23053,85278,17539,57333,22962,90749,57898,30176,96021,97390,48640,32302,62484,29371,14469,47810,29825,74940,19992,18957,58424,83412,49828,25635,72540,79072,10614,68828,91815,23287,85356,41167,18900,35288,25028,99796,71116,98635,13569,65464,44854,78545,51347,38204,92222,22786,92437,27271,66735,84861,67163,39778,85444,71187,92630,88903,75379,39933,93787,65773,61539,13279,65441,49695,65418,17125,50693,49406,82566,60221,92908,68641,69069,99333,30846,44669,51763,86323,97949,23972,73410,72141,58318,38691,49649,65828,82686,15385,95491,61670,78896,15282,40387,56084,78059,16131,33282,19407,50959,27630,43775,78353,66188,25549,29381,30587,22560,35264,86602,61163,85496,21961,21332,49637,37498,96086,49063,92895,14035,68400,29287,80904,66609,87644,81886,35866,21880,74894,14849,35710,97963,88058,38295,99261,28731,47048,99605,55305,12838,64497,76318,59764,92598,48924,61773,91869,60831,82712,10375,66568,99572,93920,44355,69600,99184,42646,64637,60424,99029,96143,54962,16486,17959,44939,94903,90481,72264,54978,46842,66714,38455,72570,78248,75082,38708,48418,19248,14072,44151,48700,48668,50407,11328,60794,45646,57125,27825,52661,75803,74967,73948,42989,68530,52255,66651,38264,47829,87681,85387,32370,76790,40623,98077,11177,48548,97143,29296,89341,70298,11329,73707,96496,90702,46664,47234,22481,76425,62292,13155,79553,50093,68050,25554,38737,56518,89585,25216,47134,22083,95059,63962,87492,16681,28192,90570,57046,50428,84630,72703,56089,26540,96793,46487,85784,18482,16414,32544,58130,82860,83345,71130,54474,37750,59801,21896,65066,86954,44181,18988,67480,48775,47733,85527,14272,37407,34761,57492,20586,12220,57034,92094,78911,97171,23158,82931,98318,45108,56719,74704,29562,61047,38786,78162,66451,80330,79000,22603,69177,28510,24330,52479,45776,81972,71916,67512,78857,43290,73537,77778,98450,45849,90788,94255,54139,51363,61477,92757,66801,30726,48444,37873,35074,15834,34975,48382,14818,53717,79403,85356,32374,78928,78035,89361,80064,11128,79910,87474,39666,64842,30620,17826,21054,90124,84101,24774,85398,52542,64766,19793,66865,68457,71067,77861,33196,87507,23469,53374,89653,21526,86623,26189,81830,88904,69224,91117,47749,43990,18313,63976,50587,16692,65250,30709,67093,52673,90280,21739,35980,27187,73912,62138,61745,17923,68451,32434,63834,94350,91823,80034,68973,50377,24779,20200,55037,54177,87918,70476,89405,49754,54311,78074,18567,97198,10177,58590,59980,75613,31793,46946,82671,52799,48534,80780,94462,31127,18650,44437,10674,20238,59389,20772,48968,61747,31898,24767,57142,66992,86459,80817,33131,53702,24874,84080,29657,98112,14633,93474,42133,75371,83550,39574,30626,44920,18569,22592,58856,89534,96543,71657,71298,42357,92049,97039,86759,94050,27706,83168,78454,12594,37761,13120,83836,49653,94766,60858,15416,52261,87477,90692,21024,21188,29702,21107,46859,79336,80726,10812,37367,88661,30030,38233,94960,49033,23469,75745,28738,34994,71659,16355,34291,51877,10903,41358,78493,64605,34220,23766,67497,13577,41786,48640,14877,97712,56424,74799,46099,24474,33285,57464,14979,92781,17463,41163,94880,35120,82690,21694,14781,68188,21735,57227,39671,15352,88462,33960,31745,53633,30091,75870,96738,22202,49132,22757,26750,65501,13088,44256,14687,25195,74543,10676,98890,65894,74612,32712,70710,84252,57151,97202,50034,87616,21618,92341,41102,61578,89605,58801,51003,66362,38412,86848,20196,58333,79200,59334,38609,70127,17297,53524,18732,33289,12786,75634,44630,53416,41238,41794,28106,45811,41415,43763,75867,84456,45953,98845,36685,60023,82890,43586,46824,27103,30870,16056,59486,47591,19599,81308,40063,64412,68331,16762,80020,24534,70144,17866,20296,94471,34813,89020,89838,96586,65727,99456,97101,66200,86249,58876,48288,71594,51204,88382,38924,67535,21029,89857,44409,61764,72307,49888,67991,85343,41739,67675,50832,40607,81438,12254,18261,66759,83658,34504,59177,21000,26336,90144,36668,45883,24239,92222,24149,26250,29676,30087,15798,94507,74637,59544,60442,17596,68310,11698,83231,89457,93308,49296,72326,97905,37191,36751,56985,20058,75800,50958,48755,62571,53488,30335,12262,65848,38269,11661,28878,95856,53244,24561,50925,13137,87726,51732,63333,86747,12096,29511,81146,99311,31737,91023,43804,19677,48903,78578,98957,13826,42221,85870,80703,61718,72444,25532,83434,50291,98222,97589,62746,74180,26492,90934,28650,23181,31160,83159,45488,60490,73651,49394,66377,94167,14705,96168,56721,81139,44408,35724,53269,31624,51324,39197,14981,84186,30502,70513,15062,31986,49600,90942,32241,79651,13260,28672,80588,59170,30202,38725,83369,88064,52675,90358,39742,36901,96594,25682,79786,94977,63315,74126,44985,87114,91709,56607,18155,10045,25177,98677,17824,40932,80612,68126,81383,92752,22238,33133,62242,11488,28616,14055,73023,56509,37828,27001,65133,30439,97546,11442,22090,22629,42308,12019,34279,86377,20689,54521,77797,37175,58535,47412,30090,79025,43289,47929,65527,84848,34212,76175,25147,88411,27478,38496,96213,30082,48042,69657,90609,89193,38330,42914,84364,13403,50078,33310,73757,71325,52622,94375,24381,43329,34561,82039,99533,43081,51216,61140,92284,99045,67832,49598,78062,11685,80753,59792,21512,88736,27540,50576,93127,31968,28771,78269,43619,19124,19493,46413,28349,69127,99114,14588,97810,89659,71199,74239,47429,73291,92383,78701,21009,35612,36450,46399,55457,94890,37072,69281,60605,42438,45829,57618,64768,44300,81742,43858,91681,10204,21279,67690,21930,49838,78774,37669,80786,54092,16908,36658,74353,25289,45058,47597,63247,12176,18494,35703,25506,36863,25422,22650,67815,15934,69047,57037,27517,13260,65309,70864,45869,52996,47517,79420,56579,48969,82110,87432,46710,15635,31106,86116,87689,68326,17433,47447,18308,50976,25154,42961,66933,22266,48955,24832,85846,56234,22177,25575,87787,98791,54375,67718,55869,46798,34974,36609,18092,44314,49767,60347,91655,46283,49825,85706,27866,40072,93093,93157,88695,86281,42312,95825,95527,15934,71788,30360,91775,73977,64436,16743,64485,42441,50435,28487,34630,97618,62668,94155,25197,73946,71428,45017,98798,84689,68060,44064,50472,11814,63657,18262,17225,47100,68605,87714,77919,93861,58607,23401,44371,33480,17977,79248,85705,99721,55861,78603,13806,10342,63637,32884,26500,55631,27381,90777,44201,34724,21081,36279,71150,85860,25458,90505,95035,58260,12864,86164,71902,95509,43051,41280,81117,63118,17251,38786,87912,21094,98329,73608,93464,92016,85635,27624,90911,39335,24135,22360,81733,60344,59877,85947,52702,68621,15009,57637,86778,31376,22966,76594,19315,49794,10378,73463,97259,94873,25491,69547,81467,89926,56493,30552,54758,26169,63765,83736,89967,42900,30134,27875,61202,21953,37801,94042,71014,12404,28317,90019,28062,23371,32087,26196,11332,91065,84807,90146,84374,59125,23499,34432,28269,97086,28970,19285,45731,71291,16034,38035,21332,71174,36134,59306,14134,44953,10825,49363,45165,17739,18746,99659,88573,74752,78558,83765,71081,88582,54284,36550,80629,13854,12696,59501,19587,12200,36785,41302,68121,80279,86877,62985,97834,26745,43440,62974,13032,16368,64569,95797,95209,12226,28734,63644,84422,68252,78861,81075,19338,79378,31753,90463,43930,75570,25873,12210,42239,28761,39316,22742,57611,62943,86493,54643,69788,59244,63918,66999,96554,75893,11643,71308,18812,80478,65701,73309,14918,49879,51972,49538,59833,33147,67176,81116,95365,30917,73680,25779,30750,67287,52286,48087,24333,40035,18203,82161,33323,12476,99798,21916,58082,32093,45945,99947,75441,92230,76385,11913,26995,46450,83976,70071,81311,18790,60945,83529,62120,33980,64346,42838,88932,44494,29751,46225,44627,12781,99115,79037,97056,70239,57695,70369,40106,28281,10730,75890,90932,39867,36093,99301,22672,27062,15230,81742,82010,22610,56038,91293,33419,55923,54009,29826,74178,44710,17245,98594,85292,60083,62807,43311,39288,72254,25687,98749,28534,45983,33261,39961,83776,15770,78649,80664,57288,49116,31040,34828,10741,64198,25674,72659,96246,56983,18845,91435,81307,86318,25738,97316,18003,71279,74281,36645,17751,14016,47128,50633,62928,24827,18681,62217,86865,48867,75766,77763,93109,12337,38247,76447,41579,36098,13590,83181,62550,49398,17176,52623,53159,66333,28425,18024,55007,15400,65619,63967,95028,22564,14771,45074,17105,71408,43894,99684,54053,14178,32287,68851,67413,81883,92622,95692,86487,85800,52864,24797,91472,35372,98062,27296,49677,61186,77014,73162,12293,83306,15207,88673,52147,24455,39207,10970,68441,73216,91666,99267,31330,14482,14266,89717,82146,60844,24686,25721,69124,86095,42171,71064,82527,33736,18432,55013,77388,48948,24160,18987,16481,73358,90662,75424,82569,91967,64217,71620,18915,84636,98386,22063,26034,23426,94577,50720,27823,19045,61359,62575,82269,92039,80429,88785,11655,84620,54320,26682,14328,58935,86891,68434,21118,15968,17802,64831,88128,79924,97506,24666,43595,24105,44100,75246,36027,96867,70554,68352,33025,27089,14965,93578,25644,70753,12139,25135,85451,27670,74560,23434,37615,16795,88576,81856,61434,43484,14401,19382,74436,67000,36839,47417,71112,99440,85989,46574,32700,15224,45629,52044,39430,10490,60947,92091,96697,31218,41855,29491,36832,50356,85959,23056,43880,47690,11974,70978,78491,74113,47825,76467,40982,24056,92954,86152,50119,10394,91760,49750,43353,66558,95177,24931,32721,91872,14742,93501,29088,18059,51294,54739,97362,33083,54387,76601,15408,69129,31465,93652,37245,51695,80949,66415,53699,44234,50787,71144,28309,83376,83155,32242,22732,48627,40745,49191,74079,89178,56026,68307,96028,24520,74827,83462,53319,21318,64833,31675,47602,21395,85311,31287,12462,54435,16225,74706,84865,90272,86970,35978,24196,29700,21276,82427,29855,76815,35160,71797,88218,60962,47126,22840,71799,93361,39680,99041,77486,25020,34624,23942,88185,50022,74203,58531,44261,10983,75674,25310,48913,35369,33820,47091,32335,54443,57521,53869,95162,50649,26562,77296,44648,31893,58166,37047,34732,68335,47142,70015,20370,17388,26010,95918,68771,93943,53886,45889,99365,75949,52581,18099,54772,74637,82479,17779,21983,76034,49198,55766,51562,38000,85716,25761,41215,32334,57486,36705,43937,15008,58136,88541,12041,42119,24378,30500,26030,16415,34373,50183,17402,41769,95945,22150,58198,31929,29206,98852,67278,73047,52800,22114,82314,11718,79598,76078,70718,19269,99286,74218,99043,75289,58441,75234,41073,10558,69254,43650,30807,34961,31202,78811,12927,23280,75415,41545,89520,52080,76835,69563,24300,75355,20974,42283,84326,88286,95565,67885,39517,99560,22960,39579,47292,68440,42984,11915,89579,34103,78527,33802,64122,76766,11308,44078,25386,43901,90398,14940,44604,11691,85489,94454,57905,34340,27630,13056,77408,98113,30619,81124,38085,30547,15861,82653,97486,32515,95678,39274,28001,25909,63411,50684,38314,50949,18851,71660,11532,57751,92611,77844,30752,76055,75044,79253,55449,92428,69157,10071,42797,18438,89926,62974,15998,69505,61594,35533,13864,39502,75100,85668,53699,61980,54103,16765,73004,41917,84703,69138,84167,64460,33592,95491,79209,25682,50436,39399,51724,20339,96076,41737,32215,17282,96398,13594,14238,19975,35110,27733,55944,22928,45713,50099,15914,64037,66611,31380,55440,72452,33763,79430,32986,32151,88943,87656,74805,13734,62907,22294,82764,50069,38275,61518,34889,15141,55444,86500,30472,78916,37614,84844,96300,40902,58282,52951,77113,33077,31631,50462,60459,34797,91098,40494,58891,75020,12167,16599,31828,56280,69849,28458,18251,46921,89340,19441,93067,31033,13868,67893,78584,82453,72159,84446,32563,63391,10515,20586,67855,97820,40370,32420,46178,62507,23122,27829,36188,13576,79173,57391,13169,22295,62537,79399,57458,38586,23445,47804,46363,37932,49729,75213,56292,68842,75915,96065,38046,99962,26226,18220,43666,98304,71186,14501,78632,68997,95492,93953,49490,13863,31983,56010,54379,30922,15152,36833,31413,18690,67366,20153,45584,50771,74332,16155,24188,47446,65632,43358,18896,90165,76023,42678,36667,54735,91705,47720,48319,80665,31103,83195,85523,60420,45134,12877,56413,67779,74747,30121,92015,73754,17712,57419,71019,28409,13420,60609,56396,28805,66206,42410,30535,82901,71736,43304,30875,62171,89388,45120,99133,13834,36577,77872,23036,62045,32821,99165,26997,45063,11891,58010,94531,66733,57836,48103,17911,85292,68801,74234,85168,50152,69311,95853,76691,85729,61808,59763,78901,19226,23629,12462,99650,49688,82770,39661,22376,45159,79252,13890,71262,82350,67371,33857,49433,57889,88605,76050,59655,48310,52420,19648,93186,53305,87479,13429,43705,28416,92130,68690,67453,80350,80726,28812,41377,94154,81771,81943,53853,60872,14748,64691,50573,60084,23644,66391,46485,76825,77040,10849,63850,42505,15162,60049,97047,22632,94509,81310,94375,54117,73935,15030,41832,88360,65396,62762,57899,35906,33745,93207,30759,86539,55805,15117,49299,93217,43959,13061,93465,63121,51385,44796,88538,19705,73341,68740,13778,57618,45785,62783,24650,80243,55904,94852,47697,25224,66540,19029,77154,32300,61384,74944,99341,66597,51283,40947,15033,63096,33797,86069,11030,87082,70002,19972,69367,17513,84014,98976,35800,56928,62538,19094,72377,16802,66244,27374,62494,51624,21624,14884,53803,70814,90156,18441,30828,63655,43077,65224,21777,14786,80401,86125,69686,46727,63444,29822,62203,39303,54940,33989,89544,61141,93156,10291,74935,16936,72196,84236,85502,86820,23615,65294,55128,40838,37400,34402,24132,34996,54110,78915,78341,51894,81505,63894,33532,33594,52637,66784,70146,50873,85450,23099,15081,98308,65875,64291,54587,17151,33918,57897,76462,13623,10761,69792,25181,51118,35840,45942,87214,72120,65925,55098,97679,17562,87863,49570,28561,77140,97199,23874,62807,78845,47497,35211,55442,83325,62396,46584,50428,70978,14211,86683,40222,78286,75062,31168,81589,61136,33147,26881,80848,71251,28748,81737,68735,56731,47146,54697,90366,33301,76522,68400,63028,10913,42822,47108,95734,54116,51719,56562,62477,88275,42101,96202,90760,65480,67695,81328,57393,76725,42437,91921,81892,52548,40624,24741,50902,67069,35918,72729,19697,21285,93496,30305,90299,46474,93248,44874,77304,10229,18710,38416,67914,46072,94068,26755,74406,51054,76204,74408,65606,93269,73469,80747,44328,23533,19041,18358,47197,67230,20706,79476,71822,49948,11367,30901,73055,92870,84952,86166,78638,94449,46198,92540,18776,36994,42266,84639,80179,23911,17197,59653,88821,95880,54365,85479,65150,35711,53062,11907,16084,87164,51826,36462,62666,80318,72829,91528,51942,90500,70558,90151,87589,81635,73677,46628,48060,23090,62206,82533,38686,57920,17346,91443,46196,55109,57537,76389,22947,91853,74419,17061,64314,36287,61510,17283,28363,51117,58023,13356,39877,81897,49868,87668,75363,15466,63543,77255,53535,18360,92535,59507,39420,93013,27584,25722,62113,96705,27563,85087,38069,58557,55408,78610,38037,55957,24310,95943,61864,39758,20031,67302,18891,45798,57051,43302,59156,84221,51525,47731,68442,48611,48151,80684,55249,79828,96941,88480,38325,18627,50871,98253,85139,83819,36175,81161,80107,39041,80623,38778,12246,57995,45369,10928,96156,53069,74153,82558,58998,57290,90618,88016,66410,38353,41221,52764,41597,33307,34291,76449,59277,44250,92384,64660,81994,63702,84317,25280,83214,55374,42062,92112,62135,38019,53930,79370,57391,35082,25205,28926,86857,53413,29194,57523,44541,38333,62225,74256,29809,26161,63457,65273,83227,70340,53019,12392,76414,77438,46704,97476,23427,54449,15157,25990,56627,42518,97164,97627,21512,53894,99761,40242,59783,12278,96347,80645,67859,60154,97779,10568,87261,12650,53061,50519,97221,47316,63550,84792,13692,46289,80894,46302,61079,82513,27710,79381,53962,68606,21468,50532,11053,70038,25603,34099,38358,57522,49307,11013,62695,43998,18173,83375,96043,58188,60720,11628,21829,69981,56688,58994,80308,73948,99217,92737,88615,49888,16335,25360,23821,16819,81849,12677,54127,33115,81787,11470,31729,92166,58958,10139,34894,62733,59633,45289,51548,70255,50125,73475,73371,90378,55753,12273,80887,86263,32520,22133,46939,32271,11128,91516,26580,76462,34009,56949,76202,33427,57829,41756,69433,13031,33425,99806,37201,74197,18634,44226,13485,84213,85621,91628,18715,62627,68123,61712,65069,25279,72582,54078,36796,53969,57968,67520,46916,36693,19289,79461,75624,51116,13878,53280,82109,19151,84546,93645,81636,55897,12647,58821,57338,71578,31918,17205,27055,34466,41971,58682,45344,84768,91367,49290,21250,83950,21603,78139,60493,26350,42065,22085,84989,50864,69675,48839,53684,39731,72967,12275,80011,60178,21929,42193,12534,37586,25871,57458,58458,80549,88192,90792,41339,34736,57606,22484,56424,54668,49284,55707,60508,50660,76223,60888,13332,93965,53983,64324,71364,15161,32340,51473,22435,59684,18190,46874,63480,82772,51865,94554,39271,86626,43991,79003,68212,65107,33385,77954,39808,68170,49205,20483,70449,53841,94419,16623,83954,22521,73948,93663,72386,33414,19697,73370,45101,54430,93255,71011,11264,29573,93324,29723,83264,29076,24741,57568,70296,79489,70169,22315,56840,33987,53594,75862,73125,19725,20918,47570,22935,75329,90338,76703,51827,31456,17002,42003,97930,41701,42546,89708,61295,42977,34674,52458,14822,12149,74250,95857,59781,29539,25202,78518,31443,18053,77013,44549,42124,69722,28987,17071,27798,53280,33796,22268,69408,60739,14253,53129,59982,33058,58103,34133,58315,62780,51878,20688,84772,94904,64336,26162,80321,15522,90267,84679,76420,27949,49229,20461,52344,18938,35958,58199,11027,29841,43356,60961,77064,79060,86855,95917,42732,81667,67077,88662,50097,42777,31512,85954,58476,80484,61873,99661,26676,26042,14856,88606,92366,11496,87438,14608,66696,63444,56848,82604,10874,77122,12853,79018,29560,67264,59292,36062,47725,18329,38322,89555,19398,10258,50733,38614,36636,43343,18400,94663,26642,47109,86895,54866,19779,73135,62310,59764,48952,19858,90412,80220,53406,55412,83995,53584,12303,64661,44306,57642,40340,38384,59424,17616,32697,62328,25039,89637,40007,81011,53231,89306,89739,42229,50480,60991,82584,63838,66134,46968,68539,49398,55700,62451,45578,33576,82273,75215,20461,67760,58307,98753,74477,80419,44299,67143,98475,72624,76744,25946,17530,49121,39883,66018,85837,12028,72699,58621,33547,10279,96756,11106,90659,77379,53717,94490,51566,32421,79194,19506,98702,26904,25904,26717,80223,16492,33131,13305,79641,50499,20236,66999,18241,60253,82465,75155,90695,48475,93558,74355,45091,18451,12067,30095,89094,26539,82996,44576,93583,79287,16975,89612,45753,22591,60629,41164,88574,74133,21976,17601,33619,53143,96298,78159,81059,29778,77388,73273,86029,51142,28643,74628,89316,82348,20533,64744,66765,80757,43230,82693,37724,83282,70874,52913,39097,76990,98542,71461,52815,92585,58326,19293,49350,74178,12902,68514,67917,48734,33421,13988,51799,76204,47397,44719,81468,86486,61957,87754,93166,66889,29189,46091,37047,78501,71491,55223,30068,18301,32670,93410,62596,79925,35063,59479,83919,98634,33855,51304,59528,16662,43405,92180,53178,13210,49303,22058,83429,85768,83651,81325,29162,64152,80810,48001,87601,49082,14220,23870,80858,97784,32867,67181,51050,44066,18368,30753,10289,16270,88249,49641,78639,26608,95864,77469,19689,58840,26538,22466,71221,87146,39777,59797,94177,42685,11259,82387,16423,39977,43821,75494,29378,64477,62275,92798,16707,13256,34286,22579,77375,41432,83683,24567,98316,99592,24981,41689,31659,82605,65566,11021,48982,76505,85202,29205,53951,10310,23640,28358,83653,47012,19153,57441,64484,20709,18771,52285,21870,77784,28241,81950,99193,36493,42924,71706,43009,28183,37012,18476,42625,65430,24938,93947,37556,67523,10111,37549,50142,43856,23848,65696,93125,36839,63884,71445,57841,16820,99294,44181,69181,99014,49824,76171,51160,53008,55289,38532,54384,32188,91719,62351,70475,74454,46648,30604,45785,56179,96333,83213,14468,41124,89992,72284,70423,12530,92372,42349,28970,15999,79012,94746,34584,28370,10540,68025,19422,68482,91278,64161,38928,45149,55534,23016,86652,38601,23245,39465,74668,85031,48228,71455,66580,65969,19770,76892,96736,58011,71014,10897,69236,69673,26447,65803,28591,39928,26367,39314,33490,16213,55953,40460,77538,72260,78221,91581,56535,62597,68174,48831,60719,93100,22351,94748,76720,99122,65297,91565,48470,63380,64297,12434,27137,16821,52728,21208,28966,30472,46381,56826,60016,19751,63933,76396,56431,49271,43220,50036,76577,98584,16968,35385,10561,40147,58061,40531,30985,24267,42257,19785,20515,36154,26366,24401,31137,15505,91096,46459,53914,92272,37886,67627,29280,57017,71309,19677,43684,22653,87101,33480,34316,75552,81039,20184,58823,84830,59291,77333,72114,39193,42602,36873,20970,71825,15189,58656,65001,66586,25928,81589,89913,86366,40668,47604,90083,13291,14775,82598,90117,83029,60147,85350,96449,31867,95177,51817,76293,36671,26408,59357,78259,54044,21758,31552,22076,86033,78946,93690,55864,67097,84197,38709,37723,24643,67354,78726,40513,30383,96327,86263,78711,96282,36789,59294,49747,77989,61959,51898,28361,57212,35070,56492,24826,62505,76637,34585,98847,76937,27628,50213,47539,48927,42187,26531,68460,71456,76951,60852,67996,30883,79660,42058,71713,94491,78847,50920,18019,60133,67212,95106,66902,81217,54416,80949,92446,64741,75950,96356,83112,62081,25699,17823,21579,87474,43402,73592,60636,48821,63915,91029,24762,66527,92746,15970,68016,64450,67168,97987,51550,36755,55952,25073,44037,78403,78844,63147,81884,46620,22644,89143,70942,20961,77183,42904,87748,76277,24745,77251,74085,37128,28651,96909,90905,84658,53986,32369,75966,63336,40161,74399,50400,45084,34814,20664,58703,42969,39703,12422,40093,59282,96744,51419,21291,17509,52301,52913,74125,70415,54043,41741,14498,59057,86557,33423,46224,54029,52237,54231,57040,28269,38092,45587,46356,43198,93270,36608,39801,38588,50266,75449,72626,10826,67806,54194,40236,49786,56881,13374,68307,72710,44296,17765,37914,39727,93786,81403,49379,73641,71249,76865,64149,22910,71768,54910,20530,79319,54227,40481,60997,57817,59400,34303,38714,61984,90967,42724,13835,80334,79307,70057,66654,93035,33772,73550,64284,65092,33189,47651,96023,93670,23514,24000,33333,84418,59797,79520,57004,87150,57929,49065,49105,71723,56394,91451,79819,62598,81977,26253,74550,90224,13246,37726,24229,58318,85237,33967,21526,86629,79690,84379,19868,16346,73419,17198,19398,44454,27413,73023,12760,91690,18962,10354,78673,50594,36234,42056,16370,52366,48152,34242,57433,52483,85046,78170,34268,34163,29187,13496,32214,12871,43708,96421,67373,84635,70680,89972,35761,66412,13532,42310,64168,64396,78543,40082,80500,23569,81123,15570,64278,45646,83734,87377,29286,97837,85869,50384,18894,37760,12447,79944,50186,30275,90386,26994,46216,25127,89203,47917,89320,12324,81726,16090,99395,77061,58767,28047,60296,78801,83297,21800,63459,86661,34905,76345,28657,93951,69804,59061,11917,41561,43499,83859,43999,17604,26274,57133,83505,10721,86376,76706,41197,35609,32013,61709,64271,40078,24331,93997,80845,69553,38411,47578,31631,84558,64376,77333,19564,58422,11602,36031,46284,35037,21546,18942,15304,21631,31235,45024,37219,71614,28870,18557,89644,87419,60147,43052,10773,12223,27412,60905,31891,86755,64177,88634,12357,63555,13631,75400,38109,84785,76430,80419,59514,90807,17608,21160,52366,59820,95222,58858,90693,58700,80766,44632,91461,14432,42207,27530,79375,52061,74498,51120,82328,73946,89354,97761,80358,32433,91838,17652,40512,48433,73827,84650,19786,83693,32972,75163,67301,42713,14436,29354,86792,83668,50660,82102,31603,86815,31428,44933,18269,17353,24524,12124,65251,46062,38992,88286,78049,68703,43656,21929,97269,77748,10880,88384,93756,33677,64158,96128,46813,75445,75822,23406,21428,66880,87240,77849,78517,44479,21759,34692,91220,61246,10156,10259,92853,43752,40388,75526,85721,40833,44754,62283,31747,12398,14557,22876,28242,46011,98182,43866,37881,95605,47222,23488,44570,37655,17572,58275,58200,41735,40890,59296,77492,14548,52646,64755,91530,14787,39705,78358,19374,74244,40812,51157,71789,84429,96875,72047,72012,37485,77678,78625,46466,85869,92258,12914,75688,85912,85284,65950,80177,83439,51412,40445,39564,33747,21496,37814,85365,74692,97507,78123,74906,57622,86845,17956,36125,17155,27782,40428,57943,98851,72211,73843,32201,14278,33980,37753,79168,85840,10740,28306,22885,21367,49704,69380,44297,46112,91258,31406,29058,52208,37327,36362,90441,30286,21683,62805,48078,62026,81943,45828,88968,84020,46028,21594,77294,27911,74714,49534,32150,62503,88480,28926,88651,71461,86140,91536,74464,49427,68881,62096,71999,43127,91078,94650,12242,81621,66419,11282,20897,93305,67953,48497,41851,71951,74562,30350,57915,16798,35109,34418,58091,25529,45503,37263,72352,96726,50067,67037,72909,20018,69072,93672,29362,73070,32846,97793,69117,13988,38371,66370,34666,77411,84409,53953,54163,11980,44117,46166,89183,89011,31033,46476,61222,39087,15984,44384,82027,64731,87181,49589,12219,79535,61743,34284,64596,75756,52889,98971,88037,23387,49120,16292,91529,70316,83428,28388,83369,13356,18421,90713,98963,82972,67342,30980,36856,66219,31944,72376,24526,52419,49083,39738,12815,22156,82280,80112,10643,57794,77781,65454,45022,48179,10377,61106,34546,71544,72726,76146,34191,16173,70829,13010,52387,17783,33015,55560,24514,65237,55854,79715,14986,20813,19866,97020,87775,11684,86953,41736,45862,20701,13893,75670,22663,80141,17491,71112,71751,18411,92520,31600,71194,83631,29418,81539,76017,30151,39601,71952,44912,19907,97473,51867,38572,55346,16789,27891,32430,40319,20686,46425,44031,35800,77262,82746,14156,20315,10040,96647,65449,75298,42480,62283,32383,21689,46642,28917,36927,93959,67350,19395,37750,46079,85011,54399,50214,94768,98642,34335,39499,47954,52862,50964,37661,14573,81546,13863,39809,48013,96813,97954,58390,36268,40034,25454,89270,77950,93274,16932,80645,90225,49936,93465,73878,18072,57356,64185,22339,97974,43798,72775,14280,92043,34241,91665,76749,19408,93852,99058,76020,22305,62189,28774,76700,88879,17831,34274,17390,16484,38117,90356,53671,40634,26418,37609,25479,34013,15340,59348,41595,84465,93715,92165,50101,45708,33718,40122,70951,26486,46556,29367,35244,15358,30285,62235,64317,74427,95964,38754,37148,19754,51418,76512,90710,11295,54887,53159,87034,85398,58029,59658,60219,80519,65309,90810,31861,50878,74237,93013,92379,95934,71829,31653,95994,30668,89010,86538,23323,81686,83117,81315,54847,41341,12478,33550,44807,89792,30005,73577,31277,25917,85708,41240,58769,25429,17942,51895,87848,94296,47804,87780,78085,80044,33589,74433,19220,41309,62100,66072,13024,97861,46560,12153,73084,62257,99231,59281,88890,47769,72147,97023,60392,92885,25598,43888,76369,21118,63785,26083,96507,75822,29983,81240,70055,19473,59670,27235,50363,96539,85899,12927,96943,17771,90164,16754,26602,20168,61923,49278,43795,48498,44045,20721,22325,19670,85817,33084,37480,49744,55514,13079,84473,62989,33789,82917,94552,82404,42893,70846,44910,77969,75083,89361,79784,55952,30879,54862,95798,54461,33357,55367,94953,70717,57513,76829,16823,22005,71846,31006,85558,95610,96023,33575,26285,31799,98905,27437,78616,67046,31298,30064,20208,62991,71984,94768,86436,44041,73826,25258,96639,92012,34591,47927,98559,44927,45865,48078,31354,41724,89135,43545,47904,60385,56748,98912,64000,55483,39977,27900,42277,90841,20044,71431,89715,73161,31041,38306,94190,78598,38044,47917,26759,72704,65041,32545,24527,37284,33489,93975,93513,15577,22309,91126,97388,21837,66657,99792,92750,68127,72482,87072,83657,19314,31409,15239,64122,79547,22331,48273,78891,16752,50633,27201,52489,74261,87727,61010,46510,58342,46106,91922,68148,42773,98383,40710,44973,96052,84106,69122,40140,68169,16989,33005,43142,55488,44117,20372,72494,92507,22236,18502,95862,42583,89854,98429,37614,30884,52625,54654,75016,26432,54871,92923,42592,23313,37283,92568,99523,37945,15144,10902,82035,68777,78484,94991,17274,51718,26414,43190,43782,41381,53967,52919,97371,74031,29216,33563,91975,49998,81574,41953,60667,68313,69068,32535,63502,23410,33524,58557,52277,56969,19781,93991,10046,31499,23403,83846,73808,85111,13917,31216,35273,61809,73235,12583,38159,27884,72305,25880,83532,62192,82275,62684,31174,28273,77913,39035,16169,53722,67062,59747,80729,73550,29789,35189,66474,53577,46351,58672,99897,31461,86370,94332,50041,14733,89627,61348,17077,56578,50795,42400,99423,41594,60560,25216,87604,55759,62324,33256,64135,90144,89341,46597,47147,82224,49866,46539,63585,32954,33402,57329,83430,37336,84253,34320,93955,12062,87500,38840,20394,95655,10633,48888,21763,59890,59111,31172,59246,66732,97262,96100,50026,51268,81823,81397,62364,55199,45909,22111,34496,72063,52012,19588,53878,18926,22066,74470,33146,15716,98596,75886,96676,57605,72395,44017,29731,24767,86714,91700,71870,54967,33946,36884,99315,80838,65836,53449,77288,47517,53551,63056,90553,89634,90345,66691,64996,58636,20169,85718,24022,13895,99463,10251,75069,27374,18993,37646,88169,27032,21603,87331,89156,66241,79499,68189,68549,34296,19719,79849,69679,73953,90026,82255,75863,90269,86999,80139,83634,11891,52770,31381,54241,27759,49028,71295,57462,12608,67089,24241,68391,41498,17635,60687,88279,68939,65889,18282,73949,68215,18672,88958,47626,52587,16589,36618,43337,11729,14531,15218,33431,84050,33445,72070,16733,32573,60677,60194,44656,20086,14234,36225,83133,40973,11472,96326,59687,12134,17366,96391,15026,65555,61737,53374,46021,98885,55679,79626,87952,48193,89940,90246,26816,39602,14818,61303,42002,26629,90096,35323,70974,16038,10738,85580,73108,34274,43656,33829,67502,43793,15102,69217,85470,81371,77362,63862,52616,93265,55971,31483,65322,59734,15934,77449,86089,66940,96259,62241,41265,62140,57704,71482,21805,54072,63331,84718,70240,39845,15644,94894,15316,79072,56758,22785,20157,84514,52374,99478,63175,95576,38839,10295,99324,31950,17317,54072,55132,60821,26686,47333,84033,51067,18006,61984,28883,55517,30132,13872,26367,48442,63185,71632,83711,22725,35537,85541,95109,59017,51881,36784,80492,15713,85961,81111,65680,23570,99822,27049,85252,86290,52842,63795,85626,38454,82013,80085,98577,21170,87693,28358,72381,98138,12404,27441,63778,41729,83109,39205,31735,99100,41361,88797,21653,65143,48229,72008,58690,47180,80655,42834,97328,79373,85308,88263,45578,78180,74947,66204,59676,36125,24359,16473,44134,61043,25081,32406,77584,72941,67592,60480,42024,69293,63402,70887,76863,34489,74249,91530,30868,50765,67819,87966,40165,56018,29463,26017,18632,89853,48455,67297,92964,24653,28499,21950,10515,17994,78805,69581,39416,89574,88323,17524,36124,73549,18608,83203,57266,99020,17494,20221,23339,92016,53388,69780,72792,32404,80794,14929,59251,18072,14653,97076,22396,18308,18985,97943,30995,21817,71020,52988,98927,14879,16677,90986,11523,55719,32048,54921,54360,39563,14563,52666,43536,21255,28381,24166,27890,60812,55745,52916,57170,26133,38762,20333,85979,27677,98946,95074,10702,56508,40237,93667,18024,85443,63453,97291,17690,81495,87125,16022,64623,51818,68656,73801,40668,36477,40040,58795,91061,69606,42230,60803,15328,13378,47802,67883,41633,34030,31396,73567,16787,60336,81719,42289,32877,54189,41230,16279,33787,17465,31058,94282,97509,64330,33566,12591,23047,68810,32035,36867,71865,71408,24726,68043,87292,41298,41477,33561,94691,20167,61028,53895,78388,19174,53603,82868,85189,47398,51665,28859,63838,80966,62984,61810,25076,70823,31608,97148,26314,68451,57491,29652,30980,47311,57729,29504,25741,71541,38735,22940,69358,20583,33659,69091,49240,26517,39993,56215,39108,39533,94802,99612,57420,71569,11711,37345,48440,70395,41872,65491,90708,60161,63500,34380,46731,73527,40601,14658,62040,38088,57635,29730,10601,92084,46312,71309,90717,59027,38731,22066,51501,78299,88988,47210,49610,34264,57867,66033,16389,70343,75371,51558,92531,96748,48922,26164,99114,66568,31640,76698,67908,69696,23526,96484,91392,88631,72138,83961,47466,60908,16932,36439,99516,39831,59617,71644,11880,56634,27192,78894,37161,65259,56996,25209,51893,56482,71681,67982,61258,22282,37692,52236,79913,31975,79079,50006,29292,15155,74310,25700,77329,36093,26275,48852,50701,29810,89957,59673,62901,10985,26003,67345,21821,44747,21408,89150,72910,18238,30888,23621,65139,65574,85488,78780,87432,77364,47416,33314,35250,85153,66099,24927,24800,69741,33545,19816,38566,66149,36096,99906,18984,76620,59760,57982,48508,50154,46926,21214,38337,82255,42691,13842,24017,78610,20396,63042,84490,68695,96973,54794,84012,58638,59984,78399,99589,51336,53479,19757,80531,35427,43050,71272,17000,60106,20746,40398,96432,46633,85088,25007,96801,64218,72286,85427,20195,59531,16969,66550,43150,38297,53928,62985,99896,59995,21487,33507,63147,20603,83385,79654,66824,23430,48071,47668,15798,93465,99163,84318,93545,47316,71055,74448,40192,97773,13417,30991,31615,12714,30050,45087,52202,41456,38770,98843,35188,62602,52477,57451,71453,26641,12468,98708,24743,85500,90293,61702,16500,19836,50317,38803,43667,74388,22808,63034,55519,53073,47069,10952,41987,89749,21447,51693,83317,27367,47341,79337,86545,85390,77604,79335,57426,17039,33186,50026,21070,96295,61521,80688,31658,40029,98805,11254,28501,94538,95679,24128,71137,32347,47343,22598,90174,91394,80076,54108,47215,93022,73447,53495,31401,89228,97011,83215,19388,60278,30920,24255,56065,45149,39976,74908,75692,78880,42193,50839,81435,63183,65461,95446,51252,70800,39951,98817,83127,24496,45183,76925,91065,42637,56220,20656,39851,12089,42927,15267,80333,77691,36318,34772,83639,18656,70093,85551,72593,72763,60007,20235,61365,57409,44189,35046,75800,14415,66947,48909,42286,33759,98002,45790,75063,53021,12019,32977,41784,37260,74368,20750,30231,43078,64819,20891,70995,15435,17076,12684,53905,37680,56055,56449,64419,86058,72673,82019,13895,79036,15398,76369,74722,59822,40439,75386,77266,94886,23156,81670,25001,70283,69945,88523,23751,31652,73534,63731,49042,52831,24002,30752,62390,14366,86473,76360,18034,52228,22887,18813,64987,35166,35847,66825,76088,32097,51239,31969,59109,51394,56154,23497,42081,70170,78383,62838,35807,16739,58568,75221,83853,46575,12076,57873,86824,93131,72310,13527,32427,58570,54715,32038,33631,72936,99777,27545,75416,12806,84279,23893,98095,56005,44263,34669,26829,47507,89096,69546,56975,82159,64241,47223,15620,98509,72046,51092,47406,50163,82317,92038,52994,15408,66632,25253,39638,63601,38796,15336,19793,32274,98773,86631,54057,93764,42568,61390,11868,25204,17022,74537,40202,27043,21261,62108,12065,79250,40475,50005,12501,22701,28788,65344,96799,28025,73517,50380,66185,67633,64592,21253,32554,29380,44024,20530,32268,52017,77577,64145,15590,43314,23689,24703,65055,27665,34943,77655,48194,55962,31737,29897,81093,91214,82174,42992,74964,76199,30615,95211,32486,69379,57458,54742,78697,31237,26561,29565,48124,33377,54900,32976,68253,82285,66718,86946,22389,59834,49613,24217,99796,79582,25122,20255,77306,16733,21802,14877,53845,63248,49528,34247,86304,79728,41818,99081,93172,49981,14974,23589,94118,58712,58697,45664,12461,70516,86120,87736,59070,43246,32038,80094,41523,73333,38332,86914,57942,74424,45600,91689,74164,82582,93232,91664,21312,20032,36230,94954,14033,58350,49432,93795,72025,97894,16697,93895,47916,48234,18028,73558,59406,66226,29195,14990,29415,18168,91456,74074,70512,52947,52569,73410,19204,40213,97534,77226,55638,67353,60088,58309,70002,52449,56477,36436,30224,13734,50668,93023,54023,82934,93888,55272,77975,56724,10542,83135,38557,75012,94346,72072,16921,15894,56643,55607,87615,35144,57600,40855,34240,69145,26306,24532,86064,30895,83150,76094,30268,19871,23947,34006,27019,16344,18452,90145,66599,87630,50170,72139,73688,13588,64605,73791,34437,62797,98788,65625,75833,69941,55941,64085,90624,81422,97200,38150,23188,86808,92909,41751,23799,94864,15953,92253,81911,70292,47584,98532,97625,93961,70408,31292,90467,20217,95887,30791,60947,36237,14224,62441,65581,68374,46180,33019,99933,49031,68583,18703,79645,16428,46036,31443,29303,68049,43014,64630,27443,25597,63014,34566,14413,72011,11405,53900,87266,97414,85402,34988,76921,47062,69716,34534,14648,69521,41997,59416,76253,58973,88882,30638,17291,60063,87472,76159,33389,52483,42853,38456,47821,17146,98525,60421,58673,25521,40634,28069,26447,10487,26211,79335,77324,70192,38313,86272,98107,79547,13981,29139,26875,96499,23565,92266,53813,83909,84985,96923,99220,86955,71338,93216,95445,88013,42285,96826,81725,44940,38016,77449,86763,75866,72042,98697,88172,39105,40916,20242,60995,11744,61465,27464,41802,71905,91278,21178,24033,49589,31769,69886,34761,19981,36038,18083,11148,85874,12836,23496,80050,27789,38731,10372,39079,85069,64108,50092,79016,61968,93114,29667,68701,98601,53604,11330,86751,46818,40168,21444,65454,52626,55740,63969,23949,74135,67542,13134,35409,55171,19325,47384,15547,56524,82021,88400,10509,27121,74054,80805,73784,22851,76104,82045,41317,61858,82996,28004,10633,34435,79899,99924,92541,72835,31301,10419,56126,52932,63022,62227,44626,61455,14941,35535,94039,57558,50361,99845,92847,51750,28709,10815,87975,19279,25315,84606,22164,11774,13467,48467,80593,60293,56488,45716,21607,69608,22924,29834,66973,87600,30407,39013,35563,45177,63453,82668,47782,16706,34104,78995,18287,10509,64845,15887,64649,63403,32200,89381,57351,10119,16129,33266,26331,58157,49088,93836,62507,99392,58448,26874,39949,51848,21613,57343,96652,81221,75392,37447,93270,34987,24166,75214,44590,33515,95201,40035,81846,64025,15364,16110,39514,96608,19663,32675,85536,33892,95879,17113,94541,93523,11201,55142,22812,77480,25684,32775,69620,58882,89970,97069,24113,41298,55580,60589,44836,83173,89315,28814,97549,48384,18393,94108,75353,24910,64043,68699,47484,57322,24695,50244,15827,84850,81487,60921,56218,55409,67171,79468,83302,56308,36613,62221,58000,31529,63513,77722,98124,17070,69958,19875,29020,93539,95304,78924,54838,42260,40610,59742,51261,26782,81819,33523,44768,84032,87185,59523,23990,28991,84405,16151,93072,59668,95254,62166,46894,46885,27249,52510,18436,23343,82993,77133,58317,15715,54029,37677,66518,76782,55188,96025,29289,59014,80307,71379,47668,35423,39790,42626,79453,67634,88688,23091,60350,63485,71033,27909,62321,80492,42233,92324,92863,41784,58135,82897,80272,29406,33156,18819,84876,79065,17005,62222,83867,98927,40804,84762,27138,81071,96355,71044,47906,22871,17021,98367,20960,61787,77934,61019,20106,68179,44204,18790,83958,33548,94738,71510,20865,29231,64642,38280,97543,50111,68013,11219,50290,94369,85745,65178,46241,48918,33342,94871,29601,95525,79900,50691,61017,94367,51158,31850,32385,75131,26004,80827,87249,73632,36165,30115,67196,39284,60501,77926,68275,24794,93525,37362,90713,99120,64233,51262,15631,99933,51749,65316,65427,80529,37672,80750,72886,27383,78483,76589,95662,31238,80535,99126,11777,33372,75907,54265,35283,80002,91802,97698,58996,99309,32304,29142,86826,89621,10508,11876,37188,75212,71479,69250,95454,67778,77253,33616,27283,73265,61276,24470,71008,63481,23832,31012,48188,37246,13020,35838,92663,46290,53783,36410,21792,15060,38251,31417,35162,24109,87478,59671,28848,61066,50086,99370,43920,56564,24576,77026,60772,46692,43748,43439,35137,59863,30335,84575,26996,33082,95524,77896,62940,94958,75407,44023,81149,79641,78881,89342,50891,57902,13119,66137,50861,51448,60880,65666,93821,79594,63187,76835,52622,24717,47324,20592,53103,55207,81736,28068,61735,89168,72104,40239,63575,31221,56456,18245,91524,63690,25795,40923,91941,28894,14605,75201,34200,30228,44138,86658,59506,29029,10922,39996,11717,38262,92410,26583,15552,44396,55110,69924,22387,75671,61266,68219,28739,31715,54658,70817,23544,59252,64816,47115,38708,48104,77153,52449,34264,49276,74227,91602,87495,75680,66087,44246,35832,44854,64880,29774,67469,42150,67860,15904,93236,97464,37195,74262,66777,67005,81579,62602,42861,59051,31014,11141,86324,86457,52966,30668,93458,91921,45652,48433,96522,45934,34571,76300,93733,49626,27608,86668,56509,71884,85561,87438,33666,10202,15877,98495,13572,56311,28242,14773,97887,63367,64229,66875,84474,75192,69781,56508,85918,85278,51729,43405,93249,50787,57745,72540,67659,28521,14131,23129,89589,51258,67096,42666,35135,72735,46183,34030,15929,15290,26776,81034,41301,97331,62682,80348,81408,13674,46480,58786,40110,72143,93049,61460,63149,46198,45320,48070,11604,74445,85919,10004,15220,89863,91245,29441,91527,57651,44455,21040,52954,64831,33914,94293,43713,69740,14798,58291,30376,45840,90972,93779,96086,70122,63222,42217,58767,38378,87441,66027,38618,34552,10203,84979,76887,17606,20459,17038,99880,56714,37501,75062,89708,26447,17089,96034,65444,32703,65344,87224,83250,23183,12408,33641,34437,69459,85876,48968,33620,43420,89909,59051,18809,18821,83546,84927,25856,25358,97068,45883,63865,58979,18827,62345,21305,93791,83741,76213,69217,65889,91579,83986,56323,47248,28911,39130,42416,46623,89121,86600,59405,57611,86046,76728,99769,74106,35835,37545,89947,57194,58672,22757,29219,66838,21091,84843,20164,52161,55163,27113,94001,44275,20405,91609,53717,85993,52882,67807,11794,45489,47823,26247,31778,55007,69371,59048,37317,29273,45519,90584,69181,70828,28632,69724,24831,41476,68257,27517,22360,13042,87781,78584,82636,79200,29814,85496,72555,67668,56243,81456,92072,47095,35716,59789,83099,42034,24489,73704,37986,31575,93084,53425,66600,13933,51198,62380,33641,27895,99433,17780,48435,34229,40028,82814,75660,75708,76097,29226,52976,23616,17838,56426,33703,65545,25436,84367,86881,21501,16559,71777,64325,57434,29236,49207,60037,16305,24230,30236,65195,47913,64553,38324,22065,61881,83602,20126,23122,79171,73574,38907,64346,58260,69632,14661,33037,91930,15832,39968,67686,46742,86053,97990,42450,20523,53303,37971,20223,73833,33516,73838,22041,81325,68677,62845,54006,60177,35360,70057,19304,52820,60160,83616,92644,37008,24288,22017,22848,71902,41632,69985,39341,47413,45282,17981,80286,69606,64820,42741,67696,52692,59366,48319,40235,71625,33344,42138,61933,91682,95758,75536,44924,16541,10228,70287,71265,91693,64340,38230,62531,51698,32067,76046,67313,66042,43258,77709,47250,60138,83506,82568,99607,48729,72226,84773,35685,89711,17222,75272,64712,12425,19371,62484,75107,73598,44647,93976,99750,39062,35417,84581,97158,41772,71766,77454,43572,43210,85310,65232,62631,67754,86833,51525,56997,23423,35785,23032,34580,81624,16000,52592,92006,27267,30397,76322,59364,68717,65035,43004,20180,49334,73050,81919,63060,82276,86922,15218,72444,76348,58290,59441,87138,45177,73624,67079,62795,21261,68555,40204,66481,97157,14790,92528,56343,65999,85277,43104,16210,87952,65005,53025,55357,87775,81624,10649,46980,27042,25769,24266,77076,97428,56290,51518,81985,21630,35061,76166,94126,74028,73302,52981,86117,68577,72189,16998,79385,56494,63999,33112,21767,42763,26142,61821,65869,14085,22134,13521,25692,47348,40606,61627,21463,77484,11811,67536,66770,66307,32342,35940,60454,91542,47543,98780,48712,51395,85491,52960,13413,16296,70755,86911,81097,49035,78418,50559,85821,42115,99923,55027,36332,28482,13834,97115,12701,76775,21824,57004,71611,18280,91172,53019,92498,46291,38486,90725,30166,11201,38386,65344,86646,99995,69615,90297,84119,98142,76036,33013,72732,89452,56427,26882,24250,37273,96841,73375,35351,27103,53391,51417,19192,58543,21496,42924,67701,43623,95165,43787,73413,92251,52345,50478,99714,35883,42793,71275,69938,22675,25642,51822,11725,30910,52593,80838,86355,13937,98693,71806,59827,73679,83897,32801,58178,13847,32599,45696,66326,88434,61856,94535,74335,21495,90559,39529,71598,61108,23098,86829,46164,77714,25485,98475,68204,43400,87505,76826,24113,65422,65506,52867,35393,97798,92038,57934,87936,68376,36574,75572,86574,42629,73467,32466,69782,40838,75871,34642,81283,35446,41416,96707,80652,72555,49072,53242,78936,86035,68960,66305,99693,24511,55434,47424,29761,70893,37285,55318,46821,61556,85647,44087,55128,79263,47196,66486,72891,95277,91441,25180,77619,59187,70855,81796,28244,77148,84855,81641,22034,18618,47143,84852,86203,64800,67122,82551,29694,87397,43609,34599,55513,52112,69601,12585,63435,43409,18516,23399,76939,81095,39034,36726,67754,82793,95673,98653,68705,10103,58140,81691,25084,31343,83423,77645,43606,91664,93233,38318,76132,62089,14071,86248,24912,71378,56674,63280,91455,82096,98703,73329,56647,85144,94546,66609,35034,38555,47954,71162,22538,93254,97551,37335,90530,52955,58348,56883,34800,42224,95341,67928,38848,97246,94067,72329,52877,80228,79903,34692,13701,58013,37499,89578,61868,64310,39227,26820,35289,17126,51556,89929,46050,46099,83070,57478,78275,97137,15761,16483,50561,43416,41496,27889,85273,68579,81998,81465,93785,65791,54864,24519,62941,97212,96214,47874,99500,42783,10828,23289,79886,42245,99876,39341,50026,73008,92673,77081,71643,29160,12334,26274,61976,50892,56901,79879,80944,13005,40730,95993,39162,69251,57292,60440,60670,29705,24771,25349,27262,88145,11716,34724,75698,12233,67163,19523,42214,19843,47958,37452,82896,25579,85015,44564,73836,95371,80711,40761,90007,72958,49975,12982,33575,96122,98539,90047,61321,96060,77804,88446,43450,37136,92357,88416,65021,49893,32176,25963,89282,61272,93415,55084,38793,15980,61765,50771,34411,36697,19705,64050,85306,47890,34002,37915,66593,98741,77021,29683,10213,90997,30259,10965,18523,94645,20190,17604,73285,24765,79526,96913,59446,39221,44971,40763,22377,92892,10011,84917,15942,94348,13553,71822,15548,88877,38627,39056,78859,29314,37346,96203,59567,84595,25395,48061,46483,75607,52368,68899,75083,87886,15489,16033,74144,80966,12277,71005,58210,67371,46184,44470,61741,28502,66573,48207,13831,52890,29417,45219,45578,23196,13316,63678,92654,77327,32700,94152,39304,77049,45762,30281,50228,40906,92682,43273,28634,33878,59382,43951,85183,82385,92351,36772,39020,85349,18432,86809,20571,27527,42089,45140,67865,97978,75043,85528,18038,72603,19904,45094,72651,50102,72938,74784,50970,47296,70376,90799,25367,58167,63165,42391,99527,81827,53016,90198,62797,66956,83883,75499,25518,64521,98357,32904,21804,93933,49375,59229,17606,44631,50370,47040,21866,27028,40750,84771,12658,13701,44277,46478,52683,26523,14517,66863,14946,69346,66199,52484,13425,67137,31910,39577,44850,60104,72919,44049,21971,50831,78414,99345,63643,34248,16115,95923,17405,31198,65123,27800,33224,88701,76680,81725,15766,35395,45417,59240,31165,67244,14869,68168,41395,21874,85636,90369,41654,78503,64350,44527,90808,97179,94529,76566,59526,65545,13487,89675,30667,81177,84363,50214,69062,32081,85813,80762,28373,33602,94594,96124,98710,49006,72850,53177,45814,95447,45588,12566,55017,22890,77596,51099,63529,31365,84339,98865,41002,60299,94493,29481,36373,46668,27310,25574,66447,23115,25039,69472,64541,71838,45940,96347,98546,99941,15024,68858,46174,43935,26931,75075,82645,53035,22093,32116,66262,11072,92982,71182,35248,88975,86553,82667,56083,81674,86415,86795,50102,63950,24574,58671,85622,17118,86871,93701,71585,77345,30643,14169,50073,71071,76910,48268,52250,91373,19438,79719,58942,49552,39416,63194,45419,61702,29840,94942,47144,53020,34193,25314,35542,72457,22552,85639,26389,23439,92192,13083,59207,26356,75107,42119,13777,79684,26893,48982,79949,27515,31906,92989,25596,44067,92119,40653,46226,70980,47099,73275,15958,85971,80339,87918,29937,23065,32618,34524,22720,83570,93133,57047,62670,32019,10926,61738,39321,49076,10570,47315,83485,42830,34856,10625,89903,64409,64583,67966,13988,17796,10369,85140,56499,52501,12268,33606,93231,75556,70155,39516,91271,89597,44520,52381,34651,80165,80949,88444,52332,31723,46010,89679,95096,40649,41172,35272,62699,28117,24895,20793,29425,15846,16337,42185,66956,38539,74103,36477,32312,95802,58549,66494,63692,93468,41540,16950,71929,11939,41023,83720,57217,48060,87292,19951,46087,90060,39660,66695,93970,55271,77336,58997,97092,36703,75866,94202,71720,79173,74224,79099,54688,51898,22148,99604,66426,32383,56621,29526,44158,85464,20628,49069,63223,85543,78168,71419,20579,50826,20722,65869,67131,76118,60386,88554,40278,85827,21935,83821,76990,74092,24705,72772,21770,34411,91829,75779,45838,76198,72619,38834,43139,67920,30690,16117,11143,14329,78853,71735,53441,66362,89050,53978,89558,38560,15494,60375,30013,77753,74447,41704,11767,64609,84819,19470,33916,24521,80500,75960,15853,76467,80744,73807,42229,86784,29920,94038,32974,47075,22422,74924,69808,48461,73709,69660,22941,93122,79778,83169,24194,92122,89819,45964,12179,58251,87717,84733,33892,55338,44526,23987,36567,49440,59670,36275,63467,63909,87246,87696,58659,56461,12051,22615,10867,98391,59320,36313,33736,19470,78344,17195,62097,59601,63089,98898,80501,29534,14763,73567,57383,93166,19436,35423,84919,16541,58415,77481,77803,75707,77267,88974,54576,25275,36446,43919,92064,74859,16233,27505,13615,93613,50171,76128,32010,13650,61713,69300,15921,91361,97978,34328,11903,80097,46273,46960,40922,75273,64031,66156,13212,89488,47013,72257,93776,89783,28088,24640,22626,83905,24677,52803,30117,47689,14507,58542,69749,84278,90932,91850,62039,20041,70952,27420,61843,68921,95970,28310,55372,15194,46096,52651,16875,91871,45245,23547,90374,88079,62935,72879,75904,29905,67526,46725,79870,74170,46181,60742,11263,20991,67894,30184,58577,64796,54242,70545,45898,22319,42545,16551,28391,22984,24188,88509,71985,28896,17250,11258,17097,94037,72683,91497,42720,76661,45607,59313,41767,51875,13592,54278,79947,76534,70913,95874,30293,49963,69105,34851,44519,73705,84910,72142,19163,87388,14683,47904,47131,86771,12415,71088,50285,66134,67334,75279,18088,49145,15611,88914,58220,54517,46073,29218,17324,38933,33850,56266,33493,84040,93991,75859,27868,46337,38936,39077,13720,71116,30733,47305,32247,60486,15899,81480,35564,40332,73160,68853,76726,45245,27193,68477,98604,60695,34937,72221,29768,99952,67071,97424,94075,72640,49852,13939,82308,27181,63334,42941,93362,40860,42016,40023,58706,43381,63792,14230,90847,72813,19801,50067,96094,23186,94796,41756,56413,54307,21715,19967,47060,41665,71517,81375,63163,84653,51373,45566,26616,68681,34453,79249,31244,86363,78506,79198,57447,67940,17195,98953,56469,48391,40264,82642,98352,82031,41530,54010,68636,28038,25549,66258,56700,95081,78753,16422,94474,40300,43351,40532,72981,47972,32553,87040,17583,51999,50473,19938,42701,33611,87129,97489,31006,40044,29521,46523,93260,12988,63538,74578,44092,23016,22981,73843,30054,67296,87923,51023,58736,37063,12025,75114,66889,83085,48991,40452,48318,77103,76923,23062,58480,66773,28348,42733,70727,41827,34284,81097,19582,78386,74073,65105,57956,80418,24284,24661,50644,25070,18522,23901,31913,95246,55062,34298,99172,61721,53307,30872,89766,24239,87534,22554,46252,30552,98928,90633,36394,26363,69898,46228,41957,17756,10657,61682,74768,56898,41460,28542,70729,51171,74803,89112,51277,27360,42658,89841,73398,79483,86727,22998,74528,54053,19252,18572,56404,32154,92355,58616,92826,47417,10092,48777,92246,76438,40225,40232,34739,47621,99349,27206,85297,17474,17268,94533,13677,14383,38538,90849,38026,42863,37254,42335,77683,54051,70957,53651,37598,84336,20244,88020,16873,53931,29394,55122,58090,53100,11146,68888,66205,63483,16833,74962,83316,33134,34729,95050,28272,12442,82590,18453,62470,88457,48304,68272,65942,19193,71436,24033,36626,23366,56373,31277,34822,61621,78157,45863,10727,59857,28580,53725,12489,12030,88682,73866,72125,59798,58382,32603,13648,91411,63767,83747,69504,39846,41669,41599,54793,60831,65524,76430,97227,33581,86961,24438,43177,46036,90586,45359,32385,59184,60436,61643,24400,57677,17185,47366,65656,55837,18307,44488,81720,52127,70064,13784,13897,93957,20101,79461,23658,93908,16678,30200,66682,29584,60228,16023,52532,47692,60686,79409,95799,28180,24052,59542,19387,29334,42122,33436,57069,83661,57306,80170,77422,24053,66014,24870,39647,25638,99321,57969,88897,71627,71321,43119,95653,36649,11012,81220,53021,44281,76552,73447,97136,18318,60796,29032,24153,72652,45112,81036,31174,76830,20626,23871,66198,81892,42923,27029,79849,42936,68715,43977,46563,97453,32043,61752,40580,67394,21363,46929,68106,83843,47682,96808,30647,24295,16839,15333,42635,39644,34299,22221,50828,72206,42465,16248,92471,10644,96905,88772,18714,65569,72145,99630,69997,94620,88355,95055,27718,35945,42685,49081,49624,27473,87926,54994,48031,19982,71825,41758,90679,36826,68400,46926,66636,34988,44403,50789,10405,36918,85738,59155,11528,54120,90679,34753,55005,17155,24808,88900,86175,73191,33161,63429,43475,23040,39180,47508,93949,73424,23965,48024,50402,33255,45537,71382,94690,46306,41319,96599,53868,60699,85345,30477,14374,78437,24437,95754,39900,78549,24299,13457,71494,57054,27996,17313,15243,45148,93286,29328,43323,45163,71909,32382,17551,88321,83339,85364,39248,11115,65901,64523,34756,11344,47225,95610,79813,96307,59899,53228,55743,48431,67781,29939,56441,87058,32017,28609,56927,58865,96701,98665,18242,20364,67015,58659,71277,91154,65697,44062,32912,40293,88121,97195,84942,80389,22438,80785,27798,70876,29565,57607,35847,98251,20919,29007,48541,44365,31099,84557,49488,99749,49542,77718,66762,68535,94639,38248,70272,94912,18703,14221,43070,25631,60889,14506,54659,77108,89719,26400,68370,74059,41208,99001,88047,20533,89267,92347,55547,52669,32611,61221,47863,83596,55577,62817,51656,26710,41767,83238,29715,60844,71442,99776,42353,90822,69219,16151,67488,81164,73038,24663,36518,19638,55273,54062,56511,65955,78986,88010,19196,28294,43635,87618,56815,56952,22583,10205,78356,31539,24406,94912,56016,15644,14569,40404,90628,12496,22533,94371,38647,85668,13621,45155,10590,79878,49746,13326,42947,89675,75894,70189,19134,99205,51838,16132,73166,15197,25661,29317,87145,12706,79618,10142,85266,57374,71299,57542,37089,51559,50337,32225,76994,77617,50814,70085,86688,60497,17567,58216,49761,90994,24720,64637,30578,55830,70417,56797,41911,56832,32609,45097,28417,96798,38071,88738,49823,41700,43312,23593,68355,58124,74414,90333,81331,43291,32981,56287,83160,77541,63674,81896,16319,45460,15537,80482,86099,64770,36174,50170,78762,18448,95881,82095,36094,84252,58831,66317,59791,64957,93542,56746,83237,24552,58015,47516,34631,37768,86566,89187,61881,32845,34033,44295,76834,51573,40843,68493,91699,12043,55783,86289,95218,48285,26000,26208,90171,87321,37447,90658,63938,76992,13941,58213,35821,50825,38443,96077,97573,82977,35852,78876,45253,34367,49227,26031,62504,87265,72747,17617,66469,35672,48876,76087,54137,51822,55468,32683,83335,40688,83528,99325,92046,54634,27377,72248,97084,37976,15429,40963,93673,23338,83953,52953,45578,93098,73265,63496,54097,42710,83742,22629,61575,12068,43008,25218,17464,88230,42988,58969,79412,21912,29175,20852,70718,32942,70308,74380,46485,95440,90203,83877,22342,39376,83106,59230,45120,30552,57612,28500,60050,28175,78684,58684,83679,38196,36672,33016,57701,94799,25026,10241,67923,22061,27226,60201,35611,65386,43583,30378,26164,15348,10563,37160,65309,70479,74765,79296,21338,50374,31252,36263,32899,19515,93454,10750,78610,90847,65463,33362,49508,19048,27913,92305,15826,98415,76382,60306,92060,16976,60915,93823,18072,56027,24796,49851,83941,92637,23927,49517,93647,40856,71152,43148,27837,17431,45219,92921,68772,61655,66717,69047,51408,34610,84247,73514,14453,72109,87168,11096,57084,85331,79381,69953,27480,16886,43462,19848,49183,26030,57363,18989,54627,88711,79225,86008,88266,37220,17867,42929,33278,85834,32961,68406,54986,13220,52652,95467,26968,67569,13642,47109,33355,76626,18099,56547,36476,45582,55552,52102,34089,92156,48795,18850,23340,46951,66036,98523,32548,11315,68889,51667,73383,61704,96634,58669,86891,25127,59743,90173,10011,89118,97072,56126,50812,52419,44498,50229,78761,91950,80577,83814,19765,97168,54016,32932,22834,11657,64419,20209,94787,81586,96150,72931,27858,50458,59621,98397,82307,84244,48810,22612,14939,12775,26313,60265,78096,22072,72065,53463,51825,19243,26681,35515,27101,94724,86816,97310,36966,27131,49530,60322,77942,17893,64384,18276,71677,68802,31877,51579,31868,59331,51491,85992,68568,85002,48877,26857,91424,57471,91976,54308,13064,83502,47594,48473,76056,15852,15185,37488,56644,22419,85663,48635,48167,26185,84635,46327,10258,56627,41259,76981,82041,86405,66447,16042,71369,38200,11589,82635,42990,11193,87806,65788,73239,86961,16949,45217,30491,72122,53935,88783,95917,65342,50613,59984,21544,85129,59573,41557,16899,80888,23754,97549,59326,50600,58195,80686,76649,36012,66509,82962,31835,49120,49703,96716,67197,88739,34201,87577,90669,91563,37756,53826,56417,20845,20952,81807,70594,20051,45227,32744,47921,45602,55448,50343,82270,19224,30949,84461,36104,28671,22953,15929,70311,43926,59304,24179,41319,98719,99190,78233,50601,22543,39375,87777,82412,54863,31829,24742,88393,55137,53652,21170,59060,71518,87648,74196,50369,73334,50083,88968,65042,46655,44049,43206,88192,75641,67631,69600,18596,46918,29568,13152,64083,31746,81492,38411,49154,73977,65635,61066,20429,35317,90681,26694,38619,77899,25774,10555,87251,49631,95013,65066,65234,97313,44784,53710,59206,96296,14125,13168,45039,73687,22719,22393,21575,88198,22291,93406,17047,36620,91561,54348,84948,35062,54365,95926,38668,23833,43525,76729,51905,56814,52765,43137,10503,58175,47387,23083,52711,60540,35067,98769,15535,85905,30272,24690,68569,86831,69184,66110,72759,59212,85177,40234,52338,21224,29749,87832,11614,60274,61583,52435,20356,70239,49708,62785,91224,53477,94537,24954,57849,27263,16790,41905,67035,45829,69208,76097,35581,73208,49135,42358,76564,95247,30809,49966,27394,51461,30399,53723,82798,77840,38061,99115,35100,69489,51799,79150,99900,60703,87240,51918,30115,81943,53926,52953,25683,33201,44463,99810,29878,31793,43719,83611,31563,18103,11755,71744,46659,55854,58811,97834,64674,86358,76258,58702,19729,27973,61712,97954,86388,83670,26883,56101,65425,57832,77586,67887,91550,64526,22694,41338,96010,72094,41474,13427,71943,14171,51758,84801,99293,69535,59852,86972,94404,12307,93221,23190,78343,87717,10208,53227,61989,66884,24157,32446,70420,47972,21149,39546,31608,63871,58856,60823,18877,67371,95754,92288,80822,67098,74102,13234,18898,84668,99353,91010,93025,45942,58144,59860,46490,77315,74096,77855,99853,19241,88333,30068,19806,88078,33259,33215,99766,75884,28031,76714,19305,55934,82269,62824,70761,71024,28684,56809,17836,20940,62862,75467,37466,44495,94310,99970,92104,60720,71633,84748,52656,86794,64582,47178,65407,16492,20172,79788,22513,31963,77229,86232,88569,79276,21188,57925,35471,10223,68281,42404,12203,41896,10976,72895,73270,44442,58554,91156,28219,26070,63879,10759,59445,98776,21480,51397,84499,94993,17861,87466,52680,67235,15755,18820,41834,20014,79498,60536,93315,28017,81793,98938,13379,87399,96832,84418,35592,85223,12270,93077,80007,13818,56647,96200,79017,54019,31338,63555,27791,27185,12531,51282,79345,35036,26962,88434,93142,71678,30777,93364,77805,51087,45222,25519,50321,44777,34589,80211,97058,42826,19498,34538,84892,18330,68927,89041,12254,10951,42538,82730,46713,97587,10571,29245,89480,85716,94226,43226,23782,22832,94983,32200,27390,56172,70410,32392,40288,54800,29653,51358,16786,56241,86241,45435,31625,34345,91784,75300,12811,55469,53348,48547,12969,73546,88073,32164,27790,45591,34816,31606,16554,70809,24705,93366,34899,16579,88556,80171,68267,15476,65529,91173,26957,14499,14670,91889,99940,50503,49381,48029,23750,70046,89348,50664,99726,89365,66639,28441,19469,33676,36057,81180,32880,69098,27987,10157,59742,52680,63945,63576,41699,13282,30926,40357,67913,72049,72247,90410,74298,34389,15609,97808,80687,68656,18520,33944,20963,67860,33418,20941,96568,25844,79899,75957,24122,74290,62840,89119,52956,23529,98179,70944,92505,78401,77431,51081,53837,76663,66973,72244,11900,71212,33486,96952,69123,65814,76539,43483,45782,29708,54487,74703,52106,35153,89356,47120,73109,61894,92338,82562,60431,12997,82905,54177,21195,34827,75636,39269,99380,13608,93244,53675,69901,51009,10681,86730,95728,61151,53378,49964,11904,91310,81913,70021,43515,35251,96966,18658,42908,43436,93606,62473,48800,44494,77059,90521,96069,24587,91853,96597,13264,11355,82387,33090,92873,39199,45123,34762,37586,59004,32077,18313,53812,66350,51933,27831,54998,88124,74409,79976,64384,48377,46823,59891,33088,16322,32806,98148,97026,86445,89865,61155,82663,42665,83738,33422,75976,44259,39833,39493,85055,27163,38944,46569,85224,71603,29587,35427,31300,29612,36187,48903,59143,97171,65389,13786,45152,67928,84923,90482,48794,95523,65251,12209,45288,87038,79571,37421,55167,21296,11714,39817,35321,65890,55921,30705,81949,87949,35813,43481,93722,57649,68754,72579,49518,74938,12915,37674,23956,18344,79911,62464,72203,40874,31483,47148,17545,14047,55397,10553,22798,57998,23400,79675,85644,18919,66678,55734,99792,99713,23963,12638,50258,67925,88818,75399,14077,49163,23419,68869,39217,73486,50782,97654,52353,74770,84116,21343,71915,48800,85649,24717,53175,18925,35926,47915,60280,50507,38881,65804,78454,31885,86897,90136,75507,35628,13710,67140,57548,54154,95140,21812,64813,31635,66580,65339,28575,71737,20040,64941,67106,80566,93169,85531,26330,59442,65221,99492,19034,65881,78884,86850,76639,41462,72636,31259,70918,88872,33655,92825,40954,57173,26210,83244,50446,22516,27638,87060,77690,19985,22128,82396,99408,75271,17450,75285,75590,29885,41586,60087,85223,88481,97702,91269,70672,22049,34637,23936,17211,77257,90550,20101,28469,46479,13608,90106,65060,76221,66623,87881,58844,10908,31626,13059,62477,50503,36126,95317,30593,29705,81878,61617,61424,71602,61202,97046,27704,59536,51909,60001,95129,22467,95716,80563,47321,88241,55077,78266,34944,43048,78992,56676,80768,18336,36377,12273,69315,73482,69447,54610,26786,38959,62986,95972,86261,76206,93392,64522,85978,15784,10418,92289,48389,52966,91154,59994,92198,64345,51759,27927,46388,73565,19835,68277,57449,30624,95269,48818,23149,92006,14918,21254,40673,88155,93009,46753,54096,34300,25387,52090,55398,94466,77489,22364,38380,85304,69659,78133,88968,52996,49817,98113,49876,34201,98117,58747,96654,18804,17364,31680,49565,10345,64428,75487,62506,10318,44484,10560,79835,61023,79066,98536,62785,97992,67932,40480,66413,45123,65341,49350,30252,37947,71359,73360,23795,37049,89948,70212,23473,94824,37224,47497,96068,27364,42865,61882,62346,17975,62034,68383,85889,18116,60611,68832,22384,42198,95902,14117,38112,77856,15560,26578,38439,47618,68140,65227,59143,56881,26979,34728,41050,94452,23076,15385,63937,83054,62407,12311,49141,96533,25304,92973,45305,82814,72376,99066,35701,33741,33914,91879,16127,83261,82611,15457,80890,83446,84175,40524,57143,10255,18248,64452,50959,31969,16765,87107,56169,45200,66037,73834,88265,47083,53202,73914,18210,84737,34561,78911,23214,84942,87014,97804,26083,32422,49045,59607,33328,64395,61660,84899,14686,27925,42887,80455,99536,80506,25591,51192,51993,92831,18409,73531,70536,29965,44661,76671,41617,43585,92918,85108,40702,53345,34918,48993,81164,12403,19331,20953,26956,53624,23391,36167,53121,24940,85211,38770,79966,32930,48864,63002,30286,38817,95757,61389,74265,75703,37902,25188,87831,36250,93699,50751,29754,46811,91105,36694,66420,31015,77576,30488,39259,15863,59238,12493,18125,20898,32271,78546,20082,25085,14316,88582,25864,68933,89000,77851,76614,59397,31785,62577,70140,33167,68514,63496,74921,21829,52552,53427,46928,45925,39926,75071,68574,22706,14046,63110,27144,67973,95548,72456,46478,37608,64459,49923,54101,52679,92341,48895,10098,37048,60299,57153,59086,37941,65321,43832,20570,59081,56823,52559,41758,40365,30558,69193,89971,75364,58628,21051,92377,91640,31509,25978,14930,33718,80232,61328,52271,62855,68803,47166,37368,83334,77523,79311,78907,77096,80137,69728,37742,36202,97077,75863,20352,94782,20476,53773,69069,44691,42189,17895,17983,89878,67958,89536,87284,93165,22323,78073,21624,84328,25103,21589,70705,57739,93462,47804,14050,36749,99949,25176,26743,32758,42540,60986,45998,44157,90003,62732,93570,74763,67915,83894,83569,23362,18426,84591,82145,99377,60037,67374,91647,56812,15723,29535,27177,32138,47537,17740,16153,36776,27134,75828,95981,62301,53134,27924,60982,88892,88135,73657,96574,85821,74478,96475,72875,64417,28714,88980,34627,29338,58471,79700,78028,90691,13570,46421,55822,97924,35767,93867,22041,45719,94699,54589,24925,31129,56335,84050,70835,49277,74704,85364,61680,82912,55262,45841,61082,44313,10326,25262,33473,99432,64231,34344,14758,16250,47450,99885,47203,51797,82096,51393,67020,78650,56016,34972,35495,78243,71453,68325,34664,15057,25083,33433,31533,17786,83808,32671,67268,99818,35041,61556,38351,85934,96770,18187,94909,15573,52880,67776,40751,21651,79121,24664,87868,72965,45984,63124,61096,77325,31178,95224,39379,35209,22798,19485,39874,37082,13343,69556,27880,59570,28259,53621,59107,89089,59487,28101,15881,72078,24696,59907,47729,95197,56362,97119,92544,75615,57084,47961,99122,56852,40320,27266,61856,67981,70343,39378,93378,22012,60359,24897,36722,40822,18754,56565,31081,81214,74691,14788,47199,59696,87759,47657,76411,13491,36761,43323,58154,79045,87201,13543,98967,96069,54794,27026,90218,84775,41831,67370,50892,63451,40716,54170,32039,78298,17559,49525,44296,64537,27852,61787,11736,59888,75600,89560,25266,56378,11109,75741,62289,11635,22505,44270,22539,19331,11487,48990,90992,15967,25700,66586,31158,15499,21766,20357,58800,70741,17216,93981,84676,46081,99331,43673,69594,26797,37131,62204,26977,67147,14439,85482,56584,29406,70803,27946,68883,63668,81214,30647,48593,71347,79629,97379,14739,89488,40635,15717,21333,86211,67390,20035,36608,24170,12441,65550,77654,24438,50531,49938,44073,57248,82321,89764,85392,62718,70669,46178,60490,21225,46966,72171,24121,28157,51726,49846,51804,64839,13457,79336,87527,38585,11847,21399,77487,52087,58147,71767,41516,33488,78284,90858,74863,90553,42544,34021,75609,73748,57814,32775,86137,93872,51472,68634,48466,35591,90011,46945,29184,27542,32547,30013,17841,56959,22045,75642,81427,12639,87156,88142,47335,78580,61322,35674,55490,94075,15403,60517,17224,79611,44751,79419,49182,31816,45646,96627,76432,47651,97655,64981,16131,69968,83518,62066,83092,21087,22983,29815,31063,49877,21872,59678,78318,82522,66701,81069,27379,72406,45739,79265,29926,54575,62835,28084,78514,16264,42587,90188,19129,76800,21212,67068,35641,50213,41853,72800,85778,45365,86893,57194,77008,71951,55756,64222,75369,82960,70804,62919,80480,69599,30607,91788,73144,80224,80375,40259,63754,27410,67754,59333,84375,56009,54872,30686,54018,76388,69409,78183,66908,39960,32922,66291,62740,88257,61749,42044,11816,42713,82799,76372,93499,96807,30564,19584,16674,65482,15202,78566,71721,43306,29340,52047,60339,63533,67324,45154,22924,10497,74761,72914,53819,73286,41588,28536,34264,82464,71345,47947,17472,68846,99526,92250,39844,83703,19115,48777,76465,51914,34738,56201,59719,34987,39552,30463,32283,22461,54413,32091,65178,75387,38437,14380,43776,76445,24335,23983,89506,85072,96614,12027,89374,79518,29755,52816,26869,46443,85308,36698,21300,11476,37506,81460,38301,21443,93124,25607,78396,25545,76974,40817,31612,40814,35990,68837,69352,56976,74376,41359,98337,29287,62457,12616,31911,81453,30324,19254,97332,80540,59120,19353,36688,96818,83669,79599,31547,54401,25073,54962,87224,79305,89349,94624,71147,93643,93362,89082,93929,13978,86407,92423,80533,70113,17288,92194,90824,83387,46266,70126,64127,45489,86293,19028,83577,30006,62636,68975,77489,24819,59053,65739,19249,82910,38383,82900,27232,95044,96568,15877,35716,24943,85813,55380,44273,47452,42230,37654,80459,20487,66691,14247,31868,17140,99141,17429,29640,47021,85797,34119,92967,66772,71103,22645,44226,40585,18953,63575,95557,33646,19351,41164,18654,80404,61483,64684,33624,70589,17810,36684,53450,56623,84241,95585,49817,76406,45072,53707,89372,51004,84527,64114,41349,99261,72320,27941,75953,12242,60106,74731,42067,26158,84543,85148,84024,47270,74572,24397,51782,33123,38477,35748,65985,12223,33478,13914,25577,97454,34305,15632,79801,73146,34579,46327,63377,29448,81304,56113,41126,47214,64666,11288,97738,34352,63472,41701,11136,25914,72507,86808,11648,43467,27394,31183,97906,98042,98540,42731,70983,32299,83782,67586,73234,26666,51541,36383,57074,90632,76951,79123,60375,25557,39869,32352,90511,22931,49114,12088,27243,81849,26506,86345,60423,74753,70173,25681,26018,59642,99366,73658,72699,51101,70737,32930,80983,30745,21708,17400,85743,54692,59676,46062,92913,81023,49687,89337,53996,42215,10728,78159,79853,12842,64939,72980,27798,93828,79635,21044,71661,40203,67432,42774,25017,48379,77669,85018,87800,22556,68971,72604,51800,18479,13238,96463,21201,30214,44276,12887,72214,18930,66926,50621,79743,31161,97573,44740,98898,37406,35488,23873,71361,77182,35631,54663,67406,42868,59471,52398,66952,71960,52687,59581,62548,54538,57923,76988,96863,27307,65788,77175,95452,34018,23581,47342,83749,64231,69080,26979,21824,10948,57609,27409,37554,72697,76071,53485,51633,93963,21177,39685,73466,26569,19316,69977,80327,14172,50239,50186,94969,25333,32548,91533,13928,98487,15761,97772,65219,80165,49747,62720,87390,98653,63909,48344,12841,37321,75990,29333,41794,80677,98914,76969,50792,36453,14098,30511,56473,44500,18589,85860,62603,93531,44021,42751,41079,28172,43579,22980,41175,92679,67475,26000,13959,25230,49489,74121,98473,68677,73279,18492,15822,46774,62065,58406,76975,61898,15620,41988,50445,42029,57370,35801,39416,34297,48560,49732,32484,26766,91888,47729,81662,44129,56583,49449,20566,84086,15557,45028,39617,12342,83526,75162,75799,57390,82463,73564,19281,68577,26998,65620,29990,40912,76379,28510,71278,22939,20542,11152,43687,14746,54284,35124,90265,36987,99608,51751,34692,25346,84057,79453,13763,60776,13833,41221,57147,35791,64872,91664,90264,91766,26821,55919,50277,87987,53488,58063,23928,21582,71583,88703,98767,66690,61643,92454,67523,57773,99512,53450,16980,78262,31316,48233,63489,67525,38825,23089,78890,28271,62878,41508,74246,61821,47054,91393,73729,80867,88492,99466,11763,62721,53037,25737,24818,25318,48624,23773,81882,65584,67290,99498,71258,86896,60803,49474,36601,83243,29160,48455,80291,34894,61461,48871,74694,15566,53362,95185,79227,27172,49533,60387,87462,78276,56535,46421,41934,67157,52241,31082,97335,37575,35064,13062,26248,33342,80641,84016,28143,41642,65169,92213,45126,87626,31312,29373,76652,51173,51498,74074,35764,48241,40067,92843,36178,35757,53377,73211,93546,41924,23851,67239,73297,95917,27443,79462,51946,71448,57971,93371,49253,84293,94170,82522,75686,16842,97533,10005,44061,69695,80078,12068,31663,57611,99706,95810,83278,12420,27660,30026,31951,15642,86141,79397,49922,85880,49275,96164,68302,20211,24142,68022,52095,36089,85178,26537,85489,93633,73176,42099,15923,55403,15782,69983,14527,61277,89072,49588,72279,60303,42291,42013,65189,88964,57153,17860,75121,29588,80790,59217,50788,50029,63699,80801,65878,27279,28426,38318,97870,85278,16485,54101,52931,77467,13232,96230,81101,71984,90250,23444,75822,23483,73686,49007,54322,34142,26118,51148,60131,45156,45413,23451,97214,58027,30008,34854,18208,95547,46580,76097,61844,44420,11238,71111,84801,18516,34660,84754,22518,82755,95755,10532,18507,86693,64891,78181,70687,25650,18555,56558,41701,16558,27376,63106,38411,60345,24143,40405,20365,92794,52907,18481,39738,24352,36381,52428,62926,44150,85809,64122,78459,83546,96669,80790,86706,22980,41196,32249,95115,66929,31906,67712,24329,27491,90654,33277,80252,69366,41737,77068,91629,97163,83704,76607,87626,40606,94938,13921,29871,43748,25453,49673,35504,49192,34129,25470,71134,18620,72160,16801,52019,38277,72457,52556,55278,49346,73727,32791,53076,20503,26092,18122,78964,75375,60592,42141,95656,32464,15080,13809,51839,80290,25763,21888,97820,46779,80286,96813,56492,53937,50337,62412,69789,81461,79006,69295,51229,79493,37795,71966,97004,77326,83503,14499,27226,82710,94119,85074,57812,16591,67034,51366,11416,20964,61652,84798,90372,60079,49986,49529,43537,88171,66215,91675,94043,68034,38763,30093,93375,82205,32737,25946,72855,87914,82127,25395,60626,85499,79300,28561,28807,64396,76578,69445,39386,51223,23262,82072,20902,33092,81239,81757,13132,63788,58362,17421,53427,55469,90052,61431,87913,92761,25005,93657,63059,61786,79475,54870,26586,20202,54423,92133,58453,85369,11901,84228,49515,56221,12186,11210,81569,12736,22277,42932,20468,35305,10556,69014,21602,22362,88303,13678,32073,87621,87299,21983,55539,17274,31848,40236,33022,94776,90502,95745,11999,52351,34259,41598,10074,48555,87829,21137,10709,27285,94880,26696,61446,89772,13307,10289,68969,48942,15430,81957,56364,78499,39013,94836,51115,91254,59586,74651,27664,78253,97074,71999,70916,46360,12369,42828,30169,15729,20190,54623,39816,63174,80304,53254,95576,38162,40571,52715,55029,29041,98916,87474,12457,29201,88489,75829,60677,81249,72271,21230,86340,63544,57205,13770,97200,81316,23207,74375,39497,98837,18712,55068,35502,45070,33480,33188,73632,52586,90822,66502,41424,62576,15769,18587,11897,84974,59349,69023,38799,86134,57709,11392,12173,91171,11445,98062,27532,83603,44862,39363,30946,44129,72430,44156,51529,84029,53314,19041,81156,38465,24910,90021,91463,76100,29140,96859,53642,98720,52678,87087,52609,80700,27452,30532,14836,73677,19265,24778,18289,73473,51991,59705,99275,27427,26405,74345,99476,19308,64011,47144,79125,68478,40472,57526,24925,54875,70473,52645,45951,55088,26014,22931,98828,41168,42663,86346,38523,86605,77287,73210,65527,17970,48663,72798,56994,28030,78586,81914,59308,65169,68650,38511,90829,39992,44380,25268,87670,49817,48085,47209,88797,61510,76395,60960,34727,14641,68633,82733,31282,66246,93981,93882,29163,63408,75606,46375,76488,98909,26084,33163,35370,22656,32317,58723,30054,25501,70938,38517,28825,23090,74736,34022,67576,18617,77742,19655,60364,46963,62824,41764,51025,10710,15030,45433,47002,86048,59351,65381,52475,22333,97476,66246,27092,25083,89067,42117,96527,53674,91056,36427,13893,61264,66790,34583,30222,29582,57081,28378,66487,58959,62865,20919,32767,74143,85709,61540,36154,38010,42120,40600,79229,63435,48427,77422,86530,74161,89041,92886,94947,21730,34884,72174,45497,23635,55265,62516,30702,17920,19668,61881,64491,11536,23364,24891,54666,84950,58525,99277,22993,48027,65153,43938,82559,71679,22209,49083,27292,53746,97560,33435,73654,19150,77300,64008,30664,24942,98822,34668,19140,31616,43328,81513,95396,52093,53816,33751,10673,32278,58816,47971,36448,98379,93747,23896,75493,72339,21672,14631,55384,79091,94341,88589,54053,79525,84996,28492,77054,22538,60960,89831,54517,70967,46955,37515,28774,50493,78706,53305,79266,98531,84074,28140,12627,14394,50026,34441,37915,68076,40490,66906,56811,13222,46140,45976,71133,96356,68515,42130,96383,50386,83732,21768,53578,32412,56248,33733,40931,76350,53471,53271,35058,29088,22101,15200,41256,47424,12578,66962,91698,79033,46472,39256,45656,36260,50991,44787,22014,86726,86639,65804,21352,22980,87774,71137,44329,96752,86676,30673,39592,77663,58705,67953,63460,59504,45314,97262,60973,57454,12171,95133,73068,88275,37704,17031,61218,24850,13679,27834,25691,51684,60677,73010,63241,18695,46255,65612,83964,31101,95455,26922,61398,81885,62300,74585,23380,53975,59670,49369,66974,33701,11651,69751,88665,55984,55563,73997,67712,52669,86177,92252,48005,74645,90795,16431,32489,48262,25613,23647,57487,43662,76721,67073,45871,88930,19588,72694,32115,26633,40577,70561,34864,93049,90392,56668,33353,52469,24925,33066,73878,55804,60454,91433,64418,45223,22461,22692,52210,33079,61408,34178,79575,54917,62597,76910,91251,44444,68994,63557,57739,43496,64078,36659,13566,55392,80205,60256,72739,87170,66842,31300,16175,60925,68621,10882,21932,33674,12477,52341,66758,76352,22266,96790,89974,40828,25802,80140,39934,74654,78733,11382,60551,57146,71171,15696,57047,11331,10575,90197,49889,18694,59439,35794,28800,37738,85960,49289,73985,61703,72902,59598,94002,47777,74179,51710,57660,68332,98349,51119,64277,71434,48858,14682,16381,46945,16580,80218,23509,99508,25968,12503,94289,68686,38011,74535,25049,83007,59115,67433,47096,48202,11143,25478,64709,47719,95030,11113,26856,38735,90067,28907,80769,57308,67101,79471,97823,80204,10658,52494,21218,13468,27432,54241,76159,37436,28875,47453,36079,41068,58396,77560,47275,72017,35020,92658,98249,52521,94659,86091,97294,69177,68820,72139,36819,52777,96800,78692,15939,18116,21123,65731,72400,15546,25809,73189,46797,10892,95802,65635,75112,66376,89660,57882,68818,91341,14734,31444,26819,61469,66084,34086,62842,87464,36288,36058,24160,87055,65609,44817,68333,57967,44110,94352,46876,32633,67980,33542,59048,37128,60885,52376,63129,94428,91532,79755,40411,79812,82022,34901,24984,19402,68165,17445,10642,75964,21502,19629,71923,69072,29866,16489,65684,35392,93740,24599,21912,84652,27170,46544,52569,11287,84016,87427,73181,32171,81035,51876,82429,28089,39160,74384,31580,26975,34515,28659,75708,30505,28083,39396,66850,61475,10148,37739,55433,97690,96480,82572,28601,89172,66082,93881,78861,38798,26733,77693,40134,77229,88622,45662,10054,91417,86866,26705,59825,59274,70507,56672,10906,63125,64306,16606,61536,17706,68909,81831,80755,46226,55931,93078,31828,59121,74179,25549,83349,34915,35146,87947,95091,22247,97524,65780,39867,99185,22321,71869,40755,84295,49211,42108,69384,83256,23466,21951,23802,20535,91376,48307,11987,72767,46284,70580,40214,84812,18910,92442,84193,40419,60652,71005,42943,11995,95639,64428,71347,45539,55929,45652,55918,48824,18137,52130,99108,61372,15311,71508,49470,27979,87454,52968,61605,70921,74913,31404,81402,75960,16804,73810,47080,43273,68159,44852,58847,82701,19541,11895,57852,45317,71311,90743,90133,33788,56061,51267,27617,59486,14521,33605,27653,57116,84103,93974,77096,53427,87604,91007,52286,15437,86905,61196,75592,84142,14516,40500,69582,33721,23999,73381,74476,60693,26596,17840,63846,59914,56892,15762,11717,77400,98696,75912,76896,12943,27699,35383,75910,76544,57105,30044,19187,15815,51925,64225,31220,48535,98128,68001,19592,11770,83974,51648,52272,29514,43966,81808,16566,83032,53222,17259,76319,91128,49414,23188,19439,68147,15324,79504,43997,74038,61704,75912,72311,50021,89845,63638,26868,11098,41914,76191,37833,10774,55660,58305,30760,77703,29478,33401,74337,68597,73093,44604,70254,93271,76406,31406,83432,98051,43461,88844,79754,34789,97110,40869,93670,79248,20659,97007,86620,98235,45084,43918,23742,70200,10563,59265,21005,63442,88219,82583,93647,53888,51908,11512,65802,55273,66537,32326,62494,99433,41965,47641,16367,63018,83408,31386,27301,75038,43112,20729,83417,74511,59871,83836,92384,35990,65382,16777,31080,36382,32745,54009,77821,89504,22549,65980,26658,61340,32512,90080,83626,99350,78122,73543,66968,72000,32178,76321,53332,81956,14219,27027,11009,41409,21616,99814,50801,12015,75869,79980,25323,13106,60373,31941,89091,67806,49208,33042,55383,23114,22470,80441,74665,36449,80027,48510,87967,36920,96688,53754,23557,66433,96825,49744,18111,46476,73494,57966,22649,81804,85231,11479,78520,33412,92574,56707,97279,84573,59444,68229,97666,44941,10964,48526,15671,15727,28357,46407,61675,86868,97111,24654,31390,62198,69333,37785,16562,68364,76466,97129,69330,20537,12862,69004,96451,63716,25607,44556,79401,63346,78176,57819,90504,61941,85290,24903,49829,86515,54220,54183,93409,76398,32460,24775,57060,36778,55518,91707,56254,13646,93671,48031,16055,31880,52277,88627,81654,88127,49592,67574,22588,36147,73229,11391,91092,19374,58822,33900,41982,39288,10845,30482,15448,21630,58905,11591,66624,27021,52242,82230,81209,48003,47996,93495,40071,91562,17767,49755,29314,77111,23885,76812,89263,80606,33694,86960,45337,99796,77349,23540,58989,30104,80690,51288,73369,44500,16603,19904,11711,79412,82174,62302,19119,22246,78598,35918,88712,15098,18171,25999,18213,96920,14044,12475,15943,77196,17399,64385,49212,61191,39247,68337,81439,86699,70189,25551,26592,14233,14416,50194,12944,16233,25289,23497,58891,59958,34096,21727,77052,71675,69926,26182,43196,74157,84566,95962,72796,46305,21613,12865,88509,81040,59923,11032,42907,17173,70112,49804,61245,65361,71557,27424,42069,64545,72701,35823,39504,93843,91649,66207,97908,44083,81257,26723,39114,57475,14461,58447,87206,93261,84498,39200,59159,91732,49059,64250,48249,73326,92957,32862,10730,17581,66918,41932,44804,38853,94227,40938,63465,98081,45776,73061,43422,23260,42610,14510,26376,11242,73067,29680,32932,37802,73699,53961,88278,61590,94498,97530,52379,94515,23946,90604,18997,46418,59084,97885,49718,78495,10290,62869,17398,79924,99184,91466,48591,94858,85524,66222,88690,85466,50845,14455,48941,11628,60884,91027,76813,41721,18803,67662,28648,49781,37228,51322,53315,96518,18464,69700,48108,28129,37682,49048,13292,37098,71577,40557,65832,74457,58649,24003,68562,63365,62817,39170,32206,70967,11482,79048,34209,54102,81905,15251,37448,84087,88930,88338,67169,24979,97830,19045,71580,94493,84012,92713,99548,71666,51150,37160,66924,96154,27421,54325,76297,27445,49185,52304,12577,30255,42995,99171,54381,18638,29741,54840,44076,41025,51678,24627,60531,55345,64575,41578,84592,69160,30217,16642,38645,35732,32936,10375,78728,89344,52463,22074,33179,92735,30652,61613,57589,84786,12175,24701,96518,60628,55156,24058,17186,82226,14591,12832,79803,81488,66634,51230,99011,91421,62217,24627,78271,60980,75846,36150,34341,89906,63087,42061,68810,99261,26335,87745,70597,66135,45844,31295,16831,27308,30164,85193,93038,16371,13344,42382,55828,66459,13902,35422,78305,58151,20437,19685,32536,52585,65806,21272,15485,11429,78209,98765,98709,43084,35546,33347,86371,86931,66417,60373,70285,15492,97783,22961,26022,72782,30660,49949,12124,16891,24147,92441,22117,96459,55002,16111,51365,37070,95005,88408,61056,72775,76971,31373,58759,97507,55507,12645,26282,37223,36373,98591,95761,85684,12078,86775,65691,57271,53031,49008,79157,60026,36177,23111,43498,17070,20269,52615,73691,82722,17645,56672,76581,73234,14621,53486,29458,38601,22450,11606,49082,51657,22080,45876,16872,52602,73513,49541,58893,59311,58276,85917,49595,38897,61033,95072,54997,67374,23130,57114,95956,28617,96512,41857,55171,68517,78586,30292,59049,99802,95468,24139,93620,61322,34013,23748,76700,15481,72607,74088,85577,20786,56585,75644,24830,49789,72403,46940,78894,74236,27853,69509,13166,28611,59687,15801,46305,79839,51573,69534,73927,52785,19410,38681,13118,54986,66622,51478,50151,43034,54088,36556,93266,87829,68257,42388,78802,66999,82306,83109,81965,52235,72590,62371,24610,23212,90179,25733,53597,97411,60804,74004,55673,93913,45165,60422,29520,84983,87375,62505,86392,78384,14488,19123,13498,60982,70475,45863,40338,51776,73418,97539,63428,69144,68102,10712,90528,70826,45115,17271,24406,18588,31256,98826,12880,18375,47234,37380,54370,89524,35106,52156,85368,37455,76251,23075,93893,50931,30238,83189,86874,58731,42283,19778,48819,68497,60936,55287,25344,66926,24217,66893,67330,61756,93521,33387,56751,16879,47719,87042,47213,35910,49568,90658,26577,44634,24969,79950,92647,70631,65050,43147,70572,48795,20035,32183,33414,29802,88452,61777,62258,95487,21125,37609,32290,48144,11326,45873,86181,77165,60638,57610,21409,70211,24204,45524,76113,77510,59715,81376,24864,12276,30088,59986,70165,69805,91749,13465,35983,98381,40893,32676,91120,92570,94507,42948,62573,99306,48375,76460,69526,80293,53241,17172,85905,54315,91460,29371,27060,97783,11445,53792,37320,11116,23106,61054,16726,64806,55896,59942,50895,23986,89449,36343,21255,86011,27875,57734,29713,90137,15547,22498,31920,23252,52706,32936,64605,76678,21438,76088,25687,50492,63381,30646,73117,79292,27439,83342,79486,37185,53715,53877,71172,89104,96664,22661,38718,75208,16160,29588,67294,49402,83867,40496,84093,44013,94837,29465,93698,16696,53671,53405,58812,13319,42200,35052,70484,12036,56687,73516,27052,62286,97977,16657,86353,82676,32349,37154,82390,76303,87566,55595,98638,17312,96271,76412,37220,81998,19731,34353,30557,64276,91324,19171,17582,50383,67296,86402,14063,77541,30938,86097,99186,58352,18103,16287,14788,87718,16365,43322,76007,38588,59558,91662,90480,41511,21397,29945,40219,33636,75578,68050,76757,93794,83082,33659,92902,53081,58087,44556,43788,56505,74838,10531,41842,52321,65732,18447,71689,29693,73629,40220,90863,79632,78253,17563,21937,15883,93915,82027,63566,95610,61760,82049,77790,52047,75131,54099,77592,66284,40616,94907,83560,88937,94260,25552,34615,82476,41522,17656,33795,14357,13829,66055,74648,52047,81735,31641,16141,24503,82493,33048,19475,70594,34420,59972,71557,22840,69238,74589,30892,12650,35519,14968,51301,76894,86844,25945,61765,46385,71234,64090,66764,29420,26038,96065,90337,66152,60309,24988,30340,26757,84498,42359,31074,94694,51993,31321,45427,96884,63156,30841,67657,54632,46828,36372,51701,68288,68732,71352,76628,95807,81656,24895,73690,26772,11375,73592,28150,43852,43943,83867,26028,54376,89570,30424,95648,36068,49181,64091,98579,93290,96562,56466,40744,69084,95625,48652,30802,71032,59973,44853,53179,99198,85524,78610,27810,47384,36313,72026,10662,16812,89616,73576,36495,83716,62369,42396,30318,76348,47787,67254,27739,80159,65876,67322,32001,20195,83702,50795,21376,59201,16648,14423,77800,20509,77056,36910,88625,77762,20726,99253,35324,54876,41404,43939,20361,60283,84132,47103,51870,20414,95910,44300,33509,76270,83390,63276,67531,37206,91656,23297,71670,46289,83371,71508,39992,25745,22311,81887,97909,48954,68367,31327,79831,20937,49377,44209,76706,68751,87070,82758,70525,42349,74622,75336,63771,49629,77849,33339,62971,32226,79965,53544,53681,14608,67253,54391,50629,25882,3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24,32365,45676,69767,67351,27928,79691,42528,49505,77212,51330,43506,73808,45453,43594,71125,74965,28796,56865,64327,82929,24203,44453,79422,96102,75199,26447,83082,14094,36646,35647,24671,51161,32835,12636,98398,75289,22683,25899,89646,13474,21993,82743,21222,26066,56922,31033,61443,42885,76917,22347,19913,15516,94405,80259,84725,57477,63053,83844,26601,77717,71978,18919,71921,10690,25515,74173,48926,30624,93131,56109,89270,33574,23913,63312,84710,79591,13237,78088,87285,76094,53983,79265,86546,83477,57117,59372,38884,36038,34084,68312,36944,77733,11001,34923,46751,20140,33106,13894,49983,21044,44586,59474,65346,90611,12770,59696,83172,48961,42892,50533,75455,76974,72989,89098,75599,18836,28612,10604,62488,12600,78357,89430,47230,41075,37216,38678,63939,11645,76187,90120,71019,34118,51452,15596,64520,91876,27331,93514,32549,38449,85293,24948,77437,13453,35329,93896,21369,34605,34852,79913,23362,27981,62785,58716,37045,23170,22752,62585,91428,56305,49442,12635,33179,44215,79803,77259,52164,54683,81029,37034,30851,76002,64853,39356,94796,94220,14941,60893,34124,76350,99449,81669,20873,38714,92201,55237,24658,68115,65831,97942,79062,92131,61836,50632,41626,14797,68130,69314,32435,39284,42124,38231,49074,85264,22282,66152,45074,75014,98271,72715,10882,50868,28144,52682,36870,92461,41185,19380,12049,18695,57416,12945,42820,22467,25573,48328,99892,75284,97548,65437,56743,16998,34899,65142,28668,61843,53691,59093,31915,67153,24497,85437,63178,21097,93104,58028,84165,70710,58720,52300,87230,48585,73035,76271,78980,36384,37631,69216,67935,61167,21674,62104,65764,51853,26746,40570,82996,96696,76761,98873,58634,74424,44064,78027,61814,72802,70032,93947,53848,27910,58404,93437,11173,76286,92043,62552,64607,37026,27590,80335,97227,32468,55569,45047,71596,91921,99768,91171,29420,41387,12897,46529,98857,69730,96396,45975,27190,77840,45884,55028,43840,18090,46011,14477,77990,10758,59520,76412,59620,15854,85229,55691,65576,49985,56948,77611,66923,62871,16481,27630,89968,71927,55395,47813,11429,56582,35546,97433,79593,20575,27605,12066,74070,83214,56683,68341,99314,13498,39665,77972,56191,80963,33737,92599,33430,82786,92406,63958,42072,32613,84141,31449,28184,84941,72537,44619,67525,36158,92194,24449,81463,26010,77543,60223,67198,63363,14659,27846,78746,19527,51844,76487,17669,48315,90259,38777,26323,50734,61180,38524,68263,53687,85759,25052,46035,59198,92152,19051,22796,87305,97047,95265,69007,78350,68667,10694,82517,38144,91751,48193,67878,85601,31001,45478,48311,25173,87058,71927,94819,58391,43621,25672,57255,21829,80626,57574,85733,66662,44519,65429,79564,73001,41948,84787,34081,50608,64525,72865,96842,64442,56419,20387,98732,73021,31338,39343,90151,95304,78539,85228,77935,62694,45987,61906,41777,92815,51449,86990,93258,50745,72463,89917,11104,28633,82837,56915,65047,35080,75064,18805,73539,41646,66241,83511,27365,15232,82292,82783,98977,82882,19007,45913,41366,83010,38574,88771,73350,12931,52906,95811,96344,78971,44233,62010,52903,46075,11892,24048,80790,53459,45336,74868,46401,24326,22621,11838,59838,55756,65833,16684,21963,68313,40928,98791,45689,61803,89996,18753,13540,53983,72549,76708,67270,76284,48727,36098,24396,16551,90446,70194,65672,95201,63649,23246,36114,62293,42834,72814,81518,68906,94860,28178,18513,27171,63585,97369,21445,44280,55311,66398,62572,45509,69522,46473,34589,65289,80159,43457,45796,99422,93395,46180,76822,53314,11535,70943,29410,17570,48068,18191,81991,94907,14883,52824,12078,68414,16815,88160,61515,15272,52244,42751,58173,30158,71636,61236,51060,79222,66998,85153,84683,82926,53495,78658,72903,19813,80901,61618,62148,66809,78145,92537,73722,65010,32074,67312,85959,66942,38231,47635,33012,51143,56051,29516,44412,96877,82090,12645,74496,73055,29369,45558,87472,11423,62589,38590,37241,47907,86279,68214,41296,24683,60001,37391,63037,78746,50979,14045,59448,70041,80706,45216,26900,22108,17767,17514,91226,33302,20826,97754,33864,95063,36863,86859,35039,97085,61934,40136,53277,95261,93874,81622,84136,21220,94126,91170,96336,84979,29298,37043,29295,12822,88652,76190,77434,45963,66121,53168,12700,12018,36885,50308,77097,10965,50739,22379,96767,35294,26379,27689,34121,97225,61981,22692,14892,43227,13971,25400,28363,97790,52179,28429,51102,47922,43010,84717,52160,20272,61900,14296,46615,72055,32042,49067,46009,42610,98040,30593,85695,55590,89784,62661,22593,24068,33714,33424,44878,62697,89132,43349,31086,49686,55966,52475,17774,84520,17757,69683,11622,64472,37586,46082,59143,26375,75959,36200,29937,37092,37278,49007,58570,42296,96821,90487,71858,85021,48934,43600,56072,28402,70958,52950,58094,67075,81871,70069,90683,56062,56503,39291,62767,82778,23650,93807,65117,73288,65764,76422,72220,70105,77475,33207,82603,35741,41861,91378,90795,36310,56621,17715,71622,34862,51493,20789,51647,89003,68901,67314,65074,20197,74218,21622,60419,99580,75504,65834,12846,30152,83604,70591,83761,48048,80436,63053,98694,77235,39918,60641,65430,43458,52294,38386,78719,86258,92441,50614,77332,75516,39390,11881,27912,39977,80929,93625,27410,14049,74354,65637,69198,92223,52030,38493,49637,25702,83920,44890,19967,39716,58691,20697,46293,24923,59445,86456,61285,75285,59266,32829,83002,32630,10813,13687,46559,51930,56349,73496,29670,60014,67706,69827,52839,80162,16805,91955,53960,12558,69869,29344,45051,27205,35059,71417,12361,65969,25967,59070,11793,80542,43616,77559,91529,20455,40948,22949,20655,61525,82167,37626,32315,35579,84057,97468,53908,94024,83626,77696,87507,34122,66112,30960,95249,75893,79427,83162,33123,35274,59295,90466,39650,38877,87904,46769,49451,72659,30414,44013,36191,84533,66460,20294,90603,84061,97974,77111,63150,94981,91041,72261,29979,88933,93229,26967,27651,56358,10937,15450,15697,94528,85640,16947,56222,11472,21984,60052,16446,17240,67684,58113,94687,17391,98558,48016,22167,52525,69606,67133,13119,87858,22873,45344,37096,24702,87044,72279,83881,30822,27790,40805,58944,95783,28935,80646,70681,97618,92222,78708,34907,31086,34409,71601,23778,94776,99447,30913,88586,27843,77627,10279,33413,91827,73984,22063,57926,67124,17813,43192,28226,74131,25947,22539,44214,50940,82470,59110,65376,13882,43036,12113,77297,70733,92602,66479,31023,86552,30279,92993,79149,35888,90962,75260,41820,99569,25304,18419,62534,51973,67990,65062,83431,48932,64678,84547,13891,39659,34114,19196,69500,22649,17459,62019,23246,25454,63406,18388,21374,65903,28144,40584,34327,70953,50277,92754,96996,33118,33185,60895,93927,13881,24223,13243,14028,10667,89081,10984,40325,59515,43918,79425,90227,65222,71286,11914,87705,96635,19939,40758,96835,13008,10005,42317,12075,20305,24988,35957,59974,25896,16105,60276,66164,15284,69269,33178,78914,18756,72180,30261,84651,47296,59789,70975,59654,31432,95328,28032,52470,20725,39023,10688,11037,30010,67492,46202,48048,74895,33534,22248,63092,86028,33581,59570,70961,80788,28078,12229,68158,95492,46977,37136,80888,36800,57061,19133,63974,19639,62016,10848,64815,26142,33429,88439,65946,63438,43003,16588,75799,32022,79396,12563,64306,80598,73338,59168,79259,27576,94995,21194,81236,38828,83382,58425,27849,30018,29178,88490,23365,12872,74587,94712,28304,50363,24758,73641,46351,55153,69468,91033,32460,18789,77010,53399,66201,92516,97622,96280,17066,38159,93540,78036,17196,64404,88943,34657,27900,34658,40262,50043,41918,87726,17050,13044,88689,41538,94487,22026,53311,67946,45111,61303,86885,89919,15307,73522,35408,60784,10614,68903,93194,64852,24754,17837,84664,21775,10225,28261,55128,50259,50416,20094,47207,21594,30683,43794,35104,94330,19369,40925,99741,21873,57558,99308,71194,42272,19857,78812,81623,50619,17370,79503,68791,36630,59749,14565,58578,57624,14845,97396,93979,29705,35007,23829,52683,52184,33907,67677,50404,92617,59219,36878,57137,67044,46935,51895,16787,56364,70826,26664,79780,94196,55581,57641,99293,95140,74307,23790,98436,80199,17728,29783,81597,74330,57320,23995,81793,81778,44734,57257,86100,75800,12078,58910,88691,43332,62304,13992,18827,47204,41926,16737,96803,54709,23470,63191,44573,36702,96810,97151,15225,45785,16214,15100,92764,34908,56043,54769,13269,39447,84960,28837,94267,66249,12309,26568,52945,47759,42931,97874,23995,86010,45749,90281,72894,32604,11098,15246,91397,83948,98880,20128,76258,11683,29814,77491,12081,44714,31816,71626,41207,50565,18191,96357,38994,91845,30451,53303,50638,31313,78244,91985,27125,59470,22375,18336,25452,16308,96694,70770,71451,49377,57587,25356,99888,53409,24268,12458,51803,82882,62362,24495,76756,39224,85150,98081,21923,29048,37384,68483,52858,90173,14928,24378,38664,57815,78419,65267,57146,46385,44193,66815,64725,54315,29146,70833,97043,26882,28406,33490,69182,48956,65319,30372,41220,50823,70030,85405,12676,45338,36416,61051,14634,84749,76578,53396,50735,30630,71249,82370,48423,18109,78958,64753,85201,44445,47293,78336,76409,52782,69045,35589,66805,86389,66004,60678,94545,32914,37575,76321,70890,26460,81644,54495,38641,71437,54531,51759,25357,52626,54665,54802,28427,66283,60832,74929,66829,75222,71614,29725,83555,76143,59352,76255,12176,75986,17628,94647,61804,79320,82275,56425,27485,36593,29838,82514,73200,74181,67476,65693,64181,43259,63916,95312,88705,25123,99535,54106,20936,90256,31240,45079,31223,96926,92985,82885,46900,53918,50844,99683,21613,62950,26477,53140,83913,15053,48855,10423,59172,48781,29304,23773,53221,69878,66724,82284,71545,64175,65471,29097,14948,17798,66128,83089,56993,19640,86589,26484,86891,46978,97886,46750,18773,48347,27391,56151,83190,50791,56514,82086,49914,97425,20950,99659,21441,29197,80024,98545,74133,44956,61450,28769,66433,37500,78281,81019,64981,37174,63963,11801,38506,22963,95807,66884,46786,92425,52074,23878,65072,87297,13261,13181,18415,78266,45758,35216,67841,44823,66229,54282,19861,32187,34636,41588,19667,74404,97241,58555,20823,68538,78556,77671,64404,52537,43236,94009,97804,16211,90585,49969,34780,48846,22470,53729,12409,73151,53321,85108,40958,31361,80638,13367,92272,82071,84403,14651,68064,61493,57203,34321,72516,86283,31779,84789,78217,17217,42462,93531,61286,72865,77410,60103,22043,30554,99752,73574,52627,48204,39864,54526,17901,71187,33789,47959,99511,97665,20495,82884,39986,57112,17709,83999,59533,11134,89859,15975,74140,36788,42167,11680,10304,87173,50178,76032,34491,75630,84826,14295,49512,74251,64474,38292,45051,64734,54288,98098,66564,68510,38667,70026,38318,25882,88127,98920,16237,50377,44167,49494,66983,95786,92396,23955,42182,49765,98806,72343,48653,20256,22580,46114,17281,70679,38981,64562,50138,28446,71689,38186,48209,96290,48638,67772,63243,97719,76085,80390,68090,27804,30182,57178,15499,27173,84380,93210,71361,95403,85422,18074,37662,56624,74939,71722,99916,43553,80546,89157,65628,75256,68421,15815,71969,75795,48213,45967,22155,81247,41266,78873,22925,45272,46967,99404,90685,61110,56867,72366,28762,59751,47851,71735,71001,86134,74804,26012,29848,76476,63841,31666,77954,83351,96698,93604,14063,74320,23865,33630,75180,68858,86961,55244,56686,33042,94787,58162,76760,77066,39640,86203,30632,22450,73304,66371,14567,79022,93409,88501,98148,72797,85753,48901,14391,21806,31136,16508,29527,70498,88564,81954,32305,31604,11301,16571,96396,15631,37772,71995,58228,15228,66443,48020,27289,75258,38692,39462,58628,93920,54429,96257,84600,20601,63191,80622,55464,92529,53547,96894,28823,58073,34072,27657,39805,66258,77993,95511,87021,71416,94722,49772,34359,92642,34606,92425,31842,95041,34402,53726,84027,48231,18544,27593,47870,10126,11101,52801,43900,37999,58061,55397,58320,70799,74734,45769,19293,21694,57768,64176,99169,46200,24482,37780,69043,21716,76731,63718,67425,93798,92782,71281,77353,38198,96155,47616,59719,31409,29881,67969,93780,28035,53363,80670,18059,80411,32449,21358,31055,89605,79186,88979,44276,31774,25134,11787,97925,68282,24000,73285,43577,46122,15507,23332,45003,50645,28865,59700,90174,45615,71193,20273,92860,69615,75752,42285,59974,40385,97598,93697,16820,16535,61991,77863,91999,12842,94882,35530,89597,34134,62704,81801,51115,44317,14170,86535,93219,56005,78054,68331,16233,26352,11975,99612,34770,23760,45148,25415,16981,88650,52584,66267,18643,18079,49722,24675,17888,42608,66593,49854,29108,22393,13300,20904,31031,88982,74783,49377,28507,75793,40798,61426,49088,62249,96205,64108,82234,67830,76222,86647,68467,29450,13065,47469,70939,93500,39752,84628,26501,14663,26927,85294,34005,21798,28858,74546,43037,76272,30430,94509,96910,18565,41451,80258,17708,83112,58361,51739,47010,25608,59241,43794,79058,48410,16436,99159,56095,29797,51647,25556,65703,66394,25632,90312,39789,69909,97857,40299,81129,97015,13182,62219,94551,52697,95141,21379,58166,52351,98521,47553,98614,90112,75126,28081,41396,39277,11694,84390,59527,75534,67980,46269,37735,97603,11850,85990,33097,92649,15024,37650,86732,89138,93276,21622,30040,99659,84799,28571,14941,96786,76503,30636,92567,42297,23082,18311,47547,28374,17752,40534,16388,10934,66760,82970,57753,10429,95609,17860,35453,32554,20278,93197,38481,83683,55045,83586,85996,21633,11658,89888,62602,57305,93539,13383,60298,65631,36548,91406,57478,29316,63106,90255,11836,35550,89548,76904,83510,94890,10163,86090,79106,79962,48246,56314,79831,90011,59360,76497,80032,29056,58932,53293,64197,27019,38588,40551,43149,49151,70969,44586,47462,82418,36708,80665,41821,91418,53630,77071,47528,35440,78140,53684,40189,51687,17191,66224,58566,48489,86562,34526,34378,61829,67978,34881,48733,60959,20367,26088,12037,11321,41230,49652,23871,15564,34632,29050,92740,25264,35870,27502,73837,10153,41712,77115,85201,65813,60615,34169,48324,81686,98120,29858,63110,66248,55926,13280,51722,50244,19954,81295,32512,56139,44770,65648,25966,88409,19615,74213,85325,99094,85214,27988,73988,52909,16693,25864,28325,28458,54022,11346,80388,26776,99619,90941,69048,45026,56762,99280,94178,69169,63339,20440,84313,41517,20833,35934,33876,68479,84185,66984,67105,44054,42134,96223,75226,51481,29821,24193,64239,12506,86625,62260,44957,15794,82051,78160,29937,49296,73903,20745,29165,25529,48899,79173,99142,33905,90825,32975,10013,70418,95730,55330,29827,33578,60365,38266,65105,24452,37855,43395,47010,74779,52670,95038,34730,79519,34264,40131,60094,37833,57090,46464,71063,86520,10671,93268,68904,26153,81510,84108,68753,17664,15841,40282,65438,59664,29476,99721,90409,75699,44412,69669,49280,95990,85173,17434,30222,10741,77408,99596,48932,37878,37042,79480,98355,86322,58008,75332,46427,10607,97801,75317,94036,71838,30560,39187,38425,31026,58604,33908,41476,59903,58423,67815,26157,83180,78485,41182,26452,56368,95838,96701,63436,92881,75224,59566,15561,35981,23720,27801,12555,32465,60106,96050,49609,61788,81905,32682,83345,35935,79404,11641,13379,18056,87629,18778,61463,15646,53635,27610,62970,66922,92180,99461,30925,10861,10148,75094,94865,26097,62432,97264,91216,50609,71665,94119,17333,28887,43911,18116,28297,85015,10909,75570,84055,98315,24826,34896,70995,74906,44915,23349,56450,49770,33272,20351,58731,43773,29525,47743,25107,64777,21209,48801,38956,63082,82619,95153,55443,80482,69590,81812,44189,92407,96087,32453,92714,40991,67660,11495,51370,44748,36873,70484,41144,59521,90815,44547,12750,25081,99819,59535,97506,26906,12107,17796,79433,74508,55562,55462,31873,41272,72890,34538,24532,52212,12466,98990,78067,87452,78145,79569,77161,44313,22612,78981,83334,30043,87187,46956,20570,48361,96013,82828,64886,58834,53766,43447,39931,11638,43156,89788,19873,13570,34088,92222,78473,45642,50344,17580,57169,13895,36764,43790,85706,66495,67940,23881,37305,71714,13214,33955,64083,75378,83364,70997,63516,64270,45673,89357,77643,69859,56082,90773,45501,36509,82385,36085,22959,40676,96179,17409,24763,47579,58505,45704,66908,65241,39324,84064,63674,61865,54299,45012,53155,98091,51854,64768,57814,52962,45339,11098,57512,82614,40464,54117,35787,59010,50944,59284,12999,39375,43787,45887,71783,12621,22813,41864,97867,52379,91953,87589,69087,98123,40135,89615,69984,84247,94356,39121,35976,87243,15362,28000,40504,21605,26036,56561,45077,34446,77889,68916,39613,11887,61428,61176,96516,65302,11589,27540,22124,21807,10708,21803,86612,76180,26247,10471,27688,69687,42812,90333,11828,84695,88624,73068,55615,70653,23792,96631,92061,23629,63641,30158,60379,51341,41913,36621,17659,40054,48318,30320,28352,89620,11011,45179,52473,53920,60685,82897,24546,18351,53832,86897,17929,20333,92313,77607,70651,84807,58721,96865,97827,92916,10175,30050,26010,83702,99626,39185,54365,52103,97813,41151,92425,47270,85344,53019,98650,75732,39038,38583,68356,42344,66043,12798,33174,57896,89883,59937,87368,40528,32443,55497,47703,28775,99025,63569,76095,36219,99398,56111,88674,98037,49093,38615,53905,45116,96709,95668,74714,15139,44432,38470,10258,48574,68894,94308,97532,47881,71364,55985,64374,51848,61820,24589,28157,92823,92923,51367,63094,84883,90737,59829,59822,66376,46502,17655,88291,52724,22846,14483,35007,10064,44282,53254,17406,53316,22031,16856,81243,41584,31507,68420,56074,73121,84474,17430,39590,42049,96992,96553,79186,48109,95191,16759,41922,80485,62115,63868,17560,67549,20260,60413,35373,34708,91351,33761,59359,21237,48494,93797,47209,17884,86986,91156,57630,13821,93326,61726,20060,25231,33310,56107,93496,28211,33254,39710,92832,34595,68285,51065,55076,30972,29124,48793,29157,77852,82785,86292,55320,34018,88642,98684,78192,49960,10238,23752,44725,60057,67995,85230,47602,29406,12773,32319,43295,99120,56537,45481,99990,20105,90857,99271,34896,49119,61026,64087,49662,71286,17052,49718,10648,54462,31562,28510,97162,36444,36514,51930,91762,79395,76873,44334,21577,69489,22345,66652,50016,62833,29584,48350,48786,13610,56597,14643,25381,88557,99966,47617,23412,51137,54846,32703,37620,63000,40942,43972,14882,80701,12803,71871,99130,64633,15183,89636,89030,20882,95059,25398,90268,73295,93506,63825,69682,59482,38663,43315,99598,36133,68055,41492,74806,69788,19138,70591,95348,50646,65940,95589,62032,69730,39215,80249,88679,37844,57594,76335,41125,56680,41898,22192,28815,40543,15907,26742,49142,80977,77339,93783,82900,23993,14998,30779,24268,94908,18174,42559,45079,62039,89200,99629,63423,20695,72706,55254,12522,96830,78644,19426,75605,10481,18657,87399,56515,97947,10900,39354,67148,93358,79816,46926,95069,92424,35816,83454,70592,20345,61717,10056,17540,20584,63882,20778,88350,42355,95583,87243,29980,60502,60129,17542,43175,53750,17500,84540,16329,58717,89096,80531,42451,72235,32498,39397,12187,77931,55613,11182,57324,47665,17990,24156,64711,60621,49752,14499,37413,82374,39273,14335,56157,82082,71692,75806,86660,63315,41996,56916,50576,89815,91162,23027,34108,60437,28262,29917,74260,69916,60029,28803,88026,89793,21231,47299,28993,22073,82400,56992,72595,63445,29999,59332,30454,50416,64740,93300,30105,13220,35710,85546,31520,84333,87928,83191,86168,15417,35843,46908,17617,80172,88686,68649,68314,72523,65574,90827,71620,87714,90702,89241,95229,57532,20840,57547,30217,27133,33011,27072,67884,61888,27787,60211,19107,40455,81714,65012,49587,50020,28858,37232,43126,13416,29426,17734,93795,45833,98514,15800,59587,14066,66397,37620,95272,93120,50091,13099,23966,13278,20138,46280,24665,44904,78240,81051,49927,73156,83690,96681,63556,15566,14813,43534,63205,18681,62042,53310,82814,60726,60186,34233,30443,97003,30677,45388,22284,42429,63992,86542,20484,50746,52797,51697,79292,43511,27938,37173,78980,82542,99694,76779,97211,97767,39046,24366,20055,55024,47011,41597,62384,96352,83270,69986,84895,47584,87196,30628,83163,37888,64333,16158,94662,11615,27693,49992,44672,19273,81775,78050,20496,86971,21547,75991,25986,75478,87095,87601,42413,85749,18913,66212,17971,35049,98021,82583,86780,20719,41864,51357,15305,52709,48241,83650,21832,18359,64882,52719,41409,29931,68987,63340,48755,31872,22618,58507,54338,53955,73568,67083,22479,13033,91073,92910,84830,55507,12785,24419,71001,56384,52637,73174,86750,36432,22437,39781,57909,72007,46964,56119,84813,43272,10378,98850,10434,10562,90160,37141,66562,34600,95074,55199,52821,87684,58988,74066,68460,36942,61426,79002,24803,63650,62832,52401,10827,48427,69508,77387,98802,62723,94408,75602,16552,81256,65277,74778,85478,18135,13335,81088,75758,21428,87739,35656,84341,61353,46069,17231,84970,44647,37495,33701,73411,54395,39013,71512,43132,11218,70640,11521,10718,47905,33038,25676,85516,72479,20546,82441,67195,48503,49384,55069,48961,85749,13102,22644,54888,38942,58986,52466,32918,79413,40859,26182,89202,47248,46933,74505,62325,81779,46998,19639,63998,46836,69505,96842,80342,93676,36162,13011,41525,84185,45885,47387,94748,19443,89477,36450,48154,75429,84982,24408,35888,54801,41961,94466,21105,36673,67787,57633,51671,18378,61999,79332,13441,87177,25467,54248,96629,67772,90660,97497,98084,29328,13166,60324,54295,22404,42042,42780,99846,12314,93432,46140,10161,60086,47646,81753,73179,14896,19729,78262,47680,34488,23924,34285,46413,99490,40778,31726,45462,48477,40419,66463,57960,70841,17477,41222,42778,25441,63836,65751,27968,69616,52650,55194,90243,50528,13878,41244,44658,13880,81883,75212,88941,66024,39299,83620,85828,88856,22488,52369,56895,77355,22690,49466,28868,63654,75986,95650,50413,60447,88726,26052,63500,33909,64410,49270,40779,52188,78972,72301,90440,85559,46520,86545,52172,38259,33873,97871,96571,31340,80860,95608,68523,77195,70996,95167,90682,27461,42081,74486,12231,61777,52559,30847,23041,76575,16123,89338,78024,83867,85118,37785,64286,42935,43635,76013,53132,99811,27773,20061,47534,26556,48081,72514,12431,59511,84242,68274,46490,75729,18559,36827,18228,78438,34118,58333,59073,23211,82071,84058,69462,21651,33354,85012,44309,43545,97932,47513,51870,36625,70593,82433,80579,30138,92942,22418,57810,16561,42362,42482,88307,31561,34967,32118,34043,44998,12814,26156,87618,68685,99933,71790,43363,23359,23591,96051,45231,90199,63953,33544,48172,15729,88035,36200,31252,33687,52695,98549,71891,27659,57979,20782,50557,37368,58968,93252,67497,98937,39462,56969,24994,17192,23460,71766,47070,81173,16297,87873,13909,24345,77642,54960,16976,71021,51102,87172,57072,71733,60550,20802,47282,80793,38263,51452,37119,37755,61273,62902,13999,43385,58519,15198,28117,17582,72799,35530,68449,99543,39628,27134,19884,78553,11109,50627,61957,33564,25189,63080,44201,36285,19636,98253,15846,98714,28256,45717,39407,72569,66278,80401,36410,43390,56044,37933,89090,81874,10030,95718,63001,98230,25773,55700,39168,38921,81404,39515,20954,78401,81062,85439,58297,57062,48946,85215,21984,90114,22896,96566,26479,66368,23975,29708,56734,25085,17082,53533,56219,68644,23766,29772,97876,86295,64924,39157,61617,99874,12228,37019,55189,64446,73962,83047,18686,41364,80046,51947,99749,54405,36021,73029,50293,35483,90811,95277,53362,92142,70275,99766,61368,18031,67582,91776,76075,91738,24802,22389,74026,75552,80753,20016,32808,45299,81950,77642,45878,18391,13722,45692,32662,11828,17292,78126,54846,69855,44329,92364,71412,45449,81601,44169,28064,22113,79254,83322,29488,98522,57509,68369,20246,94319,55795,84556,20461,88692,48169,69156,76442,16869,98220,67655,81907,50583,53260,49183,45399,93918,52032,89166,55221,47120,69011,71194,89740,75721,19379,44716,99200,96394,16975,31803,40820,92929,68873,71969,28264,71545,59161,40211,82273,52165,31328,65840,21939,66246,33126,57934,10717,84193,61776,55646,13907,97005,76853,40189,48046,93190,21154,67323,33587,54291,87941,15681,83926,46245,33131,89262,59476,79404,28048,33232,87466,21400,85698,38362,70323,68274,47526,60840,20803,34717,16394,70999,23343,51106,33225,37844,80951,47141,41897,66267,43737,26233,43660,18258,18573,24741,10776,12232,16818,18260,62779,61716,27280,78725,88420,98090,55299,43876,94482,40829,11324,64590,68019,42060,65556,93403,26907,80951,35047,73331,53176,61057,81931,90761,43566,32648,32774,39646,39825,31521,99949,51168,45984,41766,89403,81770,13412,22097,37527,39383,78065,60616,58894,78338,77046,22689,59782,62815,64779,64546,65023,34148,11406,63029,45327,70811,93847,73855,96331,67448,42178,41663,91720,14309,15384,12729,60564,11369,24518,37270,73321,58446,19101,49235,98891,26710,15796,58386,51323,92746,63328,90967,62430,93392,70402,50898,98848,77392,23938,57918,56030,65612,91928,69875,41418,57578,34329,64246,92615,37291,78795,31223,77388,75548,62334,82140,19091,32318,23210,54629,82203,70488,81721,75673,41455,34360,53267,32872,21514,84038,49292,91721,95027,70521,98732,37625,61303,75792,16851,24535,35843,31742,17042,21616,67295,12471,91304,79895,73449,54676,23774,49375,35423,49695,72117,28813,49701,18824,42038,14205,31403,48086,15523,59534,14390,40173,54258,69511,76443,45758,95449,89378,68676,83985,40088,62787,92837,34829,37359,34757,76689,33999,12685,39699,76211,82163,88878,39246,76250,48291,99549,38502,39710,40554,55951,42349,68577,52875,50976,91819,68951,92512,12192,95642,39078,22487,84866,67293,61497,12902,16258,80931,14297,85237,47826,64011,82097,99738,26404,39744,29700,39805,40443,47128,50041,51728,86508,25659,10066,27824,57434,24533,89969,39684,59386,92202,88144,36086,55535,48790,63551,82901,10610,65444,16538,40572,33629,87842,61619,18905,99080,28869,52365,98341,50725,36050,42126,96257,46862,79650,74607,95755,26845,78790,95760,96944,34068,33624,12293,67731,88833,94307,93159,37549,76526,17410,66360,93648,47285,25035,11693,11354,81724,20963,95963,68752,13851,18492,90752,67740,91685,56933,55728,62337,53759,74286,93572,58619,44780,45483,74131,57593,88658,71057,12800,37074,27465,56598,87006,66697,43861,97094,97673,64918,98776,92219,63797,67800,32664,88205,91178,87835,81293,43685,36476,95868,75282,38608,23274,73744,74732,34318,63096,10795,89769,29472,52662,65448,99830,47692,37176,62733,91342,88194,84451,96295,68056,16609,46959,77276,80824,69122,10466,61382,69976,39043,17682,80246,41653,15136,83888,20329,34100,80726,41512,97353,14399,85724,43123,73061,36793,26185,85756,76301,21570,91202,38502,18850,91594,57727,34684,73145,67920,89627,92962,24060,92309,13166,74311,23581,21413,13540,89226,26959,56886,37660,95953,65959,10489,24599,43254,28176,14283,77067,91433,91083,87318,74558,44471,60320,42917,91065,82962,23309,60844,22317,62225,66126,96009,31922,61018,38362,46386,58843,76091,95754,40867,92364,59067,50117,39752,53384,70570,65982,60751,16501,82392,68542,24949,57773,95348,70064,93595,20701,30269,77508,40986,37897,40230,49737,12193,55963,19799,27714,75646,43461,92380,37361,89008,44609,98398,45103,47675,87901,41848,28252,40959,61771,27700,88719,69843,15968,72563,55188,87344,88059,69098,53161,81028,88376,15713,52850,48675,99946,59570,35417,41268,96128,61624,13938,92231,56931,27186,82716,66257,21127,75025,22222,11718,94649,14888,62778,25301,69241,90639,61496,79428,84312,19247,82790,34365,87033,99921,87295,50146,25844,90909,29368,48685,27931,28872,86404,40191,40885,38919,82840,98194,44710,25797,99117,88614,74952,43884,89900,43430,45936,47920,32486,44066,95345,40067,23156,89083,55910,11297,26740,51565,86918,41930,45556,24068,41773,49758,45002,64157,84025,24616,28800,84567,98918,69914,51971,76506,85288,10029,10446,99657,67224,70107,79097,38589,83260,58380,73447,47556,15211,18236,84987,38651,87188,52264,55368,88661,34559,39226,71369,61566,14324,51310,93009,62047,96526,74638,70618,30725,62884,96420,14162,92154,16752,96401,44621,85942,55769,98878,35055,26937,75376,40064,73804,24128,74725,58737,59097,44731,65167,28974,72913,80692,84868,92472,35542,43125,90354,68421,11427,39874,98190,92648,92013,44128,87058,87892,70293,43304,64906,91026,48852,56635,16220,67004,77203,28476,94320,94718,78227,72006,18170,96394,72724,52553,57986,44886,59499,75499,35196,67438,97067,43282,68793,50138,78929,78171,62428,86263,73852,76035,59274,26114,80813,96823,66730,51100,35985,30243,45768,12845,99376,87998,31121,41541,10446,52936,91185,71739,76849,15292,29053,60296,87781,79564,56579,43635,11644,82589,16819,30971,83068,56044,35326,37145,81960,49124,71663,59886,46335,63938,75093,64037,12438,40373,88969,42738,99018,77450,29539,30104,63738,13026,98561,98476,95936,18896,11247,28606,61452,43457,69336,16033,84922,17904,41038,95283,15159,27313,47607,15948,87602,50170,40174,10475,71779,76634,32553,22808,50319,36469,66262,48520,96478,28179,83982,74342,27972,78090,24133,33050,56792,75228,61737,24116,46728,42771,67193,78016,54678,34856,64362,33265,78871,42960,84539,92017,27930,16992,51752,40614,19475,50705,51150,22160,14350,31551,57754,53590,55651,84509,39000,18953,27105,18532,70182,53901,71373,95715,98071,89289,49846,36451,94664,41472,78482,27365,87979,37502,98821,81943,30139,30950,83265,19512,54570,74191,42701,18423,32599,42896,18548,67598,40464,28119,98388,77417,99107,43821,83754,65966,67192,53760,92855,43616,71610,81613,20042,75330,37620,76765,68014,73677,81806,46395,39484,69775,79006,56571,38263,17698,31814,50663,67931,57727,66921,26670,82522,69942,38376,22608,99299,53874,81082,43328,23457,21150,88962,74157,35148,93462,66786,76624,28605,30081,25568,48731,51462,67661,11998,59149,29219,76575,95380,83713,31179,98414,48013,30310,65876,94208,88726,61919,57071,32679,54047,49635,83730,66391,94983,56258,76864,48409,55346,72329,69943,18949,48088,29133,16993,84935,48105,45363,75442,22143,53161,11058,56247,69047,61642,95669,18559,41361,10135,32591,85619,61187,57556,95166,14148,20534,59021,45613,48537,37995,18287,50170,94178,83934,17288,82252,92900,98864,40119,62631,89379,12270,34040,40817,20189,81113,45095,29172,60633,32057,48542,12118,48313,16367,66709,95057,28242,42374,54725,52893,90727,53214,18688,89206,30964,28185,54884,72267,10064,17004,63533,94108,79780,30886,50786,25744,66912,43835,29032,95319,80191,53922,89520,38378,93691,74768,21545,61888,79081,46361,74418,90268,37914,48430,26608,74105,70366,95338,21369,94191,11531,80603,80260,20122,53963,64235,56539,83714,71289,80325,21762,81172,42254,68751,65214,62688,39217,38530,72675,98811,58916,69879,12770,55020,96238,76600,81344,90320,37845,19491,42443,26228,37428,56638,85774,29453,34110,55494,70347,97728,63473,35175,60268,43467,31486,28951,37163,65840,42522,22602,40096,75829,39365,18209,55691,88633,87289,96836,71109,53468,64761,28282,52800,73486,23829,72645,56522,39132,39218,50434,93686,44226,77599,51289,37400,88995,59048,39815,95003,36680,68142,77317,72321,59645,68153,30296,58652,49706,22972,68702,65498,43169,41281,16645,57468,54029,72892,64057,59255,85292,24888,88296,11664,46917,12493,85777,53806,72279,22312,22746,86785,61594,25320,22737,67916,22236,26701,17819,97562,53681,53444,65219,74139,48437,14768,29481,13609,44047,75826,77134,51054,39593,27454,97764,17167,14800,21851,17702,38455,79376,22673,89962,47407,24498,25930,11776,57518,50029,80338,64950,82864,79626,89732,34107,27789,48602,58434,29899,17631,91785,52471,57966,37874,85413,84183,51720,41469,19071,94817,68098,66263,58746,82155,82298,50282,43274,79670,52134,48107,55068,84949,21134,42736,86554,81546,38440,94293,99548,64576,86784,65378,58741,54218,40652,83160,32877,56446,10613,72801,31190,34299,57430,26826,78304,63169,69531,50630,23425,68717,65080,30257,67281,95964,17790,95837,73928,99219,96737,69183,17583,92268,71246,36393,21714,71482,55155,96911,72436,43669,17798,91885,23992,40337,41264,24586,50216,14768,83605,61617,78155,83374,71915,81321,50365,33382,90090,55040,60912,63001,19580,12818,36895,38009,70414,82089,74835,72949,77329,25992,72420,73686,99720,69892,72886,34810,68807,40155,27636,84903,60487,89663,70569,28088,63031,84216,89479,26819,74549,27843,35203,43638,50093,76575,56023,77088,91055,40139,58675,68339,88118,37813,19327,65181,11032,17169,28454,39116,86052,58921,15154,45943,11709,17671,53113,15886,21456,96835,26909,62647,52187,97843,62567,16607,24339,36156,33736,96515,98746,44095,27328,79316,84225,98096,64515,31964,10126,78087,50412,57569,19260,18328,64862,45429,18499,50135,40947,38382,23292,85003,99588,59767,27666,82210,11023,73006,33348,65902,28696,72183,60345,81937,77306,60995,11561,16023,17309,37179,40047,84683,52317,52615,58585,31983,82331,18024,74405,77507,61053,78813,73255,78853,15016,19115,52747,36145,96200,15797,72020,82926,62604,91988,49941,41105,47202,76250,98277,79992,26062,78746,53214,13380,65935,93669,99389,26161,66123,16431,11868,86483,91761,76954,42475,68147,62691,47252,63444,90822,40628,17316,94791,70309,31921,12970,39140,80367,60238,88884,63865,53134,19223,36340,98352,16496,60319,18309,31704,61184,38574,66739,72167,21818,52819,40675,98971,96936,22971,29067,91806,90903,90833,30319,43797,40768,89805,53504,48207,90739,29684,80968,65254,26561,15265,41647,26509,53476,27828,82731,46663,82827,96995,90876,38756,35796,98887,20264,60337,55731,31371,36602,55261,73940,87141,73040,81268,33832,47081,14684,42000,13321,33428,24000,85010,77433,93676,15324,25119,74540,43800,87054,71713,58925,87647,21364,44573,61793,55390,40138,77845,31893,58891,95796,28428,51388,71133,65798,72615,24919,12920,83040,42516,82888,26925,50624,18865,40175,69210,48120,35135,83781,95942,14460,94476,12688,62136,97446,32279,76180,29509,54176,27114,24180,27806,32764,62599,75087,55532,56685,56633,26542,83105,97005,66167,67393,84245,98266,38338,22681,55721,73860,18606,64202,95276,45629,86156,85371,41652,28023,84827,37477,87964,65397,45332,50776,24500,82623,13781,25938,55476,55988,48614,71220,39382,70263,97700,25422,22110,50609,72343,58691,93420,89712,12108,74105,26371,91980,41886,92444,49485,19110,53047,59265,28137,46075,17535,12973,44307,10482,45963,72188,78525,94417,67257,86532,64231,74701,43022,25280,34117,64310,93334,64038,11816,74578,86925,61353,18317,63018,46118,77251,15097,50345,80171,50388,19605,49576,10201,30028,38637,55227,42385,25282,51395,24295,14489,93820,99710,27081,48056,85026,92347,21383,56550,35566,43158,90973,14601,46852,95484,14239,63239,21954,10089,33834,90853,68693,10792,14219,14447,40251,45773,31173,80771,90232,26945,58420,56813,60441,90439,60149,35821,17532,23724,44115,46310,57026,93614,62593,59990,85417,53772,92850,80522,12347,62639,17087,49511,39325,81328,30348,95119,52668,70405,31525,98484,51589,91330,91186,72241,17130,31453,87518,66074,57380,69159,98014,40222,41018,50971,83133,21686,20808,39405,39236,42045,48271,97378,71397,13973,95762,15076,77664,97181,62053,32090,40304,35804,23347,42806,56989,96934,32138,36871,50923,18610,15976,57078,47191,21685,14219,91503,78659,45950,55484,30379,60501,65451,15640,95503,96336,42853,33773,93109,40440,37120,71536,10636,84377,33426,44957,85055,69864,85484,51632,55652,90857,50182,66814,63087,55733,43115,60953,49647,15958,41864,52019,80751,76923,21623,60085,84657,59676,47688,73546,50159,34162,67767,15973,74032,26101,21551,49603,80041,81098,42969,92006,83967,96846,85862,80026,51077,92268,32200,87437,64920,70210,69692,55610,59590,35497,37067,42482,62089,24715,92186,72475,36876,40555,58221,70664,81023,49773,32711,88565,10251,64341,78373,72598,30714,15356,30714,53590,31301,18451,73367,24965,27483,89486,97639,27752,69351,25733,39884,25949,15792,20937,92412,87330,33017,85988,24596,59322,63497,15784,60462,23894,60676,13336,10331,65971,74549,96914,16986,63030,11657,35905,72239,27568,90611,23074,44068,30782,26986,88813,97560,97692,79060,37270,95740,69769,99960,72138,97112,11261,49153,27203,94624,30311,18813,97264,27570,90430,99600,99239,69858,83384,56245,34625,22883,11049,94286,26904,32376,78265,94666,90063,25602,10916,71246,24689,33618,61667,10024,69215,62516,23523,91033,43620,25154,47047,56415,26883,42549,47933,22726,23592,53062,96404,18471,39322,69864,18468,67304,50832,98513,97359,68071,81716,75160,97712,69465,72582,84772,87465,97953,45937,81351,59478,74650,45331,77709,13136,58253,45311,67729,58719,47496,42729,77235,83343,31221,62464,13093,46410,49671,73106,17065,23831,56837,65369,88086,11346,93438,21268,97925,14159,94803,62708,47064,37529,52132,63582,65699,56752,26566,78263,33312,57047,15368,36482,91356,49044,39742,84201,77630,68497,85657,83781,84978,36603,22690,70758,34094,17203,67611,19022,60170,27026,73072,77801,51751,86317,62721,92343,65504,76880,83540,97214,63328,60969,45736,89844,61942,58617,80719,64911,54898,84253,23952,83695,55628,66023,12761,20629,19663,56547,85035,41053,54527,32047,76843,73357,86534,64615,21259,78835,86335,41569,83229,29000,22264,53818,42452,32855,19512,53327,22233,76613,76757,31946,86979,22094,24741,66023,29335,58730,89479,60792,15614,79284,63247,86969,38306,87800,50243,76370,54043,46768,26513,33029,23222,30192,58778,56009,40710,46802,52065,67840,68556,40256,18542,15812,72450,68146,83140,90747,39504,94960,17835,38926,32724,11846,30600,59926,71355,49596,57567,32229,18107,62552,93344,98337,42762,12856,93724,39586,99567,49099,60093,34454,65721,17775,77142,48352,84471,71745,90034,71878,68163,14768,32164,13661,10219,90543,62140,67960,58421,20178,48680,56370,20335,69925,22723,32485,19073,53173,54794,92568,15702,36290,54847,42942,28969,15198,16321,46694,44810,41293,61628,19356,15991,61665,97296,63827,32799,25027,69556,56739,50420,75318,22722,10461,84982,20836,64481,72998,65929,98653,55331,68030,51624,78590,55056,97760,42542,14394,74611,32461,40983,21125,37068,26319,57563,53809,77510,93019,20283,15911,77001,66172,70389,51996,25904,42733,76890,39640,76309,40809,86886,57790,23317,39397,62431,63917,47636,58288,98470,54989,48724,77410,85140,30250,97049,98701,14699,42444,69433,56786,33278,55666,31959,16280,28664,62291,19711,65970,91433,90437,94992,68120,11279,31134,85884,67485,61088,18705,26769,60261,82224,94748,59640,77020,78391,33965,33382,39560,13631,78336,93595,49048,99126,12326,88690,12112,58559,99735,82497,49296,94010,38792,80172,84611,15764,94527,93708,27465,63313,41831,54807,42226,45024,10960,56950,50991,68266,47357,46225,77706,18353,12798,96234,51818,70599,43961,71308,20604,60725,37756,96188,48058,17807,65598,85827,26599,45452,83521,49195,18539,57771,24122,88067,72868,82680,84659,18754,52961,12731,63397,96208,75531,57820,77151,51842,35135,45263,32727,94481,24635,70875,36407,82307,77218,50663,44832,57683,61951,54085,23591,22236,22111,75228,35374,39560,83419,21240,62814,49318,72344,34983,36883,57141,44577,59926,77879,35315,19141,53645,87055,32079,11307,78386,55889,43635,53384,74224,87383,17527,89716,81448,19071,66008,64484,92683,89180,56588,94065,89707,79266,67119,31142,66293,35884,21705,36970,40287,61753,47452,93174,80150,75739,65655,98964,35514,49044,85828,74220,12912,34238,77441,29806,99036,49763,73220,12167,32836,14779,90247,79074,76466,59174,59659,81517,52678,97140,85772,19279,94024,32180,73341,32188,22766,14861,33584,40377,37899,64018,40872,34508,90200,42081,86803,53727,40314,53853,70673,22923,82066,91078,16774,43001,62222,84035,12046,97587,44440,50239,76076,53902,50053,58353,70143,45550,91115,87074,52482,67315,13809,16223,27819,60164,76956,89389,41441,45540,56826,73692,73463,30989,35531,49019,24573,11340,90751,11562,81656,81185,37073,96885,87121,20018,13951,69359,23782,91833,26485,44789,32782,55907,85706,57817,71403,92074,36146,33840,14241,62506,82966,63991,46256,29557,85919,87880,77760,36646,47343,21844,47888,89566,61732,26803,89410,43269,15904,91204,74726,20515,23855,39968,50912,10058,50822,73112,28313,40584,75146,24988,21078,65225,64296,17307,67261,85061,13482,29937,58087,84448,95226,92329,38261,49398,92943,49222,19639,47569,37426,60786,60440,66160,44163,70732,13818,32901,40030,93560,10198,42335,84031,99846,66036,99393,29104,49244,80581,58503,32891,42595,69598,20130,80648,88551,91614,78715,45425,41628,86951,12109,77334,73606,61971,17339,15976,54935,65683,14334,71836,81468,47043,56966,98130,86201,32095,12680,30782,63320,78518,46377,79140,44696,30896,11800,34589,62498,83791,57609,65312,78154,40760,50798,65027,55846,46524,56294,48560,96136,52286,21578,36350,39079,65927,80877,70607,39954,63404,73772,34786,78255,36622,74044,41217,36210,94797,81759,72329,63381,75486,33065,75590,55475,58202,54176,47514,81393,41171,94966,10515,15904,31827,57794,29176,81046,86495,69423,26796,92840,51727,26722,57752,43001,97091,42784,48650,59446,90051,86611,84321,84404,54595,32925,67769,98684,20948,81587,99683,40268,57771,20397,81239,52882,34934,14648,49897,36426,21378,46051,49182,43185,41815,66539,17634,66653,70695,77211,66444,49520,97223,94818,43250,51478,30197,81794,28205,76549,86005,50566,24564,88975,72493,63395,72221,71114,79039,65613,52898,32765,31184,82232,67437,67382,19725,50181,45308,97480,54440,19198,10065,18491,83180,99779,85463,78020,56406,71562,83007,68061,76528,85294,81249,66771,82216,91612,72402,34143,51823,69442,80172,79178,97039,35629,10694,60810,78081,79013,56578,50272,99637,84418,27794,13590,60370,57662,77680,85547,72541,95926,46821,51908,68095,90372,24769,62429,98523,57578,83855,68567,91991,46324,64278,12166,45705,41787,40617,96996,82189,40921,18008,27467,12402,50850,38351,69455,63406,67443,91369,72675,89201,81965,12142,24415,82978,16907,45798,82835,29179,24792,47965,77674,25823,72042,24183,78468,49627,50893,67470,17931,63999,98036,97796,10197,23611,13191,71691,32702,20962,44260,28149,25209,12816,90385,97184,97132,15891,30289,20027,55632,20587,36547,66471,98918,93449,11463,95587,12637,30014,94191,66794,54912,40991,63066,43268,55080,47036,91438,63099,87091,55182,29849,52586,98867,22941,70310,65494,44547,20537,29161,60983,63774,66911,64872,92087,35746,54588,52188,73832,99513,99501,50796,10192,99632,57451,15231,76636,28118,36990,63001,46900,84027,42577,46723,93360,26056,95006,84427,56370,20839,23908,61790,67044,29444,53134,43438,36017,35266,66204,87057,14209,99808,16588,22368,55143,25457,68626,53588,63420,42351,18057,16080,48496,57697,58314,73157,58017,17238,83499,35107,68610,68729,64594,41129,92942,71798,61953,85172,51565,28064,15502,61578,26742,86982,59894,20077,31222,18734,20992,15447,66968,51970,77175,22257,44076,67445,95347,31094,20825,76738,99872,67040,64621,51660,86634,77127,94721,91426,92013,34402,82336,76855,57367,94864,99327,33203,19733,71133,12067,61976,14857,55469,62032,58382,61568,75903,20085,74535,40197,69860,58500,19638,87500,60793,49948,90263,66855,91998,23078,16254,93907,76310,24987,93823,38228,30999,78890,75365,18231,11601,27110,45966,80177,51701,92763,42013,79259,69625,34413,69867,29655,92595,28436,97580,95467,97730,36759,67461,61089,51881,84052,97419,34315,45662,35505,81059,66439,34300,27077,91157,69768,58701,45090,42393,50058,67744,34155,55301,21791,60878,81796,11560,28948,34937,34343,47935,73227,56038,97899,19319,70782,92105,90256,43879,96902,16360,36996,47377,76799,32869,10522,10056,60460,21649,75094,49863,86031,15417,94286,73995,94395,92030,82966,79074,38331,93360,77666,39087,15384,16773,37974,94875,58674,17624,87796,53419,74464,25274,51076,84432,98088,51731,50580,84407,77835,32534,66124,82144,66918,60480,81079,25773,40058,56717,79775,71661,85471,92686,79202,90865,37338,21189,43409,71155,28839,13774,71474,84024,88117,70550,46766,53011,48275,44072,67672,82554,63257,40968,88456,94227,18911,33557,97720,83952,70803,42680,59847,58530,21963,60391,82298,96232,27630,81855,75339,25481,74557,14616,11290,47570,18084,63432,76837,64347,37124,15040,80976,65202,96021,70878,12276,22697,96900,99195,91493,92900,40725,55818,89177,97565,45324,36352,20900,73384,23308,25575,30487,97984,77601,74592,83082,22046,46180,90459,18415,80274,62523,84956,73495,12121,16905,49073,55002,31199,66942,20595,54498,19307,75882,42506,88827,80425,18147,38991,75746,98771,93590,21544,37781,63934,42532,62160,31529,10818,43242,16396,46551,50217,72115,40306,79467,61371,84112,39527,60466,30063,55729,57170,11337,65671,87573,66196,74858,12959,57061,57824,23882,27271,93872,83754,37683,89916,62829,41502,82069,23088,75489,63866,34826,61017,38763,86971,37466,70870,18022,37942,57618,88678,41989,68799,40479,82528,37654,14675,91749,46019,77617,87476,31284,68765,16794,58287,34441,94353,37812,62732,81415,81571,51688,15244,34148,11544,86248,14047,74341,98450,10021,48668,81334,75442,71722,84004,15714,39641,48384,35416,58571,36629,92074,36619,14618,22656,37426,82927,95907,94599,81498,66663,85007,58927,46618,66742,41980,27798,61851,41554,15078,30189,76759,87003,82772,25440,99466,13984,13095,51347,57508,31555,41089,67084,28386,91046,13312,16408,13633,32858,47065,83370,75218,86665,61877,79398,13774,76647,84890,91805,96294,99770,88129,87206,38899,63645,99511,34880,40074,58083,56008,76997,28183,12301,91496,49544,54561,83210,47617,77290,97228,85431,20491,54015,72252,21884,95316,24822,71714,61184,40895,60320,35255,73959,73556,66789,89846,21067,12514,88994,16739,82004,66365,67125,61474,52536,20929,20725,75951,59447,13506,43751,49278,12872,66758,81940,46197,65819,46524,64824,64654,88221,86914,66605,14785,12742,71092,89651,89836,22822,91825,29569,52243,73403,26994,77909,13202,20524,66693,79038,38903,32009,43597,68651,74346,13977,45673,36864,27465,13416,76548,60177,20832,46022,65461,32338,90597,49790,85229,74121,20005,69568,85626,83143,37723,13912,88483,68655,78562,97453,61702,94561,12940,40316,81604,39183,16902,79784,85955,24438,47695,33392,80674,16190,61582,91829,23734,25737,69286,23111,69488,62354,38552,70658,17748,80727,55998,17067,34080,12581,27273,48876,46419,55015,22852,43740,34806,71433,48582,91712,75748,82084,88031,94749,19805,85419,27526,28949,31306,14322,62790,54465,85926,73905,12004,78261,23413,77431,55235,23228,65703,48161,97667,50481,41345,63624,50465,31006,75390,10009,11827,83292,51036,22148,35041,56168,62079,20779,98878,40646,70205,43410,24765,37584,83533,86572,66774,82825,13992,47355,17503,81794,56818,28338,77908,57985,89773,39629,44716,58161,49521,94141,98528,96404,40168,48046,35232,44070,54021,51677,46244,41578,43959,62503,13793,53412,80856,60941,83894,87913,61404,71442,42797,47193,11054,16942,25395,71629,97821,58930,18891,67139,32150,41790,77853,14325,82970,65668,89181,61169,76911,52546,47662,76794,94741,20514,11635,45834,60112,33066,51145,73938,14591,43527,16089,96827,24465,30805,49487,75559,96355,30946,75666,25597,12558,17828,54214,60449,70527,54734,54720,38749,64242,94451,51793,97116,55433,42582,84535,48935,83598,92711,62857,19719,52311,64943,84225,90895,65337,73484,26591,91101,38395,67732,98725,29146,96203,38274,60861,82528,87275,47459,88195,75346,92766,56480,61305,52130,10403,39854,85996,56211,59261,96553,20441,41982,49363,67154,15241,44202,97815,29233,47045,23802,25062,25216,84160,73142,68241,97794,74341,16646,46378,47439,19961,90083,13037,16878,95064,10111,85875,72603,96851,88708,67433,99707,33345,26197,11272,17275,71669,65088,36664,96197,17048,58982,46965,67957,45144,91218,11990,18476,45660,29815,38672,96243,14847,29749,43940,43657,18197,56473,55034,30794,16019,11634,15732,76521,37753,64891,15067,62657,59866,34283,86655,40242,57413,42961,91081,54710,29183,38441,45327,83764,30875,60798,43017,52047,37164,28861,30865,83834,63853,44595,41738,64848,17038,58221,87728,62309,53280,93121,53588,43939,32747,62045,53799,82700,79790,41335,61611,27281,29602,87821,76474,70519,74156,21023,93102,53509,97774,71871,55955,44590,41765,69383,48030,54375,49006,78903,91042,73727,49895,68886,11350,52036,63115,50427,94463,23725,65627,99615,74969,50189,64553,12771,43401,16587,93817,84297,95347,14500,43785,14727,24620,34700,12652,23929,57282,72426,23191,23520,24574,50458,81244,80896,50111,83269,58355,95623,87200,91418,35132,26653,54762,16610,76741,79922,84499,39085,52925,53237,14276,30354,37880,96790,87327,68627,65414,68946,66129,94382,70145,76789,28167,58916,12770,11834,34882,30001,91417,49877,59212,37348,79598,28496,65064,69324,25084,72593,45420,21123,93550,41606,90256,10633,55270,62993,58748,70386,92189,13322,34492,44595,74054,25260,80299,76628,11800,86198,74179,18774,33134,68631,84818,96492,25460,16627,46698,36511,43846,80036,98627,83717,75388,39991,41605,75707,81181,33797,43085,72473,18767,47445,22814,48873,31362,50898,41317,14470,42568,59914,46265,88218,29509,70133,73535,60126,28758,79874,85947,57478,40684,65418,96235,67403,74854,79308,84527,58887,11161,59475,68111,22642,51979,26284,31893,46675,83711,26902,99604,83677,63474,50638,43077,76758,60056,40047,42633,43044,30427,25830,64105,17829,72065,39679,58386,72337,27377,46629,45315,93860,80252,20606,81127,19957,63686,81725,99616,52402,83617,85209,55059,86131,22417,60892,29423,76540,63320,20507,96866,13241,57429,95003,82213,52163,53620,21285,65378,66595,15856,98812,68330,62713,89689,28521,40324,41165,36295,14765,79449,20156,32245,60195,84332,21644,98614,92452,34442,90788,21298,72510,70080,29680,65330,13455,77666,89251,58473,76223,84668,47172,26587,95964,19139,73199,72550,13349,78506,87523,12167,65111,49823,28244,12383,83850,53323,82863,89786,94986,70029,47026,73883,84267,35009,66494,77798,71149,99469,67798,42182,59523,42661,80066,46367,12350,51995,90510,49908,68601,53856,70391,27315,75412,37035,96793,27768,50980,78660,90606,74530,91945,76214,49529,45486,70680,35316,30973,81367,70125,37897,50392,83572,42637,57977,69852,45577,71169,78444,39875,37178,98281,39970,82792,51443,35006,41692,81485,75151,59957,14672,72423,41188,19042,89316,64286,70822,27106,70422,16055,48954,91185,25508,45247,92515,42496,59259,31559,29951,38721,94233,11819,78363,59765,61216,58623,76259,17664,40668,19326,88251,15216,23985,45191,20346,79601,77662,64679,23062,91767,98978,35441,94413,57259,70551,22718,60491,90281,71334,23088,32847,70668,94762,39287,11803,60284,72622,72585,61693,19186,34590,70696,71936,39755,13043,12356,26649,90287,61523,93878,59868,70697,46860,45213,30446,70340,73689,28987,23288,12095,83965,23894,45646,39823,99670,54103,28613,45486,29102,83065,52156,26270,85692,96585,39100,87342,51631,73297,99891,40851,15507,46000,19873,44734,30159,50189,32216,67314,85807,83014,43315,51963,42736,21497,55091,67458,85697,79702,24637,98506,16084,88052,42045,15451,88696,11677,46450,43124,63852,44676,70130,85508,12788,81608,27081,90570,18677,15497,36203,32077,68480,49500,98825,75100,37510,35897,12294,99969,51970,11706,59395,40725,19422,19988,59818,31812,44588,81410,85166,27780,37991,21243,94681,29515,87114,88822,35102,99864,99991,74591,43188,65316,93245,45227,12518,96662,32922,96298,56896,23553,13799,57092,28133,32147,60101,67566,29248,80443,70071,27683,50718,93354,57951,79554,35550,75499,35928,73121,40794,83790,93514,68895,72716,31505,82366,62735,64628,28758,12818,68578,55652,84189,29589,67325,36520,45461,41594,27343,54241,58255,43247,10041,41871,11752,65480,19097,57221,24154,95987,16328,90458,66822,54612,71266,88857,74528,61205,31987,85648,88795,59131,97537,27486,19214,30286,34817,45098,78998,88482,38455,38543,58649,74040,26842,17173,65103,54605,45356,60534,70006,32403,48721,40506,56816,77835,10095,23972,94424,74219,18720,61023,94783,77553,72961,37578,81736,22588,56044,45966,32405,26338,31467,59410,47835,63751,22297,17581,81176,22015,97088,46187,47596,58073,98250,61507,82104,59965,58415,58947,72486,88661,60515,31554,64718,58440,24812,33708,14553,83506,97919,61119,73801,13430,72433,96196,86676,94531,48880,10288,35874,29810,24053,22837,23077,47572,45758,39539,31778,32271,76356,76315,97969,86284,54972,97721,18539,15830,78363,49793,59456,58350,83924,15472,79779,20463,99880,92571,76464,33372,16118,61942,69587,59508,48245,21319,45179,40188,46110,93724,95393,74070,35463,86742,23440,66915,99367,89546,50826,48030,83463,90364,19423,94050,97511,36936,63869,44186,64938,76852,11797,31425,94984,37404,27028,63216,70035,18712,64284,10536,43670,91945,37803,36791,32807,21025,47647,70107,94110,23657,82261,55621,47747,89072,81843,66593,56511,31095,16757,85966,30949,47565,55886,70223,67245,15838,48646,75652,97608,54805,76622,76352,23919,70972,39206,74503,37352,46254,63047,49214,51431,23898,71732,22613,50777,18380,33883,60307,35386,20565,62489,79313,71800,21120,89674,80551,51582,40756,18384,23018,62034,17990,29852,76508,83328,20170,91991,31596,16115,23999,71681,43881,27317,19713,92001,23822,52884,68533,81158,45847,52237,50913,84287,50860,43303,15291,83140,19409,95342,83254,16288,71516,72085,32963,32684,46137,14122,27417,85078,62686,75203,11680,27841,94900,81290,16068,39240,13692,63617,75063,70357,22852,47998,51521,52866,12809,83577,22077,58848,41969,27240,13033,80947,94904,68388,32156,94529,13711,73962,74147,63472,83629,30605,62483,44482,66151,39127,91697,44702,28847,66738,49648,53876,45820,84468,25173,17621,21122,60643,37905,23172,19607,81577,51769,90973,83546,69265,40441,41190,82621,80322,73215,26774,88146,18283,48746,39525,36632,69467,50439,52979,26188,50210,80838,53936,51803,30730,77164,18576,76977,50434,88119,13187,87198,94509,88712,77791,80284,56277,28296,82380,83392,48714,91805,87950,90351,96141,24509,25515,83318,28381,92155,45602,78763,87889,69242,88252,62389,84009,66490,33866,32405,32090,62762,71450,67941,85228,24942,49517,92037,66045,39368,57459,40258,69688,13065,75994,81379,34870,38567,49276,29970,85833,93841,45685,23826,26227,53828,12460,92781,49262,35551,58862,49559,31604,30465,71054,88998,18844,18868,24818,87146,19224,81649,38938,14258,15476,10738,83353,80401,98615,42663,79201,24903,17801,42456,57300,67047,15861,42469,12649,47309,29077,20956,32524,77895,46936,58990,74325,37448,84689,52049,60480,67820,99831,63694,40257,92085,73347,23553,78167,71158,85664,75210,48597,52414,17400,44383,88887,96757,86714,26519,46161,50194,36905,60488,92737,33962,19109,58620,85768,79826,56418,90615,62540,63123,87107,37326,29550,37851,56010,32430,91744,43337,57275,99308,70783,38206,64303,19747,24588,37940,48327,58769,21725,83795,15432,13188,82641,11530,43435,58062,99880,10665,27174,60470,94211,22555,78760,70940,92343,80812,86266,81184,61401,20477,69767,53461,87130,23491,61666,58220,95005,39716,37356,96860,84045,41179,24296,61213,78562,12003,13796,88719,72096,99756,23938,27668,27579,10535,52173,78428,64342,32172,61535,69878,24501,43961,81915,30015,17579,76966,58762,61038,18888,60699,56356,86022,83254,75303,64345,92801,47317,33156,16795,66628,29529,87617,17133,10382,53101,57767,98772,61871,94828,23943,31504,42869,70105,35326,15071,60207,13441,42451,73691,90683,29753,80529,35337,77524,86258,61861,44220,54990,39687,11917,67387,38514,51969,57301,96605,72069,62837,97522,75571,16064,82818,68548,36705,38136,72750,32520,82215,48351,65695,58445,45217,62778,75570,86700,73150,47892,60339,37825,61334,91862,30803,97580,83669,88002,50695,89477,93096,50479,63844,79567,68613,89481,57635,55802,10459,99708,94382,85858,66541,31045,46527,54751,89178,62143,18680,16775,79656,50812,12107,41391,53532,71501,80728,85512,55807,37362,62988,35875,51619,67923,46693,48841,56706,11287,77175,90003,63925,10049,18122,87894,54683,11257,91175,67530,87911,30484,58846,34861,91659,10605,41506,53911,10412,94542,31582,45761,18101,55334,53810,69048,57736,16167,45501,84120,28033,20515,77204,60202,44059,15816,11599,49460,38224,11917,96086,30463,68077,82597,54325,35171,79069,85939,55130,79522,83876,32181,93458,75097,47185,16332,60022,56580,56834,21213,69087,15700,62877,35766,68732,80684,34670,14207,70741,15318,85001,49730,25174,17418,63358,22180,26777,51539,99285,25822,26414,23520,10101,13551,95542,15702,89456,70077,68286,81671,88420,98128,20226,17700,60453,67666,36682,62345,57693,13500,60111,46462,54007,94137,38310,60053,84177,58120,52072,93715,63403,73267,34379,43233,22156,52726,36807,42463,71849,60934,49991,58777,54243,97957,76233,79289,42371,66695,86801,48941,26455,74249,97229,39054,93192,34746,33705,92029,42516,81970,65709,25169,39468,61538,51474,59972,15674,69765,71759,29272,41477,71577,45431,28566,90609,60832,14747,99337,92907,49694,93089,64511,16197,91324,30069,51207,48834,58853,42239,65921,51366,93114,82014,66432,60303,38186,46003,40379,92585,25734,15394,65410,10435,74352,27520,66638,10770,93500,46319,12583,83518,51598,32882,94327,63827,57573,71349,40507,67502,32173,56244,99333,88465,57252,19314,48210,55153,20938,85217,58415,37721,50947,80118,16634,47074,23768,59581,54898,51308,63119,35485,95224,66170,10250,36293,70203,51871,16967,33237,78450,29010,57131,19920,52276,51524,40201,81542,39082,40071,21627,36500,69623,38346,47864,83500,68955,43623,67439,38093,17578,13493,92184,63459,64721,38045,28995,14212,24497,12468,99078,77718,30547,72192,90309,42087,54363,10177,10502,86550,16077,76840,77855,60917,64144,37098,93873,43082,48751,21361,56692,82963,23817,81420,39148,77216,8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30,60637,13372,54829,44760,60366,87559,34162,50166,49966,41383,51405,94421,62219,48431,46525,49021,46457,66609,93031,73940,80564,67274,99311,70208,65831,28704,51348,37247,31869,60394,99087,81253,49740,50734,47551,68076,17513,50397,46136,55684,21039,99463,32400,12052,90240,72717,35105,98543,96913,80887,38650,95473,13681,98208,58349,10091,76122,11073,78564,48495,73068,25863,22855,32510,37360,82391,86784,99705,32568,78823,93738,74720,52528,55030,44963,54340,67235,97091,21855,90826,40364,46630,90130,35416,45923,15520,23328,27931,79570,48344,51921,19751,71886,24773,81794,31256,28913,78228,23260,58344,81450,85996,75085,97316,32787,39839,36570,83160,89156,69755,41396,78520,62265,70266,44191,25388,44002,31619,84135,30742,54188,93374,76247,73153,23573,21137,56201,68231,32168,25656,97821,98778,55875,36253,83706,82704,35598,53263,32373,52184,58391,31528,20525,35184,98659,22668,64452,13422,90734,22900,51329,22246,16801,40599,91578,40348,44700,90836,90725,14096,22835,28300,81891,76591,40730,36676,55164,52062,49290,89352,94819,74396,28712,39051,43264,23622,19678,63701,60289,72268,68833,68064,97815,74450,80062,48268,78782,51738,36129,95977,79070,23710,78221,33505,28620,69782,12087,66534,82160,63537,44978,96722,19391,41458,57546,55349,72151,95005,48052,86185,64826,45865,71564,91950,69396,90816,70570,57968,74141,17343,68208,27056,32458,94803,60391,44483,55354,21540,13333,34896,76286,38584,25375,68616,64881,91346,67233,37357,85843,49804,54044,65619,82075,77226,31906,97143,25262,73686,85969,24972,94066,47205,53076,98772,55183,18740,58730,42949,37490,87844,36061,11642,27825,69722,11478,88001,65716,12740,47084,15622,56920,98832,20065,35570,64687,62911,56966,78189,79731,14605,30059,30412,41250,40861,79960,91301,45908,43814,44099,38694,44252,83550,34919,54125,60016,72368,75497,89258,78234,70218,94853,77920,39008,24391,89903,26265,87818,57803,64647,40285,75140,56758,80784,55664,22720,46961,65638,33802,29610,18549,43235,45192,62044,99106,98060,96482,55470,99575,32474,21221,82847,21080,80474,69203,24904,32954,95639,87937,89359,18151,81126,42369,74641,64838,40400,39696,70968,10443,82768,98509,23435,63560,69771,19675,59356,21864,66548,32952,50742,79514,75655,75327,34534,59865,64231,52453,25906,14513,19835,41176,84707,19899,49879,35388,25408,93838,42822,81755,75551,92903,24130,90875,67071,54080,88042,59411,63934,82131,52157,68693,18218,34073,91290,13141,92913,66971,11374,95648,22356,17225,13016,99493,89769,29682,96970,26194,46035,84197,94435,22708,59732,72457,17636,53581,58921,22254,39021,28460,37595,59851,31077,99830,87916,95019,95135,38725,94499,63193,96472,44026,51320,91442,41988,18318,54489,64311,13804,83193,74303,11639,33647,56971,93948,36312,87985,64397,63844,26889,44323,18936,93088,89848,62509,85649,30301,70250,98883,96384,56721,54392,88792,10666,37670,18707,63262,37632,88567,93945,82697,16991,76118,94209,87475,17926,68899,44349,99515,24188,58564,47494,31349,78673,33699,14506,95013,84484,51277,61470,31425,83725,50822,99457,79150,66821,60042,31549,31785,70324,46128,27986,67377,71437,92536,15451,21689,35096,95517,11318,73029,70146,13816,16851,45395,87698,26445,30024,67481,33610,69983,21553,78357,33763,35670,69947,76669,83410,70610,45001,84081,46874,24476,26256,34182,98110,79189,77345,72172,50747,89959,37008,88556,63236,51854,84070,63706,45321,87901,94828,18700,16507,82480,65115,94278,16576,51629,30347,76353,83094,48034,96039,78119,71579,87238,88599,65534,54604,25976,46459,46819,98898,32505,20909,15466,46844,61604,12061,67185,52164,33665,58958,63858,90367,77571,76172,66277,72958,43647,32948,75798,92324,33246,77848,66484,88381,82335,21760,90390,77587,35548,34098,51851,70825,10413,39457,96804,11092,91245,94977,31523,32317,38342,94104,43177,32820,53318,42023,90480,56776,63887,79577,82859,95479,49089,63825,70550,40874,83992,45564,92920,90299,47878,64819,94659,30051,27833,59123,62858,57829,27078,74602,26184,94570,96546,34968,73390,63289,21970,71037,75300,32273,61042,42827,90543,86369,51312,62385,50546,29690,91417,21393,56918,92088,39151,14513,76394,48605,86795,65871,77641,89390,28673,71631,13243,56648,31065,23059,97154,70622,34611,46181,71687,54772,51587,49033,55227,91699,30130,89537,77232,53307,53589,40067,97273,70660,76379,10407,20358,54388,94686,87812,93495,64494,39452,56111,38467,59480,18392,50108,71673,18341,90366,43789,25859,21209,23497,20593,49745,46428,77032,31786,38300,77162,13879,19177,32393,34915,93030,30190,68163,71480,50457,68300,51563,28822,27341,65014,90101,39689,81889,96170,70459,56912,84780,22611,19588,62600,59819,34712,27524,33026,90261,92126,10703,34706,41425,87050,92894,60317,16509,26421,35530,92001,84070,10388,93596,55611,42066,62009,20906,80435,39608,53941,83223,68311,11088,61217,77440,19745,17888,38779,20664,14318,38237,78358,83489,54562,57560,89953,90532,58336,65915,18287,81359,81339,48699,17678,66352,46869,93801,36336,38512,87204,38360,11751,94417,37892,12478,87902,79565,57240,12907,37779,15941,61989,22037,89924,91974,24778,69877,26695,91616,29314,88271,11226,58662,28667,44118,68904,35091,35848,72922,38086,58402,17027,49480,64411,21993,91693,64903,41735,53098,99305,65282,28966,46615,56163,16937,85198,84160,27759,95626,71203,33143,56775,11235,12101,80989,46306,24102,49579,85954,44746,23557,70011,74495,84203,45444,41630,44310,35675,96725,94720,50697,89788,16320,55301,43784,54799,18305,91461,65045,33167,53896,40624,24731,40765,22205,42492,15952,83752,62386,36192,32081,66011,58812,20017,57874,87662,20075,31356,76358,21457,71512,28702,36557,41618,20790,54152,84215,31184,53575,38288,27118,46942,78064,32177,33230,28941,52759,82480,43113,49788,99483,45896,41028,86940,47008,50080,87849,93872,21615,53954,10397,24498,98158,23578,10348,85465,23719,86014,67476,47099,84880,14688,11119,83997,57317,95635,69838,32343,93731,69161,51382,32241,61840,19449,34314,39667,57146,47603,34058,65360,26163,71230,71003,72954,99967,17001,59189,50749,12319,93805,99906,71941,52581,76698,32845,82503,27029,37385,77189,32265,33447,92215,24876,45351,52444,53845,82502,14021,22202,60742,35463,74887,41168,71336,83079,68508,44976,29711,56394,76869,55654,87624,27179,35869,15359,29392,84705,73324,56923,33856,11601,52614,32127,17487,83317,90606,99066,38395,52582,31853,38045,33301,80641,97173,34263,49782,46922,57615,84121,67847,65558,67315,11049,39986,33342,98467,22175,90785,33985,19062,93279,95655,98097,58380,30227,29297,11050,38624,83416,70152,24752,16755,68927,73396,56400,44775,10172,64143,88781,39000,36388,70225,10091,36214,24428,94425,30129,57036,43759,45687,95750,56907,62586,45401,17571,28556,34637,21355,46376,75212,32048,25159,26082,80642,62374,93861,43663,93861,55739,19184,72477,95228,79726,67906,90275,69702,41447,80464,76660,39072,67086,23104,90371,73664,45318,33726,88215,56839,20954,95297,46402,31879,82945,26332,75715,67363,76651,92301,18158,74357,50203,24538,72096,18511,31655,49144,86254,17458,66816,84225,14095,55665,46595,94692,16929,47443,31487,13857,50925,99820,17950,84568,99147,13618,52341,75131,83177,21348,40908,80972,58828,23538,96746,10045,13884,42513,70405,61092,88488,16876,19201,67291,67527,26099,59205,87091,57508,42361,52498,86312,76856,73089,79644,97287,22903,65800,83301,90296,42496,71508,23592,96892,60453,28016,27893,59506,34123,10380,66873,93523,61072,98834,41187,32470,88282,24243,82003,77381,94862,61346,88305,74959,41742,16013,71888,55085,80901,55476,39626,57277,44651,99985,63188,54870,69931,82255,43352,39399,95179,11824,81785,78156,92322,18620,64878,55134,19565,34221,41771,97696,80673,25898,21325,62423,11344,25456,84439,94941,89022,64258,22875,46539,33019,45634,94602,39040,61318,22766,80503,33662,23776,93423,43437,93706,23160,21566,94950,23557,62653,89600,66419,77202,60528,29419,93130,42374,28718,65320,79722,87475,94341,17372,57569,30597,82272,40718,51852,12867,35284,98446,33432,30455,81418,21891,42872,38918,73197,70575,12356,78308,28456,22450,62497,39513,85242,30625,83777,68475,94253,63538,91394,77674,31904,54854,17236,33886,99183,35814,11785,16635,95012,52306,35135,53932,75430,13849,94723,32112,45178,40116,91153,67394,77141,10018,74820,63238,84260,90173,26142,77498,24680,65457,94909,96302,51867,63305,36833,45102,45191,98648,37310,36109,76767,25674,92159,69493,74590,49613,78937,17600,58783,30052,40359,24659,35613,21388,97148,12066,39092,68684,81514,79977,64283,25978,50586,12259,97834,57911,85789,93116,57502,74104,51194,39981,59217,10015,76466,93006,68805,22919,90090,66994,79256,61128,84219,23148,32001,77460,53950,70798,41203,57300,97023,18597,11768,84302,63875,61477,18721,80043,28497,93063,41894,89672,55715,92268,37482,92596,89886,75512,95894,20629,41457,17028,73183,70393,18267,81157,29475,37291,96637,62460,46543,97135,24589,41083,33744,19752,76494,55342,16972,99461,61887,58083,45488,85091,63592,88729,63379,88182,47565,74007,87418,60178,90687,59463,36000,89525,84454,10294,28884,64672,82054,55220,47997,25258,26872,49324,38297,82382,61942,74644,77433,58431,56425,48332,48265,59513,81144,47065,85780,36071,10585,58384,28705,35673,93349,41859,99818,80300,85949,27936,43194,45589,65149,88580,32588,14947,88726,75935,33760,94031,24198,11633,47485,70000,77117,16657,47950,24180,96110,16509,11207,94756,95337,82695,11720,60793,32616,18333,82134,94585,69805,31361,26577,42393,34742,93029,59514,21757,73734,39297,82101,39111,83407,68226,40838,94008,32641,98255,27928,37357,14888,93916,33997,36809,55503,84777,45591,72682,73816,37064,43866,25501,52889,77837,45082,97928,36341,83917,49717,47511,90892,12534,40092,16961,20024,48149,39454,70522,44794,28035,65591,97019,69652,75267,71440,32703,15119,16214,78903,36723,88787,54626,10654,97853,34080,61142,74693,48147,63628,43029,58242,14357,54438,34072,89837,34052,22099,75630,50715,95147,66002,91926,63911,34926,82067,77715,15031,12680,80345,26309,91971,20873,68263,24390,59431,20095,11855,69781,49329,48791,17971,73301,45903,24870,61658,31903,13004,33680,38290,69281,32220,42945,84724,49241,13656,47355,57347,39935,75573,50171,30660,45023,46841,63183,50871,95380,54228,39820,99093,42149,35613,61248,10734,73733,42773,98171,18014,83754,30920,72087,34980,91892,18387,38689,21763,55254,31533,58465,96669,94246,64159,76329,74328,28738,55786,57101,88526,66691,33082,61160,15965,83101,96157,99473,10322,31405,83355,69976,33299,13878,35306,82992,95500,70337,94844,75602,88921,15816,97778,80710,32995,24948,60223,53061,26039,74570,31429,94781,24090,70856,49771,70208,91829,57715,70997,82206,28185,13932,17620,21656,59440,80122,25746,45901,66257,31304,15991,56738,20184,17740,52895,36223,20346,28974,12416,29299,47293,31743,65026,73224,63397,59798,83923,64757,27027,10498,53678,47886,58068,85827,68359,27695,12117,35936,16839,49504,10225,35785,14381,70301,57663,53080,52316,59403,78654,75657,46891,73160,72115,37869,63504,75252,31720,22927,15775,62283,92143,54963,12060,38703,99918,89848,38505,71508,96372,25396,12114,56941,68529,65634,67700,18591,51354,68312,95180,10990,62779,43636,24972,11639,67509,63273,25592,92387,82127,59819,69465,56476,78945,73660,53934,23016,48653,95594,33426,66255,34176,64474,77873,73245,95870,24694,41119,92295,29721,20551,18601,25963,50169,65125,17225,85282,51967,57719,51465,52773,13572,34688,94330,82216,81413,68521,67726,91722,36663,32917,96232,89458,36350,97082,66847,70297,96771,43257,79896,36862,71605,57431,85120,25542,38295,15328,24704,72433,56852,41263,53305,82079,93620,47872,16817,25662,71974,50896,29647,74991,19296,38312,36119,76497,93753,41555,77731,82488,95507,78864,80062,63802,11399,69345,17395,96056,73808,50761,29632,23910,59495,10135,33800,15230,20399,91397,25214,75080,73000,47378,97917,11512,30489,44845,75563,10267,63726,64048,10598,33471,35545,17045,53462,84478,44055,68185,10736,25263,92819,64196,62442,26469,16772,91066,70142,58928,97269,76411,53258,33127,85977,81067,87088,22033,59635,31693,15005,48145,25856,11483,61872,27403,12393,79629,12485,32082,80976,46209,15324,34857,87108,76711,78941,29655,91990,69271,60978,31366,22506,20884,27181,56142,99890,91579,19746,27683,73515,74874,21026,53818,77007,31771,15119,19571,74592,95233,76919,65062,84695,45687,24488,41111,70740,62961,24143,74388,38724,97985,71405,62017,66989,37654,56684,34418,74642,16561,36221,74381,79371,94487,41283,10849,93511,38835,62580,67248,65498,68280,39981,40453,32597,49633,36404,76806,14656,20972,91031,83639,82209,67881,43753,10120,92297,61954,90162,70013,90804,44713,53529,49670,30521,85855,37656,12529,69713,12760,54859,86769,92081,17748,21169,39536,32967,24526,90435,77422,19407,79857,78778,17672,58655,56941,68418,23177,63837,88269,85851,45545,75357,22926,31409,60375,77617,47935,40234,45399,72377,29041,27934,25032,42388,74069,90117,26791,48536,42912,78542,50669,49020,98905,99046,15445,55240,92650,69677,46644,96006,48495,13306,45509,42265,64194,65553,51845,62223,84487,63043,94224,60272,15988,43047,76094,30218,93553,65927,65956,91625,94990,12700,19601,57403,70183,64841,91300,66024,86880,92299,92464,16515,95537,63954,62945,63994,56112,83720,14302,47383,13409,38813,94685,35333,84977,14944,63639,55936,56354,53036,55178,91798,67677,96608,79781,28307,61889,71564,36423,90932,81608,87641,22444,89913,19868,19833,91805,56507,61860,42955,22672,81524,61535,48765,75490,46672,47142,97357,25132,63760,33930,25425,31026,93317,24978,25931,45763,90242,34881,31778,22385,80547,62052,61024,63874,76728,58587,90035,89463,68218,54748,48250,19097,63053,69158,81312,27974,72826,38139,87434,23885,11107,97316,72880,46582,42138,39792,48774,56924,83795,47613,79189,21484,83408,20869,87159,56506,99726,25718,37494,21775,97210,87998,57582,34516,54508,82576,19082,24003,94610,69633,94697,66445,67109,35158,40128,55192,78982,68708,64743,49695,57376,59130,78919,93619,32581,66858,17894,15240,21135,75891,37173,74030,31621,35837,24562,64725,28498,48456,62077,33145,54168,13802,26797,86033,22319,27445,30521,87476,60631,65476,22362,31505,10248,17696,90292,14138,73718,19807,89551,41163,71394,76263,10781,77354,79017,29465,23532,87118,37163,12059,96132,81805,20359,75062,69165,91347,57357,29511,72489,24505,90452,56361,44937,42863,33144,34640,57016,36438,43152,63890,12081,59130,69048,70183,58208,82912,15580,64822,13558,50642,25017,34606,60148,97769,59877,62980,97453,51992,12057,51982,76258,72281,46243,63700,83498,98972,10582,31217,79798,76989,46779,98782,15157,44921,44723,54425,80781,80388,49324,57315,14269,74127,59089,88675,22164,21683,55902,21328,34343,16491,19797,93963,23008,63292,44487,27461,19547,56358,58727,65217,91736,69460,33186,18767,70454,44921,60895,23846,82740,56453,20468,16229,18920,36696,39816,20416,74540,67778,63292,22292,68371,21629,64833,98365,87142,40033,64603,49759,83863,99842,34060,34486,79260,24409,78714,38036,81431,26633,44053,27600,80440,93080,81463,98375,90343,92982,71523,36965,17381,91012,87136,67458,11492,40614,52874,57287,60282,22367,12762,18681,57115,36143,59687,97464,66571,71722,68023,12158,40086,89300,68278,83343,44880,45090,64044,55446,94101,65697,37152,60955,23123,71576,31881,47148,46522,53803,31056,73624,27502,45808,74811,49520,11710,59834,31857,53462,35176,73988,99808,34946,53877,60578,48499,54124,80724,16640,44658,17899,92841,75529,38366,38059,18811,77028,20566,68217,21552,35919,54034,62767,90558,56273,65221,49121,42237,58545,87791,28651,71383,10748,72241,72973,34108,50036,66318,87366,32975,47981,49087,26669,55394,52028,64086,65179,35726,17066,86264,30896,25775,28390,68385,15140,13883,32556,52863,53500,51382,70094,44078,86560,17092,33627,99754,19154,44342,72478,39211,31799,54572,73946,88968,52168,44333,45665,97757,90177,48490,85760,78602,21436,51738,53748,74036,52064,81023,84203,26974,45908,35251,55993,92904,50104,11650,17898,66397,33927,32678,76835,38898,97630,96710,56904,98463,90070,52100,20056,88480,22813,44563,46942,61122,64369,98095,22719,18203,86674,43363,85229,66415,44805,53897,67361,67166,92505,67920,87315,26624,58374,37916,24101,99659,40828,31507,74167,17941,75474,18232,23416,69962,12140,18529,69060,17521,92993,55119,95041,12186,16996,24603,42974,39634,13216,68742,12523,50741,96294,47935,81494,12637,63599,79383,40997,97558,19801,29844,67020,86491,60308,44607,90632,49165,43673,21042,83094,69459,26018,13612,98922,48369,80692,62089,38810,46502,33485,74955,33644,62002,27535,92727,76315,97813,66815,74310,98431,83478,66220,27955,24893,83379,72228,49110,36758,86242,14476,13404,55537,14854,96264,88888,95666,13932,13980,21139,68198,83879,79025,45459,37757,19155,38812,24965,51447,45615,68372,74872,10493,90113,92477,85803,23500,50891,34235,53114,89764,51543,64704,91797,52839,17552,10599,85162,63825,99766,55638,55393,51219,19851,72279,72457,66749,85698,56238,64629,86905,31335,38453,29269,31465,29414,35205,96793,71609,20241,59275,23004,76858,49102,49163,19161,63699,53624,94465,64314,47629,76325,99326,83890,76194,20398,65722,64382,48312,76731,38695,74324,35239,80810,72859,51044,57807,81193,58267,93413,63638,82540,61039,50175,41851,45456,21327,54269,44475,44949,96925,80577,18747,37280,26087,18810,81706,72979,30409,14911,31293,92950,31001,48274,25393,92478,83477,74645,99818,64346,80311,18934,42898,65841,29466,31633,47957,18518,62326,88724,64561,99480,55778,67182,62453,39788,67419,98512,99420,90503,43076,67905,27610,36996,14329,22337,61990,40398,97063,35913,55086,14352,50834,51253,94207,15695,81487,95477,14842,47454,26829,51949,43863,80713,73671,85798,23705,36649,88097,23304,57651,92037,83546,39645,64859,34947,62513,82085,50275,70722,79534,34594,69774,64560,44211,57323,57714,67568,95781,27637,68018,19755,56306,63466,72160,49519,62718,99397,74227,97193,60541,74115,88437,96457,55423,75541,20396,81826,69740,33339,95454,85781,89128,79285,74527,75812,48429,15919,69220,65331,37889,30698,81989,97579,38236,31267,91757,28911,79697,28201,96760,44531,35014,35088,81637,83856,35825,48484,22321,55692,40595,26390,70997,20526,95994,67417,32646,95287,84316,51379,21454,45558,21790,68802,85882,85941,69645,63189,97831,42455,33944,67311,63368,29812,37007,85192,64038,80489,25604,60906,62912,16115,94770,25527,42039,78343,45201,61565,27547,16628,89144,86416,91599,48365,62698,94034,30225,18826,55920,12392,18329,81535,65240,60425,77077,79552,88523,25471,61425,66561,92083,35383,87517,72388,97802,70654,37767,27592,76626,66301,38893,38427,36102,47098,45999,72273,17865,21395,59730,69920,90445,70173,36591,56606,30515,35189,65808,61627,87364,16970,12729,54176,36589,47161,54639,25778,44704,82297,31305,22643,82350,77506,58646,78138,21689,92168,43352,57197,72780,73971,71117,43822,46879,62150,59243,74014,84912,97140,37928,90861,94239,98368,49988,37761,57155,97944,30326,46869,61797,68102,14270,17282,64337,49020,31708,27942,33747,23641,95954,95403,10790,61620,94450,33318,18627,11630,38496,45470,68092,41016,54239,79909,25057,49279,90311,77707,97844,89736,52030,63327,51529,39405,21062,23585,63812,58191,73304,10263,83575,15863,55329,59328,72388,65199,57990,74835,34346,52369,42887,58559,59878,56437,95023,95889,70043,40212,95799,30882,11860,23559,74045,78488,89259,64758,59790,78352,99077,12324,64147,73523,27762,31035,26563,58327,59841,90952,63709,13133,95260,58622,78666,56690,82020,91210,27296,84100,90168,17804,39054,97168,43497,28914,65430,67752,78340,43079,32212,26758,60408,80882,92309,50772,99931,96273,35114,99781,97869,86140,75701,41321,67750,30576,67059,71305,20469,85277,88520,88160,33325,74461,32123,82294,16839,40232,97271,45304,11924,63993,39755,96991,58152,47258,31239,38008,39679,85021,19269,13755,48524,21100,81086,80453,42878,46971,30933,91380,60859,14903,57693,87982,31159,50807,43087,58564,74656,77949,52784,53122,60930,61790,23708,46026,60563,25487,85559,16414,57240,99126,46812,54342,21833,36728,89349,70506,38164,74989,84921,58256,91607,83495,94472,24716,21365,50208,10424,57332,72225,68484,63363,61754,94273,25484,21716,70894,90839,39265,64011,75054,69730,16554,44037,99954,51959,95224,19556,61300,81366,37143,11431,65460,18671,57383,14041,27690,72186,89405,76968,24846,81986,92132,54253,54149,64556,94091,97041,80784,58846,68986,79010,42496,86460,35190,64803,34051,82697,29101,72412,17352,66240,51899,10483,48316,46742,58963,81127,27910,68358,28883,94669,75349,99486,89439,24196,16953,56769,77083,32334,32618,29058,70429,41664,88756,20058,60224,48284,18783,24045,85958,48222,30083,72376,96844,40895,25173,41147,55206,80558,75418,76371,42951,97559,64188,69360,91841,65057,87203,59165,56568,48057,10293,89123,76332,72748,22216,65562,47743,66541,12017,67598,74413,39713,20301,69311,65638,33297,98285,13771,51183,11661,96269,15143,80062,31517,98140,51309,33374,82234,85681,32173,90548,98693,86339,80145,55458,94564,87196,61064,50133,80177,77155,30325,74183,28678,59866,43631,75225,82495,95762,49238,56196,35986,92455,82681,51195,85775,95733,35913,93862,33426,42774,86814,60740,50855,60818,24038,42374,54141,12140,74565,45887,21517,43913,36395,44568,10229,55286,32020,56480,29645,14716,71561,26784,37820,19475,18179,10017,72942,45004,34673,81602,14721,39626,41895,73829,64781,60695,19440,56884,53562,24345,53766,92768,96322,17215,30518,57318,43316,36129,95561,47065,68204,65808,18961,75365,40320,49436,49072,63764,36142,84245,18272,92226,57059,10667,95562,43365,18022,22681,64497,52212,31216,38384,96408,89706,73431,96963,68380,40880,62178,86644,10322,60685,85663,45045,44157,31821,38910,25722,75769,71876,98179,20825,84102,78723,40736,11799,67982,56716,90007,73711,89267,89015,55472,30856,73658,87420,14437,73606,78407,24326,32129,25192,64141,51294,89108,29928,21346,60412,73060,88517,20725,73488,41571,11668,40975,22429,38788,34341,76969,91007,54741,62956,46469,32147,10359,73360,48952,65395,67091,96276,65107,96361,99193,68479,96937,28142,18441,76181,79547,71389,65533,96273,36925,31321,11079,32352,36035,16006,11478,62902,72840,28803,11997,51271,82325,88533,64124,13009,17466,54309,76711,98492,74808,50855,84163,35469,80876,72159,21007,93296,18428,76759,46078,32240,31439,68988,66720,65034,83415,53781,81788,27450,14001,33312,87767,17921,68914,54199,80631,74486,13790,65093,49753,20650,58899,93417,66703,28541,24541,38925,24857,53580,32087,39228,71579,40414,16408,66746,64961,49642,44962,11055,85901,73044,86399,88208,57293,16970,98698,70211,14562,42732,81784,57492,37623,44063,51494,94172,13190,67239,66726,22343,49325,70912,51684,49192,86429,70912,30048,40435,65270,45856,75268,62319,63814,88178,67110,48677,88013,53004,18388,42021,68949,83512,64346,83174,37480,20755,49051,32328,72568,11675,29386,92454,43509,35468,60949,71089,20384,68072,63226,62224,26447,36516,91291,98653,89349,13418,76710,53814,62449,48554,73058,76389,48145,71725,46068,86693,41082,60793,32318,17600,56044,56917,31327,57883,62447,26723,43644,34883,15624,40720,78966,97760,52844,91027,79789,27987,49600,96134,67524,81713,14485,98178,49814,81361,37504,87240,33033,40378,31711,63250,52822,10994,97029,97489,21535,66953,22194,72278,42126,41449,61958,34323,22231,69880,10412,94896,45825,61281,65692,47266,92897,90567,64801,44861,33498,19096,94597,32651,72853,25935,40341,79192,52725,61685,70703,51348,93623,20029,18913,40642,99392,40193,75471,42062,86817,44768,46739,46472,12222,51139,87191,98220,24964,32771,86288,37702,40051,91854,74891,46812,44762,37785,85612,93591,48282,29936,98597,19209,76369,75364,64932,76529,65022,36624,35263,67687,13868,98540,40651,40665,83016,29100,33498,77708,47350,50546,97867,89743,45468,62086,84062,14919,16922,11795,26341,26422,72756,25861,95004,22580,11169,83377,53500,13720,96066,56742,58682,92700,36419,59904,66457,62182,45431,45049,79124,76817,98921,83112,96605,31196,97396,46248,41589,40383,67457,54075,35480,70961,50185,80784,89323,44045,52975,39687,28069,16336,78359,85822,60515,64521,52392,17227,27412,99852,42893,90159,19422,66864,47530,93265,80217,83895,22030,43879,89086,35112,34066,45286,42764,57076,51555,54989,65293,89208,57119,58464,42238,40867,24849,42939,40238,38711,64932,29063,19707,37680,35264,53637,56840,90406,47792,84653,32753,83438,22326,83050,73282,63505,12754,55496,28354,55396,13681,92425,57801,47865,69832,81130,86200,48570,99130,15578,27484,79001,44561,18810,97798,69555,87432,68695,54986,73531,71348,99592,96957,69625,45993,34295,68884,79148,35876,63109,51983,50982,52291,81112,68178,75832,47980,56394,10889,52359,90502,47009,44214,21370,70702,83634,68826,49403,73400,30026,18336,33365,79508,76288,11598,77153,20066,97081,93197,54739,90686,47356,49349,15701,16828,52449,37563,16637,95368,54638,78497,19041,21330,80860,62033,72352,54226,81569,24166,74263,37476,97530,96067,94215,54964,64695,86554,83377,21350,92511,15941,85995,73039,12681,55515,88693,48477,98512,57994,89126,40677,11672,90515,67937,18666,30513,89189,20092,68174,63920,99816,39075,23480,53085,12858,88275,25251,59859,24945,57921,26873,85583,17889,89902,20481,15868,45843,79066,78992,31031,54505,48922,82429,25280,42469,98786,82201,20118,89435,80519,85559,67464,28420,79045,98809,36462,29302,38909,68583,13501,93247,37786,56171,19891,47523,91745,26499,76563,38839,28676,71659,10582,31025,55649,50047,71929,19796,23538,53057,70131,91937,72377,63117,41078,36253,88594,96620,48266,73720,53676,79102,33940,36969,33440,64499,56257,81485,25683,66018,16776,20968,22286,33753,87815,42295,58684,59727,59685,59226,23310,51509,90294,34158,41176,42778,65627,10683,30759,22000,82353,30793,11699,85184,55398,54457,27475,21774,44727,12329,19156,47306,45825,69360,36065,33802,96292,74977,77788,82999,84234,96416,73263,88549,54961,74460,25949,91258,60137,61973,67449,67273,76269,88649,21205,34391,47024,13424,54316,53374,75478,52719,22843,11188,52193,65323,61959,15834,33882,43950,74385,62707,14007,11249,39001,78193,26289,10224,65918,22533,71818,66879,54939,47030,90542,78628,15514,34608,77570,19792,43326,21396,91459,25364,16068,56201,42896,35683,29292,80523,20951,15431,66158,47644,35213,35425,62471,47144,95023,70469,11929,15956,64944,13120,50867,63589,21243,30789,65616,41897,32044,70936,16686,70064,58145,57194,72890,75219,11201,84189,34127,88351,45672,44706,56775,24957,81955,52818,24381,63929,52230,53227,22426,45922,96934,46891,54680,84222,77450,31655,57680,66309,10540,99814,13686,16879,23746,84975,12906,79252,54877,94203,95893,45061,59531,17991,65984,11358,37903,21725,27793,89593,43777,36647,96729,91373,41552,50960,69011,82551,52777,36496,13035,87772,85822,14362,70373,20259,85182,85780,70973,85889,19629,51350,26289,79690,38333,60034,25325,49333,87432,85031,35714,72967,41380,57958,79072,99654,95832,31300,20351,74320,35634,49533,95542,86665,75296,52767,37980,82090,54454,79879,16050,15770,84202,10081,23072,83738,93592,20534,37945,65277,77502,14352,16483,51978,20552,17413,31501,80517,29338,26273,15413,12847,12082,11293,96787,50527,69192,66384,59107,48575,45523,42496,68011,28762,55233,72579,16845,40200,62182,28594,48974,35396,50913,33783,52467,42776,40259,20772,18319,68335,26627,72726,51731,47420,67400,48420,94633,93149,13143,30122,92976,88349,82953,19863,75663,68280,43176,90719,91474,21012,25286,40835,64044,59157,16767,48871,68018,27770,19726,28204,10577,23770,57346,47028,28174,37292,32076,17560,10034,92696,68428,28912,44795,96383,92301,51890,60174,30412,27640,73458,37931,57398,68266,87415,78411,67921,93902,77475,52684,91622,37144,81920,60106,69155,64837,48142,81749,98529,23626,84713,37599,54408,61284,64216,25080,93172,52755,75350,54545,73152,79482,23687,21115,63170,67131,87439,42177,39948,99596,14848,98802,94743,40257,79283,71157,26007,19971,33654,58695,98401,13375,88815,62873,92082,75570,39093,67629,39809,12341,32228,89721,52853,80365,52481,74691,84844,71914,27582,97307,51750,70394,85910,72631,44564,40766,76313,28513,17662,61663,75801,67102,74398,64734,51591,20934,84295,77862,53379,10290,84237,35974,69802,10651,17882,42635,98481,25078,60534,91742,70313,10618,35498,19645,38891,46980,36344,59147,46237,63244,93380,87957,97131,61877,96782,21491,57088,42145,31801,55829,13149,66317,98015,20368,76837,61153,84988,35217,57393,95387,15041,64171,65468,31867,60309,71569,23702,63124,39812,60258,25475,12853,50724,47689,13194,18841,44022,79396,79174,44256,93318,63398,91691,48642,53606,23123,61955,74598,17477,44076,10906,41487,93955,89772,67810,67484,98300,91403,12404,13773,59048,38903,49064,36862,43687,71812,87599,83217,26127,96928,10731,70132,82290,28223,35801,17834,80278,79234,87764,90195,71181,36043,58464,10803,12051,65100,96568,38552,28433,91384,80341,27122,20483,83176,83578,12795,33230,18860,36444,96609,46797,32683,57330,52322,84119,52950,22796,79671,39061,52129,80765,67185,80697,80940,60176,74374,39732,58552,97355,93137,15364,66726,40716,64363,34645,68526,76224,30235,86364,52201,10611,70120,61225,67943,15330,85460,99517,28986,77781,97917,68112,61410,81729,49323,58877,81710,51318,86473,75591,10965,53631,11099,55486,83111,62199,26524,78211,82503,50414,59005,93965,99606,56875,92920,84498,11265,60920,69985,97007,53685,56888,17415,48040,47152,49971,24029,19532,47688,90071,76736,42417,62317,27315,11461,77758,73061,51722,76387,74461,26075,18038,93282,99065,58574,89001,54106,76799,78596,60630,69361,49995,42943,33114,99469,41873,58921,74994,67055,96518,68715,75724,96688,64471,95078,36826,34136,29744,11714,70306,75205,70513,32184,65193,90082,11890,55967,88859,64186,73399,61649,41968,55037,36794,54154,46696,56392,70328,25837,76352,66674,59954,38830,71580,77164,81980,89508,87020,75210,79782,64905,26831,52543,13416,23020,55404,20178,12590,27921,37596,42435,30547,11615,43648,82724,61685,78865,72657,13162,78113,78387,82510,40074,55284,34343,41060,70424,57582,96649,93875,32377,88570,63664,15174,12984,36593,32640,40899,80840,86113,25685,66473,80554,77321,55841,55003,51994,15255,45535,27086,31122,36004,19308,27376,52433,23185,53402,27455,66588,32985,83781,73556,34592,45668,71852,66803,91698,53873,65754,46306,60240,25807,59128,32568,90234,18847,25563,41948,18094,60470,17249,84588,25787,37758,85750,12582,87884,81495,61723,85392,61079,36610,72266,87961,55634,45165,68739,46955,31723,51888,44445,89524,13699,51269,91701,11761,81910,40256,63751,94892,98733,31278,70491,39468,96575,43505,41240,92625,44917,69905,40633,22728,61804,97169,30061,39292,33391,74597,76881,67150,84107,44691,87667,50088,75651,22186,28035,91217,60994,99002,66045,35893,38680,62856,45356,91161,86766,11790,47184,58922,59529,55018,47211,83408,46655,31073,23127,88777,80271,33869,77932,90833,99083,36634,64740,51706,88404,93663,40132,99154,58953,88076,91744,23380,60070,30232,84149,44774,59444,45700,18615,81502,12944,17562,40684,77557,75349,54115,13294,57682,22429,64378,99592,87278,86675,16006,52083,19671,87459,16216,59671,48270,26469,56470,98941,33134,92794,67243,40262,93976,10269,67893,80373,94759,15583,31607,37426,27712,51998,41904,82596,50257,28666,48438,27081,39338,55598,49499,60914,66478,15886,74335,84816,63665,39071,76868,82268,39921,72725,44007,28357,43636,47282,95837,69704,75606,80749,45379,86272,20466,92113,65277,81046,13666,75122,12341,80222,55312,60098,32485,56387,32317,94016,88920,75716,59147,52043,67072,30595,92126,28789,16009,91074,44414,19589,53255,97190,58320,49335,36052,11398,97879,18388,90711,18640,37427,39035,12711,54987,91535,22183,76503,19958,15264,97487,73773,48107,39209,22493,34911,92181,40613,97499,19386,40748,61497,50598,77108,68056,36363,63337,37034,80727,66411,50497,57521,46814,98396,33108,48801,96114,60999,52568,84644,29833,64973,53302,86265,25376,86326,79922,43896,17774,32512,46489,60222,53482,42820,44376,45685,64876,56788,56835,19043,65058,92439,53440,41445,62873,42581,25444,69795,17971,77511,16180,25509,97390,17659,78206,83325,38193,65862,61201,26006,65064,18566,62673,41084,72351,47261,34686,72821,70018,17916,69971,34199,61525,37476,95275,22998,98195,38160,86395,93584,34239,78846,74823,50820,55946,57999,30625,26209,49994,51930,84683,60784,44297,49336,59209,94509,54478,42229,82171,61063,25490,81813,79020,39326,33803,19803,87139,31034,38359,44774,48634,93743,48465,10400,41972,31890,47177,28348,90020,17739,82157,51317,88146,20895,69082,88968,26655,58755,67319,91843,83096,33400,74994,55265,49097,12691,97906,18021,91701,17837,81625,64049,53787,85888,67924,69256,85458,64635,98555,65524,17137,86342,92830,21335,46176,89568,10222,10255,38814,88500,50595,46248,85621,36639,15695,29908,48562,49182,19826,51028,19025,11514,37466,34080,33873,34684,90392,84717,93134,90332,22746,35347,54734,76318,19472,55427,71141,26496,51979,25503,80401,15070,78116,29462,87619,19050,98419,53680,78455,55762,27271,87207,71860,53881,11688,83284,45480,13033,74595,33881,75036,31129,38965,25043,95980,70320,60412,29090,39553,78855,75034,42675,66498,10784,53608,43886,91726,42043,58071,47089,19575,47104,56068,60984,22787,76492,23928,20982,83938,39645,23202,29596,95291,54451,79577,54315,11261,89193,88410,66529,16101,49780,36249,49823,75330,24611,52862,79910,97174,70553,96710,86518,31598,91444,21158,64443,98212,28951,84665,32929,37346,94052,44748,86847,52068,64388,41386,55675,84824,45881,14765,40925,40536,67175,31800,14612,19972,93244,68969,17473,27759,53621,44013,39542,41333,83565,23438,87077,99337,92155,61054,85489,46545,77803,38538,35729,91808,18505,96402,84499,48815,24301,31520,37590,17694,42004,59869,18844,39880,87987,53091,94849,82496,99250,37040,75091,84761,29941,73537,22377,61853,48467,51341,79513,61117,71252,15966,93116,97837,97909,19042,92390,54614,49476,83815,68670,24101,97110,36820,25193,88897,89308,55162,25952,17538,22921,27604,27001,63525,58591,63762,69217,78016,58754,31199,70461,15436,74013,74908,22502,39250,26980,34226,63849,45171,49698,70738,19943,48683,39684,41902,34043,61744,39211,53146,41198,21346,20247,20362,44098,22931,90237,92720,13696,32357,38014,41909,64154,67848,95235,86308,59105,51086,26869,86230,21198,69664,13646,78350,82453,98682,55380,64374,85223,75249,69000,43230,99547,17734,72160,45835,44081,12586,29355,35965,38690,13687,12377,69285,77245,82685,79376,34412,66580,91556,75874,19895,53033,33199,59065,47527,54787,73264,17522,16899,35073,30638,54097,88996,33450,95003,50819,74020,82301,47875,77205,16123,83107,62655,15680,38846,70179,55687,21487,11228,86217,99522,55116,10686,83006,17441,11576,12275,66533,97202,30692,26747,89798,73727,53428,26614,71101,42461,82792,70291,89301,26530,63699,88114,64110,95662,74642,74231,66774,93247,26377,56817,65691,42264,83288,83755,63822,63864,97686,94099,29898,81138,43503,30489,89369,16608,18596,68849,14877,61753,80016,14213,24273,24931,41156,50771,63237,11158,42286,85734,78844,94171,40306,83526,49121,77871,89166,43601,71064,62159,76732,72169,47038,39176,60473,73486,23260,56938,24948,13708,75263,54127,96674,38496,37806,38515,95502,22390,19307,36691,27577,36996,86542,96141,80953,51745,17814,92711,34668,12509,52610,14076,93438,55001,16903,82066,32286,24921,82435,62093,45718,30720,76343,47309,54137,22633,57299,71497,11032,94535,90331,90196,54463,42363,96586,53216,92478,39398,31693,76560,42246,94148,55365,45247,49684,61788,64435,77329,96917,12231,51731,42498,89838,50632,17673,62734,74265,44424,34385,78378,74738,87703,48018,38865,17746,95811,50736,85213,15542,66214,40040,42369,51150,41705,50385,31731,77503,34388,61634,89546,99489,84134,43530,20227,68017,72922,51956,42086,23844,92739,18968,77201,39167,76458,37467,77744,78486,88096,71543,26606,92831,20035,25886,32316,66942,59449,12020,65606,88192,23140,24977,40648,90603,25261,49060,48939,44957,86464,27064,33819,18725,84656,11999,55157,78753,50497,67743,67192,86814,61113,45515,57504,34767,22012,61850,89344,90564,11403,57167,55692,96919,74638,80263,54815,23504,56953,47846,72037,11791,57101,61707,79698,64580,78059,77619,21619,79292,81805,94935,67410,94856,70144,99066,56935,56631,11356,45017,72814,19503,47546,84427,37033,69544,31787,93957,85510,78599,99400,60493,23684,57080,93738,51765,76856,38767,98466,32780,65489,73944,31242,41322,57612,42035,32794,94762,27063,39781,29756,68338,58693,98922,15710,52083,45774,89670,19999,76693,62294,28744,97743,76424,44145,63459,75034,90730,22784,35685,87093,24376,54465,95241,33447,80836,49425,81207,73871,74109,39745,92029,34677,92990,31029,88022,63602,17784,39398,49729,76979,32729,74044,93697,20105,91733,96681,91075,98949,29671,16078,27220,28783,62423,59075,44637,97022,36396,35536,94151,96333,80221,17923,84120,24162,37176,53799,27495,33465,66264,63045,40098,81489,23752,82306,77551,58416,24881,11224,28067,63657,40573,41062,43530,79043,23920,71611,18325,80831,10317,65741,32909,28482,58636,30211,10151,39197,42105,95330,84437,41190,40324,19372,70429,20724,51392,36195,32858,57591,89019,27041,48210,78598,31719,35294,31112,56383,31228,90097,62135,21571,61676,42893,76977,43979,54676,72211,88081,61747,95196,62060,27766,46730,75982,21710,94399,78098,48608,22362,59469,37753,34670,65729,19431,83131,65669,69700,73890,11466,71918,78577,45854,69803,70610,67105,44511,93743,63787,56402,84076,22322,24606,27421,42926,91190,34299,51452,41804,71677,67011,46268,73531,47901,93642,36565,83107,47580,79322,33113,86898,69871,27093,84103,29897,46464,19562,25693,91980,22158,49477,38336,44488,81896,72418,57313,57134,32183,83344,63231,85341,95886,58405,52194,46242,66787,71610,47749,64948,56463,16442,77254,67438,93725,34097,19647,22913,61965,79688,11704,43634,15869,56350,48505,34679,71083,46438,90995,80037,29047,98956,27000,23341,46524,95693,95291,74272,46417,63193,90904,86294,93033,42384,59321,19615,45864,30676,49988,90035,12957,97295,50735,90142,92245,82754,17498,23393,86557,78529,67623,49343,21180,99298,39533,40442,42334,76338,12601,29417,18602,80856,81951,15897,92516,70368,95925,94505,58431,73088,84860,32726,56525,72087,48305,24745,53399,37718,80090,94457,32263,46955,89118,26327,64740,87861,86740,40660,56820,88482,47942,16145,36797,52469,71149,26522,31376,18325,57946,97728,41639,33879,47770,23430,99017,10757,97118,46691,60894,29514,46195,24539,23359,30236,82553,72121,49745,61687,96883,59127,77495,94975,51379,71499,12287,44563,33676,18172,53454,82014,19435,49902,82211,11973,22374,33180,39760,55000,74690,25916,33337,26443,71764,94543,77656,93805,18480,21793,88200,22939,40328,63511,76363,16540,27010,83277,29509,98823,76765,99339,23403,40526,29401,78739,41666,12073,18608,79872,81335,19405,57669,62935,29661,11338,61080,53828,58538,14933,72972,93532,15476,93819,83414,17356,57790,26072,35140,68233,38139,51781,23865,43403,60719,64007,39218,17019,66029,52234,46754,88846,19130,37156,68555,94995,21628,35252,71264,43718,39571,56801,47078,17552,22320,71220,79653,74228,90473,60674,86167,66055,95810,72374,96163,21630,48263,54413,63426,76822,91488,90926,39871,71611,63181,36625,45129,20974,38637,23429,94875,22675,26031,57967,36932,69469,63281,72518,16764,90665,82971,73548,52269,13669,94574,46984,38321,83002,28176,11917,29461,19050,20574,31475,42043,73204,48611,46851,87782,58224,14337,39296,63309,85884,34180,73711,54278,21783,72200,28031,87986,21504,91218,35474,81782,84737,95598,71933,59981,87862,31844,70356,44389,83979,62548,42961,20155,57309,87450,87332,66169,57812,54257,80052,67955,90278,17232,68175,47788,65950,47467,40569,91485,48150,60122,21902,98210,86456,28324,87497,97105,94242,63698,43360,33378,19375,76429,36248,84172,56872,82782,47724,74529,54210,42751,12659,98601,25315,51024,81856,13293,16464,47502,81723,87790,13868,32743,78716,92698,50312,66574,49036,89962,91204,11132,13325,70994,94230,43437,86978,99215,75028,36254,11645,13886,99366,52857,21008,82557,43115,94632,66021,22604,11310,51427,67242,72807,74576,45765,73532,22729,15854,28644,46357,76003,53130,88973,27061,80910,64117,31494,87905,98814,88835,88589,81878,28104,25552,55563,72203,40011,24006,72599,34193,37773,25520,63491,65079,48819,55432,64324,12058,52390,96382,91066,21595,56110,47056,63908,16527,52396,64955,40037,50187,96670,83245,49179,13447,13827,18431,40125,17238,35746,95135,46275,81306,57240,49251,49768,34343,98230,49966,99564,15879,25972,76594,28006,29499,73745,45681,19381,63856,18978,81841,48699,12053,28311,73444,60422,26983,97403,79406,48031,59840,90887,73433,19651,61777,42263,97192,41853,39416,10138,98301,87888,73528,10884,14855,64351,23158,98835,28461,40820,45052,71521,75673,58718,11274,65132,60429,88620,41612,30729,66250,23401,39701,61472,16605,49163,14164,88101,59998,56204,10204,23495,57121,74816,11598,62288,60911,80429,92295,12673,15068,63047,79791,51223,52999,56040,80800,47397,21812,40068,16102,54519,97047,34781,98626,81102,91104,37172,64719,79784,72470,15909,59852,45573,43540,38014,89820,12549,32790,33787,89165,24934,27004,49720,93431,23267,39568,23014,51857,29663,72503,66395,36756,84423,40495,24913,43897,13442,26839,41655,83361,78228,87932,33471,69664,78057,51896,89861,46271,60630,60769,38810,37156,97838,59527,89544,14083,82691,87115,91585,20126,30463,72918,80579,64401,34167,13990,47550,77664,69615,63514,93534,27867,43733,94873,74837,85057,65185,10889,42364,90499,64376,32827,84409,75128,83904,72375,11695,53758,24002,76595,55973,82808,18165,84226,52029,71810,54029,30606,74873,58014,63735,74139,62518,44102,61592,83583,28011,66278,98366,68746,31359,12414,71147,11487,62161,30278,91368,22882,68453,30895,15543,11655,11813,46244,61890,78522,22503,71793,96630,61019,62939,35558,69195,87154,32837,82272,32986,53381,54047,36044,87911,25620,55315,50814,72134,56201,92593,46160,63231,82398,78664,17348,64474,31014,68910,54230,72984,26677,92563,39204,28679,45410,63275,84185,46308,98972,47036,70245,83597,71564,77016,43137,77885,64426,64329,63342,81702,85555,46380,34311,22619,63332,68565,10552,99921,17887,59795,82281,55128,74973,91970,30016,24570,84553,48696,82162,69874,79540,93114,50883,76579,23608,25017,26461,96614,22127,64359,92505,13756,39762,95152,66734,13950,10961,34816,17814,90075,23050,19312,97939,80724,78531,96503,85337,79309,12434,37928,49488,54035,95138,91259,67350,11423,11607,26993,94674,94028,17656,96340,36000,21868,70312,24903,68923,48307,65001,67523,10447,78131,24743,22385,71450,60243,81152,56550,33105,75869,51561,94811,69033,14215,63611,65878,38834,82114,56916,31696,33361,14323,77447,60576,91289,84719,32329,10626,28522,78368,31764,14734,33592,55502,62798,41348,59978,31484,27101,80137,49643,23543,70135,59880,33266,18314,70309,40757,60674,21009,88687,17530,39693,98201,88326,67153,32837,55374,37156,65554,64612,74817,87589,25094,37990,25897,60349,68090,20077,89850,85749,87158,43442,89295,81909,46462,39129,45373,97871,28803,14329,15532,67730,95981,71434,57351,31975,40100,12189,17099,54619,37015,15353,81583,15224,25209,42524,55512,13418,34052,26952,98890,51398,23021,68098,15345,15809,47297,99717,96249,44556,39366,57738,57924,77209,18447,54515,28285,95574,97899,78702,20945,46592,64892,62675,45257,14941,91398,37608,30995,81216,20963,39487,20093,47612,23930,92613,50169,39950,63370,92132,43574,30802,34113,23224,32593,23500,44721,60557,75334,29838,58691,84570,59782,76995,39831,80028,57766,27951,30408,96906,82382,80015,19337,84943,43049,99076,28977,39796,30459,17265,12309,69069,42295,32488,45153,76329,90202,72506,10882,71398,46788,10138,55993,62742,13452,88723,31639,75563,12951,98807,86587,69139,36637,24308,30928,17744,73399,47956,97977,80432,74458,99482,98729,37918,38946,68593,93895,56549,15236,88379,98710,89307,52837,62246,42883,70213,27395,92734,26765,93660,36106,92167,33365,16544,50652,33607,45192,46872,72104,85506,85250,41189,89318,24058,48132,89838,43332,34799,78049,83228,51285,19671,38173,90880,36305,59419,76100,65529,86427,71340,24439,96483,91868,92849,54999,38558,55358,99072,88285,81158,30737,45629,77834,13518,51478,85080,12748,86145,83227,15466,65260,65902,90618,69054,51035,86024,75383,95419,75583,97638,82170,13964,72520,84201,18631,83350,20052,73945,65239,56160,46179,97131,20027,52831,89533,14012,66303,73667,48749,74318,46937,47365,50633,78726,12345,97015,33745,65464,22501,66205,96682,13201,23050,23237,70651,45993,89430,94060,52318,34082,75183,98517,19417,56316,52809,22624,99407,98621,11018,15619,64667,56654,49706,90131,46789,49603,64982,30901,52431,57506,87044,55565,88426,60837,45796,20623,73776,76276,86239,46591,71538,60398,78539,58637,51424,12946,56977,71637,50744,84671,32223,56434,23080,68199,67817,58851,85150,57895,90991,51822,22391,85139,60229,72943,31404,39121,67939,21005,43602,12419,16573,81683,51869,43415,33432,90009,38999,38625,61298,31804,98204,31062,91920,69047,90769,36470,65163,21690,93495,22502,28247,25677,95128,73926,61095,23215,52979,40834,57683,80600,54135,23196,41535,30216,21250,60927,12968,44282,48865,54044,10963,31206,26134,86513,66113,62723,14521,15951,41426,13985,39954,68787,41903,61943,71650,25145,90224,46123,61042,72498,38166,13028,76554,53460,25329,23131,96958,65036,98065,52842,80708,18695,45169,32123,25023,25020,93801,29259,29284,28453,42373,12646,68375,19600,76548,35322,37148,66824,60964,20995,48107,82071,19800,18874,22670,46561,77806,32561,53513,25423,27789,48804,22484,15737,72160,39107,72339,36591,84265,20151,30852,16602,82770,11285,77617,52317,80683,96489,91092,51348,58930,54324,81137,68221,78726,93804,12675,45735,72908,85188,10159,61497,41523,52760,78440,70084,23220,55448,87595,78430,84624,27191,10628,52918,30975,12333,10259,96987,45244,24541,99820,25866,26269,83773,55393,20199,73509,76755,97655,74762,95366,86674,51610,42722,82782,39515,10636,78903,80082,45446,56182,33501,42980,74963,75641,72298,65263,74710,29912,38361,76249,66138,15675,19012,71227,98611,22124,93004,12445,35162,47452,58819,35819,46927,76167,52600,96743,38404,60964,12555,92322,62101,73862,10718,42325,10946,11571,14553,57320,14807,97974,84363,66501,46350,93471,78486,35402,94273,38957,94205,44072,70657,24882,45885,97403,68259,65470,10039,14000,81180,46218,26139,76848,76168,65310,31288,37684,26730,54515,81140,60382,10326,75668,17319,47798,20345,85460,74001,84373,17843,40144,58063,64399,87604,12168,86064,67358,94215,80153,88813,58518,20603,16537,96399,59322,62946,94785,77063,90637,48724,57037,39462,33788,29933,25328,91207,51132,37303,48857,87218,11741,45968,59923,43475,46015,66854,79615,49938,13430,44399,42557,32510,14881,36474,84655,71426,53545,55942,42409,18282,10638,96972,84929,12057,26214,15899,57663,37736,56640,41046,67330,41939,86208,74433,33170,93878,53922,92351,12000,64002,16712,93106,64556,52338,91794,20760,31816,45933,48403,69568,72879,83326,13345,62857,19805,41177,23341,19454,53227,43979,49561,24330,81636,34269,31753,43502,34842,42170,35184,20204,15822,82552,86357,71449,16869,96956,66348,72349,63414,29818,55410,46233,57827,91753,17676,86420,45169,23653,39013,28444,41638,46137,38451,13316,29568,43385,88355,44750,99942,13598,29673,85791,39445,55529,82223,70240,35306,83371,91383,10940,58681,52612,47775,24394,27488,37120,98541,91793,41910,78919,12935,13447,58201,41758,12129,13052,65765,11021,67795,28618,33796,38761,19495,55962,41465,81283,41626,84109,34724,23264,53358,73635,57041,32996,44113,57754,66531,39073,57408,58917,94976,35618,51724,20948,43868,82128,76434,90405,22661,74265,52714,98443,93740,30680,80253,89338,39038,12601,78705,99875,46466,47176,16088,54199,14217,72497,61216,77597,36714,14470,65290,11868,81348,28285,40920,28299,44252,79744,87903,90346,38485,40293,98525,68591,24795,53951,30360,73105,55126,94016,62382,80778,49600,34155,97165,82848,91696,53599,64764,88339,96152,42571,52666,36154,78121,10886,66263,36263,54294,41019,23660,79454,90415,40356,51633,30802,18887,24852,81569,31800,75686,43824,29686,97440,10076,56988,62255,50734,44160,96107,83073,95572,24785,80775,36973,16577,43760,58214,23628,37064,22271,64171,82976,18352,97212,80777,75382,71337,43898,74032,31006,23470,89623,47866,90054,79096,84944,29455,44474,77665,35488,96056,50621,93754,33933,45617,63082,25991,18282,89558,98311,71732,11089,15806,96529,32303,36364,13344,86492,38450,41423,64381,96167,45729,20471,56956,49268,77972,91463,31740,96932,55824,79551,91594,64987,90167,61172,68779,20110,34979,21147,98298,40746,94983,37964,95084,18075,10904,37286,12385,35787,18484,69480,23366,56795,35803,99921,99324,91544,17829,88202,91072,97910,60340,58575,47055,63076,30306,15253,23260,19119,98464,79062,26605,34649,53502,60603,57332,11073,65136,99685,49691,32009,26049,35894,90713,86223,45042,57968,29327,89639,65132,72364,86748,40139,34098,27182,43756,19725,16139,68051,53753,60751,50144,96548,27566,35966,71771,53590,79393,74523,14828,70942,73735,61213,50721,85152,91754,26650,40023,25190,93457,12436,31417,54568,46128,35120,59120,87566,72542,44397,33162,43047,73285,43944,31098,36608,92739,97143,27702,47870,35104,88009,10634,24759,31891,47986,17814,47047,76264,52426,99932,98143,76494,80600,64294,96629,18541,99506,14865,33862,55725,71019,47200,17862,12487,53836,34120,41941,58232,58754,69960,53905,22421,84205,84209,28158,55324,86548,66925,99742,83483,81295,17611,63855,40507,95072,95579,11233,17288,71837,51897,41831,51850,49610,55355,80417,59826,55028,90769,70210,68395,31638,13550,59054,78032,83998,65844,92405,73801,82375,21607,18774,29001,18758,15485,77528,96580,32292,50276,27181,16467,18293,59492,17647,79021,15422,70217,59507,66282,89583,91082,59042,19404,63996,26955,45113,31566,93312,19062,12976,95221,55515,79616,30396,21745,13752,61173,75294,52383,54920,88473,27753,13913,40217,17585,46495,69729,51446,56187,94720,83999,37798,88146,93369,83648,67200,50594,74525,17919,96827,86119,47038,84682,13973,12369,45997,95003,40479,53098,54675,57191,40990,57594,36231,59551,71717,58924,40083,21373,71914,96375,69845,40519,81082,97728,97828,55216,81177,63341,43045,11437,53847,28674,39790,98073,75410,60609,63630,31208,37093,96672,51921,78521,83537,74192,71714,71355,12699,65146,52445,99921,70056,15436,88742,17067,41968,39932,64753,56110,16197,49152,50261,82048,76479,29949,91471,23404,23551,11434,35172,22737,16730,35147,37074,49277,15596,83284,60809,50428,28322,10360,35432,43277,16796,36016,84755,62926,41781,57319,91333,25536,74392,70780,44197,58850,72826,94965,32326,18232,23404,84064,18624,47187,93581,17330,31787,37596,48676,10492,65688,12287,16213,55028,24597,90647,66770,18237,96237,99085,14458,78276,30932,41727,58907,24325,53468,99539,95678,50139,30068,64972,84455,51860,63058,96667,61958,70919,68932,16068,52876,19641,37643,39061,48768,57255,69284,79872,68143,73014,81401,77510,56186,36074,73420,58091,36663,58076,98186,62920,58136,89795,71533,97554,18084,89178,99857,91307,42410,51476,53693,51467,31719,90182,55156,16222,38470,57522,16788,88713,21345,18419,32796,68591,96302,56731,27390,73973,63886,15632,69024,38683,33728,53133,29064,19537,41628,73531,99065,70021,26715,78184,18915,23440,25288,62213,12273,79423,45644,44299,66274,63865,44334,70506,40709,89600,88113,25343,46194,86507,88579,90618,80011,89948,22490,34538,63519,65173,28535,21174,36578,97501,49217,86381,85065,35652,91909,33934,18850,63991,56999,21043,58256,41232,57737,87461,76339,63500,18727,72624,62748,38257,83035,84260,99983,53099,96324,26292,86416,71608,92577,91828,54965,89360,12426,38281,62546,31390,98123,46862,62217,47083,99600,26628,17689,83994,17500,48900,49353,92502,62149,55927,62251,84835,12603,78202,36088,37390,59078,31723,25606,42995,63411,12130,10058,83824,81168,57106,53332,12184,89022,83268,30823,66252,18633,77416,10079,75725,38940,59640,13233,54963,53624,27703,16616,89952,16289,29962,40386,61957,59730,98728,63985,14678,73762,77641,94050,71679,42325,75770,27784,26262,96922,83868,12935,45463,86271,93578,75209,91463,75121,55311,40663,56365,48452,93112,41706,89902,22568,60654,41046,24599,39061,57590,33758,99941,71762,26547,72570,95125,35826,78081,65064,12179,83484,73692,85725,80070,28990,29686,54764,49462,93223,43712,30515,57231,76439,32492,44984,16278,81824,28311,73822,42710,84427,88176,12910,42046,61594,14543,83624,75137,63215,14684,20688,70329,12983,83904,86497,43370,86605,63376,92837,60466,21192,71915,14212,24223,88413,76740,29492,35239,30721,69639,99857,10145,56012,45291,70411,87437,33331,71567,95657,43603,59899,34302,98425,42492,82848,60133,76716,36090,50305,37534,98632,73835,61338,92976,19494,30653,34389,49087,67562,55306,62190,40061,71106,10565,78941,97690,96689,83144,51705,50639,34020,95062,94524,86740,60620,32166,28917,41468,51725,95062,26457,41050,83289,25173,94653,52727,62595,43407,94991,36907,19226,46005,96949,90501,31621,23017,77372,55268,27605,10653,81627,83976,33988,37368,18599,93628,19345,27692,73374,59040,54599,95283,95397,45402,57800,83085,64146,81169,36013,30741,48187,15973,81796,80764,10626,48149,18202,61048,14439,27372,30627,77297,17302,20197,11637,10519,56024,10713,76182,14318,79185,28414,86144,60567,76824,34910,59556,95462,88292,52437,70011,42404,14641,54198,76634,82996,59207,14807,91086,13957,13153,86757,82874,71899,55157,74865,97895,42496,74956,15698,91500,90225,73301,91369,41218,27750,64814,76893,79449,25906,93293,23247,69446,29306,84719,66807,15823,10059,44297,87188,17572,57439,55825,18895,29683,19400,32093,82741,80755,51969,65811,18582,82024,55664,44522,10282,66351,73445,50169,32085,31953,77442,58219,94884,90862,51707,66722,45018,49571,39030,93668,26260,51526,90590,91205,95328,41977,65588,39846,36697,87401,89766,19057,78454,55685,89510,77612,22414,30729,73145,74837,45182,31584,69284,68512,63647,26965,72326,94177,37916,28550,58404,78299,92583,12686,95109,81558,35555,49543,33977,72644,23601,47047,22610,72184,95646,88732,51707,72593,11171,89008,30743,13748,15548,73314,63039,80230,13643,97915,80829,68993,46821,28824,25657,85409,83489,27931,29584,75334,92408,35617,54890,99737,89431,41974,92206,17496,19728,12060,39683,91810,32849,66217,61624,46004,87967,66519,52974,34051,15878,55148,17165,17985,33769,38360,71468,73936,43886,49206,31340,74911,89262,61156,26090,21113,99748,98469,74617,66145,65046,28267,71453,72588,12103,98911,97463,88916,25973,97242,25439,85888,37046,71892,87944,10456,45536,17355,71704,84025,51493,51023,96885,23829,65147,32868,67487,59821,92772,85244,15516,65338,26455,52366,40286,11169,52058,88551,22039,27399,89659,89416,62750,77987,68591,40424,45948,47855,48868,36726,77103,24225,14485,67741,82741,94980,50249,64403,13529,84069,14316,60871,24009,88194,16288,97850,22284,48072,65753,72386,36663,68322,23278,75764,87917,57925,73749,38854,31856,31990,56309,79595,83235,47484,40483,74861,66569,95335,78484,31227,75326,95195,22067,48190,66419,81939,45871,79065,98117,10070,69472,25855,54175,13972,80164,40991,90685,32930,37215,44001,92256,98812,71415,37381,82667,80890,67615,88669,71314,98808,40015,99076,76515,58186,73550,62901,66621,21849,12241,59565,55642,96763,15502,45854,67674,54465,45001,55730,23899,53556,26897,25539,56556,63184,94608,81231,36696,86873,67543,48033,92918,33286,76776,30011,18304,14829,94392,20903,86874,84846,57677,69209,58766,66731,81454,52899,62714,39056,56050,72939,97220,89419,11978,91435,81260,34878,44207,37685,92058,63239,24940,54635,94769,11959,97974,21045,14552,39327,66220,52454,47366,46609,79717,60089,65257,43922,23657,94999,35425,73072,56768,74553,76751,27614,30244,37105,50270,63203,44439,90652,12114,84787,37261,50237,31641,39573,74448,92240,17756,93589,32012,60631,98689,85255,68527,43182,71471,49892,26496,20612,34753,86812,23262,95905,82099,48366,57922,30116,16362,55281,44361,87617,62020,35445,65834,26639,58698,85096,25762,82791,52875,94314,32950,53717,97691,52173,21524,28014,53453,13350,43540,87317,77423,72377,80192,26775,82674,48492,16088,95465,60431,42855,32171,34089,83055,59381,74779,42267,75308,74522,88738,54542,88750,50588,56807,95331,92658,67720,47736,85184,29183,11831,22277,37955,63346,56464,68468,75168,54682,70286,25901,83846,18648,71105,66320,71730,38984,31891,14589,35581,58113,88151,61266,50975,33851,97904,71051,48591,17857,68894,93741,66284,78305,40656,17780,95584,80946,29250,10348,67567,30799,58242,85602,28817,97243,34383,83887,99510,54483,23937,64915,47037,68499,61465,32818,63905,36265,88493,57676,47973,90748,70753,68550,15846,74415,32720,33288,55603,70415,87772,56766,37237,71489,10561,16004,11008,85973,92712,51227,52993,75452,28024,77457,91301,20803,97625,44315,52515,81704,32744,58954,97999,92762,70289,76983,70270,98071,55108,49465,83335,66444,12763,50617,50372,38834,63766,39716,60989,98665,11186,38135,71669,47709,69451,38403,30064,45384,76069,47961,17901,22077,94861,24015,19505,25251,78244,91567,54473,70996,55114,23988,20423,79203,23100,31196,73053,75773,62304,72213,98714,47359,85693,78716,39056,63542,22894,77044,14129,58119,16059,55298,12393,36252,55805,21924,31719,42967,58169,10914,78589,36701,93417,34934,26874,20070,24073,28404,89492,57473,49511,26022,81627,27201,73555,42568,54770,63965,90512,54088,12926,68835,57591,81477,41059,99063,43540,83441,58184,64000,24990,92914,44041,65192,83029,39952,22002,87626,38904,22720,15329,12862,19214,98839,60102,68332,72090,31975,99954,12916,56282,43949,47169,70486,79922,98763,43846,32494,61502,78367,65063,41111,12369,80915,70060,79206,80163,16159,81037,99645,25338,57810,44361,89455,36342,97396,45717,24530,55487,64474,56709,73492,77270,74198,16337,42385,28677,60569,82310,25719,19814,51066,19484,77222,19381,63638,43792,65893,36815,59316,32850,32786,78969,80731,73437,74597,95304,91475,47639,88330,17642,26334,52785,14477,80792,58394,14557,57685,77302,37428,93888,45512,34230,67816,21787,64183,24355,78880,44273,90925,63827,26802,40817,86124,95927,94292,69251,79853,96303,27025,17391,29783,12667,37657,19839,58802,10147,98505,60789,70344,22417,71708,32294,87991,47669,83859,96531,83501,24248,87303,73164,51208,12681,58604,29438,75880,58428,17985,92579,80900,37693,85561,83014,65778,66203,92798,17012,47955,90205,83348,31687,89352,54301,85835,52847,44050,44066,91735,55040,90257,93831,18253,59022,90006,96459,46313,73636,96140,61780,80839,93575,56283,14157,25954,16999,46037,59565,24997,67782,80399,96057,95220,35472,54929,80904,24420,79793,28053,38889,66793,68022,79416,54227,25032,78122,26515,95640,35158,44817,37274,37565,23977,45813,70657,52955,83192,61324,48308,58407,62996,61363,79018,28923,64594,91016,64467,23283,32659,78277,51945,23482,98054,37087,63679,64842,99081,61953,60090,81138,56818,51253,65151,81154,58792,46492,43513,39915,47437,23187,71072,91153,80074,93637,69873,78084,21119,39927,69142,27436,97798,17488,74294,85770,12988,43826,50662,44764,50761,40070,18492,13298,11583,91348,46439,58015,84776,59228,76888,13715,64111,68958,26647,36227,79766,39317,49294,80054,38579,75252,85783,81443,94323,40130,61400,75145,57743,37455,94767,40503,60816,35958,10474,21214,91361,36739,39523,67485,29083,20417,39111,62495,73396,28449,13547,54067,83342,37389,58459,54470,21852,76907,99944,36203,22245,41439,44871,43092,51744,88293,70008,41276,45258,19104,36496,66684,11242,24264,16244,57348,31078,44057,20848,41132,21828,65576,60574,81185,36582,62986,96577,56408,69070,58601,87651,49664,57216,88428,49134,98061,37260,43179,88912,54630,51072,69765,17818,66981,31095,17164,98632,53590,51651,51561,53534,19839,17463,84928,89540,69593,67765,41232,10207,47964,52083,98752,78116,94666,17643,15965,93882,71041,80773,12673,93301,66900,89043,61345,72459,90325,62370,55254,74085,77335,97400,57872,56392,79472,32210,37132,23915,42149,50631,32569,77233,60021,98434,26482,24774,33042,44082,18331,72202,99005,90718,71350,75197,39922,84200,21626,45315,19882,49865,96474,12549,76383,11098,52640,37932,41846,66199,37621,35642,44236,70618,62678,64264,72182,93671,15207,19761,53677,76908,69367,14272,32697,40442,28130,38478,71586,54294,96626,78112,69290,80869,81585,33391,14339,71597,93683,56076,88030,41522,51266,11895,46921,34328,73417,66038,31200,55888,60741,87538,66409,63937,65161,30610,21998,59277,72864,40154,74230,30193,45450,38783,12105,35982,91430,46285,58145,42021,96751,48183,70399,75126,95084,63790,26461,12716,13828,38071,67303,47740,83360,27063,16694,59826,52158,66141,17795,40221,75712,86891,84968,68826,10718,87319,47543,25703,93597,49819,47187,53635,29788,39983,41236,55804,76631,45686,67494,27942,74786,31558,29572,53119,17980,87020,56541,70880,88423,80587,92446,97421,46481,76851,84514,13007,19639,28359,78472,25053,65109,99274,52553,65041,26950,72797,53650,69425,81166,13297,43107,63447,37659,56329,88048,57408,64709,95288,67233,28349,39931,65022,86564,11479,27833,31995,14667,30625,36074,47372,53008,14017,77340,66379,43463,51279,98581,51584,16867,98227,63552,75913,19944,28991,76974,97919,28044,46102,69215,89401,73254,99172,75940,45728,66399,52457,24591,58952,61255,14116,69616,32094,12924,80997,85493,26395,97250,82792,81851,59356,62440,12833,74363,10792,52484,22965,68998,81744,11353,44951,78172,19712,33047,78151,42442,81301,10013,91378,78797,42464,12645,80952,64432,42936,78719,27555,17956,10527,33415,36657,20785,13720,59753,21684,13508,90393,81744,56928,19922,88885,56008,98431,93236,60414,82658,61990,31747,75109,52180,72390,97929,23952,88282,74595,70305,65061,25996,17434,33754,67616,15139,40334,42828,97118,73801,70922,28805,49329,40214,14311,98810,85790,26262,14558,87877,96823,80833,30466,90436,35431,39193,19697,54082,97014,38080,15136,68853,10069,29431,74156,27029,21647,59058,74493,65971,26640,77106,95858,91773,13496,65481,96997,90859,85818,48053,56432,84639,42293,40652,87841,22676,90748,70350,49005,75630,27097,93284,88538,88245,60273,43597,68377,37637,98237,40067,30644,70798,54510,21344,61505,31048,88627,31224,70066,14104,88814,28724,56889,46576,73198,63295,43257,86893,64431,93953,36050,35217,52644,77908,84974,14918,95397,99647,35731,54471,53859,55273,73201,19769,36526,81034,41571,23668,22891,91235,26312,24180,61287,90788,46395,73530,91746,28745,79983,33763,63105,51677,72148,20368,60793,96706,35559,71067,44549,20283,69067,25237,27332,46406,47369,86153,27571,67954,93418,64042,94165,46793,84362,19455,69664,30904,77633,86682,82957,84580,45966,15978,33711,30052,11367,34596,24881,26997,46250,37533,99648,92694,29319,68584,86689,89019,15198,10889,24533,78164,13609,58579,32781,54465,78229,14997,17481,74944,15392,36749,14707,38966,32415,63932,38187,63681,17825,10825,13447,72693,84535,83285,83450,73589,84549,86189,43805,78548,58733,39090,67282,59769,44810,12947,91858,30861,73153,83746,16518,15797,85873,76452,32705,37833,39778,89251,32626,55846,38156,69008,10123,83514,47833,44178,86963,16528,70185,32719,70829,52511,25269,81316,11610,70139,94198,28938,59366,29673,37254,30686,88629,47827,71073,84601,77995,44607,85833,72605,35487,18836,56877,26332,12504,54325,82293,35434,28396,45406,47883,49909,53177,57730,99135,75096,51735,68843,78995,74587,76109,23671,63902,18002,12263,77532,12190,51048,42862,54894,76096,62181,24258,36920,31735,66091,86260,75386,81337,52774,54755,33380,82242,34212,46784,51764,37056,74579,45541,92335,20310,37610,51605,39791,93332,56345,91881,40655,72131,68522,37907,48147,95478,79035,90926,70846,10932,92444,77984,45593,41291,72523,48460,40082,80075,68320,65622,96983,33603,50712,42932,96059,85920,68211,16431,31078,40684,65074,26428,39350,49133,35463,68261,67821,34680,44826,29054,98403,93029,81236,42866,38151,58014,55107,91592,54225,46285,98681,76830,95261,28155,34561,92940,32864,55570,80875,65117,50550,87701,68454,34989,30084,15094,18517,68251,20882,66117,72618,17123,39450,21294,75406,55855,35551,68870,84844,22490,18987,64650,25996,86640,94789,79768,20347,64351,76988,35587,17533,32850,83115,90952,44602,43403,57487,45293,11200,47603,35981,89876,11651,76173,20506,43642,68848,63588,55587,75236,64142,83475,61215,91069,43026,26355,83035,87077,35168,22798,71208,13409,25340,69639,33227,47075,23756,50832,98239,47418,85840,15068,15160,80466,31736,12069,26415,31638,55507,44748,76892,19194,67471,42634,79635,87695,49913,92151,42108,48594,11607,46104,81024,80796,37478,85728,25158,32382,19986,16374,15090,93716,77809,11298,78936,53136,19255,61745,24520,35443,64070,72541,98017,73492,98763,92270,59474,92778,80974,86826,42019,67940,69537,56971,69488,35959,20625,12329,72491,88626,64790,77561,76841,84637,65367,20187,56709,86529,65123,32417,45603,40769,22037,16857,90771,48162,60331,58200,35222,26133,96715,24001,60198,48296,13132,59201,84717,86067,70710,81311,78493,80991,30422,11416,24427,39595,90171,22076,63655,89676,74479,87480,80222,77620,23378,78910,23524,23022,91556,74433,84447,77865,43029,67312,59245,78722,96770,72212,42980,96113,83238,24435,95232,11670,93690,34788,21479,82441,94251,60483,98799,62466,29360,20196,70663,90131,81107,26666,45259,36609,66866,69200,59229,70055,57693,91580,41076,27087,22760,53882,81412,70037,29199,17964,16409,90644,61748,45321,93132,75738,43360,70346,77771,60856,97851,38786,43344,85574,35929,36304,40904,13975,52328,67772,25673,88672,45596,29712,61635,75565,52753,85875,24486,28854,22249,64894,48229,73351,85697,96076,24752,30387,35522,11257,56506,54328,91412,22583,75609,89685,87483,19505,71725,18483,54347,50733,23099,26525,50548,58417,37364,81192,68833,93178,78964,26963,12576,67788,24615,54900,71542,40852,47011,49500,76581,42459,22667,67202,41269,65268,12324,95549,42203,16080,67361,51750,64502,46000,28882,60920,92257,39292,12821,75146,68503,52732,83396,35996,71302,71638,42301,54269,38319,88511,72376,24127,52991,83611,77544,10779,44101,84413,62604,21721,91165,10723,90062,57633,64996,42395,24874,15153,59329,99981,31785,84951,99083,77623,41987,33399,59952,31169,67788,17928,38055,78457,86178,59749,18436,82911,20644,50844,50227,69252,17102,42281,24355,84819,56213,59342,57163,53950,39445,41504,99753,36309,49117,28423,21041,15941,41011,50453,45028,99226,87857,32538,78897,89883,17608,18623,69008,36365,17542,58411,98705,77579,95939,31923,65307,51064,91932,37904,92677,81701,74990,97934,74004,78530,40096,83304,39664,91158,11924,12188,67139,82229,33485,31674,67343,92777,57132,98413,19873,37705,48232,93240,32019,79881,97596,45707,51962,97878,71873,14795,26711,44833,17096,90835,80625,87261,68620,77138,60326,55041,98436,33394,28511,74339,61179,64452,79215,23322,44164,13387,51660,63947,75119,15839,16288,59730,68436,16106,26408,76499,31032,73570,29132,86278,11449,31002,49455,11719,35631,36467,80334,37752,57733,35087,22337,16384,12452,76707,17845,81451,65043,25387,16993,53640,91668,91485,19455,53552,16323,79565,60120,62939,38402,93916,92097,73938,77807,31272,67636,77973,94762,85194,39844,83405,54076,93612,71501,41423,58982,98901,64552,41870,38982,51720,20328,80946,58319,69481,36158,25342,94549,48945,98125,92656,65919,70937,28913,71697,24174,39369,83625,12886,53408,70844,92960,98865,25633,51618,25577,57963,12084,26233,27426,58043,83046,96930,78494,38285,66552,63272,86477,36119,56605,76036,65243,97617,30074,50937,32419,74420,44249,86813,17238,96097,56145,20707,59661,12861,84686,22453,80985,52131,62339,47401,31325,65407,47126,47249,43324,57129,69899,62745,41422,88596,22588,21804,12662,24846,73119,41754,13494,20258,95235,39812,76741,80291,94996,51405,88415,94310,69511,50365,20719,99105,53341,18324,67413,33797,40470,89243,58943,96610,68336,22874,44101,68745,38317,64214,15954,49154,67672,30889,43752,27679,48627,80804,80719,25906,74880,80807,52870,99839,92011,44271,44170,68175,86283,31034,77331,29093,21414,76076,39111,45117,60671,76598,66326,72982,45326,63110,56378,24340,13103,55096,63357,37931,29842,64233,48493,81829,58580,68569,50799,66861,18365,72900,13867,85871,57369,60638,68807,16837,55064,12777,18371,40240,91802,48616,98348,33367,70300,26260,36551,93074,92961,50477,76214,10605,49317,41091,36400,72385,61337,47256,86238,71025,36318,83439,54701,32377,54480,91447,50435,57448,98799,52357,77890,91270,88472,10409,15894,17851,83847,38420,67293,80052,29409,12074,32610,20879,52422,27524,26052,88478,94423,10519,85716,42559,77181,35651,26222,10680,70338,78812,76922,63770,20665,54709,58693,56537,69989,65323,83080,82252,20969,29588,32238,59593,86130,68645,47033,92436,83453,58462,12379,46900,77408,64425,71186,40054,47382,37089,61810,59133,93023,37792,19716,17164,14210,73592,20487,34860,33842,79154,37700,46382,35278,50664,89650,43416,84368,18322,30029,17109,35115,31610,48888,46634,29283,97915,76877,76047,91267,46049,10173,24764,90370,40376,82152,83929,17019,76063,50779,76435,22098,61963,98563,82205,78060,19193,76797,77917,28016,21881,41055,85843,12551,82334,26232,56232,26929,22214,76183,88136,83336,73873,11656,86236,24052,31774,12540,37828,11479,26477,92878,91300,60697,38865,27278,51715,62081,83573,43923,34615,76798,84686,86029,94171,17569,64489,45271,35734,91548,91442,17916,63853,19492,44191,47536,85308,48425,55925,44642,85565,17967,85810,34767,20946,16095,16236,26477,18894,93014,32047,31425,39227,64928,98328,87148,27033,19668,73809,29311,49139,65807,95417,29464,19436,83580,36874,11835,98865,56848,86587,49520,95007,50159,69422,59753,50477,26830,70330,86965,76843,66675,94170,80877,37403,26924,14026,81466,34064,48324,58219,94544,80593,50996,70055,92851,62973,46542,81574,41894,16179,68651,28451,56557,55195,24851,39571,63545,36266,84696,70317,91711,71863,46124,35213,31255,94648,27142,41955,45524,71599,58841,22745,75287,59187,93099,22935,96797,17444,79395,87145,75504,24200,44863,79728,17314,31390,35314,68097,88136,68133,77887,89858,99046,76241,65932,50648,81927,79473,22648,33797,45695,71488,40836,55545,65411,24085,81605,66367,74058,13235,33073,47206,99967,64701,89262,83210,15040,91663,96466,83653,37934,71086,33551,14699,92454,55479,37985,27103,21649,55372,65834,59704,64299,88303,61289,74103,57219,42036,45695,14764,45043,23585,38586,70139,72706,86262,78704,76961,71249,59385,56532,49172,45037,88541,76150,99227,50723,13669,32047,84457,73449,52328,48656,64271,84242,10771,43190,59820,40362,63259,73079,79661,63595,98429,32949,65456,48389,71334,68162,64528,32977,11472,87501,28186,70167,51093,11528,88840,29081,83488,58351,96521,76548,12836,28500,60791,49128,62916,13129,57303,84346,60508,64180,30183,71035,55410,73866,17466,30898,79354,36764,48538,99125,82951,69075,47968,33331,96395,70764,73539,43547,42475,49578,22603,78313,90573,72134,66706,56767,64125,11525,56504,55096,83874,24550,80614,21137,43900,35985,29828,95139,68987,22027,48961,80423,81666,45800,70134,17519,69144,70355,16805,49013,18378,10432,36847,88369,93372,78352,10748,26336,77869,33766,63327,91578,24918,94552,70084,44677,66393,82179,85064,71454,35357,84833,58141,82981,40463,56516,19429,28602,87958,69675,39112,49799,51489,39524,14776,71285,22719,58864,72160,76335,73297,15979,40158,56464,91721,69265,21650,72662,38246,40527,83434,73619,78459,55085,41206,19436,81765,70998,10925,19860,86792,75545,67874,92266,14101,82644,70473,76958,82675,92599,23252,89661,97913,72450,99246,56879,67617,27897,20014,66698,94390,94382,28567,35463,70822,31028,34550,41286,20265,86959,93114,77834,21074,20171,76774,37230,89496,68702,19554,58332,75229,72715,54704,34047,21097,90339,60525,77465,17495,41280,98091,22617,18860,47618,84487,47760,84282,30045,57926,94951,88997,42497,67001,79470,14035,54493,33673,77638,74949,82768,23551,81256,69978,13078,16873,38261,97136,69651,63556,41007,70660,28974,77740,68507,60659,31224,40718,69234,45422,96967,30037,59467,95079,33792,76922,68647,35958,15685,98618,21542,97123,92066,91037,44371,48112,16500,56418,57899,90785,97180,61042,84636,39015,19249,85150,32584,53523,20356,90613,99444,48189,85367,64407,39447,72233,15940,87531,45915,63805,90479,93199,81901,84621,97851,42280,17477,47607,55234,55580,75708,31561,12309,69611,49799,83252,52353,33395,23100,98125,21193,35011,50710,41985,15838,58672,80109,57892,52905,46144,24312,51927,68161,11595,51753,74089,65781,12328,54798,99773,47132,30338,90545,58632,70619,47830,72417,64347,25311,65767,76500,94952,95606,42607,67672,21548,52132,71811,59740,19896,98026,72948,87663,75942,65663,19151,80672,34605,79566,74750,83362,93613,73020,25899,14691,28470,25535,24747,52714,18819,32497,47645,80592,40511,57098,13645,66859,26836,33599,19868,79071,98518,88346,70692,90422,93317,46371,92567,72980,10787,81789,27787,72378,19487,12590,72942,67888,25641,99019,76216,11176,27089,99503,70459,46269,48663,51095,98421,53668,57502,98702,21283,43235,60895,42706,34899,92039,59603,81790,80054,17179,36604,88275,34219,29894,88027,45561,98099,71793,20089,29663,22686,21417,68072,73764,59960,38750,96708,69934,21371,72501,32044,55977,75269,50515,20425,63566,83949,20556,68562,49576,82337,56729,80815,64177,65463,71696,30145,98528,78127,56364,54522,92563,27818,21587,87914,64527,49401,70444,40512,17800,63122,25660,33299,76976,30208,75190,66150,54702,76897,46118,36876,18455,17791,84664,32808,26862,32461,74889,72908,42204,14414,64086,50665,11841,22410,25657,39856,22748,36623,27170,38256,56001,35498,74835,35206,92301,75700,68486,11840,17290,19899,70679,95601,53928,15012,25747,91749,93808,88099,42985,80864,97720,25845,89370,11960,89069,27398,86194,32152,44788,77453,79056,13225,17313,31246,88474,96038,37587,91463,50990,74153,44835,23689,14241,33173,56465,16570,24629,97285,74518,50956,41087,32808,29462,14576,26792,44645,61131,40269,23210,86171,98338,82177,10875,98129,81097,68346,31352,55385,40350,57620,22089,76981,81013,20450,13952,19988,34905,83578,61956,75551,19974,84940,24961,83645,73227,81491,99919,21641,86090,23899,29679,99720,23116,69826,95356,77366,11970,49948,36696,43620,37005,28938,46468,19530,28924,94491,73059,91920,68568,73088,34638,68390,93469,66808,36016,83621,20490,43453,96194,76727,24294,61747,22452,59803,54933,84097,20470,45223,35242,40228,23268,70613,90543,10704,77713,67392,98302,11174,92076,97755,20475,72948,23656,84595,44209,24558,80346,22920,45434,86021,57031,75500,85756,63777,80461,85114,51889,39365,94148,79916,54532,92668,97656,76094,36015,32382,26111,63699,66326,82424,92987,37940,37575,95474,98553,40250,24991,18543,36650,76956,65542,73926,39211,48333,21416,61510,47873,51552,14221,39209,43015,39907,89381,99258,99487,24320,68412,24737,96624,57269,13599,89218,26284,31744,16194,47052,99267,65810,92491,91151,73058,37033,44950,41628,78458,11794,21246,80878,93559,99540,38628,28246,43134,28202,38799,17425,39441,72040,38238,63649,94795,52665,71397,13332,30560,76730,57332,52084,57889,72593,61579,78266,81242,46034,84424,70723,25024,19161,11937,28928,85215,80172,79812,44302,26868,75806,76617,72651,60212,91047,27681,65303,70157,71969,54306,48023,35523,92957,83976,38333,51808,30857,29831,96774,50850,18952,36958,94978,89736,18138,76803,47852,53452,98447,39671,14654,44531,51088,55678,18915,15414,55520,25947,44758,92991,94361,11670,94387,67132,48156,18223,11624,55971,60639,64757,70503,84962,62862,38873,17903,38782,48496,40883,22649,78772,32688,28306,83869,35038,59007,68912,36319,65917,88422,72732,18819,94295,14890,73216,76073,74991,10822,16425,26343,36765,59425,14541,33393,79735,83032,45983,40196,31754,82841,84458,85728,39524,29354,96198,95084,52349,16979,45849,98286,92655,75377,82308,69466,42298,31308,31964,22551,39915,19780,64362,74107,11596,68550,94607,95181,95427,99610,50961,70548,98024,60050,94249,66121,65842,21282,22081,41502,68446,53207,32658,51202,78540,58130,85094,81745,73515,33032,65330,86630,19216,16007,94800,50276,65643,96060,99955,10446,34459,89038,33488,32468,77701,29905,44003,11678,64448,75589,19054,31743,77716,89760,30669,37874,26738,10938,75755,87468,31860,33609,10932,43624,82612,93501,75655,65211,89136,10204,22211,56285,96338,80588,35683,32193,28716,75269,25876,68500,65325,60538,66014,19393,67164,77390,81963,24515,25838,17276,40635,34226,31419,19295,30579,85593,21792,54730,10969,90928,41337,16589,25663,57237,49440,63772,86868,56212,93381,71289,51286,86504,41634,28330,34167,97375,41685,95108,89148,31744,60715,50639,58721,18271,42346,31494,54363,83384,90748,79837,21432,19953,57880,32004,74870,62242,48118,31589,48731,81602,98995,16837,75081,84033,18071,51806,81961,95467,15078,50699,87275,79980,95327,97520,27312,44465,59505,60871,95303,53972,42402,42917,51863,82835,77263,73049,56373,41571,51454,92820,37696,11229,49616,12777,14404,44603,31242,19672,60748,33403,16286,17512,88723,40426,63975,27247,48283,67543,32180,38213,63289,13934,17483,57595,68844,77642,72318,80072,95104,15906,78149,38163,52321,31136,21235,41606,98329,44481,50068,93070,40555,54166,81008,18156,21879,41924,43431,45348,83374,28154,87666,43696,63054,48720,55357,53092,77511,29252,79494,79902,57583,31414,90349,71631,35858,15997,24333,52993,91279,21443,60770,43878,30879,75064,90102,87282,50156,78704,90120,10605,49456,82748,30947,61535,83285,75979,97522,69454,23143,87608,57231,17330,95295,68597,80597,44870,74742,84330,25959,94579,29999,46399,61101,74849,39903,19004,71663,38110,66192,51024,84728,57506,59689,72482,57601,14732,78552,84118,57266,15836,31870,50248,24164,60750,24101,30448,39400,72488,58397,77005,13540,65010,57740,53602,63455,44526,81668,91197,34920,67076,59669,53726,47923,87873,56757,46303,76789,40778,31906,44674,54855,35742,70951,16207,91015,99114,49142,94392,97082,32456,22997,72636,33230,26305,10167,71832,17663,22610,91271,56588,68700,80977,20961,96100,63456,47143,82759,71575,46230,65397,63941,79348,92435,91424,38932,61543,11356,13190,27746,39403,49509,10517,56106,63046,70049,21565,40075,80050,94996,87610,66866,55077,67870,20682,58639,33565,31084,23049,51326,78087,57267,25421,38070,15277,37439,68747,63053,93337,69676,54164,25426,85392,21106,24731,82250,65837,67150,92384,25912,21698,42917,82338,50585,61960,21448,29036,42281,69789,49150,38392,77730,13052,73315,25260,56639,36452,28019,25552,81137,86042,26550,48284,63345,86125,15981,59928,12833,93436,71526,64350,78839,24328,56573,79787,25151,82621,69872,61834,14672,50785,89848,52444,10321,91764,97812,92775,96893,31349,80260,37839,44831,94902,15390,75570,48366,72821,13779,10797,96724,30399,66719,37733,81939,27898,88439,91235,88147,34203,86305,13986,67503,47294,30328,22273,55494,44076,44530,73486,49580,37776,58407,27474,73555,45256,13088,75457,85931,23519,13118,81471,92468,44308,33235,62785,76390,98929,44236,97427,11039,83604,72819,41947,46774,76272,54226,13378,15984,16927,54776,68017,36661,74565,12745,55562,66305,34528,55966,20117,79396,57718,35188,97910,15833,82172,89994,21253,82090,63690,58605,53591,13825,34531,75257,78405,10106,63848,96475,76543,59039,60823,61809,21692,17106,65254,53613,48214,83023,81988,67815,25492,92567,49203,52447,64550,40444,93429,60007,38591,89479,41231,83889,81200,67508,98021,28096,47215,70347,47944,79943,36995,86638,89613,30907,10589,81185,23684,95361,31997,64002,63865,51507,37955,53169,21642,16862,36885,38172,16542,60917,26225,10299,25290,64298,66017,19634,49224,17582,62876,30005,59269,54214,72786,76133,14573,47810,38889,80954,47020,75661,99173,51354,91530,93515,19231,70728,62553,51673,17416,20935,19826,60349,39360,96306,76019,85072,93021,71000,14045,51665,97521,54358,50837,25710,48373,59671,59893,15769,40345,46803,84388,50262,14539,45254,21674,51439,31571,21823,68274,99395,18490,74315,74283,71537,45838,76835,66455,95917,57533,42774,24470,56430,49448,88659,29955,97213,64145,12960,75597,55166,50629,48345,39003,28743,53051,33861,37793,49211,63230,72858,23961,43329,36127,69296,70137,93051,14023,80323,98965,17129,57475,76255,39874,62677,14920,81250,66352,10239,35765,25086,11385,82959,29584,53173,50774,25211,66727,93861,49404,54498,60765,57667,72409,59480,71788,70529,29967,69196,25125,10965,16075,23705,50121,70970,29850,37747,62514,52382,12647,55592,20500,52173,43394,69548,97951,48106,49052,48365,44867,98785,70364,30342,27699,21121,18996,12966,83318,73439,57642,54204,84755,92400,44397,73212,80819,70582,12826,14063,37585,18235,66120,48665,86744,79465,22012,38501,84684,50515,89100,90982,32256,12560,85312,22383,26388,16502,29135,15919,53597,93080,13372,37746,83747,52172,95531,83297,11810,77177,51037,29648,22430,44814,31776,34780,71803,76403,41185,97903,57888,56145,32071,46097,64664,69799,80397,24628,82451,57511,21033,66195,77511,71474,57054,24139,62262,25471,22637,85494,49685,26680,40268,66353,48275,39546,48678,22931,31820,56759,93992,68222,68776,66794,35951,21557,34622,67618,62457,79860,62728,61336,59633,92335,45156,32440,69787,51387,86012,66493,84840,24417,48549,53359,94269,99925,54175,71294,16842,19760,21585,36654,17966,45907,99684,19528,77003,78838,83522,24229,62724,99668,22064,34197,90688,96722,10476,75422,78569,77020,82922,33925,84716,14951,23745,15282,95740,22518,30884,68055,84176,52354,36818,56493,61722,78163,10572,84026,78585,90554,40079,18496,41548,31524,75396,34085,26057,59427,74884,66394,76243,39016,96953,68388,68116,92217,14730,75860,14134,93140,22155,27282,36281,32076,66671,36983,68939,61360,38000,44693,28061,80785,14357,14772,28395,49060,52407,19836,42132,43684,18574,11256,16849,86657,10372,93962,39329,56127,57469,20577,25933,75979,14074,32017,43264,28931,72378,50205,88466,26367,80941,38047,92724,69145,48476,44114,87253,67440,32026,71539,38963,58233,12368,75745,26720,75334,80331,17211,71803,17142,26993,46974,75325,89280,66537,31848,51315,77187,92904,32837,19683,40327,44177,66737,21647,85983,32085,17419,19164,45356,45831,53517,86199,23306,19219,33219,84045,53804,60856,84624,84511,97424,44359,23132,58423,37255,90147,52456,57289,69183,70945,87587,94779,53144,81452,64950,38381,91718,71053,99438,31593,91234,12252,71536,59325,81666,32598,95425,37777,12137,13729,68132,20634,70129,83949,64022,51760,90718,40159,62404,92904,32267,12388,96793,87474,38847,75941,57688,63883,34556,30753,67840,75293,82400,50872,36137,82619,92956,34894,50520,75933,83864,28482,74690,63301,75020,62258,15554,46747,30996,43096,91277,63037,22389,81060,48351,58292,36071,30521,78192,68720,70705,96063,77772,34754,63505,41602,96667,89631,56030,54343,54621,27880,95784,67561,72494,73926,67453,51861,36380,92641,63830,85036,26013,95991,36382,84425,56190,78783,66453,73868,58418,75406,15235,88544,54305,93472,39460,60991,70707,67988,12146,32862,61369,64407,17144,47774,58595,25058,16633,42560,32648,55710,38744,50478,41780,40649,27274,65094,53998,96372,97868,36643,80389,13003,17208,67129,92665,71264,58932,28686,12916,22415,12261,28419,69343,58642,77265,73671,48892,39003,28974,41240,50441,38918,40050,84215,39652,78510,62790,63249,80399,29507,18813,99506,64132,61801,43375,97613,92337,93773,13971,85443,95250,53189,95421,78271,27566,47666,84423,28663,44938,97513,63781,73645,79724,59697,59087,83524,30495,95400,64684,49982,19750,83886,81902,12810,23010,32482,12678,28332,34945,11698,31486,79081,70106,26201,22467,60212,78248,68289,26971,57296,14823,11361,61766,81547,36134,26380,38869,56027,27510,75516,97811,99097,99626,33529,92080,28011,13001,74123,56664,72022,26096,93585,27018,68115,44693,62703,16406,84860,13297,65231,45731,12520,37570,54112,62526,76000,16038,38489,46274,18655,41704,46267,96138,14912,99303,99449,94069,96696,64075,35204,60388,64798,37946,64453,21606,64532,18119,53464,78078,67975,81645,23279,51470,48673,62273,24222,68408,14577,46696,39217,51189,91862,97618,11106,42176,72773,23143,75019,70574,44233,31991,94444,63147,55721,36050,62595,23712,28168,23997,68243,20607,94708,84416,62647,29944,54761,77983,72208,13288,60014,33043,52949,17675,14051,47681,24929,74073,97710,71421,69353,49373,46431,10545,21432,29907,95594,19002,35545,44656,15344,50560,91598,90251,28459,96348,59118,50275,10052,43731,50657,53129,54357,90585,80925,31585,51586,10456,97216,52449,11722,91600,18619,19794,21441,98293,63113,71997,16222,92490,71434,81086,15334,42391,41015,83409,81199,72013,63190,98498,41678,78021,61133,43931,69296,59159,35788,21542,47221,31929,53165,66013,67924,65499,44196,69606,42075,20934,97870,94953,69653,27973,86224,48464,76402,71862,50689,74029,34170,49238,58098,94259,52634,69837,66262,30454,24914,68402,33244,53502,21637,28376,71435,36795,47085,49605,47557,56624,58474,44040,52905,54236,57996,23029,11513,80260,54742,86810,30972,50410,28242,58472,13910,52372,96158,39493,95593,71733,98769,64330,67861,82352,47772,14651,37667,91117,51817,71574,44940,66901,69052,39494,91786,24275,65008,62552,68024,63527,31391,43998,84286,23996,71288,92521,98179,79874,35722,66221,94018,37672,90121,55219,48103,37790,91537,96697,76243,21657,72500,58233,15963,62001,48956,90763,13781,37268,40159,73290,22113,28585,76422,52459,41698,62912,55701,14548,47771,30381,23566,17914,49820,35256,22385,99112,70603,55095,42609,10895,15483,25171,26528,79768,20919,54651,75042,75144,15121,19350,68070,99787,32883,52176,86041,39690,85177,68268,95514,14015,79078,32332,87712,43183,50971,63308,19955,44463,10906,12980,25815,19202,39818,77121,30790,86978,73336,62359,72519,97839,74341,40371,29799,43992,29137,37169,93328,99040,97697,63531,15046,29400,30713,52117,39252,14190,85603,99827,76238,43649,32354,98151,22392,28770,55769,49094,46976,40353,95640,92169,50606,86153,32225,33065,90690,15359,30598,21387,19705,97812,74227,33469,59236,10459,45608,52388,71225,94117,60271,81104,52234,30310,23574,52607,92593,13018,41538,51269,59850,86214,53608,32595,83534,32317,68202,85716,26897,96270,22000,62138,76888,25099,32346,72592,98535,96057,60018,67617,89727,68466,14601,80055,50590,32961,40343,48591,82665,34420,17753,25121,32919,63586,68157,83581,48558,69260,57689,10172,60376,54452,45888,97091,48966,33719,35610,24815,29822,35047,22775,45278,40528,53017,74581,47775,25223,59242,75424,95791,15156,26041,25017,32455,37164,57755,52010,44679,92790,49382,34054,69345,78265,75780,65692,12729,89587,11319,57201,24664,73021,64345,81467,73878,87498,38769,45133,33874,27995,90736,91129,62748,44361,71021,52087,82384,26153,30640,43954,24106,59414,23279,43418,30684,19893,70421,41024,34138,19509,91055,33585,11792,94882,28752,81646,99822,28800,92221,32808,81198,47004,65595,35851,31761,35002,79922,54776,23346,68404,67235,68471,27541,26050,73068,72827,31420,69601,70413,67276,17245,29779,74873,10810,65913,59686,79398,58377,37866,55991,54398,37614,34319,61640,72780,91186,81422,63654,94375,73521,63800,47526,87214,99279,33293,78415,50006,47502,45498,78444,68758,95042,97789,10344,30508,55473,74789,86088,69008,40755,26402,40016,28129,48307,53366,84455,17590,54792,86837,52003,73000,98694,45905,64683,51149,64926,17746,21796,75197,56896,13975,32398,84681,26058,82367,87490,99967,30123,37038,11443,61488,18184,24781,39517,36202,31530,75647,53553,93087,53979,76065,20809,86669,23444,24337,52253,76057,95729,81243,48194,20637,88757,98014,86974,27487,77332,16625,48022,19861,99446,27010,95156,68672,10958,95242,34455,92038,72546,16886,28180,94453,38093,15081,72624,82148,43002,51369,32880,17095,72535,65505,48853,78270,55271,17082,39978,21786,52916,52513,54244,53443,37764,58896,11861,15203,82189,85379,80629,92722,45767,29372,49781,59759,63665,35551,70496,75349,36523,56645,36339,60408,40437,45120,45935,74562,80587,89062,36028,24501,12732,44270,17161,23225,84323,82686,94985,96203,42619,84253,13879,35645,11350,41056,82603,93641,86658,95313,20699,39294,55679,15672,39055,73054,60347,77385,49479,62217,25954,60237,42778,68021,22364,69957,68129,81279,49171,50127,26718,97111,74379,89118,87276,67397,33140,76212,43880,52222,17043,35261,21025,95357,56235,67895,92457,67009,23726,98187,29662,89453,95024,10007,61809,72707,23244,91169,69487,65899,31833,41865,26031,61916,78711,74509,67651,69451,57729,47676,57599,70408,54555,70112,89565,56895,74186,66923,39793,17823,19621,99626,17112,68756,68346,54728,76434,14183,58850,25063,67697,91246,38359,23015,72139,33647,66708,58665,61149,83123,65619,38298,54144,73121,77741,70567,59812,33337,94822,97184,40860,88235,87051,66059,10384,77528,86862,20556,35805,66610,99414,97718,20999,21109,36495,32552,90991,18259,83094,94987,60894,70168,52485,64678,38261,24895,47744,43162,54804,67380,37640,87314,55587,84662,22629,10826,96864,60892,95785,70886,35318,30478,61642,72167,92020,31093,71694,30915,12300,86447,10778,47205,24186,69136,17136,17622,56680,43631,59495,18731,77908,34997,72423,22473,36680,70155,17351,49492,70767,32792,26442,70022,45061,53597,50755,33113,37119,54079,97570,30485,58410,41093,85367,97585,88025,66865,35226,99264,76217,47648,26477,53344,58463,15292,22390,48966,27306,42225,67371,11769,50672,83651,49703,69670,23528,13583,88426,35503,68104,63367,38788,64970,51088,29178,18268,93659,25322,40874,27117,91183,32974,61799,72167,96157,69203,92882,66546,59596,56268,11507,56923,69920,47023,74107,43401,71548,11739,99575,42573,34112,58767,70760,47563,38480,67678,31312,17697,53988,48422,45491,25144,69086,47590,57890,44465,28944,31671,20774,16747,38698,72293,34994,44580,33989,77901,44540,30143,71353,64397,98590,84298,13193,11543,24146,15744,19024,24779,79957,36979,81342,91133,31310,14591,77816,73647,72830,25591,52880,73978,67380,53325,86385,84003,39186,16181,74176,51684,94462,70194,41064,53510,96592,79460,24115,75933,82487,60027,80534,46748,63747,28742,88729,62900,74463,79108,98283,90795,64759,41441,30216,94447,18917,20709,77148,78496,53714,25946,87828,79625,16537,89147,89189,56526,88500,59902,78894,97151,38351,13547,60791,75678,43724,92819,74839,31740,73013,16582,60860,25894,29737,73248,88909,93263,11904,37563,56445,70034,21282,24622,68053,69392,61580,94556,55969,20969,38014,91656,60661,30814,59312,47028,97094,85997,38159,28357,20956,45989,32206,43995,37983,86772,13674,85639,98199,35544,68306,66686,96595,30539,12371,43295,58535,78877,94289,42044,27705,18608,84362,38222,98439,69583,61271,48726,80433,28987,81291,42638,15991,10112,23359,96314,39769,85359,88113,39818,95185,99521,17843,60538,94217,58111,57224,55288,41761,44412,65958,66531,36434,27422,55012,70694,53996,13734,44097,86489,49707,56519,76155,13704,99422,43004,78318,37642,49443,69412,98007,47344,55763,98938,24814,39877,58488,75566,60199,67802,61272,72482,32973,40379,83812,18512,45686,19131,99120,35468,43885,91194,73183,38540,81779,13324,88771,69048,59312,53075,90453,57697,96158,63714,89187,87304,89896,31052,84966,47880,34370,47362,69692,81227,33956,38625,76793,31429,16506,38595,78017,37693,13330,73178,45511,92313,43148,16012,85965,19032,82978,57716,61413,95705,25193,15265,11777,49726,82474,69033,61449,19143,22443,65238,13282,19693,12693,61848,88304,97670,38329,87094,94803,53881,70070,90302,86144,33152,26596,54745,86368,65067,24165,59415,87272,78883,24178,98634,48047,46670,53571,27241,41278,69872,94053,98532,22821,10600,37641,21728,45726,71605,66400,25147,46003,46878,77303,90035,41757,34277,18753,62416,31757,94066,33425,79727,97474,58241,69618,30965,34288,84711,88741,22741,65176,44820,10032,78985,78983,61466,28659,89319,54219,82472,67970,23798,20698,53583,29597,52502,57640,72865,31962,19699,48656,54720,38426,38583,58622,94264,20198,15796,98246,62989,76220,78622,19169,41895,85828,59141,33765,31977,69662,10127,73693,65145,31677,74476,66392,97800,34785,71371,18096,84319,68734,28185,30575,31370,12415,52356,53482,93513,14836,32845,86373,76863,19043,91662,45740,14754,93478,29933,11767,97844,23783,89079,66405,22932,85974,14640,27370,65906,71216,23901,22738,58230,60790,28245,87901,15681,97753,46721,42441,64755,16638,70767,55858,95493,71394,13669,38894,25341,91752,59786,95127,68948,78687,69236,68841,81488,86612,17096,69080,93341,55040,23465,30380,40685,18973,39025,77232,61519,69340,19923,81784,31138,56120,70189,43951,25116,62415,69568,28594,61560,84142,63965,19647,48383,32415,71832,40099,14797,83922,13435,32725,13802,87410,46954,70923,94381,36777,16375,93560,79949,71917,17181,15473,97823,55933,52796,21161,83225,31690,31610,98387,16354,66878,62206,92237,81946,17068,32492,82359,93454,85905,39890,87633,68631,63656,25665,32987,77052,39519,38977,42688,50885,19308,32031,61096,45786,86559,20789,27662,35135,70076,23176,46505,94057,85548,22908,86719,60663,35613,84430,67595,55731,45065,33062,55497,51222,47581,91467,32430,44097,91219,55481,78276,68470,58905,16463,60095,21637,98319,13024,30341,64812,17873,63142,38058,14261,44650,11713,39243,29089,33052,50348,10555,44551,18354,62299,91882,57112,65331,78748,68561,16887,67234,85460,36702,39767,27119,34016,56139,77204,98886,31141,14532,59187,39968,22292,52492,89143,75670,84655,22112,75657,74522,99276,67818,76609,49774,99170,48897,88161,45942,78004,35469,79788,45425,10745,12707,63608,85889,39664,75805,54846,29209,87439,47237,29807,42328,93750,71235,71851,79253,85880,65657,13136,21463,54833,58228,35850,22010,89028,75052,46043,86010,54319,55723,18293,84511,21220,25152,91849,91032,83236,68721,34160,73911,94893,31172,47239,27544,14583,94765,79152,63404,62626,32725,75551,57030,87648,25607,93496,10595,41280,24326,15725,77117,58396,91907,63894,61165,91553,61053,74603,57020,98189,44620,48398,64665,12137,74886,85485,87598,50289,28703,74818,61940,98576,63465,76331,32745,40520,93122,77834,91425,96092,75382,32268,84789,64292,40898,34330,18451,46791,28829,31540,26089,67480,12718,43416,94466,50256,14727,36523,34399,17312,72132,88086,43630,69310,54601,54887,53065,35682,76380,57461,33674,83587,86449,93799,88338,38228,52338,39014,89368,68513,95112,23735,67417,19313,24891,43028,76305,11387,28129,28438,79419,76599,27250,75443,88468,36020,34739,54002,18008,49789,37350,22839,32246,38664,41334,20574,61551,12531,47441,15779,96289,95427,40392,95322,41659,42865,88061,31656,15630,83098,68458,73413,64185,78997,51680,21384,17663,45859,80526,93433,58073,55840,71634,91341,73325,65835,54384,21708,43438,89109,48748,20740,73602,97909,29381,78480,19070,94103,52169,15657,42738,52663,18491,78146,15593,90160,23513,20800,24945,36633,32249,50282,90968,55537,72902,44215,45633,84170,44001,23663,69769,80493,12615,43152,19996,94868,27381,61421,81677,89801,99380,65928,87423,19873,46171,71896,81145,19829,86935,42585,97608,24792,84550,50420,68599,61397,22069,95741,50722,76620,45358,11561,37260,60506,29835,57118,32297,67824,97759,40003,17461,11707,90092,27046,72524,22235,25659,90963,38260,81852,68204,34659,10871,96865,41734,71289,43310,81484,53080,75346,79390,33902,18183,96387,79155,57545,56997,36092,36191,93353,73576,48346,37346,84923,79762,27046,22443,13098,94534,24947,72198,91011,28840,78276,67230,83510,55647,63410,84971,71434,49547,46169,98047,88822,73417,98757,47631,28775,12180,11773,96938,32072,35404,65389,59686,18624,98150,46264,31725,72361,86633,19852,11889,73250,61592,80425,89460,99109,81691,18065,99187,31202,13661,47581,47477,20621,62473,37171,87734,44111,67874,16341,57154,18531,98310,94072,70102,99248,57662,51282,28448,47112,75972,49166,16990,36915,86710,44819,47509,34276,96064,20230,28894,64287,41844,89729,99723,96180,20842,10356,91631,98477,33529,15849,57946,35932,88890,78779,99434,64209,37527,97164,81429,35697,18925,60982,56364,31576,14864,73720,80464,97896,94765,41796,84958,39116,67116,13207,74711,21784,58068,29044,28850,69274,76435,46707,87042,93798,29610,77840,65897,62461,43055,89795,44894,22006,18720,48057,56271,90347,47765,78936,77972,49795,23755,50976,78997,99077,50320,52137,68075,53940,92431,20715,28401,22372,47433,87990,54800,86902,92612,75581,51814,93486,55757,54702,68428,15970,66280,62522,30188,48729,31328,26070,63920,28132,22892,94415,47607,45115,31261,85030,25904,78569,56887,97044,53608,56978,89694,86776,17276,54448,63585,44894,36921,48151,39658,80361,16371,59326,55653,47064,78008,65572,30264,37841,72958,68925,12250,91597,28274,12539,25429,33547,12808,56973,88876,12439,84364,57662,64977,16462,54255,51033,27460,14450,21901,17990,75014,56489,83825,10040,56626,43114,18714,60648,11628,54148,97927,20327,84365,26284,27847,87839,54087,86147,57971,44901,17138,96258,76119,53555,89573,59981,10637,36298,42950,13013,43269,96712,32460,39428,79607,16508,59453,54239,84865,51871,40234,49319,23244,23773,19932,34924,36351,16502,13949,40346,73302,34003,26760,91435,54510,66609,20032,37869,14695,46367,74786,26826,21873,44735,52302,90877,14252,68931,62572,70479,20710,49001,94807,45550,67118,10792,66397,17633,10662,29120,83896,58241,69225,75549,38105,88200,36639,65678,50501,86386,39346,44617,27776,29219,78381,52775,20027,26591,14848,49464,59646,59908,52399,62816,61470,94982,37677,69981,16027,84651,17545,52435,66161,59559,84025,91054,78848,79572,15879,16625,74461,67949,41721,66526,22554,91446,78938,83712,49164,84075,86188,16421,35059,82844,51745,37603,89657,65215,86101,67633,96622,99505,91616,31141,23948,41266,16607,29265,46941,83357,61862,85887,64920,65831,32213,15682,64502,60878,50004,82642,80781,96682,49150,97078,66947,77314,19191,81170,27935,94576,29296,86309,27919,50618,38798,30098,13595,75728,33999,34069,17742,33433,69344,71933,61549,71805,67033,92544,19439,87883,43142,95174,20411,79999,71117,64447,81183,31590,98216,64547,96831,19931,53745,80786,73222,32726,91272,85601,77087,63522,43938,33109,93336,42344,62074,15760,60649,27108,11551,96499,66180,28077,50499,26093,48817,94075,73143,96247,65676,75712,95516,65521,81365,27758,84941,15455,40488,15743,51860,59134,98932,31671,29737,15668,83279,74473,11737,32282,94825,24186,57538,74153,65407,66862,61949,77772,87753,75680,86066,62463,52322,68306,43640,19746,71685,96310,53661,20759,94749,33432,16345,52629,24567,63518,29372,47766,14206,50460,14422,71023,50689,80430,11612,25046,34933,15987,84003,19309,11000,72910,18611,63568,71003,78086,92228,25082,40994,59704,19756,18744,69565,27783,54176,58665,88279,90342,11176,88273,71864,25945,97250,96746,54157,49463,79290,70843,85251,46097,19360,80876,99082,61175,66946,63046,84609,53799,91050,70145,30204,66650,93915,66756,70869,47786,28758,64249,45269,27909,94478,94907,94117,83588,33567,10825,89071,40211,13538,20157,92117,15924,19294,53679,94117,53020,23743,77640,47661,10587,56158,20636,89159,60558,32403,14334,23658,11251,40810,87262,52195,86321,11113,44706,83704,17930,76355,77754,82752,82455,60534,40453,85063,15781,20366,23978,98369,14831,13228,70584,50524,95581,82215,69561,89374,56170,29374,52675,40811,59814,63793,73611,90500,63036,10729,65344,82860,38822,36581,83940,75241,27812,71036,29513,32925,46839,56675,28492,94777,95970,84697,20986,49270,49204,35004,69269,29679,63188,22630,43672,10333,80308,71166,62914,20250,36821,23778,29039,52302,23454,43601,35207,51646,71342,69909,99702,42547,92186,94762,45895,39213,40153,47265,49582,23697,80591,43206,72399,68384,33275,24478,87583,10859,57662,33705,26622,33301,77268,74904,35632,57254,70256,41182,76401,17670,66011,59762,37116,55886,38576,48145,44378,68815,31620,31374,49760,56991,22593,12170,98374,38867,75246,83497,49574,82064,37171,97484,37999,59845,27491,50414,38086,13981,92272,61283,66306,54244,62430,28101,42110,14944,19496,72571,45926,48701,49738,32613,50420,66998,43047,55234,20314,45888,48374,57418,12075,38004,13913,18827,91783,69392,77400,36716,52138,17466,87492,32086,52849,14480,82334,44603,54010,97503,60369,50646,85394,93729,69846,38082,96351,89791,95311,39475,31995,84623,94888,68800,15878,30572,98469,72238,35492,87800,42601,41955,93132,39643,11961,80596,39268,21430,90603,67967,22731,73192,23689,67580,91278,24072,18381,84677,29406,50207,57782,15429,71883,29261,51499,23185,51443,90532,27989,98956,94635,38790,42283,13141,21543,17071,29975,95292,94201,71564,74013,15083,87335,80290,26316,71081,56885,59486,29770,26925,29784,91050,46033,74484,18599,31863,27202,48354,75451,86000,53318,51470,42612,28998,21408,48589,68478,12572,26615,42392,76721,61304,38909,48462,20236,69513,10609,24314,30471,22123,22930,28069,35226,41430,43684,81527,99741,82084,20729,15047,39514,80480,86244,56075,35645,97814,63732,89716,22611,81002,68836,83563,49738,19545,43230,40904,40216,57943,62378,96638,51720,48864,60093,88458,76036,20163,80107,72940,69158,26746,32312,62474,92820,42071,54950,79222,44164,41013,16599,90609,67882,94545,36003,33483,16282,53317,74366,35004,16420,14167,94293,32589,26194,54766,95915,81518,87277,36995,35684,97204,53864,13483,11954,71295,96804,58874,80141,73325,77433,37578,18907,98491,89758,14988,45655,58301,86138,14115,88943,61229,98933,56373,61439,45671,64842,84174,42969,13410,40149,31615,51218,68485,12135,56422,20834,24297,33691,52031,22229,51456,18282,26317,76788,11299,14031,62125,75582,74229,85122,62326,53359,40762,13574,69025,28837,32636,61023,21216,51306,24791,81182,34400,39693,33218,29193,50308,71431,81365,72673,58924,87875,16309,43620,83623,87783,52398,99056,49455,48419,89367,18140,95965,13807,83178,14101,91713,96930,40604,75575,33955,26867,57059,63298,22426,74201,30608,19768,91465,79591,91844,14788,96009,65411,12448,17277,39981,15763,55524,19621,22381,13364,57621,63470,89199,57509,51877,90104,29240,68864,78133,68763,20856,71749,75395,71963,22708,95268,66770,74431,25939,10275,59309,20310,51040,89921,63316,62705,42665,39629,90815,96221,27417,65450,56663,88496,11327,51823,12717,25776,21456,19602,21917,42939,65437,28304,64924,25659,96961,48702,82204,43299,31114,41444,53322,50643,10354,33918,21535,73282,77872,11864,41361,26302,13402,98572,36256,55202,52272,53046,53095,42372,51815,51884,71609,73846,93243,55801,87786,96297,65286,44226,71533,49829,46771,10237,18100,95504,42686,79402,91726,64647,65477,96354,95131,61398,70493,85142,53830,52193,10885,17972,70388,85925,86193,74002,51227,78000,38485,21967,25807,31708,55570,55102,86439,53751,38975,32539,25242,94416,22423,19214,71867,62535,43840,44441,50165,73250,72132,16664,93668,88311,32525,93262,76631,86993,35166,87472,11907,34024,97440,80007,16720,80281,25165,68714,96141,33290,47548,95413,77847,28262,32603,51966,86554,36826,70837,67502,44869,67498,81833,97897,55757,95761,84953,47526,34795,30468,96880,54720,54476,46548,73103,19780,51394,23357,65288,23970,50748,56982,36954,39893,23840,89515,28331,81665,23778,88339,51381,10167,94471,50503,43699,62401,17110,49696,10218,36476,67998,90923,45216,45436,92205,58207,94923,50578,45664,55064,35954,88181,71446,93474,74341,75849,82628,92104,35970,59047,55474,34106,34998,15968,16146,85299,85391,18198,94157,90068,37632,61637,92218,20227,63997,44071,39819,43957,11845,93332,41427,14915,71520,85256,47916,56135,72074,41507,21046,92835,40786,54629,92369,70997,88152,93808,38675,43613,90650,93443,16187,50634,50265,24804,54611,89413,43707,64628,92798,78894,22027,20289,20357,51235,15993,16295,50091,74241,85603,16174,39718,68882,37276,50891,96325,24874,64378,43765,84959,16057,42174,53267,54345,64155,74867,18935,11162,18370,73371,32971,25231,25339,15917,91232,48232,74418,36201,25311,75723,29607,92403,47693,55892,22756,36582,46786,59560,76328,82776,91039,39862,29770,20633,39023,54132,83674,71868,34027,87263,34966,63194,83991,88970,17717,34017,43034,53777,66430,37405,16060,23112,34638,76514,41990,78894,81199,31202,14231,97731,40149,68647,69976,59005,73883,89364,71520,43955,11301,53403,28624,70776,36221,87054,46406,77074,97601,92465,41809,39752,29904,46853,63428,93523,65448,12364,36120,41005,50168,11896,63174,47301,63940,50459,57804,34892,91678,80639,74488,54297,91031,25403,50770,10365,56099,87260,40214,83812,23374,82413,38689,25101,43788,41128,60932,79272,14027,42943,42585,59200,57828,52097,80864,46526,40774,88919,42387,70033,77995,47563,66846,10079,49978,31937,56410,94258,59012,86153,41536,66972,48821,19543,88576,74913,53888,66597,71095,58867,36976,41519,29719,50566,77629,46582,79868,65281,25124,17345,26256,72658,69739,25699,71787,49689,28920,53300,37038,17260,67319,25200,18320,87284,16624,39238,90967,37815,51563,14295,20258,21407,27271,57413,27595,76633,12226,47068,87328,59622,84583,67315,49792,31818,78331,20546,72991,12102,80544,98128,11527,69039,25017,34254,60508,32716,20779,65419,71032,53458,39142,22611,19519,54859,54836,43545,37585,49303,49860,59813,60908,89145,53735,10088,33516,88677,53693,81361,77999,47027,45636,89997,82973,22890,43398,36204,94167,97185,91433,35360,17275,27203,39301,99538,38155,75760,75621,22657,29383,34111,99965,21557,15458,20584,37535,88714,81669,95375,66227,94260,38454,66106,73814,78520,86813,90142,75480,29941,32606,18699,32079,10804,80013,18985,47942,46289,80556,52474,61862,31168,81049,27967,90265,72620,48027,53117,36635,22224,38122,81228,23444,71556,92626,51974,12317,31137,33550,68366,87334,63424,60653,52358,20332,26160,42109,74976,31102,28044,38047,17919,94452,21463,96094,34831,47820,72362,89682,12914,42192,76098,32170,87958,28813,75728,92618,35136,75509,97225,85058,40234,34771,47678,46906,56953,14978,86656,42229,14613,20199,15376,40165,58963,64613,89286,22339,70871,65462,73931,85372,45873,50947,30530,46977,28536,19133,78684,47376,90667,65260,69243,62053,10700,11630,65520,79422,21812,45133,52923,12448,36233,72503,83952,56755,47133,82864,99235,29912,84430,57523,28903,42705,17981,31096,33779,99812,41322,18288,18966,68124,32529,11242,64337,53867,13425,13136,22375,26630,69381,25985,66736,10981,84179,52796,46802,76918,25477,61749,37497,27067,20933,16110,67899,17622,82586,36504,95096,30092,73974,70494,17002,49034,32857,59328,95789,25834,74303,92764,44083,12965,21483,44268,67260,15818,96073,74861,33483,65330,40173,28002,25018,17418,97734,54886,41565,87277,91601,49420,70646,76316,46311,73544,39538,79943,40077,81523,47173,50856,90421,48364,59037,81157,75405,86233,87110,98543,82744,83628,79193,46576,15281,20796,73296,66784,41601,98236,64879,25266,11537,27690,42057,23845,32857,35015,80356,49698,82187,25946,10114,80598,70658,64961,57989,68125,13869,43237,47095,57096,14867,93385,84874,20473,42860,69116,25745,71599,75009,32104,10687,13323,97216,60620,85312,99144,82797,28608,98379,86774,85661,35529,24870,51126,88249,86188,64186,27913,48009,50210,35088,53301,42991,59697,76035,98973,84890,33537,73705,74639,97076,49055,23129,51739,15219,84866,56268,22105,37498,20083,79362,97785,13167,40080,32006,68667,12992,41009,70547,39120,65470,66368,39981,44412,59747,65942,94540,45418,22672,27819,83437,64049,95838,67095,85066,88485,29005,76502,48765,82901,63500,22895,75887,41409,20228,28340,84794,62720,94046,53859,87413,94522,40095,20466,49283,23227,54192,60601,63058,16481,44653,61345,99495,51341,11418,42101,80039,99232,49600,88531,32471,66411,94701,62647,70276,33860,36011,84395,82291,12824,87390,72746,29214,24389,49555,91296,35965,88957,69751,16730,95150,30587,92427,29134,92340,50759,86033,13041,33646,96736,85091,90359,48647,60842,82551,19911,73907,22749,97121,19639,36926,87104,99786,97919,59436,85022,53882,76056,66750,23820,80279,21315,62842,53924,27411,66600,83738,16585,24048,52438,64539,96572,85405,19110,69172,83865,83474,37088,74358,24994,88697,45093,80722,60302,28160,89167,69283,17551,31675,82746,37681,18882,41170,32533,17635,29615,58406,97117,52059,83892,93172,45031,11661,22231,71806,78637,37422,72263,53749,75075,43380,20126,63505,15962,66973,25292,82776,66813,53278,89945,63182,84047,50283,80215,29343,31289,27285,64056,82073,82628,19348,79619,66627,84740,88798,88238,93742,83721,43930,36369,94667,82034,38118,73943,11110,26575,40927,45270,85058,51494,47371,65810,55450,47089,38283,33051,98502,15678,88596,15632,32876,36856,36742,47839,65121,75047,82969,79072,44389,26355,67123,17859,54279,92963,45714,91168,23694,42776,59232,78482,10252,50241,87680,75835,94339,15613,65185,91084,59566,27609,94812,66515,56713,40462,73835,74719,54673,97327,45335,26376,51135,10748,37065,45554,10194,51391,52972,70681,51922,60930,26237,14090,56942,13267,89842,60121,24375,32754,18794,54540,41131,33425,38583,42017,67698,78458,13116,98547,63744,10842,80458,15388,53575,71755,83498,76197,94838,56382,93101,76674,17417,38965,76680,90059,86593,88535,58796,52352,79972,52212,96023,89286,51090,17867,49582,44976,36607,77146,93548,39250,55442,42328,76264,14066,17079,49872,96476,51791,56873,87386,34637,48462,73091,97460,21329,82564,22093,22779,28991,30058,57206,75685,83962,41038,40486,89344,56507,42717,75451,70639,46860,36942,64921,47518,87961,24053,81596,61675,44420,16619,19615,27392,66730,39449,10037,58193,93115,40655,82363,28253,42627,80031,20866,28330,48996,70213,46139,87171,90950,43170,56521,88553,40645,59183,42068,73768,54206,90267,71821,37319,95131,74337,76786,12726,72137,67536,64858,18538,21658,18364,53751,68826,85950,46420,29623,36020,32934,26067,26751,97148,46864,89983,62962,66810,23478,32758,55283,55417,65331,18209,54621,96761,25428,35384,97647,52535,77567,89627,25163,48371,93470,93810,13481,49741,18625,89125,63721,87457,33469,28042,87374,29911,37500,46876,46860,43710,19561,94666,15248,64579,63452,51153,76004,11680,62677,30759,11251,19688,29705,97338,27809,44059,35849,21508,92247,12205,30722,57152,49568,49918,29297,77166,85631,24266,21086,67791,50677,92533,49941,90561,80466,26550,18540,40752,78303,78640,92156,83440,66759,64243,80982,85481,54844,24845,36996,12367,79064,74653,73712,99687,13122,18263,43835,76077,21433,72916,29370,35535,45388,79279,84422,29929,48088,68313,54157,92609,22773,74576,14344,35896,35101,52124,61393,98859,56347,69030,76137,61653,48025,82390,35374,83192,33707,62562,68433,47846,19858,63808,77215,48444,24879,46691,55892,93097,11391,56402,21627,94707,92382,50661,88098,18149,28416,25181,34955,83085,44587,26884,93835,43662,46692,73492,12337,34228,77719,46217,95390,54118,76223,50887,67664,24548,56416,73819,87867,52385,30781,66606,77726,42284,74810,94788,66208,79454,45041,39888,19512,16724,15432,59826,30136,93748,38562,52731,34857,64073,27247,22152,89508,73013,20824,95000,44433,42110,37598,96247,21273,29677,20045,51416,27018,58486,69066,77184,27238,75169,66393,98127,89394,95570,75384,36542,76626,81696,14559,46423,64496,20266,93891,52185,91316,62541,76239,96260,40219,87664,10620,34386,87345,29118,23694,33467,71455,52342,87860,28629,83305,32536,40248,68115,93244,66266,72884,31059,69860,78040,10103,89311,71401,10889,33493,48839,64277,66036,29677,82475,18854,72271,13889,22532,45936,35578,63042,30166,96176,77876,64133,12161,41255,40364,78832,11093,84728,34561,84352,62781,12387,96372,17475,86964,59286,30967,78221,26743,18734,16019,87587,36985,64846,96020,24185,36898,48843,18896,12685,19004,50639,58217,58527,44402,10930,91578,14146,64941,12804,14153,83707,28027,62787,51510,79219,54575,84399,48158,37560,98676,16385,88999,10793,84891,59224,76242,20083,17333,51654,56396,16829,34340,34656,20026,98325,74278,87562,34075,44405,10575,30907,42792,24452,34299,32935,47908,44581,99779,90573,39994,96115,96668,17200,53141,36575,22231,93657,82080,73292,27154,68377,10168,63170,66029,64970,54115,33595,64935,96789,80197,87773,33193,60962,55885,93169,79492,53035,84736,52628,20404,23461,27827,35580,13513,15667,13488,45705,77186,24440,28724,91169,70033,91130,70098,30886,76728,88142,34918,48210,81957,72158,79501,16526,20808,56840,56230,70856,76448,55747,25649,60257,47390,53017,38026,42006,19871,33543,46207,16577,83657,56979,19323,55169,69298,54577,62906,11407,49776,17450,58636,96481,82491,31450,48477,37815,26813,74935,10185,84435,87657,57402,94179,58921,57714,73213,42184,38745,49231,62839,47866,21748,59139,54099,41545,43771,88240,77149,32146,45954,80451,85043,15348,73544,99260,71357,98408,45949,11750,17313,36362,10926,26644,88281,80744,39004,33378,51348,82519,56397,68182,52687,24258,35256,63997,33997,87913,49037,87692,46683,48877,17836,58066,74597,91797,39620,58425,76337,17092,21353,73713,19638,75921,91241,84518,64357,90927,88642,11951,58204,14929,12848,24405,32864,87088,67738,32389,55580,34705,30393,37811,53339,52483,34160,68460,76924,57727,20698,44518,25146,62050,49407,90146,14779,11754,54203,79707,41534,81846,65221,28008,95413,85545,27451,17465,82986,55216,91485,57854,54996,20898,46454,61383,27347,67614,54633,77864,65407,39316,31747,78616,82791,59781,30556,94542,86861,26193,64146,20509,46552,36930,76865,43905,51427,61803,54090,95694,31225,57759,67739,91494,62049,33515,56980,50012,92354,80279,54001,26345,68261,62278,40297,65474,27777,25685,96333,63048,98323,93271,59350,65729,89856,15130,98288,87810,61949,80052,99415,99396,17562,27597,91475,15614,30469,51649,75521,71944,84847,52803,13414,96326,30010,87895,84299,64848,72160,71308,68012,81950,59867,46617,93591,70715,91630,84707,73887,80572,83585,52603,58778,84114,59342,26380,85081,52327,89160,18643,36201,83294,53663,91787,72554,38782,38582,86012,62473,38685,28717,81505,16588,55512,78068,57489,80870,36800,88488,57458,40357,21459,57916,42675,99404,30641,89513,43728,45299,35127,58035,58471,40366,20585,57864,28648,57240,78162,80236,73709,18867,49735,20693,83223,40241,74919,57873,35375,64962,29140,99398,48843,25516,11095,46127,37848,68855,63008,43094,43814,66221,65381,17149,28340,31771,55752,66973,86441,43585,68249,38036,74210,31292,10765,36971,24642,81284,17854,68939,98259,56691,74871,36142,72230,11770,89228,87822,75964,54743,57899,60465,74900,33186,22808,15387,61679,36929,50868,49867,76177,56415,19941,50702,11090,78163,25532,99530,80678,42544,21582,80377,99819,34887,95929,30207,57429,53625,16501,27263,15588,81432,18080,96495,65998,73638,32851,79118,90712,84909,49088,27781,46360,28173,43458,81847,44989,65771,95428,57706,13317,35251,13142,22112,42465,53193,30584,49293,94997,98854,11128,67095,96255,55718,93600,35297,18694,45958,61626,89665,99710,68017,61631,95898,66481,93837,66511,70026,87585,50276,66601,11065,45217,41536,60182,60978,36953,37209,82386,32281,81378,93126,81676,96838,29897,77078,53437,65120,32613,72234,69688,61890,77252,53223,85401,66090,41809,20976,67441,68616,92102,15551,34673,21161,35058,11980,81734,60327,14603,15797,14257,71650,29394,94098,16045,42091,87184,10652,49071,95164,86784,79097,22651,45946,79888,53971,10946,11240,86867,75327,32670,23534,78519,57171,83760,18176,63541,31892,83771,73113,94894,92652,55763,34957,54278,53637,52879,30846,79959,59056,97242,92659,31289,29343,44114,14554,55360,38604,30760,10849,65627,19970,13616,31935,87230,65076,52652,18032,51943,26433,63163,55125,39311,54184,39800,35405,55370,17369,59817,32224,82217,72548,12426,57139,51411,92772,25957,71076,92932,85545,74270,78405,69506,20303,91996,24441,76713,90207,34168,85625,26123,45156,32397,18350,48189,53553,73272,37875,91608,36502,68068,74981,69297,13411,39932,50540,48096,77820,88647,17128,58498,72378,69324,82187,92536,89251,65866,14508,52460,41632,55589,97880,50142,31565,71551,76808,90325,95091,37491,40907,61954,66748,31796,49041,50218,61791,71683,77971,90867,88093,25902,80938,63590,80861,18643,42935,32730,67343,20670,24692,75088,92092,47292,87766,95569,98396,67705,89069,97269,58535,40562,99442,30971,51396,54648,16473,87921,28440,79938,38208,50445,64553,15504,70896,75269,49361,19116,40240,63700,25580,17081,69217,31955,43872,74252,76806,74596,81225,70062,30690,56462,55170,18436,77111,22855,41146,27520,94293,41087,40997,25575,20874,44619,80345,73868,32661,67744,93635,27706,82020,60041,56561,55264,32091,74437,98990,23078,97870,72854,69033,31672,23065,65032,92889,33606,77241,30606,52879,26982,67087,66378,58374,19214,84310,97961,65479,90284,78498,61480,56408,91323,65268,38619,80492,67737,12178,68452,75241,37006,96211,66479,22760,87421,17418,15483,61670,66083,36789,30377,49424,99331,23826,22996,67751,53590,43585,65542,85505,11149,36661,32873,60167,79751,62950,53558,11129,99030,28769,15009,41228,65654,27480,21384,63455,71622,98370,57533,47280,60486,67088,87138,45005,50308,21921,19142,21337,49944,43138,69055,80987,33797,39238,29411,43636,83346,53593,39620,71295,52653,95149,44457,94874,33576,39352,83562,64237,27418,60850,35407,16637,90192,24146,82360,26366,43136,60706,92129,40165,99810,80678,51698,51475,87126,99393,48011,15299,79639,19565,31112,53082,51390,58694,23691,72272,18625,36119,18041,24777,46989,58367,55981,15247,50213,62765,95498,47238,83868,34404,33645,67046,90343,91015,59821,10237,93697,93820,85145,85379,78907,28974,51551,61114,46419,48738,57346,50867,29236,25674,19573,93534,58315,88495,39829,34511,54646,88544,93375,72487,38713,69213,36880,45506,25178,29720,34762,74708,29922,62148,66704,99687,81606,42013,41002,84557,30897,60540,59153,67133,90873,43400,88956,12616,54768,87935,19871,31826,45414,79284,76879,15882,25960,14358,80861,19149,38321,88371,69514,20504,62501,81061,30810,69978,75083,88045,72264,33833,67618,47910,79610,52674,12311,22452,52869,51569,17308,57174,86365,17686,48664,40152,95860,27231,77624,57704,85468,65830,81800,64723,24530,22550,82068,68947,23576,16165,75860,91155,95934,13517,85751,15890,87685,74289,12457,91562,31563,12124,37295,82906,88313,15448,46168,42202,58184,99501,46308,75837,19820,56148,77075,87854,63989,65574,28378,31454,44813,32925,48139,84408,70196,87491,50293,68594,81654,96105,47999,57675,63516,78431,67821,50570,22074,28423,30933,26920,80216,14375,15662,94583,92414,22596,73189,81560,45019,95221,40663,34186,51261,68246,83868,40830,63723,64082,49359,19695,42071,86839,44455,68186,54000,65226,41120,60080,79675,47722,28573,18559,72260,55909,15521,95514,92666,75074,41205,80557,35557,32985,75209,43671,17692,73126,34050,62763,37379,28280,72081,95524,15961,92963,83379,52549,81192,65612,70191,76292,18409,94434,67476,82026,68417,60419,73461,28437,27019,23014,97516,93721,12042,55548,91232,92923,62535,93789,25861,24959,91293,24360,24794,52442,19555,59337,17125,27491,10984,31204,53266,84178,72954,34590,82968,16319,54476,40217,31443,41444,30848,23277,22782,24675,79648,45630,44332,93314,51870,47059,78425,21905,59091,93855,37559,22068,62364,83722,14568,64181,35915,31623,65881,49849,17297,47300,50643,21254,77204,93416,98578,67720,40657,95425,95998,21397,42024,30065,61285,88507,43746,89527,96468,48197,56169,24368,75533,13304,26640,66726,10916,69815,96132,52751,38714,75815,32800,93991,19516,15614,76854,50749,43052,27265,82154,42455,97552,57753,80697,81968,95028,26107,89113,94772,67928,28130,38453,81531,15482,45321,37715,98198,38365,89797,16373,75858,32392,33011,98052,18608,10382,38482,42419,88020,29964,41722,82868,60637,55172,54845,95939,54765,99453,87835,20378,28530,50245,54572,21769,93936,58348,18615,28104,74821,18202,67694,43427,64618,36061,66150,20423,73247,85339,89632,24813,71664,17609,38222,81229,94572,23016,94102,22006,42944,77262,13715,55593,51507,49602,51911,45500,16603,98270,85144,13204,39222,60119,24683,42554,47052,68849,56749,74211,89748,66306,80841,17488,79600,35499,76914,60641,34555,73967,15565,43024,12295,25921,67862,96753,57259,71416,70351,71273,41950,29833,82961,77819,34342,94653,94097,83848,13404,64959,26769,26928,65935,80431,17925,17844,42611,15090,24942,21830,28974,94090,42519,83564,11041,22612,85499,10411,94036,20611,67545,99112,58799,64971,91550,43604,35622,62426,39628,90649,50512,85643,82689,42042,51566,76371,14410,67347,51823,39279,75023,65174,80455,41035,92351,82609,94551,93072,28092,67849,34489,32575,47428,48831,36115,54515,87987,56304,22038,82134,22535,39442,14763,34302,68983,14792,91873,74109,73866,98097,91173,52012,50750,82926,38030,31051,95044,36495,17318,82401,17349,73200,34434,62927,10649,31204,81182,37987,45965,54261,60446,19770,83118,42887,96430,95058,80833,42938,91637,52582,15038,88953,15377,99786,47847,43425,64240,10626,61921,66959,27331,40427,34014,39992,18720,87792,97360,89961,21282,70418,25101,94985,63585,19758,65247,94985,34840,12108,66723,45478,95920,15171,29269,42101,41933,49896,22738,34802,71012,30783,52934,89158,46229,73248,23347,50748,98515,16780,18033,93343,35174,35981,82268,92047,44062,46200,79390,50752,55769,49013,44574,99161,84292,11715,93168,95859,76364,34669,48619,61261,73212,22579,17610,79220,83240,83142,35908,10309,74359,30111,48664,10065,47741,39741,44617,70777,56576,79389,82240,45369,29187,39634,39806,45015,10936,47042,11352,20213,44223,53020,81135,59035,11554,38630,65349,84722,26367,54502,41917,60806,23539,91543,45049,54977,91045,27773,60111,32501,41531,27248,39842,22177,74676,77446,24344,18106,37719,15863,69228,23893,59545,48923,78357,62392,79325,89486,63802,36863,85695,49810,82717,31697,74787,98797,26758,78364,14733,78932,91310,79684,73123,97506,42272,82039,22840,49371,19100,84984,79065,44613,38874,71619,49152,53014,84967,28247,54986,81149,98873,49903,12617,28291,71529,84540,32353,80592,69010,32802,98250,80823,17484,90897,16420,24392,28432,79091,10212,10915,66926,38686,48992,17493,26211,65427,73836,45516,33029,59228,51273,49542,61714,91628,51878,81040,90118,49715,56305,43347,45573,24769,24256,61419,24805,67181,68181,80642,71530,38659,14041,34122,54767,87215,43085,95270,83006,49780,50295,15786,18974,84937,46477,51816,60989,52378,92893,70509,55695,82967,44668,14229,41333,20942,55163,83418,54066,70408,74687,13949,97272,22455,69333,12272,95578,34329,72827,13736,33870,84488,18705,84541,66085,58278,95097,77807,31853,73144,19211,72955,71814,75443,74913,13566,86598,67988,61328,16640,56926,91854,59586,15945,45712,87848,36392,37364,26122,24265,16786,33418,10232,88469,41561,15583,51656,51103,41355,68658,62401,65712,49754,17104,39461,64441,92709,46868,21417,91976,88826,50364,21772,87012,51280,28511,45442,59456,39870,30759,36777,22178,50109,59750,59248,58139,20259,13677,56433,37442,75648,75577,99146,52733,86310,84859,48233,27953,33700,32151,74824,78204,29709,71233,10500,45801,76105,91315,80644,33535,41732,15424,17600,66428,49322,21780,93492,10430,41109,14456,16240,33894,78520,58565,84454,30203,55921,72683,94159,42893,58407,21673,34649,78832,88998,58813,13340,29682,95438,31940,19100,56875,44960,98262,30611,19550,63251,43163,73772,76617,49732,61958,28420,23353,45206,28913,29927,39426,94852,95140,96098,59814,36970,16458,19286,36556,90271,96352,57630,24856,74836,26644,27907,54858,42702,66589,85835,55547,68329,33454,66894,69042,80408,87787,19140,90174,30860,55253,62978,72521,31740,95593,10997,73182,80956,12086,63295,13034,43588,90873,57044,10335,73779,48248,84705,63085,88920,36911,24400,44402,74215,18030,26302,38560,58818,76005,40173,74940,61807,93752,22305,88168,26324,97362,39435,25457,91397,26884,68144,54645,50891,54738,77924,65882,81698,18157,39256,54400,50330,10835,39943,54326,84635,37653,75989,14760,44984,77260,30544,71323,39229,76906,50890,16369,75663,12679,18549,17854,81832,55633,86740,53382,84692,70849,35989,63185,25120,34563,63867,71058,46339,39668,97381,53104,67911,82170,16747,29167,43201,50616,39144,87123,46393,69368,46001,50706,29541,93860,19507,63968,87835,35568,90597,56931,17973,73373,73634,19172,44076,13568,80301,92773,48777,79470,41441,16197,15061,99757,69298,65291,71797,20508,91784,51595,61258,97807,44723,79649,17512,65322,76410,38249,97996,58799,74258,94835,78579,37804,10449,26212,75001,42972,14279,81134,61308,22772,26302,80039,22304,42912,93291,82578,39526,30427,65424,23270,66031,19645,58613,88162,28790,26575,76164,20758,19064,45510,66717,14488,47872,48176,21434,52901,67522,49463,89436,79630,93018,93815,47922,24691,95410,58873,88293,13139,65188,47281,83467,52429,79623,12568,86742,85565,70741,24770,71412,19785,45409,85559,21080,19522,83141,41014,37877,31191,96195,36781,35826,59209,83664,39693,59066,65420,20114,54292,55473,40013,80200,44912,68020,33228,33620,54580,76586,29619,77751,40330,55357,33327,22459,45030,34861,60669,30892,54108,41600,85598,92184,12638,58585,88777,28944,97648,10290,62085,71016,39668,40639,13366,25953,55673,59858,46925,76834,68000,89349,80355,67107,13957,10506,34767,70711,71342,49297,72916,49524,71266,27855,76968,55895,58623,95088,84405,54661,40804,51473,89152,96068,89798,43857,33854,72962,59659,46938,39766,93837,38136,27018,85521,14774,25366,85336,99959,39018,67747,56212,64454,65784,65201,78021,50156,20274,68481,92346,26875,73420,74257,41657,45639,46662,34979,57815,24272,89463,79291,13201,40374,76623,15309,91387,34558,82662,84688,43613,28319,42276,33174,73866,27866,26668,70454,14096,79585,33279,86499,75202,22970,12169,94631,34871,23240,35597,72767,85684,14580,26877,66393,81026,74136,45612,59488,69127,41482,75599,76444,24784,76668,12107,66547,91352,38480,78745,47859,66156,33038,56629,99924,56256,73528,43800,86590,82532,34794,52142,91253,20917,56852,12595,37700,28587,58880,49118,63470,95720,57052,61100,97473,18096,59681,22257,70172,37682,73600,31670,46338,11168,27266,30570,82902,64355,30342,84766,43740,65546,72299,52599,19853,85969,91008,10470,23746,25907,77334,32029,38451,88027,80050,79103,36305,63425,47753,57563,66761,84790,41931,71557,77926,61860,47234,20166,66641,21480,48951,34352,97313,27862,33155,81323,37225,32747,17462,84406,64306,61385,56095,52482,45663,52303,16475,39130,90077,20834,90127,96898,10633,39964,79078,59600,50894,31387,94824,77102,14287,97981,43314,98598,30585,91347,29874,26566,58216,74191,23834,71772,76604,95894,12231,63187,80291,50506,29617,90574,24619,56778,72264,48988,40036,19821,40587,65090,16819,17836,46688,97710,93258,91360,29025,17538,32231,76574,76870,92655,39679,35971,85242,79011,12220,12625,99945,61393,22732,55975,85280,67962,71062,12476,46426,18266,80013,55778,71638,83355,82435,43283,83068,97100,30064,16684,40464,39824,49979,87755,67746,73583,76778,39108,42722,30228,82160,80000,60110,55980,74079,94779,85311,80835,58514,34926,61642,13250,47934,41203,96744,61074,36435,45179,51901,77485,50598,68221,69061,81914,48588,31653,82494,87688,57107,84360,31452,35280,33087,58023,53331,33992,34554,69894,65126,15895,62617,18336,62269,70995,89416,29223,22100,96026,71435,89211,83558,97588,14579,48090,37201,60571,50528,36124,95614,69919,49702,59155,45206,15263,35641,18661,75040,71370,48796,15516,46504,48732,43090,92412,87337,32590,62363,83894,61969,72003,20542,24165,83267,70654,94888,75020,91214,73789,58381,48330,94478,14156,89352,23035,83157,64573,99118,66779,35907,98836,44593,96172,43839,84109,59275,79105,66006,76125,99897,67032,88086,93142,57674,52000,69848,70452,80804,55777,11809,37946,84277,47914,92461,58404,39264,42065,51941,94838,21135,48671,29044,42115,43332,99590,73410,13123,60632,11301,65986,35560,11962,28506,40611,35669,73827,79480,21427,75603,87304,86665,99216,44062,76403,28581,15662,78840,39974,84056,65220,22277,42271,21095,23703,32960,15797,89727,66811,53387,37678,26953,53046,56727,29813,51753,15292,40724,98112,62295,56791,98681,40040,90933,81426,89133,96190,82698,56435,61606,58972,85516,43700,46465,18266,77482,96420,70382,89274,52328,99093,35729,56427,21655,29837,63707,25081,30096,82784,79131,22229,55828,29127,61680,48273,27891,61998,76133,78055,33467,95926,31235,55185,62760,36808,99279,58277,11122,92253,88836,73791,91336,19919,68559,29919,87356,68092,26114,15378,33217,15256,62695,60919,19827,60041,30511,48635,60371,80764,13327,76696,88667,59892,14472,64233,20921,19149,77365,95597,36524,49936,10865,48065,30053,56288,85735,88365,78878,29684,60941,18622,25414,13540,89171,30509,20073,96998,81107,11077,64018,94021,23021,35714,69644,22298,88561,15927,16552,41327,36833,49506,44926,33541,56564,52596,91026,72842,85116,53931,24901,85712,88428,29597,77010,51590,25061,11595,23953,78288,18426,58713,64405,50736,95201,31961,35739,56589,93020,15419,34321,59454,84020,96433,26133,85176,34222,93523,37604,25955,65601,10777,50745,21902,19580,93764,61277,78929,13599,83989,49677,96082,66969,15444,26467,68133,94072,16896,75554,35081,40433,35803,54375,18741,91601,46552,10218,18933,29233,74599,51665,85433,90155,24421,78605,62798,13091,15721,41130,30349,28088,93243,48727,32410,26112,73840,37984,81094,92832,40770,83696,58677,98182,42742,47090,18800,53308,82885,75699,26547,63522,76311,41110,52004,63272,27685,37371,44894,41945,33942,16879,23446,62040,82970,75305,97645,84554,15410,40084,79682,20787,52095,24232,17860,59204,63106,13274,78685,65971,94309,10328,62323,13551,95107,63725,65110,26828,88550,42645,91581,20870,41638,72353,40299,34581,12263,60725,45769,31300,73110,32351,76234,38765,90750,61936,93262,54371,20118,39358,74453,36340,13920,61308,23194,57483,52813,72604,53619,50552,23132,17356,43001,91447,35582,19992,45484,84648,51392,36755,15031,85570,85038,79836,63651,84364,79031,97374,63123,95543,93376,52737,88573,18360,22674,38584,62140,70119,32351,50885,30308,18303,99295,95197,85520,19539,59084,50872,36272,51398,11045,57236,45338,14946,96033,32715,96695,59011,78019,10082,73906,76004,68701,44564,13925,56182,34614,62317,61642,89803,76131,32939,46969,10106,52269,60002,39364,58415,37525,55210,99054,70267,14374,66785,51114,83762,92833,43905,79116,48027,80860,89909,68289,21559,63143,36571,48896,51369,19118,70635,60885,33855,88521,73438,41336,38101,26433,92818,28946,33406,35932,37488,18460,35147,61379,26265,84806,48516,29854,10283,44091,50284,87150,71637,89636,65040,22235,81686,55394,75364,77221,10246,52180,15354,40647,44717,41427,62549,24946,63824,78854,90456,15440,46432,38516,86225,48068,97958,66978,83797,65730,57745,34239,74476,42599,78635,82278,42113,88516,14234,50839,58711,44047,38206,62495,39750,59238,43116,42164,88195,33880,54816,93463,71669,51276,96328,79959,42037,46845,51162,71380,99619,65176,58185,33773,12799,40214,95639,56535,34572,20531,16831,69142,37947,11653,54075,96157,55516,61764,47471,25547,83262,40891,52555,86990,43021,60313,32690,84122,14296,67216,22950,76306,68175,30040,66763,95124,51055,71282,30007,45087,72727,86720,11044,47987,68730,84000,16231,11947,27168,72187,38794,99261,33919,64379,92801,55924,81700,66022,91165,91645,59980,25083,12803,76520,13556,80431,89683,42466,92892,19335,37460,82491,68483,99038,36122,82728,35550,23693,27268,71626,15334,87142,65625,54157,49692,18745,18592,40796,31178,55928,67513,74639,86868,50296,89510,71221,82667,46452,76327,27281,81695,21512,77328,43899,58451,94275,80949,44269,80298,16816,42994,73818,57022,71846,62929,76006,67267,76756,92381,71076,67002,87297,73893,25432,49543,79788,18804,23521,69350,95422,71598,40533,32101,74410,65300,34651,60332,35296,24487,66267,58128,83072,32130,71307,50413,40863,45691,49138,62458,49960,75704,56347,70366,12386,91681,17884,69561,40690,79166,85736,52491,49691,98554,74385,47704,12921,56151,13437,99386,20862,20267,51817,64864,33859,17539,78031,73739,53197,21713,28043,61088,20541,27038,94251,80178,68711,88186,76785,12981,78190,13190,29373,17353,96909,88249,94742,81153,13693,97832,14296,56650,15256,83708,98149,59146,50428,48067,98816,58377,72148,52416,11902,13184,81711,86652,68979,92246,42322,65416,37100,26883,11197,90520,82360,93180,84272,75150,74851,34689,36695,71070,44541,34733,41118,53435,62663,18403,60580,83916,33550,12466,56855,24679,82746,29763,77135,17930,12892,84088,99435,10368,23805,52583,48226,29030,25683,91347,56989,95089,84641,88725,83502,95368,61080,54339,35961,30603,73837,73673,35045,27760,50518,56926,25648,29675,71425,75245,55613,85193,26510,30059,27441,75609,46983,42275,45027,32225,69213,99858,36131,44870,32560,28438,52951,80966,69652,58543,34600,70434,45552,41177,50829,72508,79251,18344,88053,31605,72288,32783,89289,27373,56825,44257,65715,73534,13206,95508,63774,75888,96995,32816,12600,65045,86055,81584,63229,20729,70972,87560,84905,56507,77230,54554,80254,49387,64488,47690,44046,29632,53067,38986,59193,21803,26344,68514,89522,70627,99091,22607,20686,18528,26936,60417,35196,46889,75615,29425,93521,73442,24661,97286,38819,67496,99590,91313,52324,22118,93843,68206,95008,26009,18782,94552,53579,96448,25814,19315,79274,38385,36455,47513,36987,61443,59238,22463,58972,93151,99990,17552,10175,13488,79477,45895,39105,67231,93762,37249,88368,88616,20963,54562,99388,37718,53882,71059,10181,76284,99094,51234,60789,59570,41432,26943,24829,48711,88172,69494,82727,60327,11516,43419,28562,98873,12279,77198,86382,16817,83386,98407,76570,53345,30195,96718,64139,30458,17786,69563,81341,87406,74002,88897,26543,79200,45963,82622,89449,24070,33486,63807,35711,16791,15056,35940,50651,14777,65452,12457,71559,92001,88706,63737,37116,82375,43524,64353,24712,39573,79524,77311,70590,87712,56207,15787,39118,15304,67292,22314,15008,89071,34665,82118,65551,74741,59073,16661,86254,83718,98876,11264,53274,73591,50451,69523,64121,91136,78058,30328,87190,63127,37249,48370,27469,65291,53789,52148,24911,32351,50077,64370,19262,92333,87381,82306,64312,34671,41974,97085,46609,76041,31537,15748,18352,43395,75487,69069,29613,51820,68250,39423,87783,30876,33125,34678,72256,16439,28836,99846,67480,94053,35873,82552,77310,13714,60321,51490,73029,13650,47653,53637,79899,53173,83745,97532,65241,70434,23683,47313,73366,20186,46297,76687,54279,50508,24296,52721,57298,60943,37378,74556,87392,56381,42898,25371,57847,94089,90020,10550,70323,69535,75144,95553,38685,31686,39511,13642,36055,12771,95588,15560,57137,69040,36716,16192,62201,80185,62832,32259,63719,54070,86618,11120,76703,32368,54235,71524,86073,88105,63361,17110,72745,81205,82521,46071,76481,53555,68457,64747,79405,11277,29837,62026,59888,74940,64381,43588,78218,99033,45314,94174,22203,36478,34286,19221,19864,79003,38585,37599,26032,29771,78282,23910,60196,24478,40977,46855,14557,44088,38732,63136,43492,51654,96560,75288,34868,19605,61351,54176,75632,90932,19417,29095,95586,25353,68318,95846,40408,82738,53289,24565,75569,68506,25438,38609,25871,11304,12317,78809,59596,84734,87698,89641,33664,88272,43138,43450,90857,19566,11196,15842,67827,97921,64896,13582,20858,29207,58919,16761,12758,46334,15743,54110,23786,33832,88700,35224,24229,74375,67703,60548,43329,56849,57898,62141,28469,95570,70695,33553,83334,36314,18819,36152,60584,35617,54999,97935,28565,62866,38098,55322,34418,22887,84542,82352,62793,91781,45149,15012,73333,23399,74341,69291,52909,60956,83028,95733,23966,39552,10839,76954,84770,69410,66153,76463,57680,97981,21114,47781,27395,18650,97723,79903,65445,41400,17560,26283,54049,51464,45489,66262,38516,12373,89858,69812,30284,76919,59865,13481,69542,77398,95934,71353,35802,98835,66471,51145,59529,78792,85950,29514,43499,39698,36976,80010,92388,67142,26284,50332,72094,35397,75170,53553,73579,20411,42435,41183,16758,74164,66675,14065,56079,80335,42381,18317,88976,11818,99807,95479,47894,94256,21466,34763,75922,69493,44639,77751,86312,95239,11631,65036,84762,16002,12575,59694,86536,42282,51159,56692,87271,54937,95489,96132,85958,78083,33576,59066,66092,66224,17002,66900,47486,90585,44616,31259,32513,52476,96600,65472,22552,99699,64779,18442,20322,62299,21226,63785,43109,97643,27675,49992,26497,44587,55495,26704,13842,28728,35328,18227,45783,33423,10250,20111,63339,94768,93073,52738,30464,23996,71458,18169,99679,84833,96792,53950,80442,98760,96989,58013,64994,57345,16091,49933,23710,20880,34842,31489,97968,47999,97387,46687,36085,70009,74268,41569,49706,70933,33037,26328,49525,16649,44720,82864,23311,56207,39249,52306,67137,87005,90911,54442,24697,81367,56670,51777,18680,88692,31474,84949,70338,70378,34937,95921,66846,83033,52293,75832,49227,35183,52038,86683,35644,33496,60832,78523,65978,14394,68709,35088,68706,58493,57212,77748,18442,12331,99975,56099,65184,71655,55405,60440,62660,92444,66964,54008,45385,64898,53663,38879,94537,82918,93796,53905,40601,65339,30319,78287,73701,25856,43395,72658,93384,72386,31810,60672,35998,77704,80461,18916,53825,19894,68617,91048,70630,96926,56939,31779,80062,73668,94012,30454,45594,95822,31601,53333,54202,46969,53173,35506,31478,92354,14206,87812,96410,19050,43698,60955,77769,73595,57196,10742,45268,59112,59499,76592,40860,66005,17909,99015,19023,38929,87716,31704,42600,30901,73812,32014,58368,80541,38875,81070,75564,26811,13327,60407,24142,81914,13230,63146,49009,50547,68655,91448,57893,71727,91817,65363,60628,38421,16734,51626,54223,73798,90686,71220,77157,17126,93341,19829,53775,27747,43392,42048,74598,98295,66996,26144,69302,50828,53612,79999,55098,77663,68257,23101,68386,32860,21354,95455,70326,15370,36805,59058,89387,80840,90068,18176,27795,25955,38947,23515,97978,29258,30421,69518,80517,22565,65718,53138,78687,14339,63465,16822,44424,72487,85570,31777,89850,88645,49376,36743,36993,41963,91280,10314,62229,91943,30284,60172,44332,35566,83790,80996,85617,95683,20929,52273,50608,63024,48078,13936,91144,74213,34669,93518,14346,22751,72736,92739,75277,85628,57077,37118,88582,48832,88139,11722,76831,53723,37873,86286,69031,22809,27406,88854,63754,15554,58075,43205,34759,77783,75090,89879,93219,72328,78254,15761,48413,90403,32498,79519,45906,91540,55505,27720,97006,73727,63383,64093,10277,96074,65782,59371,61418,22988,25522,36549,91586,72419,54752,39706,36984,60346,63340,82837,79959,16639,12321,60790,56083,55552,24605,64921,22141,74458,56933,95476,64162,78337,61677,73370,20354,36741,10316,62553,20641,10620,70630,62471,30156,54609,54311,11937,48629,49511,92533,40414,54155,94375,56457,76871,67547,27472,58944,26836,35526,88847,70088,69201,97310,29057,83473,56581,48184,33412,68262,97426,12238,98349,54046,95169,27046,45165,16423,16870,42649,70512,19881,96056,79402,53493,87998,74739,46539,53722,95762,34199,69714,63552,41289,12636,31136,45752,72312,48503,70641,50198,69452,72507,25739,80473,72740,10956,35472,78992,44931,91145,47810,48825,62730,47214,63663,18295,54921,62087,66003,86168,57366,72102,74485,42007,96939,62537,34284,35786,10099,24867,92886,87463,10561,31083,44422,65814,79318,46468,96471,12219,36425,49356,55866,38432,23029,25199,11478,69407,60727,88294,37675,42212,88010,47097,85751,74023,13772,92383,18703,71591,12687,26402,80468,85726,89506,22097,33007,78844,89167,72647,63150,61422,19073,56101,84738,42058,63389,23318,93139,90472,18626,20039,66452,10227,12416,78766,95615,44457,56997,28841,73448,42106,56337,85764,76146,10927,61239,17180,27798,85075,12586,12871,53425,96751,35527,55048,24794,31536,52772,24746,82872,89326,79007,68101,43702,80739,69420,44255,32156,37157,86251,31096,72799,14071,75038,74265,60803,37004,14194,79509,16090,68042,62149,46806,75247,68994,49857,45555,50054,59400,35195,46526,82143,22573,22448,38314,47752,35198,56957,42470,35472,88617,68460,56030,35378,44645,40860,18688,11675,33929,97752,83229,48475,61752,98599,89653,96071,33664,12370,23980,20777,26219,63646,62949,74306,24470,98294,98211,58571,27664,78898,97233,88704,60597,19016,88457,93190,20195,25568,74220,14192,42356,81634,67803,28767,66312,61607,64734,35732,37831,10217,71947,86383,39101,28907,15541,37609,62524,58237,18103,29694,50499,44942,49213,65160,48835,93020,48427,62748,36532,86570,37463,22765,44015,69152,12554,73669,67354,93159,53530,13424,97978,22747,76024,33837,19602,92700,68128,70075,66355,83480,96319,65403,65609,68036,78920,15026,29599,57652,96946,95853,69666,60995,56031,18899,24601,87864,66346,26935,97980,15237,99201,12534,46843,13712,37238,21190,13828,73223,95743,21289,90201,39610,46635,24878,15975,13855,58111,75570,54173,41001,18027,22118,17944,30515,46632,76923,28646,69001,76042,72843,27826,66195,50721,40194,83947,42052,31433,62118,27893,13135,88943,10900,73388,31294,31113,18366,74085,79233,76709,16069,48168,89670,81729,44305,37979,59504,64522,24898,95450,14300,23972,77361,97406,77313,10164,30728,88612,88433,22969,73269,59510,97599,58059,98106,96900,24473,60399,26944,27648,64811,38587,46979,73865,36333,63604,34604,35973,42053,43406,18948,89093,68858,62751,92354,80765,59852,62181,19645,12863,53910,28459,79926,24084,67472,55053,17235,77277,23092,83395,19802,43095,72570,94538,10753,49334,54633,99228,13342,26892,78118,25130,71978,16480,88423,32539,80564,37965,94112,64797,96884,93874,39825,30189,88782,90590,74821,99116,51406,97897,52962,99120,68479,85865,31057,59071,94966,88107,56430,14016,23899,52612,28779,86418,99459,47880,99944,98600,71233,89294,83546,97377,11016,45807,27920,58215,30135,99086,82873,52876,15438,58519,12493,44014,84745,66958,94455,16163,57251,88923,45653,71278,19069,89617,77013,73387,22537,44274,82414,80162,24476,53300,28837,87945,50212,77006,12928,22620,45283,44390,86077,37813,78155,73576,51431,72374,38655,13380,71784,93165,18647,37179,54174,35111,24355,18445,76228,82840,54657,85815,69897,49361,51276,38773,81551,78009,22509,67032,66344,11048,42856,50853,59420,53865,91042,46749,36392,44643,79860,34847,37734,66924,76101,66384,38104,76201,75100,39096,73470,44197,33033,94021,97341,99667,34772,98097,72058,54090,97957,11324,72059,81032,92608,76234,39399,74957,99087,12268,40336,64534,14621,58134,80892,39389,94343,70830,64980,85151,72904,47979,32148,78153,31130,11811,32895,22783,58575,95904,83684,77385,33434,69306,33004,88424,55527,21697,83508,87753,68463,13794,63524,46957,93921,94912,98270,60515,53843,24543,21940,25685,34595,21477,58670,50260,48400,44880,35481,76141,76079,55492,39046,35888,40544,31794,11043,93835,25667,87485,77366,50850,56827,42386,56702,46706,83645,59115,73703,37497,55359,38420,20946,73253,94418,32350,37024,52725,35001,16906,62138,38462,93690,69120,28669,87964,16313,13079,26335,88617,82476,33028,38393,77995,81174,24445,17585,52049,62321,82820,58009,52673,92126,91999,77759,21492,68227,74958,54365,66392,13248,45724,94188,36010,57928,70236,20840,29988,13235,97830,68426,26467,53069,85945,64312,34844,30045,53611,89397,74007,61486,87525,84473,75377,22801,57090,51378,18958,41994,78148,70936,48028,39576,39542,86312,10928,63378,88567,94224,84528,13768,99359,61928,90030,66374,80437,35724,66275,73935,20845,14400,11529,43629,24876,29731,36227,14689,79398,13099,31163,69155,41123,80035,32243,95883,78938,46766,59118,70420,52165,45729,27295,39934,73622,48439,98398,72820,37054,33181,51730,77837,42512,55509,38677,82831,43647,67579,83142,96305,88775,38658,35571,26987,66497,95221,75229,51913,88659,72035,95476,44676,70618,19474,49282,66968,95841,90166,98336,42592,91415,95784,56729,14636,29209,93515,32294,63739,32040,29009,69274,56897,59065,15403,45745,93560,86696,18485,37851,43385,99583,11131,82469,49785,16246,25650,90636,30875,63901,24302,64826,85884,52158,65236,58726,54771,82148,69383,42530,21272,46059,75436,23740,53098,22494,61406,30915,71659,83291,71686,94059,76976,48544,76814,86444,81753,81567,68054,59988,81708,86346,48895,89614,91263,14257,62944,17271,47192,47289,89415,12127,19498,24634,48470,89132,63511,76064,55341,49787,81059,25817,64446,68667,33174,20749,79947,94994,82160,64411,10896,70217,71461,32491,39801,38723,82246,74606,17679,20102,53594,28231,22361,33158,69001,34405,60253,54704,64084,85597,18049,31383,36890,25540,25943,15010,17262,84887,22199,67800,54085,93718,70754,63562,54390,87588,90416,54581,43276,94979,61908,36944,40500,72017,83988,57890,22745,49412,91692,54091,11804,78586,40820,99406,35668,92085,77536,51793,10147,71830,79798,57873,87955,22444,60171,46451,49117,59204,40664,83047,81064,33695,45061,31340,58781,34528,17695,84900,89882,61803,28960,63391,98361,50682,74864,12889,77376,67748,19453,17935,96574,35466,25145,30475,37802,54894,63883,75285,46903,31245,72783,63709,90281,22268,55225,93518,81952,40124,86409,66196,34432,35689,15710,16084,96675,34531,17288,63505,90223,52180,38756,24789,90864,65723,34123,20103,95234,43618,61028,85392,81712,61204,11552,84240,12853,21837,42488,68993,59284,44840,45126,30476,13497,83850,21849,43517,27724,93522,43186,79445,58088,82774,87469,47679,90564,71035,49949,11807,17573,98364,92340,91481,43784,66617,21792,18300,61977,97994,95769,36321,99451,70666,46865,88383,86451,53488,26764,71390,82408,97419,40153,15704,88712,35997,94255,96930,22016,54354,26500,14960,13528,41006,39235,41126,76076,68681,12123,35764,70598,90603,79418,97642,13478,69569,34240,31526,58226,31487,33418,70918,97118,80911,67560,43543,12170,81816,32933,26311,34014,99339,80367,89727,45181,79085,66959,83675,24760,54478,49741,95870,40493,10552,80344,86278,24770,28980,50132,29222,11362,15974,88991,20357,52414,92916,93348,80158,10115,61124,82947,88927,35000,50015,11691,16261,54463,33618,38456,28837,34235,26365,54719,41797,73957,84592,99346,32733,66942,30850,45332,61745,20925,89398,79891,17026,53879,84219,81028,56289,73464,40820,14674,88302,46237,69554,62114,40459,27097,79125,37983,96438,31585,55621,51250,85284,32443,33345,38477,86262,61892,26123,94022,13712,47056,18431,76708,47783,89441,83238,42093,68973,66560,69113,76631,68773,17618,13578,45586,24978,42456,57035,84227,49034,96173,39832,68682,98117,75150,11463,23703,51791,60530,91725,17633,45154,69412,56057,36343,28092,87093,44132,78078,11980,69370,30672,55010,80519,38605,38833,82826,21892,68721,30324,51543,56803,45659,64931,57068,19208,94083,90691,24127,56125,72787,95459,35218,33987,27952,76971,44546,29254,34099,64504,35089,88017,51280,14120,86173,47100,98857,49435,10586,75633,24709,95105,98759,73996,68991,71931,58744,80515,12749,72543,80063,68911,75761,23444,79044,44389,99614,81598,15577,52567,31175,93934,85252,72050,88103,28196,54311,54932,54172,44968,79459,38302,68872,21907,47931,25936,83150,65103,50088,64848,71098,90224,53635,66250,72741,75471,28711,27999,17821,46331,47814,39874,95815,16957,88641,87388,12601,61707,90461,52896,82859,25595,64698,69701,61392,30705,93901,67443,82727,27693,12905,56856,28407,22204,64679,99830,44837,34933,22017,85315,97042,64730,33868,74518,57477,87577,40845,81358,33041,20319,22407,40298,56194,78442,29572,87580,25412,11263,42853,40292,64666,91284,14032,74342,23120,16833,79431,74552,24630,62435,74400,37633,39589,11259,90463,84320,34625,53598,79696,16666,57225,96786,20517,56247,69261,16060,42469,27133,39259,62083,69801,85124,75358,98240,15409,85018,47276,81345,87785,90936,61211,55687,23146,72678,11268,84516,82797,97157,87199,66446,55697,59236,82453,66402,31714,21018,20305,14161,62465,99066,94949,65920,62379,12939,57506,17222,88692,30592,45675,12119,86863,13362,92931,14797,70897,50555,93345,25072,54373,36944,91853,81317,23215,46155,92217,48405,52869,56810,82611,69053,81042,91086,41568,89736,25109,67515,70569,61831,71487,60161,71172,77623,81297,31118,57440,62661,23344,56529,17671,82981,42047,33053,57691,56738,56888,38951,88046,50116,64585,56359,49630,17532,90532,89086,33158,46379,71673,42813,11197,31177,23135,75689,38562,19596,90626,35369,72360,71861,84974,57678,68387,97476,49271,71559,42148,17126,52404,27360,88507,33868,48961,90566,30585,34302,24048,52105,79388,80265,21907,32152,11447,39966,91016,41302,67784,22295,61238,67374,23654,77104,92323,15571,39378,97027,29703,71595,13875,31601,60808,52283,99079,12879,56561,39365,14426,11518,44048,60450,43591,55511,32111,82407,80856,61659,47184,72713,77589,79236,56219,52333,64037,54524,85484,71580,95323,90946,55317,90568,41915,38188,94555,99064,78182,78116,36505,53404,11057,54553,63681,47577,83964,68920,67110,66679,76310,29539,85974,30980,52694,49137,58465,37716,95403,18150,39322,52299,63126,25818,39656,34608,14255,80216,84056,53175,87949,66159,79846,38098,75056,23426,45686,40103,24741,87550,46798,24932,56422,48869,31892,27204,30227,93194,60873,38706,37898,42346,74269,42004,94766,81525,65136,68690,65033,81128,12692,37227,14925,22284,25056,37755,93451,58145,51824,69493,53358,96633,76071,71440,93024,57402,53943,60038,88613,39453,76773,55020,60335,81976,23186,73351,30457,70749,35342,54082,78444,31289,91246,80746,93016,95392,18349,60233,77462,67288,69576,98159,27465,76235,42408,31182,86999,63000,69599,12180,70245,29982,74561,68285,18732,37765,37189,57661,34092,68881,64320,16288,54750,24610,56971,58096,16566,28053,55321,81462,46346,25874,10804,65902,17669,80331,53059,67049,42091,49645,90730,60075,89630,52820,82609,43146,32903,88785,43641,52997,15081,89828,14717,52610,66756,42305,59001,87591,93887,35399,68731,46406,51346,46462,91711,25389,30917,32014,47776,28645,44208,73255,33590,67564,14546,65729,87599,82126,68939,29007,33373,14863,60468,44844,44266,41689,50774,98659,38122,59855,99321,86175,18632,18952,64454,79184,76605,87210,24271,80121,21170,63731,36426,39738,37768,76749,76417,59579,68024,18843,80866,85563,12916,35495,35665,47715,76744,89383,95298,35715,25900,34262,41280,56285,70271,27392,88357,80560,27946,29273,21114,14891,97709,63546,78153,70697,54422,51512,32146,77614,87342,12597,15523,28175,33765,38357,38102,95623,19727,99060,65850,29892,77651,10813,36781,84916,54627,51765,57660,79445,61477,61869,16001,32220,29697,52423,31502,16716,97564,57310,50465,52780,10109,52514,41080,20434,22258,13868,42501,72720,15247,94922,84725,59553,65327,84944,91553,73303,52564,71923,57378,62086,10980,78085,55477,71029,89300,89427,44334,46648,68268,28464,14266,59949,82264,16715,44702,15697,65246,80344,91790,24083,41146,21767,25940,96927,72473,15337,49276,73658,90882,59996,66760,80299,33997,24405,34648,75476,47244,53561,78921,59178,63013,67822,41874,46728,30774,57322,46926,85642,54108,92985,45887,30173,92919,73914,99394,11383,41330,70027,81847,41858,81973,35403,53710,28499,59467,53972,31877,19716,11224,59022,34424,25410,82006,34588,95228,52553,80945,70943,34259,89360,91983,74934,66527,78063,78773,65704,24701,28178,18468,11020,73649,16614,56405,83542,69628,85496,68887,91534,12802,95412,42469,31611,14596,62130,81797,65260,98370,40592,31411,50941,29696,23825,60011,63617,60501,11831,45389,77539,37904,69687,62623,50577,37420,97360,79763,71624,25257,75122,29612,97584,86936,77457,71519,66346,16594,96427,18191,87211,20360,72758,92300,95967,96946,88483,34884,78091,97278,72812,86961,56324,33168,89463,14650,28173,49345,66621,33417,60095,36051,19683,65401,42009,10452,94903,53370,13680,68283,27809,72749,34726,82235,90490,73746,28243,22690,34486,42180,15665,56478,42444,30898,98840,94482,25911,53250,50630,11938,30465,16314,10448,30180,22875,87408,77862,85173,16664,35068,31912,82499,24875,78616,25151,46818,93935,93116,65022,20483,55221,71327,15704,73940,73384,36005,69197,99761,36446,66529,92400,21397,89695,24900,80544,17492,19015,41750,40018,36190,87380,25770,14005,67530,66219,49613,58247,45854,40351,63953,14246,66735,72940,53273,77382,12161,66613,34575,28137,31619,59226,64250,83563,51978,40200,94981,19106,52912,42877,20746,56507,48934,58489,61185,36157,45911,22953,95039,10574,48032,15710,49365,25456,82532,98686,39060,17732,27681,34164,11459,74152,47371,24347,20801,21999,31154,83128,35673,83285,34458,93552,81326,96669,92206,65509,99228,48843,97969,40487,75175,19749,11998,16517,66118,39795,95467,91311,90248,84062,96157,83366,68056,38572,62504,89180,41833,21622,95333,58714,78946,59033,57885,24511,87730,35669,92835,47959,33011,88193,60189,55033,31677,96676,49110,20102,19803,97259,37440,75013,95305,56619,38743,73333,83959,88124,67014,35599,59212,81990,77632,53240,77486,52450,69174,68883,16473,59540,27073,69237,13888,23584,64142,38222,48515,86501,43546,16516,62108,60465,19818,73455,94048,19974,72541,44256,61095,52207,54140,25193,76334,65239,90856,97386,11799,58429,13946,56515,84016,55769,98425,21259,59036,70108,79580,82844,73653,23466,41748,53663,62228,40655,99483,55547,85046,37356,18372,12217,56293,60777,71003,25707,18016,68496,11889,40373,48679,80096,78205,95798,53130,26883,54155,34158,32250,78272,54378,44474,16520,83818,25609,95263,68291,23884,98103,81303,94377,40008,41000,11371,46717,59860,33482,34431,81554,49591,89562,72002,77181,95973,14410,93428,62849,90013,30734,93529,46079,33010,82570,84005,38476,92608,83452,90782,12294,66444,79001,44418,94959,88969,91868,72560,24230,17125,36674,84385,21425,51214,49148,73474,26072,31654,45186,28577,65361,43485,90117,61736,50497,43405,14662,47942,12193,17776,50539,61192,59709,14465,74861,78328,51784,90708,75388,41877,12900,78861,64403,67880,15775,57362,50188,12611,35523,14113,19238,25706,35256,37734,20498,93078,89189,13702,79527,79458,46980,18578,55612,84250,50355,53759,25332,81052,51621,47120,64269,26927,91094,73758,21321,30696,52170,88423,78722,90245,53412,19159,33036,19934,75244,85014,91983,48909,53362,41379,52660,30160,22020,65945,15843,38178,52637,28032,90247,12507,51964,92440,90537,75753,88370,35742,55173,52332,12496,17808,65718,30331,94000,56512,59351,82901,99916,15639,58154,20326,12924,84524,58747,84704,94265,61499,82494,77725,22109,11477,37100,17952,52981,29685,66016,96027,35505,16179,80206,50656,61062,89293,41351,49625,24413,41611,35062,50844,16804,70360,51333,46000,78740,90273,76961,79564,81004,11436,68884,44830,24638,49345,41328,57962,43444,17370,74740,93398,43406,87497,37026,11403,21548,89391,48506,24276,95802,87604,87999,76805,74258,42441,82253,30745,98775,59408,11945,79393,83782,81557,47463,65598,43375,30785,34975,42120,29862,25408,50557,16670,99944,65640,78862,31074,44304,44292,98583,39980,52549,20408,48280,51290,12092,23851,93221,18471,50262,12748,44336,70932,34673,77582,51098,36199,14511,86261,23520,10461,27294,46195,49283,34538,91982,58016,28636,28457,91434,21532,34098,20994,94947,36348,94584,22691,21591,54144,64846,33123,46210,85137,11360,91617,41392,14642,90945,71456,68562,40979,19593,85382,30363,13640,27446,51555,92115,12567,22689,68591,47592,23783,75765,84966,68842,38572,34289,46169,86625,51261,93163,84594,60112,39065,75659,66973,65005,42237,12725,78337,94058,39325,21605,30398,89482,10049,88498,18833,71917,22534,30366,14597,66721,10201,66932,26971,61405,52525,63103,56512,62011,71443,44117,34708,39760,83882,87470,51492,86973,99749,97511,45050,84072,88921,48783,49754,61781,94733,31763,68994,23955,77304,64342,45027,21204,15062,60475,61160,29566,70647,19123,93676,24677,71446,23460,92773,74245,82696,17404,76801,98932,96257,28023,56846,42829,59810,85144,86420,35044,12118,60829,81195,20922,45836,99114,63798,54288,72978,54312,23544,79301,36032,62160,33636,99536,95016,57000,84702,31756,31575,39272,85439,35951,60972,88724,42624,68205,53256,28318,43002,31770,87247,38335,13195,91618,98631,72357,88308,13985,25458,76628,38288,56827,68315,12103,67993,34378,34391,70595,37674,10280,38920,69638,68336,37649,29113,54598,22661,63541,88399,92854,53829,30722,13349,67623,39802,42634,86495,26328,35506,65380,42189,80389,85601,18379,94684,98559,58316,94368,89733,82643,51346,43550,74363,57715,75691,57680,99798,67054,80336,85002,33557,97879,34014,26474,34441,34669,86715,81216,40360,39143,92798,95653,73998,52701,53793,69852,11537,26341,87486,67325,21359,15739,25153,28020,64327,14095,80657,62836,68931,66086,57320,81220,75480,16860,28834,31744,91855,12823,86263,95956,42068,13743,22424,81326,56820,58717,36212,10452,60527,54991,47751,28994,50275,46462,11898,69637,41852,21155,19070,60559,84158,41114,53431,78849,49765,15158,60678,24543,84604,25105,78729,88593,10462,31621,90474,77234,56047,77590,47022,96426,22039,64420,30635,15726,44215,98202,13931,93564,67828,31626,39599,10943,86822,87100,25978,42135,76460,56925,17378,45361,46429,42819,77493,75931,42140,16905,35953,49199,91210,13008,65710,20331,60406,72896,38663,62932,62441,51964,44590,74595,20904,94336,25798,36048,54967,34908,42124,62025,97348,41294,88645,14688,88560,78376,10855,17164,66837,96752,63238,63636,77627,67185,97676,17588,48176,73688,15665,45067,41649,47972,30897,69203,17815,14396,58227,89168,44526,46982,72388,42235,79105,12026,56396,45557,42112,69446,54559,90819,38284,90174,67240,23708,19088,35629,81143,52291,64009,17082,80345,88229,74115,62748,62920,46856,37936,42548,91204,43906,71077,64340,29181,62085,95759,69502,81857,54826,14252,70692,88632,19760,72580,48015,64177,87987,97179,91376,45811,40213,37046,85639,95093,43192,29944,32713,16247,35287,78092,44764,93293,85315,85025,65306,59331,89482,87809,24555,93232,35784,82494,20152,20915,64532,98587,74567,66213,25569,82364,24326,45317,82905,73275,68581,90456,79541,78335,70843,72439,38591,90993,85136,99170,37969,12544,13436,91661,53847,55951,92753,80639,98118,45677,78736,86729,62707,40550,43349,11522,62924,98427,83322,46689,19506,76841,20694,41348,33534,80718,50344,60579,59669,78902,47932,66902,47088,74896,89282,36955,76067,93120,82706,28250,56033,43416,46403,77597,53076,24441,98608,21150,30135,66045,70993,72789,26914,58144,34116,34229,70423,94762,55778,66488,97627,22244,19295,88247,60858,56968,66559,61059,22083,16015,89361,55070,34440,74002,96314,62853,42683,43048,69629,70352,67372,88868,21162,52026,22329,47315,37978,24384,84486,97188,97032,61808,46647,13037,79098,93709,38476,47088,12423,37123,47503,99784,45129,29896,78610,44224,23255,94979,50844,20830,21915,12689,73335,30670,57744,11019,28817,39532,12668,86977,24384,37397,84834,96587,86085,54965,79064,34626,31970,33523,57580,77776,24293,72128,11249,25583,16034,80082,77472,86036,78775,19021,42756,58543,11349,18037,56258,52642,21060,38434,84759,25375,58017,56575,35384,47073,86451,32846,68205,68444,26852,84269,43507,59024,71166,98564,48600,13209,51841,53684,94670,88342,28775,18299,54861,72574,30993,18471,63078,57535,66771,62626,77037,22174,97410,58712,82434,28769,99945,28032,89522,57672,70326,79369,10867,15480,45026,49904,42575,53349,42964,21237,84559,89108,95052,18277,16740,46052,23017,60865,34080,66737,54999,16418,81747,57243,15405,24673,48242,81852,65390,48503,54700,44947,73432,50169,65797,34897,36234,28261,53336,92874,40913,93406,66414,27706,67826,98193,97148,54557,45673,22384,61074,42065,36222,39023,98382,36635,41268,22838,84137,96668,85735,33172,67374,30053,36544,80129,35632,83299,51648,70584,73204,40205,93799,98312,71493,38979,45196,71869,29635,11718,71716,71720,30819,45668,93671,25115,44302,65958,95387,74187,11766,33875,66880,97102,53354,22842,11110,38012,10745,80022,15791,49468,51608,80656,57393,47754,37696,70692,79729,41408,73361,56669,68311,66746,57408,90478,67702,17304,31292,32985,27469,85474,95157,51319,79801,50714,12724,14784,79609,72571,40250,16598,91613,19392,44691,64900,59844,55818,42633,13537,92019,15815,56992,96937,20227,34282,43589,27278,82351,18720,61099,79459,20405,31485,51458,77032,56825,71291,91172,15425,15878,62546,77814,75631,54316,84064,73162,49603,80691,91437,71993,80346,12038,10744,57295,62130,18741,60677,46400,25514,80977,12891,57278,16843,82989,12696,77954,70949,83939,20937,44360,30455,20003,97345,38070,55275,28733,48450,41225,26626,30681,81545,39376,75892,20726,27477,82970,37595,97476,74661,34378,18270,51387,46576,82985,73511,30678,20723,44154,92378,62201,15964,90638,40288,40102,27742,14840,24625,50379,33925,26269,18172,11608,65790,94661,10667,65492,79109,10750,79398,82629,58030,37659,40378,86903,14053,56724,30439,28434,59617,71369,49125,93492,26680,54113,26031,67913,96832,86129,25613,91363,17356,92961,26766,88740,39675,13461,65018,16666,59689,94211,91325,57026,27939,22294,87886,97156,52605,18565,61675,56918,42400,86358,70211,22006,60221,88039,24742,64844,80453,49129,65434,49440,70275,75045,24648,58934,12709,68348,68044,50396,63681,31448,63342,43683,55921,83833,39955,81850,22935,18166,34380,92874,87261,92016,33532,95927,71308,34043,51985,94614,55862,89090,11730,41852,40288,55283,58107,78827,99381,24770,29542,53823,26571,12486,66825,58267,30950,42042,57675,87031,82597,77948,81588,45775,78977,53085,21355,20970,13896,18152,93149,86489,70571,11999,47970,77743,98234,20325,77202,29866,38032,20906,31784,92153,80917,66283,37015,26280,13859,91204,50962,79525,12850,26434,51101,42535,96592,94077,72460,84660,56180,95321,67432,77876,85791,40501,60649,99264,10321,32882,66407,40833,44721,74759,55931,90874,83077,61615,93402,84172,76695,57477,28746,33179,39424,22487,51526,43071,18257,11274,43245,86747,53329,54809,25637,51934,48271,23848,72768,32201,87746,56739,53353,27510,77567,12641,40867,84313,31958,47864,29506,80664,70770,97470,77372,74302,91430,92158,56505,35273,64832,78303,80239,46413,28108,38788,56268,46274,76495,39309,57563,27203,57908,95081,94528,58760,40767,70530,34780,14342,64797,15741,67345,35271,52451,53631,47675,59662,20609,22073,53776,16854,33026,35808,31900,50781,37572,16966,67510,95826,36425,13339,49785,67370,72208,24551,97792,50063,77597,17847,24284,38167,93519,47592,37397,91804,55457,38857,94172,14688,41983,19233,36742,99965,32125,70821,40951,77699,38898,19123,65381,47054,80479,92484,11584,18740,46548,64120,26059,34111,76878,63211,30704,81818,23138,76528,84139,22863,41123,57094,33601,57338,60409,91229,14674,48157,37809,99163,95377,41345,34802,37288,26579,15894,98571,25460,18451,99134,10829,12331,46961,88202,22308,33588,67895,71830,62241,32567,95404,82607,59528,74527,66701,63672,68091,66603,20098,63170,12901,47580,32304,84616,71264,32089,30697,66648,70167,49522,17398,16571,59153,73210,38370,56011,42546,17609,87578,33575,96134,88102,21200,74844,85273,37813,13762,64014,93692,47394,49625,20242,84044,35654,76161,61123,52746,27658,12435,79824,30225,29097,77942,64600,27311,12687,95700,92421,26660,27013,79883,63663,22247,43553,60365,23553,98216,94103,63645,20260,71212,25976,67229,13268,10497,80010,44008,97205,30049,78942,91126,55072,72459,13710,55878,33337,67012,53723,47588,33399,19431,96670,35599,74166,63617,55296,17634,96734,49276,34060,67118,52052,55484,19956,86003,88622,26531,56084,39469,85954,17846,92457,83407,25177,57335,80204,12437,52999,26731,90835,91687,18313,36747,18101,26645,32402,27325,20583,71018,14078,11227,40045,40008,53186,73709,75885,48625,80424,21110,63423,49787,46051,12110,13955,56438,44991,29759,94958,10964,39551,89854,91400,79753,41270,17505,45572,58070,38544,87898,57985,18426,13845,46501,62140,61824,24904,12158,95463,56815,88144,65461,44918,43404,71489,15610,40618,48660,21393,23420,62734,54582,89028,54705,55934,85090,51658,11971,40383,83675,77466,89700,31898,98819,71156,20056,17783,10718,53682,77050,92393,22929,30229,16335,20558,26855,86894,50228,96352,90019,47903,84901,90216,94518,64033,40607,69117,46287,48362,14148,80336,47916,85983,94612,39507,89576,63068,49248,96771,14556,76723,62508,60734,81337,96182,27519,84489,62467,42436,40805,79042,57399,87089,95414,77325,60686,64108,33393,69232,17814,45080,83608,32363,72973,15527,66856,55900,82443,28877,96036,10136,67461,30241,48623,86117,90429,58237,19843,71431,59880,34322,44068,94909,18379,27962,42175,11144,14959,11718,69329,72170,81785,78329,83819,19984,90872,92371,94853,98544,38209,43216,14785,35833,29782,84642,46756,44154,88967,64345,81685,49009,75274,17095,77489,54008,63481,38287,74069,76031,29577,61602,95468,28743,22342,94237,13123,18107,10288,97207,43236,17190,99170,33423,23434,47682,75641,93080,11936,43897,25127,96712,31743,58463,24461,69739,43974,21200,74326,73345,67355,90071,18860,28716,90544,83960,90286,76047,79619,49445,50893,16831,70335,11033,58196,43763,12859,68990,50629,55747,43214,40807,13116,30224,96017,72385,61309,22847,12033,47303,56203,27943,79068,84027,11027,72575,92118,92769,53726,16636,96774,99456,46961,63608,42154,83372,93080,15681,14221,46147,51222,93457,11623,90257,67946,53825,87639,95365,97931,67085,67989,67186,10425,99225,64055,77139,53280,12849,23236,38495,33141,73571,50024,24887,72255,65854,70138,46138,89364,63061,56745,59463,22355,60826,77588,13402,87075,20141,45343,94794,79662,94361,64082,82324,64728,70680,67256,38846,87980,98933,91118,48896,54066,34503,59816,87321,33688,31676,58252,98862,74290,88117,74293,10289,78300,21407,71012,32806,46191,85156,77869,43995,90094,33106,96015,80383,78009,68276,68856,31958,78316,13492,92646,10694,35546,78426,67142,47838,80615,30805,94587,26754,75442,25727,38558,60746,11945,93467,74344,11677,89052,30640,46101,65715,78164,57579,42711,11986,75818,28983,60287,22970,58292,42428,78678,74174,43085,80292,46569,24662,13775,49022,16233,93933,89458,33165,34099,77427,17941,45423,59800,16606,57831,29106,89741,24780,38300,58516,70158,51008,68583,55555,15952,69039,28041,20297,44133,16596,73737,57324,44626,60220,95026,15494,72053,33076,35276,39033,10826,53626,86566,77549,51818,80176,89271,79389,42673,90513,95009,49576,41479,73443,69215,87677,56460,77913,97915,47862,58368,20322,67974,13900,74878,55520,15980,98791,19674,72395,93723,39638,49146,86756,37719,62437,66309,11378,51940,24433,87298,59371,53595,63338,52143,60017,62893,28648,41373,60818,67137,60028,83028,92601,41013,16773,23680,33512,75808,64718,59079,52343,69658,82864,87768,65230,50761,89167,94173,45093,55611,64576,59434,72950,30377,23315,81246,64013,80278,80534,77074,20452,45978,20983,72473,64745,73200,12510,31447,40121,21048,52299,30000,24309,86270,52553,45754,14353,18015,58164,98558,59067,33290,24619,78892,66022,37538,23226,65035,30593,20070,29811,63830,58078,30609,50174,26626,60463,15996,36551,43586,74098,30056,54740,72822,87771,39965,82808,46174,25997,42336,29745,23095,64687,83872,26742,49684,62293,40119,14838,18979,87747,20805,63300,45094,98173,38666,74411,97989,92697,75706,97268,39380,98371,10562,16714,84393,31684,20171,19436,59484,17641,44983,57435,30211,32154,83326,52212,31405,10393,49337,14965,82542,96753,84506,44773,16253,67592,26069,15116,16857,15121,10094,47921,70640,73945,72400,62508,86949,62391,58870,78137,69402,65619,36680,99484,24623,25899,31749,77529,25103,47515,61898,68013,98725,97037,93992,27861,64355,62519,32739,32630,16800,67490,49074,33448,60402,53781,14822,48821,18237,73930,94514,91295,27646,25416,36366,72761,61444,16662,40016,60959,95264,43401,60621,70413,65704,64221,56093,20043,33546,63870,50253,37851,56340,10324,21919,17080,46750,85455,17584,17981,37470,40887,69821,89728,24049,43941,97508,32299,98804,24716,37347,53105,89340,63637,35777,93592,36006,95267,51045,63470,40352,69346,71359,87301,87738,87053,97786,89252,53134,76279,89254,17506,83910,67775,82279,50002,16315,11667,45143,14637,76228,62430,44189,86425,21546,63000,90247,40957,38320,80310,94775,42906,79743,39946,80054,18535,23843,31709,33409,22319,92028,38893,40241,55785,44376,20418,38312,28515,44876,28079,74281,62980,67050,43208,93789,89711,20025,70422,52267,34279,73588,87690,83709,23511,94045,13197,39729,91164,28218,57149,75026,93985,14213,92689,55692,40454,59987,19149,50826,24730,79483,58032,74761,57955,87104,24576,63489,95496,72225,16321,68266,64949,86047,93435,41177,11477,56967,89172,45361,44777,88518,87527,92091,48600,16893,79190,12741,60805,15377,32623,90981,59430,38935,36656,44679,47704,15092,86344,22068,23981,63296,57186,15756,81338,91884,29568,15649,51692,65646,32422,82570,38524,99020,83459,86496,50558,70500,32162,28099,48189,74428,10580,89593,75465,60026,89224,22623,83996,54719,71462,30339,73251,73922,56516,58049,87873,97112,33355,85926,63658,43756,98447,26291,48924,91730,93795,25512,38174,90889,56624,83363,19653,66430,67397,25363,58326,21940,92084,17387,28853,48675,62310,43430,99336,76252,32627,25208,82583,37706,45325,73123,34361,55871,66788,62070,24126,18257,32720,59457,88542,97720,89668,44408,64972,30892,68482,94524,89316,68678,13547,92295,75896,94554,47139,58015,90763,28939,18412,96355,10826,17993,92885,43362,82505,94369,82568,63006,80632,40523,57857,68884,86136,88347,90527,20329,53277,12532,16876,96015,96228,33887,58424,65170,32728,10444,15606,82638,66120,46639,61162,15273,77432,91712,83291,32072,85130,23224,89379,36777,84213,77218,83008,46207,93925,29170,63963,52927,17194,51018,21700,44643,56050,97535,78216,59157,45479,61914,22609,69291,81015,90236,78296,11683,63867,35332,37160,19147,47742,58412,46983,54482,65905,43510,97619,87468,72894,65432,47595,77080,61479,68974,46133,33709,84100,19973,26811,63343,21515,90082,67009,61459,70695,53435,21854,10847,31026,68194,53050,66323,17081,37872,67083,89334,16588,74107,86347,16747,18668,62386,59277,60504,60443,73623,59227,47171,84749,57461,43989,19693,88834,62346,60371,78780,70881,80850,41840,85108,94320,75624,88725,84436,60925,43682,38378,49403,81348,92681,66868,68687,31696,85816,91454,87201,29251,61741,16988,75146,86538,12206,84871,73360,44035,56042,67419,49577,51868,65228,90484,73668,41474,99363,12781,41874,16134,10800,41346,67063,78578,58185,49297,46068,97446,60388,47183,63816,42421,72247,40515,93861,12084,94514,24194,31393,89486,67419,33476,91687,59656,86978,77580,65051,83139,24483,76613,83035,28040,93773,35172,96956,69619,30056,44802,61702,23781,64455,51925,86269,22916,19512,27605,21229,21535,11741,35446,12220,85997,70146,22428,47246,83497,67202,71034,55938,37493,65513,75389,80155,13021,23603,86294,26889,18845,36429,55455,52306,41177,69126,93244,57354,29443,43622,37965,46544,79420,68505,53038,78015,67181,88432,37389,44075,72727,70705,21003,60683,75662,37620,11147,65678,75166,94232,61533,17737,64610,93213,44533,90816,60866,95507,76137,31205,85900,90434,62426,56835,37876,39999,55498,12878,86255,85126,26148,23870,92639,10533,45054,74100,55481,87001,91676,78257,58360,60382,23728,60892,47177,96737,96436,16328,95718,68590,73830,72022,82611,19769,35940,55862,50781,11788,84418,39846,45001,91430,19117,31012,52193,66376,22047,97283,61885,57799,78686,28276,23135,96661,59458,69294,11161,83918,80256,74828,52273,44998,27167,47607,47049,80691,46216,73612,63833,36551,36624,11004,27114,25117,21907,28630,28857,77184,83023,20311,41968,80545,45190,83146,37329,55134,62368,64226,88708,44212,73362,56102,63368,79670,78129,18678,82624,83200,84715,22704,82105,24846,67041,65789,42955,11824,60346,98873,46397,61676,94495,59355,75772,99459,77854,57075,12356,16189,16685,65088,34778,28258,53425,77082,52083,71743,78502,47151,86937,15005,88912,22886,82222,18159,70105,79262,61289,39573,74275,32140,80439,27257,94296,26106,51134,93217,83175,95110,70010,82596,96909,65912,41882,32975,48890,11995,59644,33985,85541,90836,83092,49611,39387,28222,12534,40663,24148,14688,99591,44731,13738,79665,87616,75015,45698,36896,42423,32302,52917,32151,75294,17772,69825,99943,41901,28146,67469,81960,82701,78050,47927,57663,67143,52897,75230,27477,44146,66627,27840,49658,53255,87663,92999,80416,47952,75741,83259,52751,52004,86210,63939,41286,62435,15774,14434,24309,68457,70110,36578,12050,79249,70697,48189,72265,80535,44641,39065,88123,14303,79074,21925,86971,54052,86144,97180,88214,30841,80860,72953,83490,75510,29919,81447,75660,20028,70317,93820,55703,96555,45686,29200,32724,47537,63745,46356,15592,31014,22323,92253,12343,70787,46732,82923,41236,15776,63133,73517,70742,97382,76742,35197,66866,78343,98054,64695,28457,53878,91198,35614,20119,95020,25459,27328,68837,22811,27870,96083,68336,51514,73402,93492,23926,37248,94617,16823,29512,95958,19099,27936,58977,36754,52980,26136,86714,17776,46253,76802,14673,87515,77309,97000,49709,23440,93812,94653,69101,51722,69564,31025,87291,15387,22252,58514,49282,51379,38586,63515,86526,34014,84986,77545,87548,48973,64112,37851,73871,29717,77991,31745,17071,17376,10852,60916,21387,35225,80163,37361,23938,43815,47794,69902,61458,22019,99465,90272,87203,80083,30265,11555,12358,61546,56372,57817,52486,13534,79877,17211,71483,43137,41529,92548,48991,71467,64924,59973,66238,30116,17058,82783,40897,72454,92564,96400,74323,43762,87321,28589,87050,27119,57781,38207,51744,58939,25638,76155,92055,33803,65038,21173,18340,74805,71803,29341,66401,54668,93974,26099,39870,39860,10456,84043,63180,23725,67023,66696,46238,32664,86700,66379,33102,97892,53660,68097,42994,28100,96091,20359,79656,56927,45763,70943,86401,59503,14749,94278,71311,18438,62086,25274,90932,52123,88375,55930,47718,18632,37749,80260,52437,36530,42957,93527,21676,87249,35899,26012,66338,36433,38883,60724,69644,50306,29237,96928,40318,30784,35206,83763,40822,58086,62452,10637,83879,15427,84035,48563,24396,96926,25214,48217,42813,45831,16957,53958,48188,10722,46635,14805,96125,71436,21999,88331,72531,26766,32421,44527,72639,37225,48662,53378,90069,90742,60443,93157,23628,40796,69555,38758,26785,29714,76904,39637,40663,48347,31577,50579,92750,74592,82801,88751,83012,71099,18334,57444,38237,15161,60781,47699,41678,84066,37511,93069,83157,23849,75633,41194,89755,34297,44262,34831,49887,75405,49597,75696,86852,59638,97567,34838,34166,53802,41576,91075,23731,61258,53920,45796,98611,75688,23440,34891,29596,72399,42093,95781,99756,26643,45778,68997,55026,94845,48668,86950,58539,28956,57276,13505,88499,28614,10503,53651,17594,46414,52380,44670,72090,62065,12561,80739,18793,95730,63360,15087,38924,26812,64971,67175,24594,97560,27717,49340,85664,94918,25253,56660,53038,82551,11141,92025,52947,23846,70623,36690,84602,20607,25721,83192,82390,70209,98750,84411,57643,12949,64740,93263,13712,95440,80072,68487,86278,88592,78695,72365,43663,50524,90378,51280,60932,31603,60981,19642,63957,70169,71917,77982,27353,12453,28902,50291,74044,52293,73540,67098,91902,18804,82246,37510,84335,13344,11076,94510,37672,65910,50345,92751,54149,20330,24671,58548,36492,83844,30717,67889,86702,62145,72292,26614,28710,92842,23407,50478,27053,68970,24057,87046,58046,88272,16849,55451,87972,71914,51034,10492,27110,73407,12812,18007,96791,58845,99734,71998,25692,97743,90786,20223,20408,49882,63540,18768,29660,58550,79201,41173,53403,31983,89103,88489,80673,83978,63702,70304,10547,25210,14103,29782,73825,63197,29899,41327,26331,87423,72791,91069,45740,34151,48516,89456,86609,42189,81805,86265,37710,42448,51414,15867,31891,28579,46564,69399,22670,47471,81156,95524,44181,95422,36639,27399,66700,77385,80567,33979,13631,32053,40871,12895,65741,70890,41968,60815,48172,28356,67538,89933,85874,64919,69908,43191,68686,22187,22451,98851,63811,10258,90529,98528,52012,97074,87986,48003,92682,62864,72796,43463,11709,48028,33620,49715,36944,51027,63045,12986,23892,14608,23693,43520,48957,57612,14773,39107,16234,38142,75243,99212,98860,75867,82339,85538,11189,92144,81327,81512,81194,93514,24503,21054,91782,11143,44768,64201,48560,86065,71231,33652,22870,55509,94109,82600,80741,32012,33728,52404,10715,43874,12145,54228,16765,40885,66642,11361,80947,74960,96498,51527,53927,73177,52843,51406,51498,62266,19630,78188,11299,51501,33886,49913,73102,55861,21370,12901,65602,60001,57254,92767,76824,56340,42813,66261,90694,49158,94499,37492,11819,59241,50622,82529,59643,78286,99504,62928,38724,44689,47959,56480,52831,65421,50577,49622,38533,59769,36714,28691,22051,33964,77538,96293,82978,39438,70785,49661,31513,88884,23285,36840,72138,43220,23867,42723,94406,21705,21690,50058,65708,52640,96596,80823,41018,56269,79181,80947,38364,40452,45093,23817,41837,90349,25968,76945,75484,76950,62530,93325,48304,28262,39023,28580,85676,71731,62723,99958,96970,62273,16408,68423,66418,22192,75157,20095,42213,80417,82871,46931,26697,92550,13176,50943,32404,56850,64009,49844,52418,97488,44095,16204,40558,29799,70125,78601,90664,15130,36158,86699,95204,46395,40794,41190,72030,78660,18721,62988,36096,88364,33435,39048,67061,90406,21599,39259,41190,40106,90933,57449,49346,78726,25390,74085,15975,40741,42047,81198,74558,87448,18581,87069,77466,68731,38790,13821,22024,78029,12786,83892,70482,39831,30312,10030,44823,60334,35364,13607,90899,38390,18028,53402,68993,67453,30203,94670,70607,98681,89994,16129,63649,54449,96573,32094,66621,21654,94519,69369,64959,67805,59200,21674,22711,97500,54988,62187,17569,56832,88991,14379,27474,34658,82233,84524,13445,66546,12922,63842,42713,40784,64019,78786,92837,52091,85771,80063,22504,38613,67482,89036,33320,37620,39326,16722,27393,44606,59476,85619,52381,47366,13598,30003,74106,21090,93907,10778,14567,61425,56905,89439,30740,49071,45989,38583,61551,33753,85402,23049,82626,55478,32882,69341,76511,78107,27755,27974,37355,37879,23151,10464,88443,27041,76219,67155,84305,59917,19513,31489,99539,84631,75565,10913,91813,37227,56168,96108,73842,49263,69765,75083,93145,87302,34686,68032,96515,48920,47223,14374,10389,27603,46064,61636,91076,12478,35523,63234,75415,53441,71976,38315,92642,93213,12398,77895,44095,90017,19167,31693,35406,58531,35809,86639,57915,89268,71209,59104,57907,46255,19625,78297,92762,71491,16599,83520,54595,80248,31830,77847,89200,94048,17036,72323,62461,52657,26660,55031,49332,10686,19914,33924,93643,99165,42317,77584,82602,17515,87024,39892,50743,84028,45212,77025,72736,82247,51945,45828,24844,59733,61090,73567,18739,25503,69799,59728,72392,27978,38907,89673,15829,43412,41684,39585,82883,94738,95646,87644,50541,25755,66663,67677,22722,97407,38309,40618,51318,45437,56868,34026,28165,98474,86278,82979,69855,87086,53484,33313,91112,43264,34109,23771,56043,34525,38469,27038,82066,18442,42460,36599,34956,84747,62010,74961,37965,80812,16602,73801,21922,61868,94900,21527,30807,65884,20041,38755,74733,48566,27740,75151,59031,78326,36237,93860,81860,36386,55191,42831,11221,15952,80887,88133,94012,20866,89312,69750,33535,14182,34598,90812,68183,36842,32629,81195,50332,40350,92352,25625,39270,49902,37395,56735,76404,80277,93839,15413,74534,47813,85319,94051,54506,94111,66743,32193,39691,95762,85523,68255,76172,52341,69044,68111,24511,89114,97370,87440,29427,93484,63734,70728,32609,35903,72470,61429,77855,93390,79705,87036,35663,58689,67762,42949,81578,99741,56944,60591,71586,20402,80168,42296,45131,24582,62878,77438,83738,51394,79913,34837,74088,57991,11005,41047,78663,91982,59683,45558,26703,72025,34188,49521,39216,47540,60690,90114,66515,92237,53902,53037,90803,47351,44866,61429,81322,15054,63902,71583,92566,77915,25964,78176,23096,58073,13972,13736,51783,22811,45719,35288,19196,42376,16850,97463,74787,99220,52095,23114,97424,10960,93138,88043,59975,81597,15113,60419,41242,18112,45579,82521,76428,98411,70830,25873,81978,19360,25951,27763,10467,32095,75269,30797,62971,24601,26514,57470,67058,71891,54373,81133,32420,68767,58721,31607,94759,34983,84265,63887,12396,78163,31651,90902,39880,54529,56391,25899,36376,73902,41413,15781,80107,16890,95071,86198,26760,93620,14795,70518,35942,61968,62592,96845,38872,85633,84346,24630,25117,56990,83531,81803,80934,25294,62256,46361,24362,24073,40519,98058,70447,56556,62961,51554,34453,30148,43258,35494,40404,80060,85035,76275,71952,76516,93622,38514,14400,58380,19260,99011,41139,59572,95202,18307,61176,60306,78678,18824,42648,23977,77524,93557,52351,25501,94155,69614,25891,29852,44044,72503,34997,55976,13406,37527,40641,20402,83897,10598,83235,62571,54783,15672,17737,52193,85646,59906,38320,95372,64135,50891,25834,99615,49977,31885,17185,49885,64126,50426,62954,12301,74666,41805,59217,19958,53237,50183,28602,52840,33247,35044,40955,22141,34370,86572,60872,25271,48091,79966,86866,78430,47563,97709,72871,40990,71559,64698,28446,16053,40077,17589,29437,40699,93825,95395,78962,79754,10704,42892,96586,84406,27152,29268,42460,71577,95711,94272,72953,30386,27567,16873,57728,46740,81684,49226,95768,63510,97196,27249,28155,84126,75984,29790,84250,31186,83085,29934,86870,91932,41107,76777,18509,66442,25569,39856,16371,97641,69531,96103,47180,24803,14144,94643,59858,25671,16593,60419,27547,33778,35404,48494,15582,10626,26565,91325,64389,82069,96644,96818,94458,54271,17121,54711,94550,30971,74131,94463,33775,11517,69443,38348,27147,47946,12886,44045,99942,95373,32619,37697,65402,41970,54922,97403,21654,22655,70671,77554,20753,55305,23850,30023,22963,65897,58291,84980,75528,79724,74412,76693,58714,30318,95100,56869,85733,61768,25109,46621,86970,39978,75307,70978,53847,25344,45737,77099,58614,75057,48415,63274,95659,84716,49594,92618,14703,34255,10983,66942,34829,98515,19202,25820,61217,65900,70112,47048,92871,35998,69785,25869,50276,42647,87237,39991,64254,86071,85660,65731,35539,27770,55981,32927,65894,53741,51041,71011,23960,68579,19881,81599,35718,90633,34455,19729,27015,36950,67163,27766,90762,71827,50122,81552,98680,80573,18652,73881,77774,80235,94223,70214,29819,20521,48240,85998,38698,69431,33279,61425,79023,89747,21018,55376,77430,46858,58014,98038,33072,17104,63707,99557,99354,90591,68668,32301,24654,53909,35915,43087,47118,89938,60757,21517,87289,87330,68815,51340,21316,41680,49540,81866,67956,94131,48734,62896,14469,77072,71118,23260,91774,72054,83053,80701,19344,22213,89116,90563,90490,19378,57230,88935,72876,68343,52780,52942,73359,49103,94846,92850,13019,63076,42818,47028,98283,52239,94462,21564,13114,56891,92293,69514,19988,31638,37104,54804,65152,62466,71855,61997,11584,71755,85609,95487,60645,13153,58761,99631,79229,57959,93304,82955,53531,99627,71564,32494,12271,98080,33487,91645,92183,80975,16789,77931,59544,83528,76603,99474,45478,74788,76141,61604,50361,53190,66200,22671,63331,27795,42263,78220,73734,46975,78520,75710,42081,85136,42960,99627,14048,38402,62063,24141,61986,76483,97962,35608,12677,80656,63703,63045,56602,28095,29598,92901,48475,44931,97370,32802,11387,10082,77534,38807,53328,33719,76372,25659,90470,27265,56564,13078,50204,50938,44150,71724,55108,58215,44229,53338,97394,84996,28825,58251,11882,37878,65068,97795,57324,40709,43318,87845,69710,40575,75910,46764,21781,72954,46161,54367,44245,29307,29020,52687,54373,72385,94187,56959,10743,20499,75839,10197,63205,52499,82377,72186,41628,38009,24071,18992,95730,21777,18596,96532,86216,86890,28959,55156,84342,80853,53269,82857,63905,52264,88276,87591,78640,83896,74577,95360,40395,27520,48207,52618,91767,28681,15827,10029,83137,30329,13423,76459,43368,50788,76335,72844,25411,40615,76369,71320,38064,92762,38026,26860,87341,27375,90103,59318,87992,21967,49537,97218,48878,11891,55979,10015,19668,90897,21700,59468,53788,92379,30751,15351,78598,66179,75072,26127,71740,65660,41858,93961,35868,83760,86814,41635,11600,10778,31151,85430,81428,13706,22153,47155,53501,35099,83506,26465,46057,99244,42040,38287,75711,24331,65666,46493,53407,53666,72914,78994,45589,37607,80620,95534,20088,91996,77246,58742,32892,86095,62426,62883,41039,85156,86043,14563,94647,86462,42048,76261,95468,14024,89500,21717,94396,57075,34606,87145,64191,46336,31808,44010,91452,17373,22712,60185,15457,61457,96562,26776,67035,51858,58621,77881,37686,98957,29649,75135,39424,23575,75407,53064,82860,94754,69724,73782,39739,19783,92353,39852,82477,58033,40569,96981,23381,48192,94665,34725,89353,40779,24472,59214,27056,10517,29923,66604,57843,39123,23978,39053,58551,89753,37336,71023,10089,82662,72862,95438,90493,23974,13093,95382,98728,27907,45843,14784,41365,62951,59396,41723,82589,91272,46476,74348,16168,62483,30693,37991,87243,66920,76485,16409,57869,23051,83250,23451,48790,10824,17911,26820,90886,90954,39746,14376,23867,50779,44598,13291,97757,21641,42617,12588,95903,22549,20274,87328,82497,94256,43807,61818,38944,31156,26794,10176,72304,19036,59723,43162,62454,37443,80215,53492,38989,91888,31306,89949,67249,14466,50165,51087,27482,68777,68639,29902,51769,14686,21704,37960,99996,69700,13087,67581,95500,18580,89305,64672,68589,85052,37517,28473,85690,13486,13967,13604,70167,86335,55071,61873,83209,89567,51917,83101,82845,67073,83385,27720,76663,63662,28565,83154,99888,11777,19108,97281,18783,48409,15214,35897,83777,22272,47353,36253,27429,96723,13324,14891,60801,16988,94428,87239,30749,57737,57565,65165,68905,33030,84079,44440,93878,44427,70021,66434,91407,73412,37811,78632,46131,53504,74504,59963,90051,21241,89439,69454,66283,37984,98359,11159,25053,44568,97437,89704,54986,15658,29270,31772,98441,68926,12248,94214,72909,81066,80192,62299,46019,34003,55262,84373,13039,21537,18380,49574,57318,80736,73758,78986,95749,81730,47308,19801,73864,73899,56931,47949,70121,46195,70374,75446,35235,32628,71893,15041,56795,42514,63017,90042,63239,53236,90994,63156,53438,71088,63752,39942,70615,66887,79202,23440,53699,86137,23898,36482,14037,20406,16152,98160,56853,81718,17550,56192,11360,61842,35072,31311,94126,33050,22036,13576,25616,85991,38470,24960,32461,13071,23718,43950,50326,99946,96627,22030,41661,28734,52554,85129,15449,84440,32003,73870,59235,36439,26644,23042,30560,50546,88824,82131,15614,71364,12820,21536,89550,41966,44344,62687,75100,46352,46695,27151,42430,62610,62016,48211,98041,49683,34638,21596,41269,10963,48193,47815,20313,79768,93644,70301,94608,89783,99246,36862,72725,94614,55646,21053,88344,62233,43919,84365,38630,96908,82396,72840,70121,34195,40737,84929,88111,75106,40467,54436,67579,44198,28162,45895,40235,17629,28716,61385,22522,37701,51522,27276,70208,29356,43409,49536,54373,21418,24727,21620,48151,83198,53055,60687,48519,68455,40169,63855,24345,10473,63361,46552,55527,64310,95567,10573,60534,10146,50332,21502,60925,64843,33501,63464,39188,94725,97166,38020,58964,30968,98901,16877,64106,26231,75214,76953,66909,42440,62919,85693,48923,20136,43832,38025,37652,64310,70202,76333,43203,71990,15477,99186,63173,57729,34829,44217,18128,75968,81864,66449,18618,66310,10162,49124,48131,88400,80648,63264,67151,16994,36924,31919,45707,12855,56060,85584,21020,34733,66198,45149,95596,46857,19930,25309,21592,40092,30361,27446,55927,97832,42796,63162,28678,14895,35952,23379,22697,57423,52264,42574,62404,68503,30240,12013,12179,66205,42276,16098,77616,48180,95260,15806,26688,44051,76086,14437,80379,23556,92182,66737,66432,82822,77768,22863,76695,28445,35529,20375,69023,98092,97961,17737,68062,95321,95342,42924,12178,38121,63281,94676,54342,32986,45798,71903,92902,75179,96997,85156,26639,32348,77744,83177,16699,85976,74363,16715,36574,12602,92803,65853,77717,19652,42029,98630,88440,39430,15116,74262,29092,56048,62877,36161,61200,40815,41168,33218,15702,61461,22898,70954,62757,84214,89419,43947,89191,97869,52188,53919,54845,66856,28235,98830,75072,53617,37154,65929,69126,73001,80096,32243,29762,28185,57471,45063,63262,60614,97728,32189,90430,10142,17777,94411,34301,84485,41695,95798,24639,88251,76597,59990,50358,35406,71401,26150,15532,71926,60104,47791,24605,73674,94642,18411,89996,35777,57494,65937,44774,46605,86597,39807,62186,50806,29630,92428,84299,30467,71855,30800,38015,19567,26792,45117,82958,71853,60091,74692,40876,94669,30297,32227,22758,11949,48567,59571,49544,92584,87912,27692,85688,93255,68430,75352,25499,83006,40094,32683,19223,24576,26485,27573,91185,18375,94356,37770,73858,10122,82101,60178,70134,18464,14194,95084,74402,14832,70944,36167,69694,23441,18761,71537,87856,42491,11400,84200,61777,63440,89007,66844,93331,50041,26819,36180,28569,63658,68533,68472,75977,83165,45317,11486,55583,87255,44868,52831,91278,69347,37212,94374,59501,78833,41695,10746,55594,84578,27178,81771,37819,14448,95353,31852,21217,54891,80516,10052,28018,63291,95507,68234,59385,38100,16745,39838,59629,56392,27584,46471,46295,71538,83718,35839,51815,49538,92572,73076,66082,82137,27227,88976,94789,34718,75982,24164,11136,51860,14534,25190,90084,20825,45216,98257,31776,36381,54385,86017,33097,32816,57380,78505,83325,58939,99267,16843,55818,42777,73243,11174,86816,77487,84882,29768,90665,64758,65537,57239,76458,68762,74751,69700,56244,67714,27258,89910,58286,98370,85184,97614,11483,87928,31050,15585,85811,86153,55374,91903,85106,90108,57877,61577,23995,73738,76491,90360,35313,37020,71562,91700,72905,75562,26827,71885,51256,89366,27975,41099,39339,47523,63284,69282,72442,23858,80204,45284,72908,50822,76373,37717,49035,13294,16287,67196,39362,85538,43516,46996,45407,35805,55920,64889,88018,11766,91984,79366,78695,65342,88144,99471,77609,37255,64596,12164,47626,65906,38668,94528,98553,20391,54947,15811,25714,65227,76830,91515,53004,18745,65151,95017,13963,96299,97514,18722,11821,52980,32195,97715,79181,80476,62072,30062,72922,14250,28494,24623,75708,29754,36487,93821,77825,70398,70518,98529,76205,48030,52381,47869,45448,33141,54762,22120,41032,83266,20787,87172,47521,17045,90395,31802,97867,65296,64125,75127,51644,67787,25057,21584,81298,67588,23541,42315,91945,26498,65412,72428,44526,95543,95677,85768,70061,48741,91235,49825,38424,52347,84199,92856,88903,16337,46443,72288,91468,60132,17009,80231,10161,97028,45706,23684,93822,34943,99454,63147,15526,44750,60739,27100,28416,55432,82964,86699,35038,57024,24929,64995,99571,48669,71397,55206,91090,58341,55164,64335,26206,61839,24680,61675,27547,91028,62795,92306,49069,45427,25858,28599,53008,29504,60000,46405,56433,82396,75384,97885,88831,58974,89025,11470,48259,28183,29426,91943,77480,94438,16809,82624,33077,48559,49887,99632,96845,36145,29394,62525,95386,77044,53084,80991,38249,44918,73092,33170,31727,88657,78618,96580,11155,55522,27786,36084,61104,94994,10227,69966,78606,29471,39039,75039,25188,91321,64883,12626,21874,37394,76322,30935,67062,55694,82549,80625,13848,48070,29658,52005,94181,92493,43497,50998,85619,76780,60616,53198,13137,25057,51010,10761,38640,44396,13553,81450,18356,20835,50747,93746,11352,88152,23886,68461,17396,82705,92223,88423,48072,19146,40513,22822,19782,71062,18949,92045,19570,44996,86574,64235,58096,74427,48817,26586,67662,12518,50465,19564,27074,17024,61058,24611,17901,64347,28609,38799,77200,51176,45475,36164,82644,73412,64533,21459,33509,97455,32587,31983,28861,64277,18512,97341,78209,77106,11700,61518,20610,54372,96596,36487,24525,55614,42849,20578,30478,97641,97649,22757,34166,33314,47618,74610,95455,67348,70701,56294,25660,77247,22290,49749,53953,91952,60435,55097,95123,34428,41212,68997,32721,58056,76483,54105,16681,98134,37927,26456,20446,76495,79232,37175,83790,25583,11342,74364,19289,74182,64424,41261,91991,81874,58651,64419,29299,78520,41107,25273,17599,64137,44960,25021,41999,68743,55892,49457,11025,94333,25625,99109,19582,75199,71334,76275,27648,11637,89211,21376,75204,79840,53163,40439,99312,97294,15257,62658,31372,52323,17291,50680,11070,86276,43018,75933,14961,91825,22970,99737,28342,59096,27500,47154,95610,93365,39981,51323,70955,59849,78891,60989,55522,54979,16154,29280,63569,71166,45280,72530,56700,90216,64946,27625,54114,45260,98384,14130,91446,13956,50139,53252,30877,28935,25584,22799,51501,65696,67570,30610,15970,56878,17276,62145,96802,70874,91686,71324,97292,51697,95116,81556,44563,60377,94213,66101,35969,85979,54286,93395,11943,58485,58628,27059,25153,76260,89447,76793,67941,65092,20097,14615,83331,77425,56042,48016,87242,73467,52665,53308,96198,16052,70588,84475,10308,19326,50995,62084,19737,62412,21690,99338,21904,16063,61643,74842,89324,50027,46388,47286,82954,50480,57888,42168,99336,66315,70041,76103,15837,66840,94082,31386,93681,95948,38920,52816,65334,30975,67727,64207,18624,42750,13519,54485,92339,72734,64871,55152,30623,81057,24512,93037,17622,68169,52734,36145,34828,45497,47931,18878,27977,15159,22431,11028,96665,35872,90800,65718,19940,88205,55383,42046,27494,88738,76393,59118,75136,12374,11867,76222,45423,41705,70197,37552,43372,86101,95131,46428,23871,93344,78449,80751,54789,58339,84945,27736,97158,55888,63320,98664,95908,10559,71547,97800,61347,46581,72855,65908,51398,89171,88815,99475,78473,82539,94128,14226,80143,65820,84745,34105,36785,49158,92516,34961,67212,47830,24980,96651,92415,27754,50334,30259,17310,90031,13482,29994,67757,59846,55440,58139,66082,34792,84033,32064,40010,72936,14477,38321,25692,68378,81707,54080,20519,32050,52575,33719,83650,58146,15806,69464,54539,78216,31476,83893,64825,38325,47883,48444,68155,25342,22502,13880,85329,96310,41885,70749,41737,76330,13118,85117,41920,90615,80402,29162,36088,48946,33804,14855,56421,70290,71473,43848,98335,10453,37011,71414,36601,33658,35780,54513,78484,50283,26799,15210,28580,43816,66993,25865,45565,34998,46377,90099,56190,80597,67290,72935,95701,28774,81596,90640,90399,39198,77092,47506,18775,56719,55202,76703,44103,76358,71863,99062,96014,51627,30589,35682,90779,97017,67813,67015,82581,34037,10971,54786,21479,12186,99816,72305,92889,51103,89939,67256,18933,87245,99025,98235,50569,57108,60675,60412,19781,11052,87981,54631,20641,16864,83104,85188,21868,55127,11860,86335,20649,64225,59422,98478,77360,14026,26517,82873,83922,91771,57253,75678,93463,32149,75138,74951,32472,62474,63549,39860,14263,37119,87392,48917,45673,56156,11099,79770,29825,29905,83336,76889,58586,93097,74831,84245,53640,89698,88756,12981,22202,56737,89337,73332,39344,78550,34474,13967,95846,76631,96238,79938,87073,27357,25979,35531,39200,90880,26968,92660,78256,34374,17468,23570,73396,88778,86449,89018,58810,38310,57584,44242,45045,85443,85106,67676,32606,94825,86208,80528,36252,55766,84339,33952,26679,82144,24441,37223,70860,47802,96806,55487,84093,50238,59429,13715,92795,52248,99073,26797,44739,33267,16664,50501,87399,92633,84436,74779,99800,29601,90409,39422,91132,18301,59472,77439,33837,47811,72376,49520,97205,86092,76960,99483,34783,87126,81751,12942,43952,26336,51282,32125,90031,79224,53323,39872,37569,22806,93338,70348,36518,61466,88497,87611,22322,46772,44129,88535,92337,40565,88513,81878,70306,45529,24529,26982,95003,17100,17368,38012,45217,29242,67352,28878,25402,49338,89629,56070,75479,68735,21790,61333,54796,46268,51137,68416,78999,88745,61807,29024,33498,97108,31282,28258,61765,84259,77800,10200,53569,79106,59616,18427,91513,60089,38854,17244,36758,14424,38944,74507,99090,48826,39752,41747,30552,58090,61372,28920,33403,25412,73752,73944,27323,60445,75015,23549,24675,71736,42255,56754,64012,62566,20117,33103,55606,87379,45546,14241,68071,25578,30910,67397,52957,18439,95694,66304,12398,80440,82949,31269,86584,86310,22178,99393,53508,30217,95175,88941,72696,90610,40084,33645,55504,39747,85404,28816,38512,76801,36425,34069,47803,89430,17518,35852,58868,24364,34683,90281,24311,73053,11747,50450,49340,91945,19602,53984,18320,88597,70151,49245,84343,57726,31660,56065,69022,90866,34061,17664,55358,66533,31294,84686,23228,25246,17026,55517,61753,65365,42815,87056,96087,98295,61501,91023,91503,86056,94846,23505,86583,86022,16668,87420,54626,84665,98731,92265,46228,16762,72338,57270,74221,24598,90877,58372,70306,78665,36989,31929,56026,69019,29180,40225,96555,74460,36582,25760,16983,65922,42428,79432,60594,68111,42072,22967,64743,57882,48473,23798,84208,56621,83449,24034,16003,41482,63779,78230,84064,19946,87614,30895,80871,39352,92260,38257,70420,20289,35910,37404,67862,69626,81576,68728,28011,41603,93195,36199,37859,99304,52945,73176,72493,99257,60650,98648,39501,32845,47303,21743,90257,13623,46074,27074,10350,20890,36562,66868,20714,53798,14082,37627,31211,80842,71280,56759,23266,32490,58095,77584,12483,43349,14375,68455,15956,74806,84597,48701,98866,19701,52989,18080,42675,94939,56650,66683,96094,12613,17899,27937,24101,63647,32410,65918,50146,39780,60599,31273,64741,57245,66543,36906,74870,46749,29474,20472,24233,80246,15351,96319,81717,28846,87118,94564,70847,72315,16048,93828,21172,69376,71169,40628,38527,77471,96217,19152,81345,11070,12491,84198,77991,26426,26003,28525,43858,95631,23862,88427,68753,53624,68088,78901,12168,51537,94925,45929,96929,14852,77520,36480,64195,23494,44826,73787,71465,49548,46679,92071,72450,36113,79052,57390,21364,26643,97413,90921,13122,44568,83474,12052,61602,31044,60741,48148,39944,75813,73065,51149,80970,37085,22581,16143,74868,17913,40532,54492,87739,87466,82667,13042,76001,77667,76201,44188,32256,73658,84830,51672,35816,55989,64135,61682,86961,38971,22802,19326,35256,34379,58863,19518,27485,64031,96736,40305,83709,87731,18716,19283,61225,50415,91211,82055,89569,50727,95111,19542,26296,47724,29762,13114,62196,67220,79074,57486,79051,99766,39586,13738,14577,81362,77079,96057,25858,75525,87151,25650,18015,27226,63562,45883,71729,29403,15736,45605,15543,18691,84904,48494,79181,30714,89047,99240,42766,75194,45165,45906,98825,22927,23726,41510,47361,21680,82070,41935,85224,54950,30365,92201,87403,91145,63836,76083,90966,27301,90034,65402,76258,10356,77192,41558,88315,68450,40686,13394,42178,24819,54156,21700,45544,43778,28919,33485,14965,52094,41017,68653,71246,18618,22660,80321,71393,85405,14532,94071,65108,83211,30404,55451,84657,35550,24812,51095,59656,74165,40276,16986,17354,52532,95789,28058,40098,52265,35727,68522,22004,45752,61913,70641,43158,50327,77808,23856,22421,54427,72181,29542,42047,82930,41400,96341,81184,44927,14084,58584,69229,48988,77017,42093,46174,88090,23107,91226,56098,72096,55718,18378,68234,58386,50024,48509,19528,81927,35314,40401,59425,74228,85159,33226,75319,75484,46291,50201,43157,58256,34367,81555,32062,25722,11789,63746,98684,63294,95326,12885,73738,73415,63423,36207,94551,63585,71124,16650,92398,69823,46199,38336,72037,25000,57260,25432,79712,32104,67024,40813,70350,25689,98548,97850,36026,29890,96420,36604,15394,15128,42176,97847,25605,28427,35009,26470,76273,52627,63938,44985,20770,66647,66061,97658,47108,83786,99158,36764,94814,80930,99097,99684,21103,77456,95545,92384,22717,83267,99035,25828,91819,27089,67833,52538,57500,35146,85281,44946,76351,10152,35523,60839,27338,49271,62855,31788,57811,38117,91610,54756,69676,82100,81329,21643,81596,33677,96676,34339,17264,29546,53826,32240,43748,54210,24322,70303,78782,64967,47768,20595,56656,88397,29380,39498,72783,34971,37073,67675,44882,85785,74298,13253,48062,47399,74856,20481,93509,64586,36834,75706,52598,60889,28768,64354,25630,59930,57120,32586,87053,25053,62361,71398,57103,60310,75096,60119,29559,10417,54944,33371,13101,16951,35753,47497,39838,16230,76525,60148,72938,51948,81037,63413,75462,75613,20883,18517,76283,40004,26978,43412,38947,46481,49430,55588,56838,58834,76212,93750,89134,17804,15886,71463,66125,29926,24721,41268,38164,61584,88546,25572,32873,13571,50014,98215,19700,49378,89374,29799,20555,81020,93071,87002,64693,43216,59885,33290,93131,98389,26931,39538,46610,41081,29583,45750,83960,21697,67963,92324,74100,27610,31194,55132,34528,93923,60244,95365,83550,82911,33266,67328,51208,90388,62331,33662,63507,90756,13789,48794,99594,85182,10342,92175,39491,60563,42267,30348,94900,37148,48705,18290,17801,93658,41224,11761,65522,60867,70929,37732,70049,53935,50973,89533,75150,52119,25570,42577,20007,31594,70357,20494,94899,66734,33548,57026,50032,88841,64998,64104,85666,45153,45720,75334,51526,22966,87069,47432,28139,42472,20256,99534,78020,38186,55205,77047,29178,71945,65897,16435,50886,56675,89648,39669,66111,52864,24304,19547,44011,85426,87260,89098,35237,97181,59103,28842,60361,63113,63564,45488,56765,78660,77521,14703,10280,67053,28767,76449,30224,84349,39095,92411,58032,14310,81192,35753,55721,19288,20017,60692,86702,30629,17885,42596,12865,96680,74769,35348,99696,98190,46771,96249,14830,26970,25046,20060,19929,31927,22580,72257,63625,48983,39010,64170,45596,91297,95589,11652,21910,89495,95733,76498,87871,66743,93610,62023,77817,70469,33283,53207,56171,69180,62453,98208,77364,46289,45114,70820,61402,69619,37056,15301,96363,76488,12222,87070,79365,58831,17840,27492,37545,79579,23539,77130,16460,39602,71615,26412,93186,27775,70989,33840,34492,99588,72565,52178,91039,99424,51677,44927,31893,91939,39836,44932,98278,29977,46333,53246,57540,53388,53071,74158,18002,29576,12515,70254,38977,78962,81078,95778,66374,99883,87438,17961,60008,44622,57443,38851,66360,51952,74218,19597,39367,37632,23563,70438,66420,62173,21813,32582,83767,79664,36134,24125,94007,63091,89940,76551,56718,97783,38669,82714,61481,56168,80075,84613,68783,57296,98552,50682,62700,70442,70570,76203,86050,37026,50576,85703,51784,51013,32642,66422,21329,70262,95824,53100,28888,51076,68173,82692,18571,22849,71830,57944,85660,87301,50609,96541,87243,66201,54771,18567,75805,87244,11858,59659,56132,35106,16075,58258,60554,96428,44846,67899,24667,52293,71555,72791,75104,47106,57523,81964,56538,88479,53087,12368,22605,90908,71291,64626,58686,95253,97121,46414,87018,78002,69499,43587,19927,77350,46577,92541,95524,82892,24271,78932,34116,67560,97514,32975,38042,47642,81659,92390,65718,13146,47010,22782,45611,15070,73705,25576,82467,56761,62008,90990,87704,29346,35102,61685,35320,92542,99667,56691,85837,87660,73562,40532,82175,49730,56797,54020,13206,65784,88914,49533,55807,55222,45151,75470,64437,11835,64779,91435,29980,28226,60420,85589,19529,92176,32695,91227,23092,61562,28874,33848,84203,87821,91814,48677,25459,50831,22726,36011,37427,51354,71152,97408,78011,31664,64916,43488,51737,72333,65207,40847,10796,54904,20819,42652,93563,60135,83464,67291,94983,63851,36463,67882,68882,28261,74614,77349,81076,28072,16050,45163,25053,55987,87598,72143,34993,28530,49547,44716,21157,74925,83840,45427,21534,61439,65382,78416,19137,48152,89469,81769,72314,83265,98846,47099,61215,87849,80670,19207,57085,22832,91222,37864,56959,36205,29163,62455,19533,49715,66189,29100,49708,67785,60112,93989,57020,58311,42773,33043,36177,25269,27426,35708,19954,63387,10469,10440,98143,41921,11156,48703,71522,83710,18646,51217,16533,81459,77739,45663,16343,55143,60990,71137,80214,15472,16288,54133,36678,62325,36962,54062,50961,67064,56014,90728,59286,42677,45159,63951,29041,66359,34648,30109,47698,64747,84464,68556,79028,74892,24481,51259,59130,63719,21519,43621,57298,96122,97773,89311,15830,67149,78778,36805,40371,43174,17371,61272,23729,58308,99955,12112,35881,99700,76438,28429,88698,98082,19818,14111,27640,71136,54052,49365,70030,47250,54190,24283,51106,27273,80855,79754,12769,10241,89654,16929,83441,58628,74370,50448,73775,69179,97096,36779,16203,27890,33233,84204,63890,77319,78865,86395,64484,23464,86297,93429,86325,24718,86024,15946,61171,52609,10328,66475,49122,83128,85341,18792,41707,73561,42985,26191,94997,21080,64115,77161,59757,97212,56107,68275,20602,15321,97285,32366,74737,23963,94583,95120,93579,39279,27534,16242,13131,53715,84204,81021,63492,26537,96407,15188,63776,18942,57298,86415,19048,47362,61072,48269,38009,99513,82112,18428,63820,17471,45639,88718,12522,25756,80516,85738,56340,67644,94448,92210,19392,34390,64693,48882,99951,89431,64741,85922,87122,22611,88783,36116,71696,53549,70796,15606,87123,96217,29254,49537,39913,54609,73220,12103,16469,76004,11203,11666,45985,43640,48174,99870,96800,32549,59262,44907,42317,95606,40525,51557,82061,92190,38452,44739,14278,57057,57894,11324,71215,37166,78465,64488,94812,55407,26489,50438,65753,71475,64054,70264,49002,27122,27676,83384,29386,19044,84812,96596,55531,53923,93555,22023,98331,44016,45087,73028,37281,79664,75727,37667,49247,38808,14433,71914,12510,50317,56438,51750,37568,42678,21506,45671,97328,70660,25016,19769,65359,93493,88007,51477,11628,20354,51787,68183,15917,53291,75276,72897,23929,58460,72268,23098,17219,97093,98742,94638,15976,64881,93846,60842,76960,58242,57279,31619,67577,40362,51460,70449,88360,70851,95453,92126,44852,31628,64937,34657,15579,53546,95476,87722,13953,83539,72480,12748,57577,57383,31421,26817,44978,73649,51924,83835,25087,93296,99416,74495,66843,34548,99403,13874,10741,88964,41864,30280,48590,19142,55171,40302,20292,18505,68316,60268,82198,40971,14471,83642,76224,75751,54435,24067,13352,25758,21533,28825,55446,88769,99947,55462,36025,49179,17973,32065,16554,66046,32501,47001,22041,11613,22044,64253,46328,16882,25236,94268,60731,29163,18554,11950,89742,60996,87418,25199,25504,11700,13806,48698,46376,30000,74299,68846,99066,61750,69333,74978,55271,70135,67555,24510,32624,14229,69074,75097,44862,21672,73835,30241,91769,96457,44969,20362,40965,90556,18080,90144,67868,51948,15056,67189,94336,93687,99747,82935,20708,61461,12764,51656,50495,76974,27674,57236,92843,27687,30569,70328,40713,86565,55610,58949,36601,19729,84552,36093,88129,91741,23719,82751,75719,21962,18435,97815,26593,85904,47609,96021,36167,60181,18107,76629,67201,17944,89843,99367,80326,75094,43632,70373,82168,26012,50828,82423,20486,11428,84031,32624,93176,69074,25913,80932,77841,61253,46645,80609,35081,46277,29858,25089,92286,59430,61230,51775,28537,99273,11829,36318,17155,27182,16241,78785,14430,35013,57991,37043,61232,63960,31455,16716,43209,87885,56739,71093,12118,16410,95392,37508,41879,41997,43473,91370,88525,22219,51372,45859,22334,24822,73127,91055,31284,55354,74938,46813,57558,65677,52285,77185,11524,74618,20486,79907,76718,11624,38947,25967,16312,51998,63859,86019,67451,55978,62053,25276,83419,40466,86184,40202,75736,86539,71812,35409,21112,57828,96864,33525,44268,90142,61525,76542,88276,24995,57808,42595,93331,44817,24355,69954,62547,50464,15706,20647,58748,13748,89687,48990,28986,95717,78820,39917,47560,92439,74874,62524,81004,43452,60930,17929,77531,55600,47658,41528,96753,89076,94549,73974,68928,57520,91322,38595,21703,69574,17964,82974,43117,10171,13816,33104,11914,71164,49285,79293,13485,33145,31845,32961,66550,70781,41576,44793,66276,18375,57731,81525,23528,66984,88535,44015,24760,20515,58787,38075,16560,34909,60316,92155,10581,20873,77061,97550,46456,82895,45159,88950,69774,92007,60388,99153,66504,71206,72055,64360,16499,10064,71486,19239,10345,35961,53662,86293,59636,26857,94444,90424,13820,80834,40412,64483,21441,70909,35844,64161,19213,75225,95306,95113,14408,53201,74511,73522,39316,34472,31338,16680,60950,86935,71999,78345,98185,37119,83395,94637,26207,72297,32034,31927,28703,82762,58967,58140,54281,18305,10912,24369,35644,84114,37608,86778,39964,26764,55086,34150,59503,61366,72027,69058,57648,18733,42176,58677,95682,39836,31810,30878,26834,10641,78264,97337,74795,73751,58966,53410,22141,77735,46454,43767,21086,74129,16783,18176,54441,88425,15419,98867,67082,83117,89973,19264,41874,80047,37260,11579,25336,37544,84194,24197,79426,36230,10393,83601,25062,80392,72261,75583,93159,77519,63722,73819,38898,85920,86690,84258,56297,76612,16947,92467,44414,61934,59969,40238,62047,19684,47300,23219,12341,45109,34713,12489,13361,52935,21934,83703,46208,10927,82248,10687,99377,11685,83336,58908,75370,53637,85431,47431,53093,84950,84003,33818,99872,85825,70406,34931,59340,75525,86323,19030,61793,94087,11032,53288,85414,80249,27759,19862,25739,77616,68116,47559,11616,32482,24508,10576,66164,56410,26992,34087,58465,93956,44966,13423,43869,42895,66444,67388,73518,12980,75808,59728,56019,18198,87995,47777,51122,31465,39344,25681,96104,84638,33447,47226,91139,71059,86556,98893,37258,47699,51816,40679,11156,54381,51585,55611,56156,51356,50551,87843,88616,57500,52796,63235,18545,51177,16181,23971,62244,49686,47206,65000,88393,80190,81630,68770,47982,49034,91699,20725,86249,14165,99686,50957,44635,22729,92043,39206,60888,50019,92926,94669,19233,23498,16315,49752,59201,82552,52005,64079,49791,10383,91482,29964,72639,76982,29047,18676,86079,73899,38152,25379,55866,92525,33166,78564,73495,98840,66825,22181,18096,22187,65594,39882,70765,18203,28556,80845,51971,45265,61129,34065,67832,36337,36928,58909,92228,96455,17805,71786,62852,13866,64076,68634,28813,63809,68244,15568,37685,47535,59705,19333,47794,59065,53239,85480,81245,16611,61380,83593,97254,61886,16862,80100,21268,49561,71478,95737,62212,53761,19368,40003,35749,96011,93402,32969,48821,75520,42299,30025,82134,20250,62958,83959,35865,75381,24562,32884,63045,62081,32036,30011,22303,96341,88081,89805,68770,57589,61999,86299,53549,60634,96342,46179,60799,91985,11978,31284,58922,64437,76691,58206,62447,51685,46967,16701,16603,60312,98071,78614,84132,39785,91778,77392,48291,71817,88904,52353,80642,71347,32527,29149,59253,87217,70157,72381,86790,67136,35050,26588,19163,81163,85210,77332,23910,34929,43601,75542,29459,76145,55081,47335,96849,69593,93446,22052,43434,90473,90283,46794,71131,83501,86249,41254,51585,99299,71226,90787,40796,59993,79768,86354,48636,86391,26925,25333,64995,57506,91305,50449,51837,77467,23610,51352,55693,36170,12210,48208,29420,11155,23208,31693,58655,66466,42659,15014,62898,89824,16901,89629,69539,16362,88518,64766,53262,23293,51922,74459,97561,77851,75611,92392,77337,70822,88496,21127,28087,81766,27071,61529,58447,47216,86681,27866,81367,26604,99838,31762,48427,83816,28114,48313,35358,15072,58461,96514,98608,14320,79536,16305,60385,90654,18752,96170,33901,99162,77639,70127,49470,81061,44028,18907,34385,96970,77980,41305,38408,76535,30439,94651,31325,46655,80792,43735,88496,23344,50186,64890,45462,58286,37183,71794,86449,79147,26623,44004,40857,19026,10469,18790,54020,72128,43120,14025,96156,79714,15372,13295,83881,80326,64921,89724,93432,59914,60638,86895,87782,84552,64554,39302,92286,70305,71413,86049,56469,51420,80614,15270,28252,77364,33776,96187,60528,82427,29967,78133,35582,83931,88053,95278,12443,56002,66114,45356,57287,93651,64093,90780,38929,70486,52757,21400,21092,94908,82099,25329,80597,10931,87380,19604,21982,65678,88895,76209,47070,27982,46425,99811,87525,28705,94842,78115,89699,71573,14540,17449,91729,19517,47098,84711,90581,95459,81062,54039,78210,71754,28218,12465,10048,28004,67530,54912,14288,92639,61759,68193,42773,69509,33437,44728,87296,50320,60507,66189,19897,62610,36184,60104,72557,40210,34764,22718,85409,81875,65261,99589,13194,82518,29928,39847,96836,80900,30624,42723,37841,41975,80049,75976,56262,24171,29827,76804,93919,41323,49661,54171,36159,58710,53925,43048,85948,25625,53050,76627,33952,43692,67890,36148,53819,16266,11112,70057,78382,43718,58943,94026,19194,10689,41920,94437,81074,88218,38754,72691,62210,85809,82468,81222,93841,99900,80379,31178,27948,74172,26529,87569,22775,50350,46122,85761,83646,65450,43600,77076,88222,67004,81708,76858,55671,42466,45692,70554,26637,38441,26678,43600,59663,43969,40190,62104,34213,49208,32914,51085,10962,20079,52970,19538,15018,22377,84518,80247,45829,34095,81411,58566,23744,21363,49412,92766,88677,61924,43107,91515,18633,23437,47710,74822,53896,43438,30610,42899,72239,90924,49129,23953,46617,71657,82899,63781,48158,30726,10588,19968,37838,18535,26518,44839,12622,22991,47835,76196,28536,66898,57951,90251,99036,89833,42775,95181,73530,94286,69787,60203,60232,69033,28839,99625,57547,18127,16639,35263,50924,81852,44810,64341,39660,69396,16543,73456,43591,31073,44215,49749,53839,67575,52862,43897,45617,67750,17758,89777,37080,71202,22223,42653,47734,12602,72420,20465,82508,68592,91017,10498,61031,84316,20526,10737,38713,95897,92483,97428,45874,69273,26733,18061,17461,66071,56602,93732,48723,21398,83875,73023,20021,32162,68435,94486,61204,50137,50000,53788,20066,62493,76787,43446,38340,30362,97238,73220,82848,11051,39506,63376,16981,68898,71801,43917,92651,44070,83347,72377,70388,84804,53708,14886,54903,34027,41963,90356,82253,10402,12419,97947,39416,25447,76726,91994,69524,12414,63965,86657,44841,61781,23348,84890,22428,63566,23319,83548,57422,79008,42455,57544,80503,97509,80407,74391,65842,50585,62809,35652,42304,90230,48934,88913,90208,79911,79974,31692,12420,82264,15702,66605,15899,61021,23425,58278,89131,58039,23029,47618,89757,91004,65688,24406,81816,70561,98500,66772,28580,26774,23954,11785,75549,38233,80850,12500,33561,40988,84736,74926,48283,84738,88086,23335,18944,64239,98231,73886,28733,78139,67151,27363,27029,19130,45873,30408,59902,64321,60520,59265,56958,95523,11924,65272,26409,38141,42892,43084,78710,77856,54703,42090,64328,55787,81239,12558,45637,66333,77706,83995,96320,92170,85166,68515,49763,44220,94278,81768,38537,39820,49719,52085,99135,53269,49839,76878,24312,69021,99906,61020,54961,40258,18021,95701,78309,30271,15774,86581,74561,61308,52290,15953,57394,61052,63995,65967,85847,69312,72100,81916,89824,74742,44939,44749,79013,85594,76508,18108,23105,17065,61066,71715,23560,23392,23507,27508,82929,11221,55341,95379,54644,45096,71921,81930,38109,94526,18360,49829,85431,28510,81070,53416,60355,84232,11262,74002,80043,23343,36644,53796,36765,18466,67979,20029,38324,60259,77374,50310,69992,64945,81682,51557,49833,64714,19521,20368,28765,42314,70362,51056,98973,72765,14772,82751,41797,81388,36384,73295,47429,97662,89441,68057,20616,42140,68896,24642,11077,26516,74903,87304,27665,70496,94009,64120,31306,95994,54660,16747,72706,37376,99122,48169,52716,22658,50337,29756,64274,23652,50674,71155,82698,41114,35373,51144,53262,31423,97945,64806,92147,65453,47053,21678,11367,19093,83833,41966,70208,40742,34007,44018,47219,88201,86608,64747,44834,86934,30311,92540,38573,84299,34884,31706,35378,18757,34588,65153,92406,91503,49618,51116,68081,64148,70407,84359,46065,97264,25649,52952,64100,36141,26671,93344,37339,66831,79795,89240,47033,33719,63125,20434,10389,25696,64615,83132,39722,46848,31825,34163,45569,54651,71562,88481,25273,15463,47810,86061,55728,60935,69623,68043,23273,27551,16905,25016,32561,72166,90969,18426,88133,29923,21206,78914,69929,51058,25903,37971,24033,76134,86341,23733,84394,24185,25923,90303,83428,41838,62195,52294,59813,47972,90969,30248,28946,76348,62086,31996,88355,68133,87868,38050,57447,99318,74065,75312,28872,50972,90330,56507,98293,74282,10288,54524,60721,60444,74314,92655,69161,49997,26079,28174,50087,46922,30134,78451,99971,93834,51239,13063,57623,95759,12787,67932,11882,60325,91843,79500,26729,69758,18323,72966,89598,58084,96649,60198,31145,54695,98121,14974,83581,25320,89327,83191,11500,60966,43627,33101,12624,76536,59361,70969,51354,17533,96474,57229,15077,24985,53535,79854,44390,35928,70157,57344,55183,74731,36739,50577,66947,55042,53296,48882,16666,19113,59680,87342,50260,19425,69516,18219,20080,72359,77895,85078,19356,33201,41498,31805,89384,37669,11903,83952,30311,46621,44632,71169,68823,67819,25368,59123,32050,41184,23386,99605,55716,43413,76748,60787,23341,12595,59473,87792,95138,13753,70839,46585,11331,62467,52330,69476,49763,46620,56817,88688,12755,68084,71584,59436,75452,43492,60278,17973,84804,10234,30859,58248,87825,65111,93575,82971,85500,68493,27256,30469,62508,46643,92051,93419,17899,22450,71712,94540,90381,23991,79929,73400,98072,73034,86906,69381,80562,21357,39123,99057,14796,62862,28193,13224,20408,30126,81645,50714,89806,91381,88787,36999,38867,83374,60455,82570,36438,38242,97712,82322,14197,69885,71273,29170,15240,89702,93303,37938,14891,48861,75709,64932,53509,71560,76885,51172,92171,12915,72996,78299,48938,24413,59205,63261,88476,37752,25355,14731,74452,98825,49669,89303,35303,54914,17241,51775,41512,89598,69039,50390,19610,59191,17612,55420,12772,85547,58599,27216,82922,18078,92805,92511,15905,81723,76246,90368,52891,32124,27185,87093,59169,32486,51342,38691,62162,33938,98782,66797,99792,66289,76809,35320,33570,51638,66282,13605,40571,71860,74197,73894,91834,42702,45845,74002,30568,22008,95737,69034,28775,17161,33448,62186,38300,45307,31216,29201,78170,16968,94956,91987,15658,66386,55193,30221,65474,71748,43612,17063,83419,82190,79991,69838,64525,71004,21417,19600,54730,87923,55508,33813,46131,21873,52341,59916,87203,89764,96705,88511,55901,54627,59115,29233,90301,13289,50231,69556,45282,49220,47972,74439,34762,37257,73800,31550,89587,31740,25540,78207,62328,50612,55115,84040,28395,15526,78233,56299,92944,92940,94382,98702,49810,62531,58910,97546,75182,11464,49606,62207,43854,61882,53452,59298,17652,74912,52418,98394,17320,26439,82854,12114,61047,75215,23487,68049,62766,53416,55908,79664,62104,29814,91497,46475,11319,98512,27635,70631,49635,20280,29201,23491,35430,69406,38372,93959,71196,33543,17749,33152,14776,86339,33201,45668,61901,49431,88939,88985,81036,83060,18927,59466,94249,51609,27369,92456,93757,35089,40715,63050,76028,93369,81059,25411,69025,57236,56291,81295,30824,99035,56245,48106,76843,31888,16822,50840,51550,65653,48119,86167,65892,93534,58227,24040,74662,31347,10766,62112,99842,47659,55838,18644,88190,79374,89685,64534,68716,71926,82711,88222,58136,66802,82445,53024,44958,61472,20998,79285,57618,40989,72173,65382,36090,57211,67704,83088,22286,71658,16285,49057,23220,75903,20950,40050,84538,12639,94137,28199,55792,73021,40308,57191,26611,17841,33562,42285,85143,47821,51369,87141,35650,21837,96466,40576,75018,71337,17238,84775,54730,25332,75046,38591,19514,14629,61555,86356,51339,98748,21392,91230,50230,68069,21572,15447,73191,38608,48057,34277,36657,89987,46240,89280,70003,82695,42109,53447,96301,48681,36562,93499,80359,88864,15366,53349,94044,23296,59646,69920,23617,93773,54691,74653,68420,97724,31079,82485,97257,27089,24371,47744,17023,93508,42881,45305,62982,60996,85594,19071,48816,82811,30129,93569,41605,52741,25527,84938,62277,53199,16261,65214,95790,26021,75297,55231,34824,51535,15913,22144,25331,88547,79831,41626,65588,51594,25033,49437,61348,62673,32436,61424,70234,67567,86854,24729,21038,75373,99438,49718,28389,50192,34065,16028,66355,11661,36292,59910,77618,78594,27424,15258,74026,75751,91484,39930,25673,90443,17471,67385,69322,23987,93506,20517,98131,28030,69828,66465,97386,35865,92064,28513,52843,91556,64293,78715,92176,69850,97831,80179,54947,19839,25415,72931,48080,87598,72158,74468,73438,23914,21509,74253,50837,97226,60539,11466,63204,13098,24506,38151,97541,71518,97608,51196,37423,81691,28541,23909,30589,87901,73545,47713,11118,13719,50198,49971,63468,61973,48731,30888,17608,18329,95469,79917,19007,75284,60547,42041,58273,35938,38059,59316,85416,47281,80512,33720,41654,55629,52976,18731,16117,19004,49043,49381,18632,51892,34873,68372,87896,57875,46226,83925,71686,57174,12938,96711,33898,33722,86151,23040,82072,30852,26103,91338,44112,74768,12024,15642,31164,97352,53385,36066,77744,14198,58816,61123,27892,74961,83728,11891,91081,37565,29317,25589,24467,58888,79484,25320,20430,17734,47904,28908,56580,22844,29444,51913,11485,80996,61403,67684,78769,39361,95332,38713,89062,61414,54531,57005,65105,82598,48106,21158,24524,65734,97704,77936,85385,85833,92141,18917,73512,67783,61851,12228,11872,53284,14829,72311,99993,42955,45352,25733,72090,40990,49485,57680,78923,49969,44042,23286,36614,89427,62472,55776,18729,32776,30725,25768,41576,72439,10378,47289,93448,24038,93302,36627,53056,83735,17569,83732,27898,12822,94522,59866,26023,42865,76507,72269,90608,73580,94770,55898,69282,68995,67014,32092,39759,28208,84168,96991,64957,40023,28411,21310,85324,49748,45688,14963,65183,69956,58078,85130,91814,49504,82023,53234,85374,98457,60871,29521,60501,34955,98582,79503,18382,60501,76638,98007,10085,31288,30073,42893,76386,92321,49680,54500,34888,90033,45334,10407,38335,54143,53020,13387,83986,58953,64254,90867,71930,64850,17201,65845,52317,48346,73897,91500,37621,17272,90398,49154,36734,76347,70892,43565,33683,37708,61999,54456,77593,42876,76753,54114,98698,18257,91364,88891,59571,84140,91676,21024,72323,18929,59747,56994,22172,95711,92511,34028,33455,16738,34131,91580,83208,11575,63694,40808,53447,80277,66819,77842,51573,25488,99957,20451,58017,19545,30296,57810,52956,49907,71426,46423,70357,83242,98004,15937,73185,98602,28133,39048,71604,84054,14549,37960,48304,29439,14665,44404,38164,48426,85095,85549,83499,26715,82756,57295,41459,76197,30559,96428,44092,66640,77908,12921,10688,50692,32578,34589,89972,43770,53732,47215,12170,28008,37045,99763,97956,61644,47635,95969,58592,19763,23278,10341,23253,25886,23782,92990,73868,60196,83746,72185,19213,15683,73276,90335,76479,64212,15906,57944,47686,17998,99577,18650,48850,88637,69832,89167,45373,47582,40417,53343,49773,22575,19926,31757,37767,40169,38324,73711,63103,71122,92032,17377,52304,73681,97573,29703,42079,68199,58305,26310,68378,21562,47530,14876,40597,42810,24595,79886,86649,17446,44605,99527,90882,72303,85272,54186,72370,26347,71777,16361,89059,29797,20848,26876,75504,29632,95098,68833,14497,13098,25943,78604,87510,75733,11675,72572,96683,51124,17585,31748,51228,22769,21033,10095,35433,17180,39504,65403,78327,75113,85054,12249,28315,86354,17959,69411,60764,40207,45182,13138,62595,13613,70146,99896,98587,59333,88509,21675,16934,23898,31710,79015,78141,43694,64039,42704,16639,49376,83022,81796,14716,33630,11211,13359,67717,60434,19211,96271,86038,52058,57027,99438,47447,15695,71440,37047,75755,63881,46558,44320,23222,49197,47902,60649,43496,23241,19354,49234,48083,61115,54531,24005,85653,67317,98101,18615,79533,22409,90552,51698,10835,68884,85764,30636,67873,60909,11689,38813,47057,56413,77141,81573,41921,51504,25866,15820,55463,67602,75541,38568,38256,14006,91564,71209,51840,42115,35108,34546,12025,89905,97331,52182,87975,31263,14053,92195,33256,98921,12211,62150,39553,34664,67285,56890,35412,36850,50679,23580,18858,35234,50809,31147,93682,26630,26883,94940,51174,27552,88903,80115,65656,51233,18610,62589,24897,91467,42419,67021,64679,60014,47799,76010,27222,46927,67384,78145,72169,19825,54252,97303,61582,70999,97648,52029,30471,72242,24055,95370,44047,81856,81027,27342,56779,28814,84720,66801,17399,47802,26462,41601,24906,51169,58460,85141,71051,74921,22293,92610,74029,33958,48036,10081,97238,52798,67906,67912,96269,34813,57610,20190,81297,58682,36381,97161,86540,45287,44942,35880,95832,69910,15325,79573,72120,78420,54083,79900,58428,45087,44250,17709,10924,28566,74409,57439,59818,83457,19744,10313,66420,86537,62125,85208,22525,39431,19366,61012,54080,89964,70517,69637,76863,73830,74291,40938,34523,81329,61648,20199,80537,73767,74245,47071,93553,18259,62427,78261,65252,58647,79960,20237,41429,57999,80809,66227,61165,16776,13194,83060,21613,40188,91371,42171,55972,62322,30830,86884,39673,64838,26510,67916,71664,67180,29081,69046,58818,33340,26374,57356,30730,26470,48624,91609,19974,77752,14726,50588,88899,23638,29782,25530,21839,81457,15059,51073,48438,88947,41247,73555,99831,24914,45648,56811,69329,94184,29639,53433,16450,34697,76288,25411,61209,27099,34596,66250,74055,10497,83257,21855,71248,68369,10953,85865,81808,37462,14936,20308,10001,24584,17975,77286,87143,99393,82714,86510,96058,47584,23912,83442,59775,78157,19302,87683,88178,15987,44855,12016,96001,59462,56909,61777,22543,80400,50628,91183,63116,42767,26771,81845,87364,63224,40375,39497,51026,39651,64966,95457,41707,58455,82568,14284,25363,33499,13699,95230,57535,57620,20600,53919,90871,84104,53684,95880,95743,83486,54797,28796,82511,79057,30563,13831,16929,60602,48245,87700,92435,90673,48403,54969,34935,84335,78860,36162,65320,15052,69749,48618,48143,13816,63591,72633,20106,73626,87180,15329,83128,70249,29835,77213,44682,95661,54432,78088,64031,50231,38436,84277,54169,54563,63751,39026,43773,61211,55616,75818,57216,94209,53124,49905,78033,58417,81896,97816,37294,80961,22533,75818,21722,24695,56196,52358,79855,67114,30288,61842,91247,37555,16666,90366,55556,96417,98374,77421,70451,73527,99928,22118,88390,45911,98532,70068,86550,82729,65899,84286,32016,99500,68014,88303,30852,43082,55879,17424,41235,45476,42693,37872,95532,58911,44165,53405,88650,32108,76740,67877,43286,33079,23091,64199,48551,50638,21746,76507,91542,69037,32543,42542,32420,99758,50460,71496,82183,16984,41501,90743,96169,24080,16122,91461,55596,89951,16126,62270,76333,58495,82859,50264,47780,65427,51288,84638,45395,82744,34791,90372,33481,11586,87531,22781,80274,62997,78432,50958,13236,72481,55390,24246,63825,16592,35417,17960,64062,20740,28280,93277,71909,80908,61832,47065,32378,38183,78524,50400,12564,24805,35470,63165,80025,84950,12808,78589,89264,51235,22530,66813,75575,46542,65132,93833,15738,11764,21053,57861,50621,74096,28667,75597,93647,66187,57097,77647,42417,10121,63107,68918,52233,29869,12969,56795,78865,59555,49532,10168,57751,11413,45535,24808,39260,13042,55784,45838,19195,77614,99820,15484,50382,93185,19413,51816,55999,19190,64151,43974,61904,49422,34943,28133,99048,86085,61723,37417,44245,92717,72677,88202,29120,99305,42933,91145,99751,15157,69490,11148,95005,23597,56001,94739,78480,23780,75032,15166,95885,62428,43600,14403,91164,81020,25653,20048,82241,72672,12615,44365,91643,84426,53738,39919,10417,11988,92680,32782,15225,15699,94292,60606,16420,95406,87604,84816,66434,80748,46170,77493,77201,29395,90346,59188,66342,73344,18113,35443,81451,38832,48438,63876,84218,75956,13575,42393,34895,13222,35837,44982,26563,52468,60603,75948,68708,57398,21504,25009,72313,74587,85989,38348,18580,53339,32432,16660,53999,19834,22010,64893,86485,66996,47992,82882,76437,27403,75818,19725,95951,61932,84842,28712,35011,77225,46253,33131,30972,33494,18386,81991,71310,90225,99102,49873,39427,42577,14887,89209,43240,10614,79714,79920,74080,21540,66689,93451,87368,18774,86988,99427,37756,90867,18393,88948,40285,18672,98844,65382,87187,82357,40286,44508,24821,74934,21600,80245,45341,38745,78467,10967,22668,45424,89026,62712,81631,79937,77378,76263,67823,78898,50416,18428,77446,19448,61716,83580,64247,32019,45081,61997,29625,47620,73154,63597,30048,61766,17755,83505,62192,29926,62260,16668,96460,78595,27092,59300,51678,87725,69002,45644,70454,31614,84293,48860,33353,12976,61193,71048,53818,60619,50307,91333,90293,19560,36418,95908,67466,24025,21524,94435,78481,35375,77571,46820,18843,48032,64172,58712,75219,69032,76468,80067,85773,19373,98988,17667,51909,38390,77860,50970,36971,21056,11895,54862,70913,98797,66337,53240,40018,15915,97781,77647,69591,27109,65894,15354,79975,73297,60273,38453,81542,89999,33831,15097,82098,43887,38135,17877,93994,25330,73070,41378,14967,13591,45190,98107,39394,69666,43743,86907,19048,65690,16126,13775,54644,26826,28629,43982,53465,99609,93451,24649,58023,24603,35035,49174,57239,57379,29780,33131,20339,30686,30495,33780,37680,57528,65242,26969,18575,61671,68966,78023,60855,81472,16570,31927,95024,94303,75190,58273,67671,65111,40662,65811,34875,96101,66046,17632,20080,54719,30741,83444,18702,63900,70910,96896,53231,83951,20641,92377,95534,65127,87980,50511,83459,64439,53775,72499,50937,66158,26817,41099,57412,20754,12860,95067,45326,86484,52974,19078,13260,84227,22963,76905,31610,24536,26270,61382,74344,10227,11921,35445,85756,79491,49265,23744,54942,77772,50368,90248,18100,41979,79544,18677,59073,34293,27031,42736,31706,42269,15459,85953,91689,87026,98928,25288,44588,51678,63047,66701,18431,51167,45688,87654,12315,46419,62766,31384,83856,68328,91160,63809,43765,40343,55025,78059,26067,57102,75294,94348,97358,89249,53973,33301,31456,74880,79974,11623,77026,39119,86685,51208,74204,55197,96147,74677,81606,81510,78263,50091,74483,76977,45653,17979,92082,96378,80205,61967,83563,73494,31231,55993,88700,47749,61886,14601,83627,90212,92326,85106,43936,66764,39300,77564,70969,88058,13999,73074,19241,38208,38821,60784,90829,36485,15049,23826,60271,82025,69760,85852,60399,15815,62560,32679,73488,59179,55063,57845,53925,33799,64463,54011,95242,63489,18417,51860,27195,53997,50066,82357,45185,11734,98728,20702,18036,43559,28719,13254,25892,64336,97001,41975,99378,90067,13136,73815,33563,76048,38398,13954,38756,30579,40744,16650,91179,95472,33241,85070,26773,72407,55579,88626,30750,98042,52893,40704,51744,56223,15139,36229,58654,34593,92014,48473,66446,76142,31666,22539,75711,56309,56045,83524,96806,33087,21880,94265,46902,49141,83849,36878,39146,77577,84999,45790,33209,34686,56734,30607,36461,27632,56443,25323,75878,75197,18630,34265,42841,30504,99916,80801,73063,69642,14837,18856,20851,94259,23960,81615,98975,55613,44395,81349,64079,15290,60652,27444,43538,48819,57863,64756,30194,26763,87752,70464,69265,79622,35622,98046,83751,57750,92336,96311,82077,84492,91172,84483,85197,76860,27509,72156,92381,52570,46417,84452,64452,33480,36550,37367,53033,51717,78189,59171,77944,40680,65702,70984,63257,16306,39939,22247,35061,37330,30364,31230,11494,49151,17692,92263,89880,32212,66348,12028,82618,12519,18543,85071,40882,64834,67816,75456,30037,15472,97271,20836,55562,79431,61241,99383,35717,75831,21461,81267,19498,98930,93772,12170,42640,36114,21683,98042,29050,66601,16439,26712,13574,92772,46356,97043,21115,29373,81188,53347,78193,20798,27856,38374,27896,81768,61626,86329,43178,59072,18691,68172,64884,92686,44185,44746,18608,44265,23031,65061,77138,23856,30904,12342,73283,34883,19690,33609,45590,27930,22590,31829,96054,20218,44775,89950,66858,40636,42640,58422,28282,95376,59920,76120,19258,34356,82491,78186,67859,60462,89646,83048,17713,21556,59064,59207,44835,58753,29867,58865,45310,16314,33913,10950,83153,41910,85473,73052,21721,14408,82244,62409,44722,43810,12920,72083,80804,28334,94447,25940,94582,10779,97639,48220,51460,67405,11015,71192,24455,78970,59290,10865,86698,76512,40962,37589,23708,41458,78401,43969,35301,10697,61680,53636,86112,82248,94225,44714,69606,25990,64482,31782,79809,13247,22985,43197,65215,73675,59694,67530,39093,51516,51096,39907,11660,66311,42955,17642,14282,45863,73729,56771,55147,39249,27798,59769,58868,46751,33328,32582,41674,19125,17361,79590,16220,78029,56824,53415,76842,39653,86931,68286,74693,22219,60371,70544,30665,40949,97577,38673,37740,57966,34393,41654,77606,24794,26382,78593,67798,59655,91194,19073,41618,69719,68542,85617,15468,96889,66477,33871,19962,51771,43290,86889,47376,22720,31601,38690,36118,18298,56991,84168,63756,79518,92692,79845,25383,29606,46305,24495,47690,52189,44321,74584,66720,37231,52823,31280,89394,40958,57685,31483,89650,90023,59195,88072,80420,91818,66482,53795,53555,17673,37317,59120,17385,86110,54018,70176,10368,94408,28760,14637,18829,12696,83260,85893,54425,77764,81532,56102,25277,58249,34808,44723,13269,51211,18426,75128,82514,34423,26868,60289,98678,50038,41543,72354,69114,33462,94909,42913,46576,98032,83405,96069,16117,52814,83643,43919,25742,90783,88196,25734,63366,65670,77147,44258,23829,18939,45870,10314,96426,62473,86312,94798,89005,16445,55784,50435,46714,80308,28186,23611,17723,40097,81399,87716,10890,67468,92399,98521,21239,64818,42347,55639,49738,40854,24296,76834,27956,21607,97095,74350,71785,24092,55738,50085,71556,89256,40005,56425,80643,49356,50696,16687,36708,74612,16079,68757,25851,35430,59884,28023,92427,85871,77252,28581,90232,79396,62186,36869,16266,98230,86690,79056,33237,44512,47113,96999,67156,60796,68418,58413,14051,61057,50988,81404,50545,79753,68595,83853,47679,48790,94448,66298,52640,50698,82239,16468,11407,81734,30160,83262,68034,99468,54326,63905,41444,39399,49784,42453,23217,57290,35192,10345,58421,50262,13251,86998,91649,58167,17109,38547,92011,75165,48064,64995,23497,42579,85693,52627,88217,76646,62844,26560,61904,96934,60734,31610,68342,91515,66023,31164,52528,14594,18619,42210,99226,55718,45008,14781,20949,30208,21050,26123,87852,74179,32333,87623,14423,18437,10694,64607,46528,37068,94589,14237,90718,95108,17394,37405,22637,65399,90922,70059,11006,86926,53389,54875,23330,75913,59920,75464,38952,55222,92974,10251,20703,62722,93346,53988,67298,42381,62315,11482,19203,54708,36625,49945,38874,78947,45611,41248,62063,35055,22011,82639,88615,58778,33088,25352,62786,85334,20681,45035,83868,68820,28625,97610,73331,92816,81945,38396,53868,37349,74884,82391,24182,21896,70288,64308,61891,57373,41321,48210,70272,28238,38973,23347,17243,93189,10123,28386,68505,66497,72987,74680,34799,93269,53377,85284,75968,20122,10146,79082,20863,60536,90525,77134,70324,32705,30841,31452,28662,11384,36809,82091,86811,17979,95331,18189,88840,95171,15834,39768,14619,84148,44514,60078,71672,87837,57866,81116,29203,12541,24489,68630,51486,30841,31481,75885,21569,24468,50686,53515,67357,82028,17614,39250,74029,26485,71543,24206,37419,99873,72141,59536,11207,47790,62457,72059,84839,18999,63140,86865,74716,80380,26995,48495,24748,99581,86081,33776,51939,12054,78836,44853,10259,35510,66512,11129,72966,50803,89561,90424,83647,31150,66276,24728,35425,42533,36436,87186,63453,67802,68805,28449,62311,37754,16604,58356,30700,78196,50709,74206,66716,32036,17688,47973,67936,21221,95623,48313,72459,23520,59147,94115,12379,81778,76578,46356,37042,57480,67896,43290,44431,77083,51889,94481,93227,84477,74716,90943,95068,72757,27976,94075,89570,14042,75452,59673,23990,47367,38984,78354,49185,73247,41690,56883,14953,81877,21915,82673,42283,17177,30183,71293,84251,94824,58862,49744,72767,99896,87133,99931,33407,40421,35989,54449,45434,92912,21886,41706,41602,72465,55479,87135,25010,77812,80097,47148,67523,16323,12677,87532,82649,16277,24399,66119,47972,73175,77238,36041,38601,41830,26116,71557,63073,47633,10539,88385,96868,35194,15085,71023,57189,38213,47407,91670,58809,89968,54664,31595,80506,33476,53353,98387,78493,50363,32093,27321,29397,96455,54514,13245,42170,61744,16646,89566,40506,77558,61600,89387,11689,37915,20233,21700,73934,54951,28888,26581,53794,13975,45834,59811,47196,32745,57943,41973,68670,29147,62680,42986,10448,22231,83196,73563,20370,60073,42643,96497,32472,61186,66560,48578,41303,39709,40828,67664,18462,68278,79500,57439,87175,86953,33754,58728,13686,54854,87714,57736,62251,65338,67873,29136,31186,19054,87365,70752,13309,87096,55553,81662,88934,30670,50235,79925,77817,96929,80270,81591,85500,67155,31140,18090,46695,91912,62705,76751,84697,70747,81286,40858,62204,12441,54720,51083,60313,61110,82866,17411,71054,22699,91856,75400,82886,69216,79325,27389,57793,84861,73453,67030,28078,73016,68606,68988,49165,63278,22970,27135,21087,72750,54744,83770,42790,29276,40404,57484,64982,25375,92723,35711,11818,95066,90254,35632,66603,91005,92215,97786,49699,11343,76949,58726,79903,83852,73294,81308,19777,57579,40213,26787,62590,76006,45920,46012,52115,12150,77849,28747,73520,13163,88946,55935,80513,97227,73494,11142,38522,80174,90732,60629,94386,12700,53241,83388,56234,67631,21733,39135,85097,17386,50615,71555,75694,83258,78064,83112,92534,72051,53364,34656,62439,51511,14344,97109,39312,28364,24050,17975,82286,21101,76906,12906,66246,77416,30169,50647,99752,76925,71482,27974,70590,77790,96442,60022,71839,32315,90990,20582,19483,91938,48514,12668,11619,91893,69192,61960,85258,89012,42095,73029,97223,96521,20900,97887,33569,25167,48864,49593,50729,43193,71344,87472,45236,58645,75026,30962,39625,82992,27366,93988,71905,78596,89774,58172,25762,34493,78955,46732,65754,87210,96357,87482,55906,60302,37985,42571,92217,28774,88420,56899,22132,79120,15480,94130,80331,50258,74237,29262,33466,70661,84821,15488,40670,73841,79679,13677,79130,54343,27442,35008,86928,58772,65353,25804,66082,15914,35775,29827,79281,45204,10044,90551,70523,12732,96177,25758,59657,85072,80146,14676,77401,69215,43893,10926,41341,88568,11066,66477,99505,62475,23345,50684,94690,74430,56904,20957,42573,62029,40023,76279,72085,13355,38213,99736,47280,51064,80306,38261,29132,84329,18835,72245,58984,52209,59274,64330,51327,46567,41154,62240,37970,73596,99130,17950,51056,49375,53559,44805,65774,31255,35235,49523,51810,90478,69723,75159,58904,56991,92103,67656,50826,89817,18316,79558,76988,69875,74057,45029,10935,11054,56892,38015,86815,30882,89551,54491,84002,36130,94442,48308,48676,25874,61126,45983,24896,66074,97817,86506,63546,61262,36097,98962,25844,47247,91580,23999,73334,75711,24205,59497,20056,96943,13219,14471,47475,92162,36057,53925,53385,25793,52442,70603,29259,68125,80231,30296,95228,62536,43959,28979,19941,13909,88864,40249,64430,72501,80170,30527,87116,43957,74856,12388,55375,35267,33724,49724,10235,11612,35626,79097,45409,41994,86166,60009,62516,22149,96891,56113,70937,74376,49898,22618,42399,99786,15365,49325,76109,78944,25739,56071,47534,11105,66941,46296,32172,39057,94178,80208,64639,88406,63452,78498,87306,24502,71622,43289,94972,43837,80519,14093,72988,29513,99312,24436,92586,51822,67864,66442,31235,57689,22162,66965,16824,69701,19688,11989,22058,38587,69987,49186,59718,44591,10218,65259,98087,13430,20340,46268,34615,36690,98023,93545,28527,14312,74909,49371,97979,86745,65821,52399,27403,93769,78194,41527,31588,91280,39136,37694,57689,36895,68764,17747,63977,36981,89761,24609,31107,54050,81940,36540,39194,67515,30100,28702,31629,96434,79872,12814,44408,83306,40552,31255,27479,49216,78623,88571,19477,29402,27653,16442,28831,58011,48603,24104,41532,84944,76314,67185,68553,67769,99505,72084,34966,90977,96240,94756,89033,76285,22940,56617,86742,32356,43118,62354,63915,78266,62904,14116,23743,29254,81814,80749,43702,50998,95720,17530,63853,28669,55772,70313,32600,64237,63734,73795,53536,31393,37346,48070,54155,85829,52606,65106,62958,54339,21430,62156,54267,82847,72585,50430,50217,27525,34449,26884,97010,80253,31424,83250,82655,11683,14935,59277,44150,46960,86228,24265,18019,58673,27254,43231,51142,99943,27810,59987,26555,33798,81220,39914,43170,75361,38083,31365,23284,44199,11626,16866,46467,21963,37866,95427,25314,41166,15957,46301,57722,84203,72850,81246,55095,80811,64101,79041,34745,41383,86830,78505,72740,24913,21222,68125,76505,50202,51006,48826,20753,45475,12925,88966,81950,43319,39176,63362,69771,75571,97691,81840,13722,27383,49993,16188,37280,77063,11596,58793,95321,31679,35063,64518,91939,31898,65270,71650,44235,52739,73532,75629,30225,25707,48692,33704,75300,98268,12087,34110,70421,63946,95771,58496,28501,27770,38655,40594,28470,47863,41239,51151,82752,32665,54428,89520,11994,23112,12505,12663,29765,66143,10895,50718,29005,37006,68450,94911,59718,44303,79649,32007,45887,28435,33558,62377,42430,23500,96315,80000,99248,15945,90015,74453,38642,89226,57733,61899,55965,84834,97820,69089,24255,36289,66603,93905,37352,23770,90958,26617,50120,52619,47491,99490,51858,63649,75607,90074,24897,84633,23426,19896,64373,31829,20459,43107,19046,80902,17898,22309,46311,87728,10842,56751,95415,80322,92950,41112,26122,57610,54772,42664,56340,75330,28309,46376,66357,94950,88367,66665,79731,56722,21508,81952,17559,74537,77918,43944,30715,31211,11625,51893,40203,15883,15871,50225,91739,64088,80017,97358,67988,59071,43619,57981,26196,11517,16357,93922,98081,56789,73099,92550,27333,27632,71210,37504,77161,37602,58040,73695,42383,10365,51861,71622,75513,12394,93061,69399,75226,80036,74923,60095,76506,86077,37517,70557,27173,20405,52405,97314,99282,36410,82670,33308,19262,97310,85838,69962,12737,34882,87886,17216,53661,69550,25730,30782,50079,45479,84739,37084,27080,52044,85155,26316,93978,70889,90401,12744,75798,87242,39621,10836,71139,68727,39563,43533,39523,37926,13197,92240,45245,69990,91876,89206,95063,84978,75682,71250,25754,32698,29872,59848,47917,55532,68842,46043,61693,43051,22527,74486,99094,94120,91209,75082,72467,81953,47409,34169,32676,86435,70612,22796,13833,43088,45996,92844,90142,83581,64005,91636,83363,53940,22260,33929,13307,56266,66192,71420,54042,43978,47465,44343,51301,68479,49763,99664,34252,16250,94629,67631,81000,67141,52250,69014,29145,90403,38700,70159,55227,79113,95144,19896,70280,74968,97086,63124,46324,47350,78631,86845,87114,11287,10142,13279,54823,42607,85185,39002,43886,27482,75948,80344,67817,32672,57315,74375,57832,98890,69127,32584,80752,18248,85001,15248,87781,80306,97378,36904,30978,23123,33486,87544,79231,27640,30355,97191,27159,68526,88349,92198,51535,99075,33109,46187,79193,45795,40393,97415,20963,20086,66552,57693,78362,69903,16326,79115,11904,21686,37537,41159,71569,94000,99449,35122,43720,65732,92701,58160,14013,16557,93814,44150,43430,38004,42010,54028,49926,80575,62354,66046,70414,66413,64458,25976,20214,86706,50710,50169,19050,93861,10250,94736,64674,75281,13161,98673,32911,93471,69714,46442,76482,75166,68844,12654,45180,71127,53153,78942,22238,44174,15792,43977,75484,27134,17276,44125,38168,10326,43866,62075,89365,84056,21248,65423,96103,16396,84764,77831,62892,13710,73780,50174,12075,47479,20161,80732,82986,28345,68076,15447,23489,48100,78067,68811,93880,67015,21767,43643,58882,51442,96141,93383,48624,77974,66320,23323,13821,91873,74544,86358,47272,60920,82348,18170,78163,47551,30681,28768,19500,18978,50133,82499,97056,10875,74590,36188,93180,31259,44196,48045,15443,96596,74854,10288,52430,52980,20859,69565,10525,74844,66966,75393,99336,24770,20903,17258,49166,62063,85432,12717,35917,39037,64803,94175,16157,89794,27358,44089,17733,46374,58085,82124,61871,93810,80958,64621,61070,75760,94645,41576,14810,75215,55312,31648,22815,79600,36280,69774,86492,42927,12480,95345,90966,82807,88531,57485,40946,98304,28528,16600,20570,57321,16559,70895,86727,25151,99361,91826,19014,51562,71753,36855,77349,92366,94824,97718,40363,64802,30643,19628,19100,58555,16764,58180,61104,11369,52168,23951,21496,80889,98513,53352,52780,27916,46977,23243,69205,55022,11755,44807,42715,11827,35836,71688,82914,12453,71569,56738,90977,86767,69464,72137,22874,31953,71155,51059,13256,16457,84780,83818,98139,93871,40186,68911,40623,60567,74609,17963,44320,61974,27157,20438,78157,42569,90876,54514,59156,38801,85592,83416,71354,41709,30332,42404,63148,33342,42421,73185,28542,50707,72091,36403,23808,65754,20496,99502,15472,90259,62515,87497,55402,54707,96390,55737,71779,56670,20625,29539,34412,72149,79870,63158,91175,17391,90298,83603,30523,84615,15703,68986,18127,73842,53103,11705,21269,17582,32195,29387,50148,71428,31449,51406,29423,19248,25578,62126,57576,68454,33276,94745,42955,75464,58148,17552,33535,66253,89966,16457,44549,54692,96423,58113,88296,89755,33245,68590,45310,29063,77468,15259,91902,40911,66624,95111,32459,53390,79152,77746,82346,22460,25056,11918,72168,50000,72349,20683,58431,39147,53877,75911,45267,41259,23217,33174,60381,67556,31721,48900,15541,48230,40839,55505,22513,92982,32829,91555,11761,65541,47171,67339,66485,48970,66932,20711,43669,22167,91950,53118,63147,63350,80203,29767,99375,60015,97924,57286,47181,40808,17456,15498,90287,62318,32227,63096,17894,18034,82410,44844,90184,37419,34249,20863,65366,85234,74525,37095,91439,10749,84043,63158,62595,14906,43434,30484,85124,77891,92438,77277,67833,24936,43937,73163,82462,73900,92377,45784,63677,98521,87830,13343,76710,49644,29878,49436,87182,22918,40861,32108,55629,23801,48024,70390,83376,40084,37912,42061,96202,15890,56727,72142,34772,11326,21619,58593,39709,20606,23324,72791,32207,11275,51171,32940,15216,71025,69441,19793,78648,96059,37095,96691,17679,73500,61365,62847,42619,27690,31085,43602,16374,68611,96235,80073,13333,55079,10650,46777,47697,97746,43179,39761,42555,73456,65601,80729,77698,20429,76685,83040,23881,38394,70004,82492,53979,70182,43215,26898,65217,94221,99060,82338,38478,20016,75510,58515,93000,72508,42957,20293,94750,42849,22634,41259,42640,30255,33275,84530,32372,62999,89971,52134,99692,82765,93290,24521,80623,41626,62628,70080,55828,65273,87323,39522,47873,40326,40276,96334,50136,82143,53313,74202,34302,57623,89241,85125,15648,28802,89720,25955,81169,18242,96868,41286,70239,41583,20513,60051,26758,66515,99628,80580,21213,29047,37129,50296,87692,19466,49110,58574,94889,56591,89806,27891,45431,71260,12102,89887,86436,27233,10359,99158,67981,81197,44019,63878,80364,18415,94376,34144,73184,96340,37917,92179,54534,10085,22907,86051,47620,78356,36041,53768,83025,68025,25460,63868,83953,60644,85614,52391,62580,24214,14121,28850,48059,51162,78743,92667,92861,26085,15487,40654,51724,26471,73908,49758,59839,97589,62960,29286,47247,97803,36668,99911,68280,48971,22523,10358,67294,51931,88821,83580,77378,55696,27645,61741,21735,77306,68429,79318,10338,13467,88132,28329,97109,88075,32855,55034,43500,39074,46673,96725,82925,17603,73591,24019,24877,53012,36182,33429,11591,65631,24845,86753,55514,70916,50482,81690,92572,64950,89908,22970,26802,88771,96062,60965,67645,83703,58200,57471,82616,99455,16219,88875,66967,36913,77475,47841,52126,65031,65530,87116,72318,81977,92683,69599,30853,45066,24438,74990,85384,18566,19912,94495,79865,64220,26003,51932,94738,81626,57604,25257,41242,79695,86284,40283,55085,83087,96522,73934,80045,14877,44065,45211,68534,38003,20394,76775,75178,69676,71481,79807,42158,68960,77817,90095,59727,89606,53359,15705,42483,55266,69541,90461,67652,82515,57357,75049,13970,20041,12141,93650,56618,83848,61437,39506,79112,97709,87148,51638,46837,79841,25271,49445,35892,19349,71887,89272,68955,81775,14907,69314,51598,49949,42518,18969,96706,42812,93480,74403,95417,50795,12374,84588,20275,91508,83592,91231,90461,66078,84522,69981,38987,32314,40262,19945,51367,15224,39152,94369,88147,15712,57893,93139,96019,67334,65075,60384,61963,39098,93797,81700,29837,10305,52340,89360,10516,96441,65156,43213,73590,81415,64568,44861,19118,31870,63846,47909,30736,53420,69533,67780,37426,89105,73791,78359,45948,42193,69844,23359,35008,24816,92836,27462,84289,99271,84123,69405,19413,27865,44077,32641,48650,68741,61681,80067,98088,83182,50931,82125,15373,46795,89093,38684,83718,63505,59683,50798,96627,47126,19801,32317,74909,15622,86076,30315,36402,12279,96306,30603,27985,82672,89803,66245,75091,67659,84096,83193,51576,33813,87108,32852,85569,49366,81100,55909,54594,26408,13731,37376,75750,26540,13190,82639,90627,79769,96741,49320,64708,41637,89564,29716,71504,48812,38921,38823,39404,65397,60941,51062,76313,58664,57045,75839,64088,44184,79753,11065,76462,58065,99946,98052,19952,72584,77867,37079,52926,49220,28205,46101,65759,28873,56763,99780,34392,67446,16579,13776,79281,16794,44953,95593,31153,34729,25267,85692,82311,44065,52283,58468,57035,31273,66660,54456,75470,77356,80370,96843,50896,82323,50226,20198,37613,84267,95434,71460,12445,21192,68278,65112,43198,56274,16889,97188,38489,81261,27634,54774,40385,23036,12134,13379,87809,10053,72004,44906,15702,83607,97488,41773,44775,52969,37014,92533,97401,58505,96296,80317,99847,49579,58064,65696,99919,35247,95912,73539,80592,55608,19812,50379,40647,87203,69795,10125,65818,43149,59623,92366,54055,67555,43966,83834,98892,26259,77086,68167,66588,90637,45666,29271,83537,79068,86665,28277,64500,20059,47800,98355,55420,78386,97030,77969,90479,29240,97054,94834,15378,66448,29509,72967,67410,40247,91186,58785,51668,67071,47965,38261,20583,36055,39591,48516,62218,79512,12951,42656,31483,29353,10236,75375,51936,84735,28515,92381,16141,13041,35856,41160,75624,36721,38703,89691,99353,21021,46904,23450,44625,84250,22659,37350,88219,44324,85360,62056,96996,42869,41320,13662,42695,76584,38204,45136,23425,59793,42232,48079,40712,18978,86275,92559,27521,39198,62492,17378,53834,97633,49523,85989,67403,62868,27148,43512,93903,16301,30402,53022,47644,15477,34593,69090,30717,29810,75375,38579,16123,83581,57834,18955,32424,15058,39978,45530,27352,89084,34907,48014,78350,81063,55455,43310,31490,67825,59594,22614,26946,67817,96950,36555,71384,66514,70778,61059,63526,83433,99588,56345,24448,85960,59911,95329,93692,43299,70593,36370,69308,84811,73492,88450,58023,83183,53167,72759,37119,96820,39217,27467,65053,38897,51506,29511,46631,33729,63055,20794,93334,66611,34089,29712,13586,41323,39705,46202,97018,69919,61526,95129,16686,35344,48523,71514,97401,11530,12749,84874,47078,17691,36653,22023,61500,61164,78478,78583,16657,14366,71263,19862,74772,88006,40676,61402,39327,58320,78600,33433,31820,86426,30828,13655,34772,76499,12018,34217,11233,78312,67646,78494,65862,71633,13725,78638,11762,61103,45537,28060,20915,19542,82815,93067,64336,59953,57186,95593,45552,22050,88417,47530,69232,42758,87463,46144,35346,56924,16125,42840,17934,90645,20196,52018,74188,49486,48644,56527,63753,23485,13228,50208,53965,87274,45724,85436,72258,80452,32917,23371,20383,46440,58702,29245,37647,96559,24461,92747,40800,14002,12752,85643,65243,47758,91665,49022,68519,38054,37126,62766,63657,91808,25891,88463,11295,68335,38586,73239,45955,84532,74609,92325,40186,23339,50635,29154,45672,87119,78758,23302,16841,32077,76490,43551,91433,56436,71290,29766,59425,22156,42438,71822,94088,83785,93463,34720,82706,44103,31949,44120,90916,88338,87565,36183,75253,40498,49625,45823,59260,95004,34817,38596,18720,88686,13696,49969,79097,69779,62088,70043,84515,59890,37816,20080,76938,18541,38868,53665,73567,67547,96045,93604,59586,48209,34719,77483,99802,37218,13859,28358,87848,70160,27093,53506,94217,64974,27932,84830,19082,55165,74217,91731,21375,69556,30650,43206,82652,45191,91068,90252,13484,20080,78964,20643,43464,45554,41017,89442,15565,33711,18225,12583,48142,44153,13762,13866,25251,50985,72014,87711,19354,60226,93866,56808,64921,59235,80949,49304,58844,43788,86375,47548,52137,76710,87835,15317,24817,70582,23020,58146,48972,25611,85465,47171,10480,60478,65857,15040,25623,68736,79080,27186,76092,55822,50831,50233,60891,50975,13884,90984,73215,71616,35464,46633,21540,70172,84314,86900,90775,21430,45434,26250,54406,19236,31137,40386,57693,36575,48670,99444,88994,10381,13184,88107,84794,44293,95984,34806,10803,11352,21959,48428,73429,13439,43774,34055,42203,12043,85087,32059,40586,82510,27692,78993,88903,21197,51952,12961,27547,22182,77052,43510,79275,26095,89151,75177,73669,69871,99921,85811,40805,44486,15590,50809,92733,14146,63443,20583,12987,61805,78670,33078,19687,15132,78482,42230,69765,21361,64341,36995,96101,70166,23496,62370,50426,75319,90933,81234,44231,46951,95501,32111,18844,99356,47823,28384,22271,66619,87377,54755,86388,94233,75237,51802,38852,46419,87302,68473,23360,74080,76518,24136,21781,64225,60874,94285,28635,14335,63673,70613,42372,86264,70812,10408,77917,55598,70815,63165,20262,94230,31861,90227,24555,40767,33680,20469,22556,36374,10256,85385,52568,51777,95549,56258,86611,74666,69207,74572,78358,23866,90497,98353,39103,93163,62916,48696,34027,64925,79018,61758,96469,35133,62212,58748,52293,53169,74952,61507,68491,59281,94131,25752,93895,60700,16299,76592,47213,85351,56553,72138,48961,64169,62062,20022,72260,66004,23688,64930,35906,48974,39728,41306,31174,39794,69575,99090,17129,39554,48177,56849,40697,16612,73295,46867,57500,85486,22765,60905,58924,84231,27249,93201,55099,14057,44162,21274,82940,27047,61924,83553,29051,54349,20351,84499,79102,84959,94630,37356,47850,28920,52035,19954,93726,24734,69254,69246,14550,83248,64831,74576,77234,82102,69968,52165,89164,52830,77239,36247,42823,15911,96587,74200,65930,11581,73668,60515,72999,61739,66513,28839,16669,99096,64790,98556,41681,76750,70632,54049,34419,52801,88895,87905,86111,96489,91487,35641,48836,42281,82299,14009,47026,14191,82777,22124,53039,27558,94147,35049,77745,56746,25903,67692,20183,53202,54750,47162,45136,98168,76794,27726,98464,22356,30769,84632,94102,28316,64905,37394,59297,91577,94414,69511,36205,64569,14177,51531,33305,14104,49690,22184,20069,84352,81835,54884,79304,59531,15667,36679,67808,47713,61800,88916,42545,45946,37051,62915,71880,89710,45500,51384,38706,76842,28390,63195,71436,15739,67879,34454,76763,42387,11692,42242,34667,60348,22745,11547,98851,44547,32011,57118,59987,22070,14415,14557,71044,87714,88271,48091,52140,89092,96876,75967,16228,54987,35734,66192,36425,49416,83843,88837,24465,59169,32994,13105,29126,12523,74455,20480,52660,43159,39953,61323,31201,91676,10681,69483,28022,35332,66181,94499,91621,71313,32910,25934,59720,17480,12497,25097,41754,49451,53799,40781,18698,24140,45049,91877,86978,41940,48751,80788,95804,70322,84688,27448,95623,56731,88010,21107,97634,41793,77187,53656,87164,31307,86265,29125,68771,78355,73543,94843,16485,85068,36188,27671,17085,31675,64872,97290,38438,98296,88924,17663,21182,74832,90527,78898,76221,24139,50550,26337,95994,12618,35767,48317,45962,45317,37945,58947,95600,37057,56992,39528,48182,99513,71475,43652,52825,63026,96403,49660,64818,94404,49681,19952,13521,30934,53066,34882,73146,84083,59201,83063,66175,96004,11294,90790,69710,60284,96309,85810,21329,52284,35775,98988,87821,62500,95411,84474,25347,33251,81098,36367,66350,15228,79541,10920,94536,35188,94784,11204,11112,80043,86421,15337,69334,40602,18872,34096,67493,10792,69206,31625,79172,54145,33518,97030,90392,15555,80557,25730,37676,67119,46024,36741,48138,66122,45549,80995,20201,39775,11093,51759,59452,53547,74811,90676,74177,53317,17408,61688,76080,26707,21815,88969,96436,26361,93031,51102,58065,34977,96969,31896,17634,26067,23053,56670,28626,85957,80516,62204,53038,47408,28546,65014,37234,19425,44148,53065,31636,24466,93147,74549,73035,53783,52890,26256,64212,97900,58748,57343,29059,76412,66338,82500,90343,90292,57800,45927,20497,79979,68504,40448,20561,80454,84630,36502,47816,12985,24311,74547,13532,97912,78280,53728,45702,45814,92169,12638,71596,23377,34172,25422,97414,63224,16054,66404,63530,10463,39329,90914,45694,16743,20634,61625,28070,87692,27626,48906,71146,91125,51045,10923,11767,43738,75584,10308,28877,12314,66001,58276,80730,51561,23707,51930,69279,92070,17204,56584,66111,10301,42850,84200,27365,75305,52376,23407,98542,86241,28229,25322,66150,25746,31452,69185,12324,94757,49591,30818,63940,57713,81346,43734,32762,95304,52794,65786,95868,75022,83504,57801,76595,11205,97755,30541,55618,83039,70428,62912,19171,36842,66138,67405,63477,50345,39837,89710,40961,11305,14310,74754,27615,85768,27310,56145,95963,56612,41040,98388,52873,98183,77227,32574,22280,20057,61994,50659,52358,46051,47646,38777,30022,62122,24657,75482,43169,73320,96971,10234,51905,95265,80462,29156,58532,18628,24390,97090,29214,52596,35262,41038,81921,21739,62602,92884,54594,49443,41137,82105,16812,53882,38908,20006,88249,11364,57043,36374,12244,50674,28655,94759,48713,58990,18758,93013,71294,40172,37201,88632,69614,95039,74557,53926,66846,63097,67107,76713,19957,76782,67319,14653,49780,94061,26398,11901,89929,79793,40445,41405,48418,46026,99152,19692,55094,74030,31472,68767,48854,18191,83109,37753,70658,96880,21690,24358,94838,48003,37429,34608,38770,77252,63771,47081,57878,14774,48530,55536,75124,34028,29045,54039,49014,83140,19453,37918,18538,82400,82522,95727,32321,81345,60452,21855,82460,21322,86851,98076,27604,51989,81195,66804,28299,10831,58327,43441,71612,74906,86740,35410,70437,14678,91568,93272,84900,89666,56902,91118,36521,32416,46056,96948,95974,66572,88144,46755,85805,25083,94629,98890,50298,30678,90975,97119,88911,23275,86138,42721,17082,21404,88229,11317,78110,50850,78114,91287,38143,42671,24549,12589,11851,38063,18308,26006,58223,50869,35805,38550,24583,37865,31979,31480,99785,39203,58581,19061,42914,66569,85189,44237,96341,57595,97988,92510,99467,58862,69992,61120,77503,23119,25520,17788,89498,53539,36755,95391,44085,60326,98263,76814,45822,61001,88930,15056,54849,83475,62082,10760,79329,20406,80536,67985,53259,95153,38986,92474,90187,72251,82833,40949,89022,68610,97240,72444,17249,72592,11995,32333,53404,18729,94248,52529,91473,84942,56968,71384,20359,10910,62513,33329,97976,67536,57429,74688,28469,44490,68487,91402,95329,10296,13778,77854,27260,12274,65042,52640,38547,80805,32031,86919,12779,77590,58471,81906,94493,49612,81235,10212,40095,86853,57263,65230,86849,60653,93574,55337,45091,64969,38810,90392,24184,82612,13797,52202,41344,53763,24226,28923,78072,47050,92405,12127,30082,18984,36619,33574,75980,58988,59631,34790,79580,53544,88344,64916,69877,53667,13761,85176,33037,86285,92768,14714,21916,10990,45798,94001,45150,27676,96531,72367,40846,13309,76777,25831,44711,16202,50645,30247,28050,38875,41353,92850,43737,40528,38536,18960,30264,13833,75942,52978,85601,50699,90300,84638,89494,93458,69196,21021,30726,52391,60637,82863,32289,10331,10839,27370,38919,16973,23446,75195,39646,61392,61657,36513,30624,92836,32694,16921,23739,27340,52238,50486,37142,39998,52429,22559,22267,37554,26693,87874,93907,81196,51919,42007,75653,69213,77428,99360,93093,99603,28495,85329,43837,76647,92398,16162,91507,98965,86325,33564,94115,26077,19028,19969,23947,52783,77936,75754,20425,21584,95471,17672,30126,61226,41728,66051,27861,54153,48312,27654,90683,97631,28372,45769,48116,78537,54467,24925,65236,63500,42030,69040,42547,75205,53355,82021,69328,71929,17437,81270,56106,49654,13093,88373,60375,56638,25508,70141,70109,18409,26496,55712,28469,55272,32801,37663,37794,57524,91534,59859,72586,66309,99435,42490,66478,72181,20496,92269,68912,26899,25464,61767,46387,50684,31293,18954,33785,45052,33424,51539,98880,44466,91687,29499,49259,18598,72563,96985,12296,11493,58794,96620,99012,19339,11154,22431,44924,40478,74465,28582,40978,30362,14938,85254,80404,86689,60737,26897,42227,36777,29353,68660,33613,92551,60727,82921,37603,38339,52667,34723,17061,15413,37655,96277,78808,46521,67849,60213,55765,96029,71150,39956,97801,59217,78237,35829,38427,71463,31387,97173,64875,94461,15890,34561,55531,30905,19740,38353,79317,57679,60800,10458,55099,30295,43365,56447,16634,36495,59374,47392,73940,33284,93948,94261,33889,67007,62761,60859,49532,69647,63234,77500,79304,33461,58632,86213,29170,68470,96065,94219,17074,99228,98846,45300,30219,19146,45549,26621,89217,32705,13729,18758,77296,51010,24873,20398,67030,80925,19094,12457,11970,89014,77722,26904,94702,19055,48865,77089,14498,98950,99186,91130,52575,96812,75575,53655,85556,91587,44212,97651,84600,86058,23856,59510,60673,45774,15832,83002,37619,77544,59530,75135,45375,67557,25396,95292,46687,93759,31869,54124,95184,17644,67750,20746,80408,81917,93411,71767,42932,87766,93204,77542,75070,44220,68180,32748,35129,75864,39623,88825,63096,98706,27669,90293,43873,82127,57817,49491,86670,34095,96486,25702,49927,75758,82016,74876,23176,52704,89822,65949,17172,56708,26312,15343,81731,80249,70100,19338,88267,57344,37464,38824,20981,38672,96601,63143,85587,46976,24960,42433,43733,89422,32173,20847,29817,20281,11229,52026,50758,43548,35635,81305,94685,78782,46335,48370,59043,33421,79278,46849,19659,33082,84534,83033,86655,75272,99409,64607,59161,12992,35159,49420,24789,60756,85153,69629,41395,46599,52034,24729,31411,35689,10505,75370,27005,71611,48044,54886,69793,70781,47098,99121,65823,85741,39616,72663,37621,82408,84499,24094,40225,43157,91151,28736,36992,80800,57593,66592,46688,89252,12267,19267,48460,28459,16816,44860,98680,40499,26675,94222,82017,20060,78093,32965,83485,30731,52279,44500,49698,51745,23139,74030,41149,23669,77422,46982,76184,44022,43380,27766,17432,83075,39755,44572,58786,55476,95612,88121,65994,74970,57742,20118,45783,95181,85178,99765,67836,75237,18558,51856,78967,38344,90322,85409,61159,72840,78814,72634,10939,54644,82684,43603,40538,44842,74589,44730,41633,26894,25122,70952,80579,82034,46149,92107,63208,53274,13441,47010,40231,76825,48145,75805,75210,98765,68148,38298,56465,89785,31776,20640,23269,98602,69066,61442,81662,26465,73432,60405,92199,69001,84574,48227,46262,38983,90028,88029,35557,20733,98487,78644,46424,34178,27215,21556,95664,89201,84168,26631,56967,99234,34700,29875,67107,49940,18257,50034,58499,64849,74290,68816,34191,13514,22538,24406,31341,55537,76335,52400,67852,55806,92057,70259,31791,31243,90302,37459,92784,56600,85788,76024,60862,91279,79221,34933,60297,99002,46883,66860,40221,43288,50316,69029,13675,93652,49860,83958,28181,78825,41124,10872,70353,70980,69182,96120,88835,72355,67688,77122,72448,65154,87405,17124,84818,13776,81902,42017,86115,75013,57560,89360,42963,66331,42044,56389,48249,27321,68880,58601,10246,87111,10899,50566,11934,60399,85352,18422,72083,69213,80155,38827,44791,57596,84663,88385,34233,33739,64265,70011,73880,85128,53269,57770,68422,11438,75649,28950,89148,44468,83896,86109,26253,32576,93450,99003,53809,12729,36263,27661,45499,74089,71856,35320,77629,92425,52870,59410,81751,39847,18957,92149,22730,61630,32128,81843,24596,30425,53543,36295,68797,26881,20314,30135,56151,23080,92023,87297,36027,21155,41693,75843,50545,72195,78363,21688,48279,39260,53461,23929,95964,42779,64775,48213,67461,99039,93370,45085,51608,56900,16025,89640,84843,79955,91168,35344,37694,66725,52583,97597,93466,31428,87148,63641,54776,99543,47541,62223,63058,29832,36420,39006,41106,38151,18969,88996,15986,43363,81593,80958,54546,29332,70183,16977,61925,42214,47503,69370,59375,67221,27813,53440,25770,57681,30573,79943,18401,53033,37082,57939,97531,58374,24183,42331,79579,13083,41710,86417,79140,13464,64929,51762,98824,39449,98380,41895,63942,88227,36749,92630,42339,18867,93907,99150,13415,69197,69646,58891,98990,36563,13354,24350,91959,37646,57698,63942,66886,44142,68635,37234,67544,21769,34322,80704,77942,26649,90587,83144,81003,46432,51414,19079,67902,29867,49376,11222,16017,33629,97368,89168,50763,25624,79602,42891,23305,24634,87750,82233,29725,40828,69661,26913,34804,58536,98243,28985,10341,89039,19166,44883,65631,79696,61804,74947,21456,27653,62610,37874,89426,45466,74528,29867,25872,76784,82449,93813,88942,53902,13371,44512,63829,21852,98329,59449,98723,44209,60120,77445,30829,50721,33338,53864,77836,24218,27973,77902,27777,71628,17059,61986,29628,70137,25028,38303,63834,22567,47915,92469,25035,90713,73522,50106,65037,87361,37355,58625,18098,46931,27571,40841,44908,63865,92507,32891,34442,36136,92956,78172,23834,65650,15635,61715,18132,95979,34511,94907,12065,80652,91068,28192,22264,19305,39983,51157,15920,21964,79763,12573,95600,66655,27292,73322,63521,67433,63065,60323,82750,34810,91792,45538,75396,73816,24735,74502,72125,21144,18275,28698,40568,98328,28671,87664,98068,61166,91177,25097,44958,96713,13362,48975,24425,23687,77332,99822,80159,82427,72722,74079,33897,66945,37785,69698,84932,86576,24699,62003,60054,29826,15486,12959,54018,57911,85287,78504,14705,54399,60906,34916,85548,66326,77579,44642,36166,80966,78024,31955,94051,91981,63743,95409,13829,33395,77564,54153,12901,50210,77769,87138,43566,17458,43826,10048,92477,38759,35262,98403,13211,62273,31061,40729,57933,38157,46660,15752,79397,64714,69061,93880,68525,43947,60797,51223,15618,67347,16843,27939,31643,18028,76279,35639,77673,85027,39412,92518,30780,86393,44349,11246,59411,22943,55357,92949,60974,37500,46466,55660,30627,26888,91504,97693,90073,46690,65641,99943,50132,51598,36038,18323,17874,63869,19053,71892,24143,92041,89553,67672,86804,17619,38177,59232,56468,41036,41466,48533,61338,76350,42463,64448,13055,94399,29809,59490,40936,62736,56347,33615,91553,66127,51219,27031,30497,36978,23515,15013,34042,97505,40139,25525,82186,77199,65336,61938,38493,63195,84341,95463,23963,13789,26978,27920,63731,23419,41917,85817,98708,93927,17969,51826,31773,38236,67685,47615,52671,12401,31874,47744,20095,33715,38679,95186,98620,85959,83116,12819,29146,40710,75513,55524,94313,25217,55771,57186,42940,52214,51332,84401,48231,25908,93575,80176,94821,14229,20481,52670,86243,31374,63918,50266,22829,58739,46637,42883,10941,95902,76201,79552,73109,23815,74932,10618,50404,98302,52200,30560,88420,26449,51024,44822,57278,94046,57378,96441,42962,95928,48277,14356,85606,96173,65156,93703,27701,10050,70647,46713,80900,10110,53449,82182,96047,84380,12951,54680,53079,18594,12499,95816,23371,38070,26673,37151,24295,41443,30187,35037,63514,33041,28136,78587,38393,36477,66659,40957,62419,11845,42254,43748,91211,19186,15525,13267,11927,14172,57085,58529,20253,82969,48516,12925,28660,77256,84288,85622,83522,36148,58905,34665,81220,28002,72541,95126,57131,12005,23795,96383,63211,34437,54167,42455,39800,52204,49625,24830,34258,44782,45437,36671,92533,65116,41650,44115,88429,77411,84083,42235,72337,38225,39497,15848,99575,85865,63000,63910,49455,52519,91147,88374,79653,44558,31735,15451,27038,80458,55150,83770,48989,90220,75689,71251,29005,45815,32102,93844,34309,39805,49226,86175,97876,76915,87682,48653,91185,45615,65509,13411,21462,27472,70768,18149,50627,24353,73948,33932,18152,48820,74386,76083,65436,91536,48951,45072,12523,19744,47611,75164,27107,45473,59015,89181,67818,65175,52073,98403,77849,25934,17952,95723,30540,32066,71612,75178,73582,31048,38845,16527,71151,76432,70490,38611,43213,14056,58594,13667,37840,22683,30248,57949,64420,90252,85100,46905,74587,75398,28460,86517,69168,44975,72784,66425,92497,71066,11123,55672,73536,46267,27699,97111,77967,20348,21818,64778,17457,69416,53443,85504,85066,64412,46338,44370,66385,35052,86840,64644,85703,91744,51157,38180,70634,65325,51014,95564,42134,80881,30925,51991,84373,21224,36445,40136,72879,90784,41951,16045,10932,55827,29339,96386,30944,77047,65351,94082,81436,34437,94475,68608,14187,46831,35650,87414,98081,78981,44927,49573,71729,18600,93432,16735,59346,77149,74300,30927,73627,42642,26915,97705,69251,43693,71419,54021,27602,95403,79989,39449,86096,63825,56703,44471,27494,43280,38658,96255,37707,96459,24386,63768,10895,32155,54160,68890,41110,56826,41884,43477,94927,52939,10437,92783,66798,47908,59622,21211,80867,58196,35239,20407,39574,59832,68113,74038,40160,33203,31629,52577,11007,74736,74462,30180,54588,34975,55005,56009,57792,61077,26224,35046,45699,91582,46843,38899,47978,70697,14000,23463,68271,23759,86095,66117,76332,92435,52288,45000,27622,68837,14165,98737,64667,29034,69244,53665,47237,93857,39180,86090,32439,36236,37831,79947,21978,70070,48057,62544,77881,79458,79643,39498,72207,45516,45839,31009,10504,28546,98466,14215,84254,88255,54748,18354,10973,52992,50109,61597,46456,76105,68895,71031,14996,57199,68144,50461,49465,21371,89895,19606,52636,18151,53286,39152,24477,87933,92090,42421,51098,77689,57415,13864,44469,55468,37052,16413,44058,66778,87097,36028,87810,39661,63543,73497,70365,99973,97639,87421,57664,55689,58959,78444,25307,64074,63160,12949,39490,17040,80706,39988,18108,79398,91762,18215,74427,28327,41893,46164,24654,61299,93802,54991,57027,89913,36362,63979,23996,13157,40721,33412,58274,79357,24095,38290,47708,11479,51407,51286,98607,81024,68515,52537,16170,22007,59601,63983,16683,99974,86740,87958,39490,48000,58662,58253,95495,57680,88876,35718,81997,54399,48025,13876,27798,90384,89557,48957,77104,19146,65352,32112,70186,90875,11697,99543,57664,90463,56223,58075,22587,52189,34039,54955,74450,36653,99894,77222,44045,84819,49903,76658,59694,83335,94692,51887,57669,91314,99116,49324,21641,32772,70470,40144,74712,78838,76504,33999,18766,76431,14408,27845,18023,50213,42949,33485,52616,62493,63419,24982,78591,34536,40775,54380,50900,56383,66467,31576,83678,13268,47953,27743,87748,91179,23678,68724,38869,81746,53518,63507,44018,55534,66414,93929,72850,85486,89956,66331,26532,29182,24957,65816,53086,73524,56031,75885,19003,16618,77513,42452,88562,93176,31940,99545,38874,69870,50473,93986,37719,93339,65912,36055,80224,62884,82530,51236,91339,89330,68105,90831,12004,29949,88512,31758,80340,38520,46071,33157,88883,70958,62057,25147,29828,85295,96052,14769,17736,15789,27851,69198,86247,98567,26486,70448,10078,18003,56825,43751,71966,66013,74180,13475,43915,67542,91127,44303,45307,55600,44061,43870,40142,17962,70267,93496,90371,88253,65175,78453,93457,71252,15460,21551,88530,28521,42752,22719,68106,81045,57256,37054,24023,86675,89839,86418,70631,78300,75672,39962,30239,36061,20979,44666,38578,52582,23165,85721,69480,96591,56658,85725,66170,16356,70676,17774,28094,32580,86139,80447,43669,23860,99636,48315,75876,57793,32491,71284,96092,72229,51741,63619,46642,56579,46639,62320,10438,45188,80496,79578,25869,10029,19332,16175,90906,31077,11811,14463,76570,86822,62950,85145,96340,26327,49196,56206,53923,30581,24316,21889,38025,10376,15549,88254,93190,28973,60921,42039,92942,75523,55925,11578,61344,50442,25972,82196,37214,33598,29602,62530,29013,97749,38561,70619,36986,67720,37681,24335,17540,44033,98657,66505,16495,37222,52761,55354,45581,33614,33491,69799,12006,60675,24780,13810,36143,99758,52282,14628,97927,75609,93347,32453,66634,12804,26707,88760,46875,45107,33222,70258,63631,79761,67233,90682,54487,16072,65865,47884,66929,86287,74375,28446,66823,24889,43523,24346,73771,88625,86247,91568,43399,75029,24564,50892,66389,37417,46022,32380,65224,56850,97811,23989,76122,23015,69715,93986,61930,76674,82807,55905,83707,89306,21885,69862,95042,43996,87967,80880,26737,91639,20150,93573,97520,24009,87616,44953,52992,65118,67400,75353,81946,48277,83841,69801,36080,69956,15183,20498,64885,57016,24130,65088,66290,76424,15979,16481,66810,71904,17260,90502,20477,10960,90050,43795,25535,41042,45208,26730,81447,85325,99138,97234,21361,76128,42976,44353,72842,89793,83640,93076,73910,86094,71316,64196,56532,99174,38942,25935,74227,58070,90304,83204,84504,67212,52165,29394,57791,50970,29076,57054,63652,78496,85159,16547,56735,92125,68210,58376,87089,23423,42448,22580,59649,33657,45200,44149,99110,44083,15709,78299,30757,89404,85770,48107,52593,93790,58339,15961,41983,95612,26035,15461,79665,61735,81840,60764,89743,45245,24674,59293,73274,99914,37063,52724,63321,90028,60262,23881,69585,26661,73037,79049,51676,71468,29896,93217,49265,40588,52833,43889,15930,70897,92185,13603,97408,70142,20313,95123,27771,96647,18796,10749,11490,36685,87316,39837,28588,42124,79870,19267,76518,96227,79950,83198,11664,70280,89458,36154,15209,61124,70509,22043,42653,64211,13183,86558,64492,76370,21132,94348,80595,59074,18071,40020,47211,27532,61192,90835,16023,10558,47386,81833,71023,57209,96066,54488,12026,59927,99783,37026,69531,70503,13707,26762,37102,11926,96831,35177,26696,45186,20481,59808,79338,59253,48642,37667,80698,69778,63768,55912,37543,56031,18215,97540,13170,80919,48108,14023,35300,41479,78553,95196,45028,29830,37656,47399,23670,80937,25746,11722,32217,72995,16121,87078,43187,26564,39868,91239,45226,68094,33115,21697,65417,52978,40053,42269,11273,27357,65696,24209,25389,13891,26688,48823,51176,81653,48363,86965,73561,66317,51720,28571,91747,40612,20044,21152,10695,50876,36633,99499,88580,79875,39931,94941,35596,86132,59430,15408,68519,40832,55236,45765,77440,45982,24485,93919,84351,30502,98971,85302,36422,33651,26410,28723,60681,93598,62915,15007,76317,93995,23232,45184,81379,48612,17547,44646,26816,93697,95652,79895,30872,54178,87418,48176,36007,24740,14281,77370,54638,80748,86864,87148,74126,42300,95008,83928,33616,75108,35198,99798,92866,51428,93776,39115,18042,76798,60921,36649,79094,95862,71852,96133,24270,57806,24738,35755,45574,36940,30763,84772,26200,59458,54263,24044,25337,51872,25017,12608,95950,16535,98697,98786,21823,36269,79585,42166,50135,27377,10783,62821,19309,77689,90561,63524,44717,33589,94285,90034,78394,59310,20709,30994,85791,13359,66196,55620,69259,14422,38604,51464,82811,58017,93555,38717,64007,33281,40369,82812,62260,64298,75765,67103,80895,30597,77470,52348,70414,90101,25004,12835,59788,88822,92524,23741,73708,88971,70604,30919,42563,84844,15032,90445,98952,51454,70850,69983,12816,29317,39930,23680,86359,78944,64653,19672,96178,69498,77682,29845,68034,79809,58413,80687,11295,56562,29848,62834,39381,41047,56476,16456,43495,19966,73185,76508,35032,82257,50103,29813,93972,25608,10623,40471,49660,98564,11136,70953,88090,28753,88983,59213,52470,81034,21415,53902,35570,16696,99810,20404,80522,22553,58850,16321,98729,40684,13745,78096,15293,43964,43545,67344,39417,96105,73120,12117,63013,87888,40387,80055,32298,18091,56562,46721,72822,60388,95467,15253,65453,54609,18618,84089,14862,69302,11040,91971,68674,84443,48102,48783,91551,35250,24981,25520,58274,60005,57882,67643,95570,56076,92011,51732,37225,37585,47036,18429,57312,10270,24676,82592,89899,26981,98469,67323,35427,35694,20845,54593,12785,31084,88567,50857,36997,15808,48592,76572,21834,69830,31094,53196,28987,32543,87036,96609,72321,98942,76827,56434,51483,38000,54431,94633,37506,20606,78076,46408,33230,76475,59243,47550,30147,54958,47390,34971,96551,68426,82558,61375,98001,29373,88857,11825,88519,73730,12758,41760,44848,83400,35787,90722,73432,27654,63713,64531,40884,33640,46414,19365,42334,40920,11442,51742,31749,93400,30028,54174,58883,34961,53278,98695,44217,74793,33027,83952,92395,24746,40667,38473,26229,73505,65727,52028,29531,20494,59882,93036,83258,51033,94122,15472,30648,10181,63656,67035,14567,22837,13611,73783,84161,65280,56446,26554,39255,21956,99135,68787,91511,50018,68744,89800,43630,11449,81539,68408,48788,39874,75752,94281,10529,79756,52377,38694,70457,87463,50320,91397,74307,76169,41651,45102,17419,29633,67699,22755,99962,55448,91258,69404,27139,79161,47710,93018,69715,16947,61807,45492,86837,58024,25538,73796,22225,71679,92096,86543,60878,22840,86692,45217,49202,12703,37109,61254,34820,15277,77972,72153,83077,33152,43980,86558,31334,66400,96495,76443,10981,63037,37505,11269,34534,20464,92306,19701,57404,38268,61117,19685,69966,35595,86930,20001,29031,82215,26078,77787,63971,36785,86370,80349,52106,75529,85641,68602,11548,83012,83482,23191,52790,97219,43361,84210,14676,90823,95869,74310,53303,43650,65449,42594,49702,29706,57681,48685,85279,94311,74257,96953,56746,12834,22117,53437,17229,79037,32090,58380,20733,12343,25972,21741,66921,61967,25827,63601,47894,74938,24141,79512,48371,69992,92178,80853,53021,20059,90740,27872,22222,74193,84612,60524,67917,67196,62379,19361,88621,40586,60092,57440,92464,73677,73546,95090,82727,49947,31136,78794,75625,79389,23530,88339,92135,37192,63523,26450,90598,13433,40172,52703,90550,13080,93036,18642,87114,34372,10901,40229,41230,42938,19869,57883,72546,24969,79144,26672,99144,86812,68258,62873,75097,64150,62738,69026,42088,22477,26576,34906,41801,39261,43321,44467,72608,87843,52731,40193,17381,73799,41597,48447,89163,31486,54561,61913,42773,21870,48242,29533,61085,35272,12513,21359,69427,93608,60295,83872,76085,49719,40847,68379,40119,44088,26680,83489,78567,11832,27598,23433,31085,85354,25678,56558,83398,50736,53303,56576,77466,88536,84231,64220,15593,26035,29713,19795,22558,66720,81946,56233,64669,98526,10836,25598,51433,77617,84647,16257,37422,11550,69632,28822,83394,61334,57444,15204,67939,24123,42569,98601,50024,67978,81737,81218,72538,48331,19222,33341,47381,35102,44110,78281,70578,13923,61332,66719,14672,46722,80129,59375,26034,57449,77110,87620,73876,40002,89835,89285,56899,30577,23732,29578,25035,62731,25814,57267,48669,69698,48299,69379,72939,70590,41797,27850,36131,82975,70801,32766,73227,70933,58327,73124,99097,84914,19116,76989,94474,57496,71969,98859,80155,21409,71244,12718,40632,58324,30287,13639,33485,50556,42966,75195,72967,43759,32774,19986,15432,18685,59926,68823,54403,65712,61508,71730,28054,59488,14998,63333,64569,53440,27543,97040,15812,90331,59073,72803,99885,43592,37799,78040,20129,91939,60019,29420,84516,68259,72307,53875,87001,99392,83281,35498,13116,20313,33840,16666,74263,61275,42263,93976,26102,73340,93274,29650,64117,60389,20113,84403,92999,90963,68406,57080,85727,70041,48356,49388,23724,89721,51826,10546,74136,26785,70686,36262,81315,34513,88339,90554,17960,23244,89147,11803,82338,54499,20297,16625,28718,81086,20935,42243,29628,27525,37713,93592,17488,15754,92217,47290,65636,23380,85258,74506,97510,41997,13801,32546,66976,60656,84853,96262,30052,59158,32972,35536,60920,30703,67467,69744,61341,68594,64824,98765,52922,49848,27730,75383,77212,94530,32788,87163,55927,24287,33930,88913,66949,59397,14178,88729,48956,99304,65479,84956,28441,68460,88974,88819,43469,68121,66744,24011,13559,93521,54102,27770,51111,20773,49906,31542,86922,43048,75453,53372,79372,98523,55380,41611,25223,73142,82142,83471,19104,45774,61991,13936,63846,14519,67191,47449,27616,83882,49871,18112,16970,76665,62117,66228,79482,32092,24754,83971,37636,81854,48068,35532,42015,54670,81647,37043,71535,69813,10757,22141,13566,27802,75163,67354,77001,43028,24855,12479,15820,25885,79382,94524,23091,83720,64579,19486,79640,21531,45031,39909,37964,46550,64271,97796,65160,40469,39425,13635,61891,21258,90594,22463,41648,51292,76268,25378,79985,83745,91701,55890,94026,84803,88884,89153,60970,67082,62286,36690,72109,14334,18031,97730,43976,52972,44580,82985,28691,32375,73473,48993,24186,73594,41371,84112,85674,63854,10020,13197,86100,89098,95140,58871,74419,20668,77288,43139,20497,73524,52057,74215,96763,42078,43188,13925,82518,70767,19107,31735,27759,88489,47004,38040,77307,16465,74666,33281,49639,95690,67291,61403,57276,33795,44922,63004,58318,83211,26017,72236,24112,19302,86511,70395,83234,48801,63881,61736,96198,28508,52093,17778,47594,48034,82421,78891,95178,23070,11977,46982,65576,22419,27428,19639,42300,69133,88142,35902,11688,28107,67388,29629,88592,19110,92381,85577,49604,65091,43222,63749,34594,76065,49771,59891,74058,24640,51944,62995,72553,68742,72723,26399,75099,82479,20989,79042,61920,16971,44398,29686,22432,64902,16080,85054,41265,95121,14537,78700,40954,56804,24985,87007,97406,56967,91172,90004,72832,50042,11343,62857,44398,86327,79198,21627,51337,26264,72685,41629,11243,38955,13158,56422,32151,48369,50333,59826,74195,87663,64424,27404,31008,59654,41772,75356,85619,85238,86229,12451,35429,18292,79432,92998,98975,96198,34997,49194,49601,54965,94670,65117,75353,68796,22796,63705,22704,10766,21236,93991,17897,44583,55866,35953,55637,93276,80841,68949,53005,49338,64634,39384,63077,70094,81273,35216,21482,13092,61471,97157,55655,57491,95616,49275,54669,10539,88301,92377,24174,43498,24214,18422,98207,46671,71605,44050,97498,14500,22013,37034,72149,65414,41174,38759,67415,70662,24596,29013,32083,90318,90585,59419,80674,93496,80074,39728,78088,62162,89611,86645,86580,49144,73090,71426,58520,30968,23938,53137,43741,82699,26968,15343,89243,68358,47439,92874,26109,59462,45863,95349,55232,52612,13569,53125,87722,51296,36240,71769,69921,26289,97851,20931,44959,28098,33172,56670,54367,33143,26790,47516,21567,63023,23207,55906,83760,67802,11052,68390,70852,14316,10897,84455,63216,76675,69719,45592,54925,66844,71723,83501,26877,61015,53613,75632,68108,16416,15055,66805,18681,40137,26381,82792,55440,98444,89670,20864,37665,60697,46282,75080,57874,81424,19690,22326,90308,90706,56471,19502,87100,94765,90715,67228,57217,85674,17239,25293,18000,57439,88927,58126,68252,60841,83294,44282,38605,91030,12632,47211,96978,96291,25028,75583,93465,96077,18831,38083,59000,83063,40216,88713,44336,52615,33068,70088,78430,25015,78981,66670,90170,39947,46448,74951,56930,69829,30275,59334,86303,50466,85491,37057,61160,36342,71229,71799,63577,82090,26691,28326,85205,77533,20416,22239,52462,35207,14907,38753,76697,97540,96090,76051,71646,89183,72402,34716,11358,50083,46246,16720,13914,38211,32691,79301,63615,53122,29138,72955,39050,97356,24018,58572,28706,53706,79695,48731,13462,74625,10971,53119,41324,19377,24648,70230,31977,30710,50709,24739,30599,39458,20328,22866,48101,59157,55230,20826,62930,98610,80753,24412,48150,55075,59129,77221,10299,10826,72775,36065,32085,76929,89263,17145,72430,11628,82473,44246,98076,69692,19384,21172,66605,83894,59686,95477,40258,10328,28218,83762,19054,64518,38113,87893,42003,85488,11522,78129,33157,17533,90592,12764,11051,71926,73157,15505,19401,55644,35616,70368,66809,89306,59502,96449,54081,88346,19660,58474,91123,99755,63136,74919,35243,13865,73104,73826,28449,72754,36523,10796,97695,14269,17014,47876,30409,41660,75822,84519,66886,57999,12349,14525,96064,64510,16085,67112,29691,69776,87176,63776,40159,47748,30128,85242,68106,42601,56375,77697,86266,79312,65964,83550,25198,79440,10254,49316,94553,98299,70386,57149,63667,90778,89329,33249,21672,95452,59306,14056,96666,66531,79267,48950,72157,31570,93320,38125,25996,93297,84226,52120,38481,92921,78296,78251,38511,62780,61586,48197,61402,76399,30743,11452,43710,58445,45921,35014,77478,18936,69340,22218,23798,15415,52966,24428,11232,44367,60660,52501,16365,15395,17974,52635,72253,16956,23688,51646,48662,65052,15476,64551,96034,81503,82108,51759,64081,54340,40516,45549,35523,36196,92816,30966,36408,53060,89731,81194,90126,14089,68734,99396,44554,45224,26651,53455,53913,48758,90442,16788,16308,63664,90262,17350,51399,85388,47227,16787,99159,40680,42203,64109,28013,13684,34097,38699,62889,22377,59325,72292,31712,93446,62800,35373,72712,56966,76632,83832,34342,36795,74876,50827,25218,12022,18879,85804,39752,98334,72354,16709,25930,85674,48417,78163,13120,73057,48302,96409,64035,19841,80279,84547,79568,60778,31312,65557,80590,66682,89405,45459,49204,27616,22988,50471,72005,75378,22848,81002,59337,17935,63670,50736,93419,24546,40982,43272,74396,57622,51896,15907,75564,14907,88229,51179,45126,88514,17158,38346,67168,35640,91212,72220,45000,32181,86837,59895,63421,41538,36258,81965,70919,41844,12742,28605,64977,67297,34699,87587,62266,26604,90333,72921,80117,61999,45350,97875,47951,39228,79050,25158,46633,37086,51319,50942,43667,13873,99087,79042,72201,32013,82768,25694,34086,74188,39427,11721,35043,73185,95990,48719,61120,49608,57912,29443,71766,58912,33873,64711,49082,47104,81456,77333,26849,61029,59468,58425,64885,85194,50864,49954,99610,42028,88892,76629,22204,19732,81793,50786,71130,41075,14426,27214,28165,81212,79435,29052,61267,99712,36913,74369,52282,56695,59991,23601,36961,65202,15947,55400,48564,21090,46541,61464,99875,33238,86053,75970,72150,58832,79469,94022,59937,80469,55055,55116,74336,98862,28212,83242,11068,94154,67503,72628,86596,46035,97898,76615,84965,44723,76190,44247,46087,33758,72569,34594,73708,29254,82384,28397,19855,86827,52450,66213,76311,45880,68484,55642,12840,82175,90168,66941,42262,31518,26626,22197,96839,57913,31789,80649,21328,20089,16189,23481,56938,89056,69763,66517,98489,29390,51508,48479,94737,70587,90661,37800,87115,97281,10674,66992,25159,45419,52263,84601,53061,95847,24641,13349,17099,60422,26564,46878,99309,80209,50180,82112,23528,65110,28822,51922,45804,19046,81148,98201,37779,11753,40279,95131,68223,12882,17045,65074,14750,87092,85382,79688,82147,41989,88468,28768,10161,43890,14703,59295,91215,34114,17671,53833,53773,63020,17625,97421,58197,73070,30766,24242,95685,82986,22468,59240,98479,59108,73129,22707,58412,80067,26566,19651,92519,89192,59717,22104,79246,78205,28804,65840,69868,83846,59093,87569,83384,14672,68993,36816,86719,19476,34930,73501,98120,25986,50803,79273,81506,18395,64464,35169,32709,60258,58028,46641,25556,50584,40356,39379,76721,97522,38903,39015,88428,58774,89779,50358,78664,85085,10486,20490,52142,30683,43377,56608,57640,32554,84571,63066,76750,77429,93020,18446,53227,21320,51597,38602,11043,40294,43477,45931,59944,90660,63395,82348,66049,39995,17208,58955,60183,28668,40314,11302,16270,38241,57048,96406,30482,10064,68689,58011,66102,27391,51121,19083,99027,87998,71198,73117,81722,51861,70172,61275,25291,27197,76647,28194,66790,30699,47797,34007,83084,41746,87650,39955,69246,99788,21056,10824,27011,36670,99165,63802,91659,39720,27776,83274,13152,98564,96384,91143,51778,53125,77665,44488,95472,94420,97243,27286,53863,62212,12395,95387,87530,70384,88385,42047,97340,92070,33424,52374,27702,84925,59853,57742,47438,79050,50335,72224,75783,50756,39031,18539,85099,15945,58099,18575,42959,28122,68835,45352,46622,65002,84485,71764,62949,32510,60194,92123,59874,76038,15795,87790,36201,76659,69680,60760,18669,52960,98321,28616,57472,59548,98829,92863,50988,35431,80597,59321,75744,55249,24876,83367,50371,79480,71075,71447,98968,24417,51392,24495,25101,91786,38706,11123,24334,47855,37825,21615,58036,71489,85662,65021,86187,25875,26160,62182,69101,84111,84570,97483,76006,62430,56150,56785,41442,85597,50255,92527,21778,54822,88482,42251,57532,73807,15253,31576,71917,43435,77759,81727,16730,56308,27119,88650,12782,79935,85816,81393,32813,79392,72536,40314,44832,68741,66928,71675,20199,23176,79826,14564,31784,68565,24991,91874,95301,50117,36669,19256,33693,40847,89072,58695,36106,40325,71106,66799,30643,17434,82786,96368,15365,92346,58033,56332,35201,37167,16010,84564,96376,37276,66372,73325,52094,46530,60292,93431,25851,37162,26207,64519,21953,12307,51631,54941,66141,92746,82451,32633,49288,98310,79059,54399,72235,38068,71207,70919,62703,21526,29967,79990,65182,82566,84283,35436,33481,35341,41648,29542,21625,78958,52815,51910,65330,60015,40137,58729,69507,26555,41986,90745,76464,73768,23389,73182,28023,34713,42062,50288,67906,61194,95386,83036,24287,18486,33215,57033,90478,16124,67306,35869,24385,31397,51450,68027,95667,79798,22949,51589,35725,61207,25735,89353,85714,71670,81607,70318,48184,97547,26394,26460,20701,11806,34393,25968,66724,58918,42366,29820,46421,56510,44276,81762,60987,17182,54036,18934,92992,90677,22449,57290,36698,12650,80123,27610,30856,80684,71663,60500,98130,97463,39969,40626,11916,94522,93471,27122,77723,53744,19920,39560,40046,39364,45779,45397,93911,31987,33837,78243,86240,11992,35049,36259,66411,31641,90305,88792,99794,58757,47570,88948,95996,59363,17014,10833,67104,84215,35990,24574,74571,82405,85414,55518,84812,19519,11083,52702,21644,21749,85746,14871,15318,51679,84029,10207,38965,43311,92400,90752,74147,70628,18955,69862,51239,96009,25556,91461,45647,34665,71637,57826,26715,55889,14852,37455,11283,45643,51142,55719,78352,91404,59688,37241,51794,41041,24738,76907,75295,88228,69708,71559,53760,91696,55077,72133,55990,39423,14193,16503,56371,31523,95795,66181,28386,27056,63939,98772,86144,35067,92497,92924,46276,30904,52086,77925,54668,47178,46895,27874,15877,59639,44526,92507,95640,16666,79809,69096,31101,32851,80467,93769,99703,13053,22471,29204,82251,59133,26371,68651,61875,97511,72627,61311,58183,57781,44232,16107,97916,10577,20701,48742,62902,60768,55884,77509,21532,56255,12631,36405,88209,41435,73816,40332,34788,60721,93178,71067,40998,94553,19383,31006,80904,52480,72328,36966,38447,20893,41082,91241,20084,71212,57979,98467,40152,40570,46453,15169,70718,45663,26200,80251,68587,73780,89395,25959,87935,33115,19973,57409,93667,62160,79541,65743,76278,78452,50549,23228,59668,16143,47209,10440,89374,51748,83899,79067,56253,31473,98398,70423,22143,52399,59714,82582,89448,39040,11017,76927,86595,51233,35082,25001,22895,50692,57614,22141,94662,89326,13977,86972,68908,98898,94110,71074,89825,71020,44924,86017,71785,41527,86521,31466,74500,16038,49399,17177,25611,65529,62948,50239,95955,81072,37345,50419,20973,47120,90288,87704,22908,55214,70792,65715,54502,89882,48282,46787,31850,65205,65803,93240,98107,26943,39351,73424,71415,43534,49705,46110,34498,17180,11029,16488,27551,72062,42095,58860,46516,23920,79516,30646,91677,26739,43009,56320,47418,20994,39406,53243,20815,68037,47901,36413,55191,77862,36795,64650,25526,99114,44722,41079,17521,46840,78231,73035,73229,41770,89048,34030,70067,13305,23440,94137,99052,19955,13066,59981,19556,98554,28018,16299,80535,49327,48485,73024,62052,89025,47962,49623,54397,59047,13453,36841,90034,39039,71184,46000,97663,57477,24115,68159,38240,37244,92538,67087,47067,80921,50685,11584,88959,64168,13081,76330,87168,20894,22612,62994,52031,98190,46836,26715,92472,91855,70616,18823,69481,80321,77351,91992,39151,14674,86849,41710,20858,59101,41784,78098,34389,78769,89778,25146,48578,11514,92647,14969,76252,63549,76816,94268,59601,28632,89329,92192,35691,24356,64057,10331,94966,13375,44870,95427,38150,54486,18046,19381,51467,60935,96731,11733,40721,52644,92528,32992,54870,98073,36516,47659,64155,38344,99631,19182,12480,53756,46636,19395,52418,61733,35660,70315,71961,89268,86965,36438,53065,42807,54239,88652,82547,90244,40707,83063,99438,31274,79974,68127,28075,23396,89147,63130,40982,88901,68397,52839,94253,36914,87642,94075,75764,55276,10754,78090,13781,19728,47610,64361,98186,97215,92054,98249,18335,15627,47253,11713,73075,53751,68465,55657,20322,17685,14426,59156,71274,91158,62994,27451,53069,51023,17622,25517,59739,21547,66886,55375,36280,80958,29997,58343,36527,39824,69273,22980,67165,26788,14562,38118,53132,68475,22252,61494,50171,83708,99213,87142,30644,96525,26410,64898,78992,57833,41915,48443,36876,96798,17406,10749,72987,11183,66519,30070,73452,66409,39886,74384,81993,76446,85644,80412,49140,90732,60870,58808,94525,23505,82315,72550,15886,44562,19530,31483,56905,95047,88508,16334,20926,62536,70003,23553,19340,38083,77964,58786,47813,87867,43821,31392,47204,73949,77844,67638,21554,69389,71222,95065,81958,89384,80158,23389,12923,70346,46677,45298,52795,78478,91362,15551,87378,48268,81291,38126,21263,32191,90425,74322,65629,54537,92684,15180,64142,86016,45498,72493,79239,82419,24561,76809,10352,51750,59726,40550,98436,38674,94825,11983,21897,93191,17694,24104,64368,93157,54812,66686,21497,29369,99396,15983,84410,20952,58051,24035,49005,57802,56601,38761,31399,91005,89959,40355,50983,48776,69932,12430,91800,50468,35885,15079,71115,53759,22927,82327,81580,71697,20196,30723,37071,37447,76790,14219,17956,50717,86487,85388,47475,48677,65682,50501,24774,14224,11312,79484,87209,58216,98196,72168,72782,47269,15181,91630,49873,51075,98792,31410,59697,73830,83047,16821,13840,39765,84284,85034,66409,99703,46301,59179,95967,50343,99414,44375,61447,47613,82487,25200,81406,90911,48593,15677,30852,71362,32766,93172,86769,73393,93912,41598,60063,57906,32447,13048,79528,22095,97235,27900,30263,65094,67232,36172,35135,18711,66363,80475,38512,63549,40169,95288,76902,31994,65089,66421,15135,48834,66019,16079,89707,64744,83934,96022,66270,32354,79966,51988,36889,12731,32452,99615,74510,47686,74155,19852,33508,29209,54021,48966,47183,60945,71839,76033,96981,17442,28380,25066,89026,70830,96034,35455,71079,71697,37396,28596,76182,65028,42604,49741,93586,45719,39073,81452,82102,11046,49473,75797,68934,24656,38526,25222,93234,51233,71950,58383,29604,79534,11494,95908,24619,83768,36593,72390,64887,28295,22534,34997,26742,72741,34700,46680,63738,77451,48696,72072,53688,62483,90668,86371,51537,91929,16133,32820,53909,99973,73123,33619,64256,81865,56120,15444,68034,60636,40524,92070,62080,50302,47763,21293,49522,27675,55152,94109,13407,62719,52532,86065,86595,74988,10192,53818,73083,52808,89783,29594,78715,23440,40149,19888,48221,82159,87811,50830,27833,72009,66856,66316,18356,10497,82325,17293,13557,90226,78512,33813,71613,12344,52009,23100,53098,34881,15687,78887,32318,25379,99889,99037,13916,35007,47333,81209,11665,83777,59478,25523,24095,25406,49206,35440,99951,80653,88193,49897,54550,69664,70249,39742,25923,12757,88327,45585,20297,55423,50127,16984,10820,29126,67242,24514,23122,67426,78484,33271,55877,90435,42846,31153,63004,65890,58148,88581,77295,94126,13922,49130,29884,99967,41129,54532,46390,73798,61885,95398,50647,58503,32753,87563,87355,17147,17809,71149,93371,46456,40690,34178,79391,51793,28608,44772,22646,73525,70060,19618,69145,24824,23269,82464,68623,33418,49495,89316,62399,77176,94069,22104,34232,68735,28631,65935,79163,97649,57038,56328,83327,51916,77486,17075,20235,79309,38241,11157,46046,79315,86842,92726,52552,73584,35858,92042,43517,97401,64686,34802,54927,79719,53093,71888,43960,39137,83724,84672,74726,51161,67225,46037,43673,81303,52332,59876,30823,26420,78664,48664,91833,47025,50854,50234,10769,24884,33450,56574,90533,46658,84390,67601,45384,87158,57238,70508,27097,88634,45762,61131,16885,84984,22488,36196,33544,87313,97083,56112,66261,94393,99294,65650,44651,70879,42469,56825,36766,37656,10923,20020,40920,92019,36551,70741,35668,58490,65279,37365,61416,12322,63623,47584,18262,69396,31396,53008,32760,55650,61720,47007,95589,14931,73883,50103,34276,69331,13254,74504,86495,92694,26179,65202,28843,12229,43486,18696,80813,31355,12543,93216,67771,93814,22919,29534,47633,10548,60682,63692,59662,27397,87217,40789,94062,81858,58045,92328,95602,54710,19827,60601,84302,35848,45264,93330,32455,75631,19906,39088,98846,74356,70048,37932,56100,57839,13961,40752,99089,73029,68106,43948,17674,21040,60072,47114,38431,62160,75254,59905,27706,15116,26933,38802,81325,80341,43923,38875,81259,78800,64731,40116,75808,85886,29800,90775,18908,92449,55947,73053,84437,56004,30176,89403,95892,70189,17067,84115,59972,96879,39314,38772,28107,81468,70827,44558,67614,20219,33331,86602,72509,65058,18546,50754,14243,54737,70896,15942,62058,36756,23394,13914,23914,57837,12346,25698,58136,37892,65805,43926,20447,76276,29590,21645,52471,26885,53983,28203,44324,54439,81731,60469,58385,30696,44004,83931,55427,32710,71433,61946,11970,36823,89685,60176,36939,21287,31269,22135,23552,54579,66364,12980,58843,55800,91348,29217,92787,99786,15668,12257,19164,65550,25352,51234,86774,76783,18430,71254,76172,88117,89258,43487,35168,48629,88740,81995,43768,49683,69375,82306,12833,93749,99010,99299,52037,82005,11721,72374,40036,45913,54219,13676,90123,32607,91906,65361,36158,48002,71259,63616,62683,17358,91010,60429,36172,64531,51922,11652,21390,81759,23673,91430,13743,72764,14948,59624,78893,74509,97779,37761,44854,73987,42572,78903,37814,50744,20804,48654,42929,26232,57382,66167,86717,88614,63469,33875,19683,59227,49287,87522,45650,12075,60537,45574,68804,73303,81583,77334,69101,46600,21445,32068,17537,52072,35310,92097,53287,12583,44872,29596,81208,27323,15978,89146,34472,40882,21623,45779,40701,66316,93223,94626,38531,43403,26560,77723,95325,51180,89761,18663,49580,38831,99437,57549,42121,75434,88420,32160,45517,95025,78157,22308,25891,75855,71172,67463,18969,61152,62768,54222,51196,95238,94690,88920,27669,50775,16303,21929,98294,83207,91531,37448,22082,68266,81634,82604,44015,44487,96722,69424,53414,15467,46155,36072,76586,56412,76458,13044,59466,56577,36865,21409,59093,26211,38686,71191,44479,68944,99786,55760,95891,78784,27228,28757,88403,50594,98567,71057,46663,53044,60261,19299,89528,20675,30870,86737,59604,38483,82300,13314,52537,22030,11558,87191,15466,26769,54346,86825,98365,45763,36381,80571,71824,26629,60955,26926,62985,33733,74002,24556,96689,10366,51286,47581,35556,64663,64728,42561,92087,11967,62781,24844,49358,36119,22304,39299,40749,96856,86313,37784,47222,28778,65259,99363,46376,65815,24820,16855,20759,63423,64339,77515,98010,77867,69148,16390,10245,26648,34518,97739,15898,20779,37504,67422,36806,92635,36753,33203,43461,79296,28287,82882,80657,95988,68247,72570,48333,89444,75081,73256,46084,66572,32099,99917,74964,18827,67791,45877,35372,78970,33778,76234,66122,14697,49267,94076,52298,93620,36800,42550,23944,72629,63393,88512,95184,66377,44327,46341,88676,80046,26111,83323,56720,34804,83924,46846,31834,47604,86347,25869,60352,79635,23063,67586,30854,63984,96428,88530,19729,18982,27479,24097,58676,96333,41591,19876,50921,15206,38647,15584,27780,66814,46715,64186,61489,86480,67627,85219,65678,16379,43934,95186,26862,17915,20867,52478,79524,77993,14466,19044,16699,52243,38043,13845,91140,43091,27237,37745,68899,51323,45962,46769,76259,89013,24844,60770,28361,39178,11757,22188,90241,83095,17065,36695,42418,43711,35915,30605,10600,53310,36516,23143,68127,71271,94598,64901,57782,24322,63011,36505,58488,95325,23250,84048,41083,40187,77713,40254,96373,88858,75824,46274,97052,84935,47012,35893,48353,65468,60894,64334,59287,98117,24721,62807,33419,87806,98776,82159,75690,43847,60478,99974,91765,17591,11397,34008,54200,55869,79643,38623,49669,34111,65620,34864,84540,18476,61258,99962,80929,72987,62522,67527,46401,97673,92153,21600,88229,85652,49445,34761,66149,65076,15945,66039,34726,44975,27389,53544,70687,17324,74484,95910,19482,46832,46200,98816,19403,32252,69387,24238,62953,85277,77175,20742,64276,39911,30642,56752,78453,37985,71605,44914,80959,80780,68581,74331,21676,43835,27637,69246,59516,39311,70474,40165,67013,29598,77446,35279,15678,91522,14502,48000,62897,58965,17414,75661,63191,21929,13982,44619,71030,68345,98687,78093,62560,24475,78440,18817,86755,76675,83074,59330,32526,50975,34990,91003,24551,24678,15854,14197,48674,96574,15165,91228,76960,12428,63322,23484,49389,37113,13902,12087,65177,12265,72819,49140,25562,46004,18498,16099,72866,44552,84234,44133,60882,26621,54644,53431,26893,92429,62381,84468,14403,65784,36719,74430,66148,45746,12002,51054,51802,45621,51611,36609,22783,15885,95509,33314,13509,15136,33054,97678,23776,58277,98167,47876,73224,23997,51412,73591,56026,45458,44895,40804,69301,46352,84681,55377,44689,68332,79524,14455,82667,35374,29209,18166,75725,57126,96558,35485,66058,95185,10815,14900,83534,89081,91599,87753,94146,48465,85987,65364,97034,43558,10449,10398,38631,99498,82358,81008,53291,99672,89221,18062,96364,57948,73819,10693,98562,17407,52150,85168,89531,43925,31504,62418,38929,76059,17382,94905,79919,74526,47123,44778,12003,21474,39579,43949,97244,36551,27822,61323,64046,38249,86458,51472,52419,92830,71780,47742,83839,59789,69869,89122,30038,97759,59301,21469,81168,91443,26457,29141,21356,97413,84762,52228,37081,71343,37516,11602,81281,62078,77963,74970,32077,50018,64128,44397,20037,78659,32402,14426,19835,52093,45208,64905,45972,92955,87641,32876,37768,73092,32594,62291,19613,86973,72809,97616,49420,45924,88009,87157,43846,72117,90450,15360,64384,67277,17796,48920,78926,94374,17997,98115,33212,48671,68163,57038,71514,56834,16113,82071,68991,13997,39957,81378,99248,71629,86483,87843,72192,97366,46578,97879,16065,17073,18416,19296,15823,39983,34334,96438,16374,27572,81948,26349,56123,58336,16208,12054,39640,92512,73094,58104,77641,44904,77281,97262,79350,15075,15550,30832,38517,95874,99631,91645,22302,23646,40147,33615,68284,76443,67531,91059,84361,10064,56612,37332,40157,36051,12312,92346,56942,87484,19688,82126,34445,78308,65875,44471,29391,40274,12383,99760,40236,93047,62660,41977,74610,50120,80324,19576,45672,50619,66044,71758,29497,20625,72547,96054,19901,53638,95049,65830,30637,45207,51920,21735,88117,34148,70901,19010,78627,24106,14781,14323,74064,19080,74572,99219,36290,22701,36934,65896,72249,94064,19381,59997,91090,78208,92958,38611,54652,21384,77793,53059,35716,27076,17324,88021,66590,42661,55098,53195,99649,24329,99166,69311,77790,13064,16260,84773,13364,11123,11562,49897,12066,75864,91805,65390,39180,32718,54672,82984,15413,27612,22239,39134,65222,88352,27471,87119,51558,61831,93378,59416,72813,98209,70317,52997,88646,55624,14387,61020,35444,38679,19702,35198,99307,19577,43766,14764,32527,21275,65461,90584,28557,36492,71320,43060,17659,68592,35424,69295,54496,10212,24801,27260,96071,38458,86644,47516,38447,27884,16366,68290,50162,98087,80014,86734,37348,25734,20574,95066,17497,58310,43643,71857,94473,68186,84732,71883,58304,52667,25311,82909,75172,13938,81964,91897,58719,70871,37864,83670,41288,44265,45981,22647,58735,95884,75331,52455,40117,13506,72570,59953,75303,96020,17196,22119,60972,23780,49922,18364,17698,99854,16713,65940,13327,68525,21126,14607,56932,80849,78195,11428,88389,57982,37135,98467,51743,90040,25803,89137,27234,51741,26815,21252,24763,61158,23206,95552,19287,59868,10965,11352,85426,66870,61953,65075,71266,56171,61625,34749,66214,32135,47384,62347,64623,26750,85208,56314,52375,19736,50105,25120,76327,17595,94516,19964,76479,53688,56932,36482,58542,95883,97824,28056,21050,16205,10276,86063,59665,89048,44662,73437,17923,93241,38186,31850,97651,38324,17599,86352,45998,14380,61182,67432,45460,55033,19205,12086,90078,80429,45312,78730,39120,41178,50555,85086,96084,65807,50471,94451,48194,81045,94987,65373,62810,60423,64086,79025,27833,33218,94450,55260,47735,93150,33335,18033,60689,71811,23899,65891,37062,27968,49199,46370,25248,28968,48495,56445,48053,68666,86707,58367,70769,60647,10778,93604,84115,47676,53292,29683,48706,36692,24654,48494,34415,70685,75254,70348,34572,36884,69623,24289,19630,90352,59426,97757,33305,74271,48333,10830,53688,70928,75550,12867,67449,80822,11588,82128,79683,56894,57316,25124,17202,54055,30925,73404,34490,28762,35426,89332,83447,42334,25729,45458,40254,92585,22836,92912,97102,47001,88425,56328,56910,50942,39215,74226,39559,98549,16472,43114,29705,63713,69412,41994,23920,10451,58495,22000,53165,36299,88606,93133,32007,10302,84588,84572,99254,62839,91623,99753,37171,43130,76900,46179,43901,12329,26550,77580,87139,17637,16692,38222,36562,77227,81086,39063,71314,84890,40047,62567,27354,25961,14447,71400,12664,63216,10079,81425,34830,32358,12421,91157,74043,23561,37423,55350,68397,20157,95903,45447,33446,14576,21672,89064,26191,21395,58983,76387,41096,10729,92478,21744,19440,11961,21952,49024,44830,57863,68500,59370,36538,47065,65951,95613,75872,69151,65606,88358,88749,35576,42964,50724,63695,46083,48381,74346,77689,24447,81974,47687,84341,75226,79450,54097,28281,23577,68938,21236,90227,34048,70622,16604,74386,12140,70309,52617,47506,85667,32598,14324,49218,44143,84505,81432,40364,76761,39455,76856,75988,39546,91381,41963,75852,56396,79817,86109,32746,30324,86044,53240,39324,78470,52955,58338,14334,76533,39776,41255,90117,44129,30392,50286,64619,61366,35949,80195,99779,59036,41951,84545,44682,20725,11897,47137,52801,51856,68469,50320,56441,48685,56204,82532,64709,83213,33332,66220,78707,11997,14019,95697,21078,30228,30314,81008,14928,22336,74095,91364,17368,70682,48390,54159,68343,98444,26967,24053,16902,11624,47194,29498,47630,26884,33624,26597,89246,35532,22740,24846,96810,39991,73207,57114,43251,64100,23927,67820,40223,38178,82974,34949,23098,16823,53441,21496,59623,20585,58593,80544,58608,59948,28871,32665,38488,75596,11937,11668,36470,80142,15495,45193,48762,50254,96103,32380,15547,70161,76020,28429,26041,56608,39978,80127,41486,17562,77451,40899,25787,82570,59892,84738,25522,59008,94388,73022,49167,15569,18893,14630,48988,61385,16320,41308,98460,66950,85539,27075,61733,37644,25847,74160,53013,58528,87345,88122,42385,75675,11253,10141,46559,17607,50259,53888,20151,62047,76318,17441,98235,75241,75464,35116,86175,58747,37190,33663,90514,98256,87937,36526,54576,68825,72509,53263,69520,27572,40417,28206,43737,78296,69121,58984,56331,46690,74124,91169,59846,34600,92599,82524,54741,92929,90545,83284,10993,93199,40461,50261,93848,17196,88968,59372,72349,60150,54678,40316,57354,64267,65819,35389,95426,46511,71024,72603,14955,35141,57567,80411,83301,59204,51596,60574,46954,64406,16263,51539,33149,99731,21949,43634,19958,61439,13844,10533,80956,40757,49827,63214,73167,97237,31414,95828,32681,65768,84744,97019,59872,57487,69112,14103,39357,29992,87516,97842,15470,35063,21763,86373,95722,21228,74141,86625,97691,72048,13345,67461,76099,21527,11930,25658,61287,17693,10960,41517,50586,26870,25909,41587,98827,79090,38902,39045,71703,57866,73221,19268,27941,95161,69553,22196,47047,45755,24266,92389,97862,75447,39706,66957,76216,85459,27966,70473,27898,36965,86008,88806,54879,55217,38753,73226,79521,23177,76168,11217,19789,43249,73016,32619,57322,69237,51823,12532,46301,10188,17989,89709,77672,19691,48646,12812,22118,98623,73177,95562,34206,58549,96866,74473,46233,37218,96213,81229,51339,79891,14914,84308,88808,85367,49006,42343,69595,67710,89560,37334,70438,82376,23096,50769,39830,80123,41267,13089,67873,65163,28892,11529,85990,10006,76640,21285,83719,15887,13846,45457,21891,22788,19357,23784,88811,98729,57526,57939,24658,98926,31236,22418,51273,41684,95462,49074,16807,40060,49061,30615,70486,58517,92825,96104,35383,72147,76734,32427,52889,86909,67542,28509,87394,76555,33494,10478,21415,26535,12038,81657,91185,96630,14151,82462,87170,63793,45464,72383,31483,45454,68339,50396,28437,63470,56052,74708,28945,30102,64088,62539,47205,85822,33138,69819,49511,44806,95406,11861,92888,89176,29021,21496,20811,50300,29442,63967,79588,76464,99156,56300,81662,29360,28030,96456,87717,59116,72874,61124,31688,85640,53356,92774,34026,58382,72656,65276,30767,82187,28922,16134,29482,51595,91146,90344,38094,43436,33097,61572,56359,38385,83626,45860,23362,32645,17795,80695,82214,86739,13766,19790,60932,43629,34662,64466,72810,16086,39921,92336,16038,66386,75572,27126,45297,32391,59915,50756,33416,60573,24141,57257,35129,10206,24915,72618,24888,67667,15347,88337,63702,23630,89162,57100,73848,22392,52915,69629,38443,37506,35835,39302,62567,90697,59461,20944,96719,62399,68520,26095,75552,12431,91988,83243,61949,96220,18741,54976,82475,48596,86358,31452,66188,75074,20840,97583,75733,89452,48326,54905,11149,18471,59695,79469,65013,75099,26226,53485,35714,55142,77658,75262,28501,72237,90045,19421,28400,53550,41681,12871,96293,11247,64558,77210,68271,34846,78906,80563,19696,76707,78323,42643,68541,69365,52642,23509,71094,38205,92041,64691,88571,47430,56964,85099,55457,75062,28958,67406,97858,15924,30722,62771,64843,48870,73010,98547,80108,88075,29962,54568,74383,67612,72430,85854,52103,69151,54744,89768,64084,80288,89297,84759,92192,15004,10236,29955,63672,62356,45263,24608,37591,86652,77319,50616,16356,87116,50402,25705,53272,84111,85709,69904,37826,63800,26059,63219,60100,71346,85211,75150,69400,34688,67220,84626,38461,98215,60184,19725,21566,26644,65452,74912,21899,32567,34264,45693,92566,35722,98754,97362,42310,84388,68515,57629,89349,91700,42099,13652,27685,20258,55172,33255,65626,26152,62398,14261,54937,79262,66557,15434,60505,50247,76613,14034,20306,18180,76041,20961,10741,88837,24756,15535,53109,22381,52880,43790,12076,94372,86530,95272,50991,86928,42297,49498,79975,64119,77674,66239,44256,39583,17046,29358,77130,88898,62266,29284,91177,52326,16332,56409,65816,30831,59092,18289,45526,44442,70615,54594,42544,47610,20336,64884,74360,26109,86145,42613,79781,46779,69840,10224,55675,74879,21521,49574,20499,10872,62187,48357,36546,76921,64983,39223,62307,13491,38259,13573,16238,97188,77382,60379,56131,56008,89526,46052,67833,43627,47243,44743,49157,84897,52804,17493,99333,86184,53082,11949,70784,97627,27622,38566,24039,18809,97419,52376,65054,48675,75952,74865,83844,24417,24332,75672,29247,48424,54902,34498,93980,48119,79153,26760,15978,85561,73018,45740,95378,52725,70015,84156,34753,35465,40565,17767,75401,73536,72910,74150,68221,93660,36600,22386,27771,28599,78567,54358,29479,62456,69130,57328,43049,39069,84797,56719,91162,91843,56293,82620,10583,42394,71472,39094,61841,16671,44988,91290,37106,17253,73243,19886,59483,24300,45815,77069,31546,50957,77736,35879,78512,26595,17057,27025,83650,62648,69584,89633,40524,26838,23575,89969,67743,34404,97821,45932,41299,16085,18040,91415,51125,15146,31404,89680,68049,34013,97160,92104,26998,21416,33693,73422,91451,73687,56471,10719,97109,67446,34529,81414,42816,80756,45590,52178,23847,60417,10961,29667,66190,48125,11967,73948,25708,93712,43876,34143,74883,92892,12094,38332,44293,87444,32321,98709,98225,61063,76361,29829,26737,38065,46661,36518,17251,66541,57617,46472,48422,22666,59584,10605,18093,29783,51847,31726,90352,78271,16809,39428,67954,26340,27271,40901,24732,80742,66091,13384,20760,16302,55455,68135,87646,92247,69462,49132,82488,37767,78362,70247,64129,73447,59779,71505,10287,22910,77091,22176,67602,71839,93500,89060,94252,57823,78432,20335,74891,77437,46235,92308,83073,92787,16650,37795,77158,81185,63346,99030,51131,33017,14210,58292,95517,63875,54023,45465,34943,23283,63151,54249,62244,98878,61094,16909,98484,79817,63295,40748,86627,53399,86037,87094,98721,81250,17986,32239,21289,44257,30129,83018,19258,49021,68643,75707,74983,61645,60916,94683,94354,64875,93350,34599,70091,43630,94966,75412,65365,25763,28012,33517,43227,11295,80775,37275,46067,24168,41828,84285,23457,26400,18149,25878,89171,34559,78050,47191,42302,98822,78784,99048,22473,84380,57761,21370,68521,33577,82069,23884,41902,66555,62967,43208,22043,63117,21154,97409,70328,68411,37796,53010,86112,89796,31892,65717,57422,44110,55367,56535,27999,77295,96778,51193,73994,20122,93275,81404,50300,93908,74344,53478,52826,46313,98166,23159,60141,11909,97440,75390,12948,20735,82223,44234,30212,72311,13127,55461,59053,58633,42661,35880,85287,96406,40391,76887,57649,36931,58767,20579,34536,86563,25552,71234,57621,37135,90511,31265,85055,64172,13246,65080,78369,38193,59514,79933,18274,57359,24313,90602,69994,58001,71335,49879,15670,69166,66528,80917,49883,54734,39489,11288,21854,64296,72696,51847,96065,54068,46494,51257,69131,82110,36516,24441,92680,23765,40274,15102,77020,99545,24216,35799,48524,33990,22890,34562,86285,23916,34753,58372,80641,44732,42378,51356,82271,85403,89528,14377,35804,40977,50219,66550,94998,73812,27129,87550,66931,30433,30704,58127,61288,67462,24494,93239,94305,57161,32797,35048,89661,35086,23386,84266,62074,57363,18652,41014,38005,43305,43009,78189,89533,98492,84278,90234,62772,38987,34393,31441,32562,88689,17756,18508,34641,90262,40203,70972,82559,16198,34986,93984,96440,86455,77011,52928,92822,97694,86547,86022,55293,37356,50707,97573,54049,66451,81655,21967,74685,70119,22578,95833,54429,76391,18288,45083,88002,18422,15197,72468,10201,38774,71162,65566,64812,70322,61174,24589,54585,63461,69377,64519,33242,58432,55121,28575,17530,50998,96198,64755,73003,60425,36309,15094,88512,20783,76152,72367,16199,77621,18606,83712,91597,10629,75590,65128,60232,41880,75072,95647,56206,97093,96113,66283,96857,31502,73218,45653,12629,66835,81255,26843,85289,21086,54345,40978,96911,26722,88168,87597,62432,51838,29856,98971,58817,46872,36864,75993,80807,31337,89875,20322,80172,49762,45544,81468,68118,75769,19866,70360,53503,46836,91326,24381,60994,33534,34719,98114,38350,16554,85079,78106,84417,53762,42238,81673,20372,50441,33385,79815,35064,20548,94480,68365,57533,51219,79067,74984,85911,72484,44615,12599,28869,35879,37320,29152,82146,63498,16582,20644,45236,56467,80098,84448,70771,20572,19653,29959,34422,27973,65231,55192,10009,91029,97264,39113,36268,31095,15687,78274,30980,35879,81988,32365,26500,64000,33279,46128,50676,59571,46842,72857,40814,18928,44058,17382,68521,31259,86980,56053,12935,27329,72803,75280,18297,46510,25012,29841,85840,50577,20636,86819,97053,21835,38576,98711,93413,96349,41821,25699,41848,42584,56884,61397,32874,95592,65286,11778,30433,26402,85592,92459,47886,14930,11989,22002,29412,81332,71005,49603,51997,92774,79417,21147,63406,62683,92667,67385,30851,58434,94926,79707,90374,82562,52772,29538,18489,47426,71567,20000,32006,87514,93419,22220,79024,20670,71642,51899,55240,41324,29899,60613,17465,69649,15215,45663,82600,28579,39013,81990,11845,86537,86100,62102,34426,89091,86278,82698,82593,47997,89451,78097,32733,71027,94921,81107,73870,83621,76203,21980,61165,58970,45082,53800,20602,77204,53663,45885,85171,96461,40950,99737,77261,30719,37208,47872,75498,69151,35502,20709,13066,17296,47416,75121,67100,18220,36918,95851,28544,27396,96846,74836,67285,83151,28067,92932,56076,69015,98654,68296,43519,43157,68805,78333,25669,71458,91583,10583,52345,70357,61781,96325,61602,42154,82139,61139,34069,68520,91636,45668,55580,41926,45119,66783,68180,17104,91220,31049,18823,32865,31391,48317,77125,40270,84994,88402,77933,85563,22798,60468,77517,97371,96582,84454,38222,42054,64081,17982,39789,62042,47423,78944,82331,25819,51247,22655,39217,92964,66873,62995,79290,24413,95318,17586,12607,53868,99877,91418,34113,43395,14400,49232,97018,19756,28040,42118,44042,97115,79175,80259,19230,61932,50734,37872,32714,64014,10521,77508,23326,10631,25978,55015,95526,10356,17392,39096,10066,55555,93757,42242,28517,20139,55127,57487,81491,32830,81740,75710,29495,21990,14777,82193,99706,39469,67072,69747,12610,84677,11580,81626,50805,38621,96524,39095,64702,19100,86164,68400,97545,40327,61519,27545,38407,50157,41466,61951,26384,76832,74952,49146,64195,28635,86026,20238,34157,60568,15233,52336,24784,93259,23923,26308,56278,86038,11575,24934,80378,57743,85317,54688,74649,48577,17686,48507,17107,54504,15324,20960,54617,89373,38844,43147,88629,81977,29592,98935,54935,17251,75558,61480,46266,56621,97161,76959,37581,81794,87079,87902,25876,52878,24587,17287,41648,64110,42105,61420,15260,37274,21621,77775,59243,47610,18370,98191,38476,27840,30904,49665,43388,53179,33013,61804,57710,26098,10707,79838,75667,96584,38795,58243,46937,50492,97378,42791,11758,23188,14394,99489,80157,25482,38212,15093,46201,75098,55109,36917,12556,77273,80971,71252,93714,52195,33183,26221,71618,37212,80870,96602,63664,76061,12078,73210,46311,11708,15899,15272,49674,84793,13580,89381,68747,54266,37657,87076,42879,15585,89130,15398,34870,88520,90075,62885,84643,10398,94415,58725,15277,20447,80526,59258,30105,73402,49923,39002,16164,40064,24251,33024,87837,39886,24749,89718,98258,49455,49570,29558,34961,16770,29823,79424,54462,70652,54381,87970,69277,65109,43690,23192,44287,82290,39895,68196,54674,55269,35796,90441,30090,50664,64684,68227,27624,77999,16046,65040,87174,57762,89377,35702,92794,99825,47426,18491,93556,44266,16722,50639,35551,34135,76545,39391,69133,90257,14507,67245,41399,30478,44804,56878,27362,78433,40741,53888,90235,86301,27297,83109,45387,67959,53395,12681,83939,30164,83091,41022,24678,54735,54353,87164,25661,68289,44274,94704,42000,70576,44193,47142,52824,52920,57577,35264,63395,50496,45466,31127,79294,69436,69457,16387,36693,81517,34218,45185,30310,95480,47632,10165,68349,34430,17690,14604,26707,55422,13517,69016,32875,78280,53432,99470,54393,76038,17996,32012,45287,79476,36836,65648,11692,18561,90618,34960,57390,49421,77607,84883,22089,17067,29587,10315,65286,15270,21996,41588,18088,86560,39820,34552,35826,57988,53458,96813,92585,17170,92990,61475,73341,15090,92923,52904,58861,45888,43508,49279,86528,45453,74051,70898,99804,68580,66478,56004,48975,98894,99335,26009,36180,37908,92022,79459,21626,60584,66064,46939,56433,58832,54288,73305,26758,93598,56452,13888,90923,52703,47727,95075,49600,21020,54389,62953,21622,66428,53519,50499,43352,85095,20047,74312,47594,80354,11696,38497,40038,66369,65162,38499,22760,60256,87867,23727,82633,43648,33842,15322,81766,29590,59636,21428,75031,15270,16324,34452,98955,63204,90238,24553,45413,16146,99357,63989,35580,94938,11944,94929,14528,26674,69226,60191,45501,45749,53693,61349,96685,97885,36106,73917,71778,53098,71265,16944,58545,98328,39416,65771,97378,63285,22658,28435,20272,72184,76527,40128,56408,46970,80367,85005,73157,41909,70121,13381,11526,67048,24649,47079,80747,86157,55833,87635,63968,93611,24576,13987,55602,69442,96418,57506,96464,42434,15658,60425,47850,54069,40796,26527,13255,53965,30314,98196,20066,87755,49370,91098,17095,41859,61657,28898,18404,85079,57519,88287,82780,49014,73232,24666,58302,58107,43905,45472,57053,32242,30823,83639,80454,34671,44914,17321,17940,65887,62388,10979,16944,53239,39293,51943,66393,69830,38819,26918,33950,28088,71471,72371,86624,98434,73635,18431,93087,53065,49235,97629,61964,41134,73261,35478,53113,46097,32932,97789,45967,75698,60340,37673,28931,12254,81243,66397,13591,56485,17897,68254,51448,36801,75740,40857,46768,32665,16764,59211,89726,83292,41129,12620,61035,82719,90511,43158,25611,13566,88877,67095,56213,45197,91735,68461,47445,60013,53706,99900,32579,62248,78925,74303,37239,21263,63446,78281,94886,41169,67207,40638,87944,17086,68344,40845,99596,85902,66450,99799,42329,49217,28186,94363,88152,25397,41104,12285,68017,82749,81044,46017,20213,31193,16435,20767,70121,39901,25323,18303,79170,92391,57897,43112,41881,42809,84332,15553,77608,53457,75340,30496,44847,20119,55281,17358,84201,63259,33755,99299,19910,52576,26583,48213,83750,22873,76918,91330,15079,96788,69568,71904,73324,69725,98685,77842,56140,11806,82475,88081,48608,45609,76835,23561,62852,63814,65499,41290,80490,68063,83102,19703,10501,85704,40753,36729,65395,41738,36831,11385,80960,50042,56032,33543,95323,40121,99011,24133,89421,32572,61496,45136,69939,54078,16697,13766,34488,67587,26527,83284,50801,89434,83194,92265,51156,89588,22984,36118,92727,52101,52985,27053,49899,10353,72357,43852,89315,21243,31676,72885,46795,25049,85471,25200,78982,45989,63045,11250,94916,82439,27428,37080,17199,52614,24713,44796,27301,15131,54769,16541,57280,74185,36535,89765,61210,45840,97832,81771,38229,94366,43324,85263,69598,56547,58119,11634,72998,57075,74380,57573,69988,61413,51836,89769,37632,94350,39171,22957,82853,50667,75546,41959,34269,11861,97485,39493,25134,41726,69057,82414,68974,78141,20183,47212,54223,71190,29484,67154,16028,36791,61144,67443,48449,82994,99637,64713,80372,86718,47268,95297,29890,81556,40663,54317,67698,45544,60007,33912,11863,97408,11718,42397,44019,76158,60355,13426,39436,87344,59704,75582,47513,50815,35346,87844,74104,30011,20088,80308,44784,53435,62470,59986,78238,67557,28861,97001,79352,89302,56564,30245,14115,70419,49597,50022,16999,37171,38633,12902,84428,90557,21929,36548,92190,81429,10569,19777,59961,85031,53899,95742,92445,32075,39803,10193,18610,20048,71906,78694,17192,21222,39800,19937,64007,16930,77802,31716,46272,36468,36933,95220,56113,56497,40690,18599,98862,74202,42369,29753,46561,38773,32181,81194,53640,12280,40092,19449,19035,42905,94970,33231,79437,16077,71088,88822,47101,91533,83369,81424,11280,37115,57974,84615,85911,14883,97097,78405,48131,78889,22351,90765,54794,31517,27635,98763,58818,56057,16620,77817,13689,95288,35493,98807,74077,55078,76678,93446,10004,79491,16330,15009,78037,20287,91405,43268,61952,67147,19173,42597,47715,95585,58372,32483,49451,86730,15558,99287,48303,77977,43086,28845,99398,24040,20361,59910,10115,94398,41298,70554,58936,31624,24117,33662,79505,54933,65504,90713,26820,79775,60271,66678,20174,55166,77021,89806,87626,59518,76596,35468,32735,26396,88011,31928,63884,70286,14144,14326,72170,77280,80792,80283,80429,18189,32414,57346,45953,30838,74390,91867,84024,46398,65100,62403,90018,40894,96888,54993,33649,21040,29514,74565,27687,10766,51059,46909,61568,30709,29091,75141,76761,51625,49230,12687,71911,43626,96089,37580,88165,76519,45480,65933,72764,15961,10044,91342,70637,41575,35681,77874,80749,46939,75650,88972,93879,82351,13968,34902,84420,61512,39566,13601,44182,77616,77234,20835,47563,28473,29619,55977,36587,44514,72383,22203,47366,12373,20996,50462,80246,25480,87986,12710,13972,65787,24158,81829,80679,11125,91312,62415,39187,39689,25807,80939,43850,84474,56909,44461,77302,87852,55982,24523,13685,70579,83449,27467,82739,50421,99313,96890,62393,99103,71260,56709,14704,89330,83440,70971,32312,21984,54278,92545,75099,48254,12899,42386,43678,57852,37787,66738,22353,75106,15931,51302,30988,48583,20907,86842,77909,98224,30414,54221,11335,76367,15580,73213,43604,81073,94742,19765,29872,85449,98369,27484,69562,20674,62511,93005,65022,65886,48957,38419,81263,30364,61140,87270,22906,39893,16927,14622,36520,18902,62738,24448,64909,63409,73003,65188,53832,18894,43975,96134,45324,41820,56024,30840,78413,12247,72117,23080,63762,19546,86627,83444,74706,18509,64757,44461,40502,37806,27969,19869,91368,92086,94774,59858,78667,42251,36934,62953,20146,20026,72589,76294,75474,91488,52296,92173,44181,29485,23338,34015,50441,71383,75945,16456,57768,73659,16370,23996,48296,16086,60436,47179,19894,12036,50808,18874,80626,21385,50274,99805,95530,83721,63785,88441,38748,36186,19953,32606,91300,21063,59257,16384,65656,64946,42145,22584,58194,40199,36494,49080,43419,40915,53827,30210,75351,21722,36763,33400,85237,74445,58436,45830,27037,65188,11636,68050,75259,50585,86853,94778,58472,19899,11661,16715,10066,38258,45144,17860,17595,63698,75427,52218,75567,45559,87238,35678,15579,26148,29139,54130,57604,52083,39690,28041,44819,69543,69909,83059,69900,78515,86780,97162,31980,42983,15676,36948,54938,63221,24636,93565,39183,75525,97060,55552,53160,42073,18834,82122,54833,93947,20764,56635,81049,71290,56738,43199,47346,85123,97694,47947,70139,65906,38886,88194,30828,68716,62176,77079,76578,90908,13898,31562,29297,25681,61781,41358,18166,22895,57968,39962,12220,32560,33743,21193,77213,24318,57649,53494,32452,13348,22103,76435,23240,64080,79767,39230,26995,83787,36298,73154,66145,76343,32403,96147,15778,89751,69035,58675,29662,50076,21100,34781,65652,47334,83211,82557,70026,14456,23932,29836,35703,73022,17428,52029,99831,30212,92838,20100,44111,14711,22530,36281,81447,24994,74390,46589,20379,91548,52341,42124,87509,73037,44352,72035,29121,85795,89611,50304,72438,14821,77044,56138,13400,87254,62782,73480,72408,32695,86767,31387,72720,51057,22157,58419,22727,91713,15850,36336,60193,82147,86690,73350,79174,64859,69222,95204,22938,13087,40029,39878,70515,37830,69241,94071,80374,78370,75791,74468,12591,23363,60490,14606,74912,95288,43438,13084,20886,99332,69976,67611,25689,42838,23301,59628,53739,99776,60454,62235,33559,95266,36664,23524,69603,45181,74937,83882,79686,39480,65292,15123,43174,59426,31161,20420,20766,72772,49096,36437,18462,33891,31529,68715,29180,24883,75258,51896,47701,89559,47825,66078,15431,10259,99488,58464,94083,67445,57605,90403,24440,70211,16985,24833,14113,68136,27292,87617,78477,77262,21558,60850,33953,86128,69663,40093,41919,65753,46508,93611,91014,59508,75742,37475,65303,24867,76658,82941,69638,12662,44399,47479,58195,53154,98873,36573,57835,66864,43651,44780,38622,21243,36897,94171,70003,37936,89590,55586,88971,47833,74287,89132,84677,70016,39221,48141,58447,77177,56529,57665,77523,79621,51437,75698,87345,51784,55576,46771,69715,49150,63442,89484,89467,86481,61230,76840,41449,92821,41739,39896,90695,41737,92346,59683,21829,77407,39175,42902,80865,86752,63213,61260,78156,67689,86836,28432,92836,14968,22655,75364,71228,75929,93469,16492,58179,38985,89954,75666,41165,84652,12214,72768,64804,23881,80711,37056,79295,73260,18150,16945,10161,56418,90690,93858,95531,33120,65092,84277,66557,39211,70700,14926,29960,40712,36726,91285,59914,77894,34828,58571,73952,14486,49520,87750,75061,51478,95784,84902,21529,19552,90900,92563,48325,83144,51299,23224,76025,20943,70043,47860,44466,62519,56955,81323,24397,90394,63296,93655,53179,37363,67158,17581,99022,30822,46932,97913,85294,22550,64529,72470,46968,94992,26129,75804,18645,30165,45542,61892,43434,15358,95787,84576,25483,34891,87531,72349,76267,35723,68915,60255,30187,76227,47516,80498,41383,16014,61118,49658,15816,81836,50206,81807,33542,27505,65303,43910,59616,78927,75098,64295,11176,26394,24898,36274,34466,99495,99468,89259,65190,75129,28825,89820,51498,51915,11193,46942,82790,90967,78491,28635,44624,67768,87397,46943,65535,35019,86876,32810,78567,77426,76078,26951,58349,29639,49697,72341,14021,95628,69892,24783,41690,60153,98668,25585,91654,64164,90099,51803,80227,68183,72608,63098,54295,21087,58264,27744,93879,20516,16163,31520,32810,41971,98905,40892,63052,11140,54926,99774,60907,23383,90966,57947,89300,82342,86048,10038,19685,12941,13621,46307,85001,45638,40580,43843,33339,54065,93954,36153,46362,52817,69815,57591,27040,35730,25862,84744,63391,86810,95626,51818,53571,95674,92457,84894,63844,33974,65141,53385,92887,69710,64887,79388,97266,53246,40203,54367,98112,33160,44641,45354,82381,15493,12304,98939,72473,29041,25629,67294,53633,14682,11455,81057,68228,73032,71958,63656,42095,22845,26159,79615,80351,25962,91557,15006,44055,41114,29532,62053,38463,80279,42499,18980,86889,54689,98387,50932,64327,99307,76161,64497,48618,47202,68515,62762,20640,74087,38811,33988,83081,73451,29407,51366,10288,61382,51351,25009,10775,12706,26388,18216,15962,82226,36745,78496,82925,84230,69267,91402,65058,17727,86526,10776,79349,65574,58556,99994,74455,72709,18130,56119,11242,77377,85391,60926,41676,19899,63408,59720,93887,11067,47592,50787,21080,86117,25089,59851,50712,63496,20955,48092,43782,66461,28469,44642,44128,81375,47708,73738,95484,22690,56230,62756,82000,33517,76947,15941,24468,32985,37900,26141,82280,58589,26090,84284,32228,88807,47062,86370,28654,52419,93930,73670,18411,47491,36915,40677,15041,26788,11549,83546,72637,75172,52377,83411,19743,64349,15061,86262,57931,40375,11106,32039,95210,90651,31622,68113,51439,13084,82395,39440,17176,81132,65421,92284,62980,69058,33512,25593,86607,67396,39767,23674,22929,92876,62165,64699,63738,65503,23711,49683,42837,50681,87990,21251,77512,46642,14518,34286,67335,81766,43955,27216,36087,59055,44106,49334,28339,49147,10728,41890,51437,86193,79954,43547,84408,70755,56157,37370,94972,86988,13220,11774,81466,36668,49074,76252,28346,83520,69089,62083,91338,72225,62814,52895,35583,15083,84641,39403,86330,87647,44338,69554,25479,43496,71377,49460,97693,28456,21154,60537,62449,43667,49192,75745,76501,97478,24107,81059,94641,55622,81276,59407,70557,97870,37648,15153,46137,86044,72121,80289,16189,39942,15120,70518,59183,67998,31000,43310,61665,88157,90207,89773,99052,22053,63026,98778,83513,41101,93443,16597,60409,55552,23266,22982,14861,57935,72504,29995,12108,64062,62945,51906,67428,15318,55573,25457,18288,18962,68779,63137,21742,18024,26699,10007,36205,60667,69129,17828,92512,14392,38165,92312,24479,21367,18744,81665,53298,67894,82897,57045,49049,95194,29439,23555,80988,74635,25647,55667,47758,60056,62220,79932,39716,41548,46207,15082,41575,11379,38710,25438,41994,67212,75415,26842,77267,75878,35648,46907,90010,14277,80027,54486,31290,44651,64186,24446,61446,50652,58317,47428,33686,59142,81874,39088,27168,49400,86747,19759,60044,30974,58003,81838,44806,69559,17819,12566,93506,26468,34519,14624,74768,41356,43638,95314,51850,81219,89131,54945,41187,27711,18856,43492,56343,60093,62732,14624,43629,58818,63650,69939,16539,75293,65321,54022,30752,19229,73101,98046,74743,16514,65482,13971,63182,95281,62506,74432,14360,12714,27724,91850,29277,29116,65290,31534,97391,60392,11899,58013,51473,29470,71224,29545,25198,62103,29409,22003,36616,31265,47057,58507,26474,76734,95543,46243,99941,76645,13845,95273,32046,46658,58599,34717,76254,58501,19577,52208,98558,50103,10273,36896,34213,10716,17782,18428,10096,27381,71079,58657,30784,40403,57659,88198,91529,28118,70609,54310,15173,46604,71968,34040,88757,44636,63031,91567,74260,98221,77950,24916,69612,45037,21649,31147,81069,15843,53464,90008,98568,81170,24244,14891,27729,57891,72694,10596,80450,73541,82580,48459,62314,99772,76683,12523,92794,62071,30998,36668,73334,72688,54194,84162,86356,51100,79601,72070,84874,23084,55198,30248,41860,25261,69967,12756,65002,75184,64679,40193,61842,84365,32765,72708,10539,27470,88359,45325,20529,31582,16041,48467,99047,10945,69372,75268,75552,64123,26687,97490,81368,60042,23210,18924,44940,74327,65736,79125,54471,89618,12492,71848,90635,53202,31567,99539,36057,65985,72142,88389,14048,79299,50428,74698,61044,52456,25084,22467,24863,68764,58051,11902,17314,49041,36605,43973,75773,13630,70873,73442,40611,94997,65057,70596,63210,85207,32378,92168,58358,44866,44405,43696,16605,90498,30973,98511,56084,87794,72447,40999,15587,18739,64134,75503,29564,24437,75808,75762,14349,93345,59798,19798,80724,68526,93285,44104,30893,26105,47305,85780,69734,58562,28102,29652,98584,78662,75546,77972,37377,56138,94184,52885,96674,39009,42583,77004,13626,63909,95537,81587,95293,46953,77218,15448,29383,59737,11467,77078,40624,80022,50394,19780,56005,46622,86514,27546,42136,25043,47400,37941,50369,37953,81324,26731,25025,14543,41958,34110,28404,49835,28531,63724,40588,68390,56251,47726,35032,72769,91831,20273,27574,83250,54022,93285,31709,22123,58224,49366,35945,30018,55131,31389,80747,92277,82774,20832,82403,13794,59724,43991,71071,77884,41244,75120,34949,26178,27713,62393,20559,16076,78159,73713,29565,22935,39887,81216,52526,54776,33812,31089,67236,78002,73868,39098,93329,91479,68093,86179,43144,38291,60511,37559,25213,27278,50569,31731,62840,40108,96126,21139,47555,49646,96027,29559,68189,43014,14038,95702,27912,27882,43004,53899,29622,13428,32532,48391,82473,97746,58288,97300,57154,74842,27862,79778,35643,69743,62431,13403,23027,63426,24883,42995,81257,10158,86572,21141,61608,37381,13603,29654,93617,27283,28474,11462,53954,73760,87228,46660,83307,95076,67005,80586,90610,97049,27118,43070,40330,21752,38953,21265,98646,65363,79236,86741,74108,18111,84868,60805,40466,83840,34842,63851,31686,91339,64000,32865,56902,67900,44149,62225,24414,12114,56406,89949,64239,89482,58352,75028,61967,70025,37834,30342,85825,69236,57319,91345,40157,63786,52203,37676,10040,41626,89052,99759,40813,40549,39145,22867,24471,61778,44392,56223,47665,24415,28320,98331,17674,50754,39111,24697,86739,89576,17124,87138,77351,21379,15116,66000,73736,41461,59764,47439,98463,12455,73267,50233,76384,68926,61093,56282,25204,43273,85703,91517,74272,87196,28638,64946,25620,70714,33013,91935,12921,70678,14118,72926,21833,87395,58704,58747,41923,17795,82694,85783,70891,74767,26373,47565,34640,32715,38807,20686,72741,40908,33430,29711,76651,38879,82176,40449,49274,20740,39869,15659,70941,91594,95707,42570,35615,56641,40053,21987,23938,48023,14477,15444,63460,70449,61623,58245,73559,83605,44589,65103,74985,35175,18242,78030,89046,83826,12755,88469,85256,43224,26762,40963,66894,78360,18959,25512,66896,31386,98035,14121,28667,41291,58241,73901,98311,49538,95007,96329,44737,73324,32321,76319,94966,20430,37860,58996,45910,52911,73916,23801,74996,36849,63263,96604,41673,86662,25459,32921,41637,18128,90024,38488,85559,21970,14118,75606,54799,87000,55006,66354,60546,65540,51389,18911,64770,42200,40988,96307,53693,28238,57779,23786,85181,82452,48414,75681,56909,90269,95804,80378,40721,11280,77921,66649,77802,25434,45080,33004,96725,85784,93610,26616,72268,73887,63905,29658,40791,93411,82000,21654,71893,29697,15045,11759,19113,20604,41526,16160,44900,45056,44975,93388,16316,27176,69088,54753,92206,96342,10245,24002,27651,88789,53706,52552,95037,23079,61123,28564,88546,49924,97362,86367,46127,48063,32330,43520,58680,43615,93650,85263,42786,17458,41333,29602,69612,72887,81916,77425,26646,22868,74136,67740,76680,34307,94805,81692,73091,24676,79406,88399,34509,76296,69883,22259,14879,38312,23171,55032,26192,38582,56471,36237,10906,34926,32177,61258,71460,63256,13749,34779,25057,75112,67112,49881,82963,62624,37226,35876,47594,61021,64187,18065,17219,22041,10197,25604,18709,91039,98441,31783,54150,74111,75340,40104,62297,96043,64042,28505,61190,99548,68287,55869,10583,95443,17958,61892,66757,66984,56667,73957,11450,91219,71254,53526,34187,92386,63393,62118,26082,79855,28312,68685,15119,62444,84703,22389,76593,94091,68556,58174,44845,75705,60194,32935,36376,71335,84215,60605,13246,45201,32275,14815,63960,21429,82845,86877,44777,58141,31032,18742,10891,41534,79644,66877,25881,45134,55424,33588,50412,80414,20284,96616,60746,52934,47080,82981,91160,27350,73287,52492,27153,43897,74196,56728,35049,59008,33144,40787,20947,49043,38959,63897,91798,50097,65476,53134,23971,90359,69242,83708,24621,45684,96906,82470,58127,14022,56280,56627,39978,84755,57865,14549,30804,10938,38915,38514,46563,17112,40794,41093,97223,92330,40422,53365,91657,89264,18211,98800,57325,52142,92218,43538,24404,97687,19335,23057,46052,64750,79405,79389,77164,77990,60995,11487,31368,40001,77017,80952,32998,12716,89653,90733,58023,60573,30056,51379,31867,60944,49507,45624,83724,75422,37568,90460,63453,69325,20707,87708,36583,24244,23651,78874,98158,86637,27076,94654,47313,64271,45347,50489,36699,41968,77945,39915,78579,10298,52768,88008,33222,15427,60038,12429,92490,24285,55245,27315,15649,95712,82797,37095,14067,81279,66823,14846,40122,88794,14406,44548,79659,16853,59181,64880,31792,79850,46837,48592,99322,39633,20554,61238,26364,38117,87034,53413,50319,64973,50733,40008,37592,53715,45091,11918,80371,14344,34370,48421,69149,10659,29771,41146,11095,76186,22208,71003,26195,19061,62615,62030,10930,56922,47188,78526,39937,64533,18845,24938,25218,39661,88060,31665,94120,25935,30277,28742,38729,52606,84405,42003,73081,23677,82659,61431,77064,88306,43695,38752,91112,41451,86127,26409,32442,77129,78408,61573,70384,96762,80468,68578,14862,21416,77507,64788,77675,24770,46656,36255,80340,46232,59258,92388,83630,55272,64770,60244,24525,45213,30148,67765,76422,69300,86729,66200,97258,62245,70333,53688,98463,93953,34433,70565,11997,16114,86467,18968,18482,96602,50234,19417,87064,97753,67202,93872,53524,54183,68575,94325,71746,79638,25224,62118,78245,73717,38376,12296,52301,44388,22502,47328,98745,81917,95160,63597,64589,51879,70785,78481,16868,24836,91015,48900,52945,99473,24169,88785,17168,97677,79048,42198,70391,35783,13592,20591,82330,58046,25252,90013,27867,32566,40818,47393,72770,34517,16314,78537,32117,16221,87165,66848,70846,34724,78492,18775,47377,47526,25537,11390,39872,11828,96749,79088,36216,70258,42951,38409,22204,51740,66870,78615,38152,85683,89027,73063,34492,78411,80211,97837,52182,95308,55802,22367,80374,28292,91392,55844,42600,53319,80998,81235,80545,35397,29786,82888,46534,51704,33864,11209,35632,62679,83649,53249,46534,79622,19809,95279,76180,62501,71021,30384,92316,62631,55739,12181,46018,23371,78790,45196,32870,57945,22830,94694,96160,73470,31794,48345,78034,98927,89844,91972,41036,72634,68217,48450,88997,43632,29138,33477,33734,52097,68133,13299,64253,15240,32750,39876,55255,87379,40987,99123,26212,98874,93149,35026,10257,77766,75238,55879,44587,12470,11869,95733,51392,76634,48302,78150,93480,63980,23978,86588,36205,50447,15326,30725,20661,15745,55213,93548,70802,81753,80307,59558,42329,55436,21383,26529,39689,68892,61289,27345,96278,64113,69732,57813,86660,65281,47441,79646,65544,86461,33765,48724,16211,27160,47915,36365,93568,17917,65237,47014,17374,59482,56015,11913,97704,19744,52546,14844,37613,52740,55492,43182,48322,15258,52067,11220,28676,97456,57199,69185,28641,26318,38234,52415,58498,78016,61556,62701,55544,23058,78350,89072,74103,74951,82903,37061,43998,89515,73904,54215,71186,41901,52549,71436,40274,37361,88943,57543,79742,67688,58610,90544,28802,87037,51254,11286,54907,68345,40621,30206,99603,33321,49760,40062,48453,21709,19155,53092,58718,61580,31539,14647,88456,26356,44672,96225,25684,71227,20531,40236,74605,40589,91209,23781,30856,10026,12976,97722,66775,69480,13677,63450,25804,25304,88994,67295,36777,41792,21209,30581,60779,48184,17355,26943,81848,55908,55138,25514,57173,29915,48101,63257,16099,71051,42575,38176,68491,31423,69007,98981,44802,79241,25477,14039,12520,20211,28817,13040,55327,30878,59837,72412,34175,98732,87708,38713,42133,65871,41255,33882,52008,31040,97485,63807,76701,99841,56329,64585,76051,56160,46318,10632,61681,36979,14754,17408,46539,99978,83054,31087,78139,47095,59526,72073,42651,66215,47574,22342,23816,26057,24901,95713,78154,39654,68760,63418,50671,28511,60799,33015,32669,32689,90985,64269,21628,59203,98240,32811,19401,63578,62176,42225,65461,66041,64116,70487,10071,68478,82472,81651,20364,80871,62843,71706,95810,34782,63579,54348,94734,42444,84284,63085,95092,52200,45181,43224,91808,54081,68827,71440,34271,50199,50172,58151,18560,17896,31921,66904,77027,77030,52756,39611,54557,69984,93977,92010,41616,93344,76390,60588,17500,12165,63569,82993,68887,16802,79710,69871,47460,79189,72191,11442,82434,50196,68474,55263,84104,38031,53351,79377,31447,45179,54944,21635,71728,37991,98159,88846,86701,57872,56854,76668,77151,34083,10330,49370,68866,46718,58136,31246,57510,66628,61323,25666,84306,74791,44907,57743,80215,48784,46248,98191,29602,54093,51061,47842,27831,64159,37823,75474,96821,20196,69307,41321,16691,11871,25728,84901,79399,75145,64120,68480,76933,34952,12456,64589,35038,74449,11773,42181,79550,18625,71711,88454,54914,81393,79153,21045,66142,22404,16856,28056,35896,22758,44386,70516,78466,47907,81392,82299,38520,77109,68100,84823,11102,92671,88809,34535,38546,24677,84628,84870,61707,73037,44554,69252,45950,50672,41582,69905,25272,96563,65723,38201,78619,53169,69315,97203,29909,93893,66292,90654,14285,89276,48224,83599,86454,47785,20807,49531,90970,33389,15567,82605,77081,41081,48802,87540,56173,69481,25547,84674,63194,63029,42079,47483,22123,19159,30432,47458,87063,81902,44741,86742,61751,12426,42197,92380,39335,66204,98285,67237,82061,11536,17080,17691,90176,89907,60107,51234,50002,19842,83798,78353,54751,62564,78763,78212,75175,99097,44535,65912,92604,44809,36936,50366,34223,94084,92670,79932,71724,52556,29189,33846,63879,54533,49024,43701,95198,78902,85667,12806,74790,14831,54157,93579,61810,45829,49635,36381,24099,21653,37374,12768,55797,68204,57234,21490,48151,54370,56662,78907,83283,63623,84697,85672,46032,89767,76538,61241,77774,26966,78612,30907,61462,45705,40115,70211,49075,13644,36714,22955,27178,15704,78986,91121,15813,20914,34900,41524,83597,36682,92823,65858,95390,68859,14044,78595,84496,30148,89937,89008,48418,99942,35534,27365,73256,18381,30715,23090,56619,56782,20018,16460,25915,49577,63962,60819,79389,82014,68700,94947,47931,21331,55872,20742,85120,17285,32309,85189,73422,31354,72857,27004,52387,23268,93968,99203,81372,52831,88282,63546,63110,48562,60010,10583,77488,44075,97548,10198,97404,62341,75236,50411,22109,46251,63258,63768,89143,22785,15999,13786,46409,16022,35766,16691,51723,94976,52854,55193,26696,22297,24778,82326,92829,56816,96056,68552,86817,45234,42694,45622,69069,72159,30793,16660,22734,81670,95188,11938,65342,26925,82243,88412,24348,30002,80176,41028,91257,62977,90095,28439,75309,93581,36676,11755,51421,97776,62658,91327,93677,40114,93326,77467,58251,70509,28932,79238,77979,36309,29070,19278,29050,77983,14380,72457,96807,37229,17663,71497,41105,65882,97189,25391,97284,12747,92283,52262,82405,27892,31746,51474,41867,10821,57705,22185,97396,95252,67650,20724,25121,72953,44769,14010,58961,98679,69299,92393,12631,69218,75183,36729,78659,39439,70135,12333,34247,90112,14587,57241,63120,47473,80933,47776,21973,25452,49885,99622,14450,87386,51419,95656,70110,93881,55879,16004,80807,52697,75524,82797,15077,66639,67196,24223,32082,26698,80552,18417,67541,55896,90757,18630,93624,53621,40802,77390,66458,43911,91949,85301,95336,29059,13950,13150,32867,65959,33656,26054,32209,24749,47792,56590,13799,52487,34240,61114,35610,95665,30497,81400,93466,27976,35410,92018,51786,61340,79033,99912,95499,35222,26460,63713,34761,71254,17454,34493,80205,29226,80913,63068,83825,37249,69340,39776,82053,79638,11877,89708,94622,46894,54926,16277,72736,87048,19792,56396,10445,95027,93823,16829,91069,83638,30306,27011,99264,77202,25013,89341,31834,69641,96315,38348,96149,66912,68873,46415,10725,53756,85522,97538,60105,72128,43795,63653,28440,17444,67968,38719,61140,88132,12567,23947,88209,48401,39932,48633,97951,61421,26079,86685,15148,62859,19992,68737,46449,64593,47945,95315,57172,46584,82889,44658,94492,67596,85491,77166,67660,39231,15194,24764,58129,63723,58858,60458,86926,71942,89658,52179,39797,73073,89726,52147,29876,95350,80203,18738,53087,82403,32189,55990,32372,15198,23800,44336,93882,78527,89386,10245,46045,89094,41021,45209,44143,82625,55536,94360,37348,27345,25779,27739,74628,94389,86507,92049,27463,81802,45482,35180,14181,35502,88935,45154,71281,60406,38467,48095,54635,68644,59696,51779,79755,26002,39432,73129,79078,66631,38095,74864,98919,63479,16342,53971,81159,64350,84946,25456,71178,79760,69814,21220,37057,80747,82458,77501,97021,88201,73989,10584,46367,65940,41056,53017,66462,33896,15622,20165,14251,24610,78286,75828,13185,30364,57849,44565,35419,49487,86950,70281,39690,56067,44810,79495,21865,64446,37102,20593,35847,17070,86201,13473,47664,28318,60603,85291,29465,25676,14121,11007,26833,55189,16839,18034,52601,64599,90942,67207,86151,72796,41935,70133,85870,66331,43372,32774,43730,96527,50817,87255,39763,65620,59821,33858,29654,39154,76604,35026,12450,46051,69903,98165,20449,93695,90917,37527,18455,27161,45251,67702,13346,50563,32219,52690,24325,93027,25935,86859,44915,79433,70833,78939,39008,87066,41854,45752,44103,54855,40379,85093,34421,58726,10295,84790,69660,57817,84093,45150,99997,20191,18462,27087,75395,10497,14257,83139,87161,62051,58875,34666,47540,58883,76976,47803,26981,43886,10926,89706,43402,36661,88123,50160,22408,90605,75894,85448,60014,79620,53192,23345,66326,47240,67337,28629,49040,82652,70880,83905,16686,70515,83942,55732,76401,77406,39009,32273,58091,87375,26408,66075,47742,14302,62980,27354,35671,54925,70925,89727,11649,64226,79351,73564,93069,89702,29856,28672,93490,15501,24085,35763,13032,80881,68292,49243,72329,32174,34825,57782,96463,60894,14516,84545,22418,23694,28195,21561,70881,12011,94077,62426,99233,84914,39442,36460,32808,50360,88770,96924,63932,22760,54358,39669,55835,54797,55336,45366,41016,43907,79294,99183,46427,11238,23413,94511,54251,53516,72699,99055,33448,74221,44816,53330,50502,56304,78991,70838,55221,94594,46562,91224,75257,41568,25678,63161,40108,32882,76911,27401,13090,24674,98057,56696,41125,84166,50011,14826,43782,94315,51451,65220,22972,51277,81975,66260,39042,13504,18491,82013,53574,63837,78405,64693,51152,55003,17017,69282,57519,53685,50602,85416,85743,82282,21995,17131,42790,57630,91226,77192,88872,89571,74275,90490,62444,76674,36635,98115,38206,78897,77789,34598,34906,55312,35945,10846,49115,74795,32289,59696,72928,94866,64147,61851,10707,62426,69122,94089,84495,10487,56197,16598,29095,36460,96030,17695,79394,98559,90846,63636,25329,39817,60977,35460,23696,79521,29609,83800,29768,82390,32139,91532,46597,40177,17318,60908,25250,51635,51606,38815,62463,21770,66439,54209,72915,92104,34815,46313,81994,51901,53615,19272,59186,11994,50388,10561,27696,56915,14898,91624,88826,54671,81604,25482,40254,77026,40932,98938,50871,55604,73829,62339,76271,50725,37485,96118,47219,86445,19166,18337,74231,94541,12102,49300,81671,60772,61216,94671,23074,65564,88880,44383,43250,12349,32536,18107,41511,37002,84685,69971,69247,43169,77737,49756,30920,34273,92346,93177,27515,76214,26239,77194,60703,59726,90837,65094,17739,16781,27519,14512,36849,71992,24724,75038,56478,64367,38490,53973,86376,22861,47374,73001,65854,54138,11364,32194,81825,90903,54167,78718,55742,69187,13366,51806,51847,43917,63467,48543,45126,17549,56973,27343,16280,48062,14857,91576,60866,95933,96677,55080,22467,44018,85710,64260,33574,25828,15109,19266,21572,17381,31071,90067,98263,90481,74995,68666,63932,83952,21912,69561,30669,14930,27484,15590,29783,70664,27958,75854,49614,98049,36057,74908,80701,91266,70440,40826,72435,99844,72530,35027,31010,89188,89130,70637,50947,33055,67328,92021,72075,17509,25274,64467,78722,53135,55756,26322,80995,16054,34708,10661,21760,18153,69158,15684,38057,56874,84967,71172,44197,77387,98260,68635,17412,48401,53700,33172,99097,88530,53734,76207,62266,99520,81274,11699,48725,39754,33823,28675,31941,48912,38066,73126,43555,48554,33337,48499,45692,14643,82966,39924,43230,46971,77160,86308,84916,27810,73384,44938,22701,93221,30464,33432,69678,25624,53271,29789,84874,49860,22996,72975,85078,85682,68315,90209,92513,62066,24396,70489,68399,25829,26110,82374,56334,36147,20609,51653,10212,51061,33576,85660,83725,19984,39147,49301,30329,82001,53466,37525,54787,64756,90539,55213,79185,39467,45850,54016,35116,54563,27131,76948,89942,43549,53382,27997,90307,25256,46711,21325,82434,11295,14524,40100,29333,10618,16179,54746,47997,87610,70528,14876,50217,98300,24622,71963,80750,47364,51758,68569,97826,20117,34578,32260,22527,32907,93431,64446,29423,97949,66136,82464,98285,85888,95008,42569,51303,70885,15180,10823,60235,11763,67763,18473,85192,83907,89958,67624,86733,26666,32745,15853,59278,59666,28057,71543,79428,93503,20145,80850,58041,60219,48275,87243,21614,44809,25795,97571,59388,91930,76446,19415,31680,27158,60132,68903,46193,61395,80413,45583,50946,80080,36304,15951,44504,78449,11410,69149,67583,31569,86560,50458,28327,60376,52989,89761,98658,31142,72980,71152,48336,45812,39009,17856,86335,64644,35800,27862,53908,11792,91732,55632,34154,29391,23681,93655,34375,43161,32158,49992,51222,45524,40516,26274,70399,91536,82054,14980,53668,64000,29511,99945,32088,96326,56153,16966,20448,63074,62130,90095,98712,88751,21010,93984,82579,55437,75128,69720,22211,96141,89625,95441,60491,80537,22973,41933,98397,46385,66881,14374,47068,31708,65150,50179,85368,99347,10586,58238,12387,34739,16879,58292,27910,44869,26001,16773,86149,75796,24972,73983,91016,93673,25035,17362,78675,99218,40746,97882,24696,29473,68071,30682,23937,40508,68755,80324,77198,14641,94079,52185,57730,52065,20054,85379,76819,23260,71033,92879,81326,76917,41018,79736,68855,80875,49075,52052,96147,41372,80336,62549,16091,40344,60087,86545,56236,82157,65279,86669,45247,32655,24812,92353,52024,78092,54022,57122,88986,50222,38130,65544,67334,82157,61858,75613,27861,42098,58177,38723,16505,21826,85535,34269,72770,53754,67311,67192,99972,24773,62177,31041,34468,72273,11679,17469,22087,69015,85041,81246,52880,69253,42251,79708,62775,10938,55695,84286,70234,78385,23515,34563,86401,35541,60773,79028,15509,85596,50546,23737,42733,64695,85649,76757,88592,56717,20718,21769,61522,95507,81547,13305,23457,62202,21450,11299,19287,86464,52168,37189,44170,33768,42289,53675,94100,86336,28988,57265,77684,88662,15195,38098,87044,24675,33077,11894,19899,70748,10158,51222,35637,48706,41571,71424,43245,53280,51708,78590,67265,88239,18065,28692,56349,30727,90135,54837,45271,51264,18105,28687,15632,10874,35414,84281,34433,29797,52477,50720,42266,56958,57357,53672,96650,40288,37540,72210,22421,77300,65995,17600,63674,83934,84934,21377,99780,85487,54116,46529,76801,27874,78049,24315,92489,89377,47620,27175,92455,97236,17100,72017,44680,61655,38016,71509,95905,69626,62452,76548,74097,31889,49304,37366,36882,83484,84571,57263,66300,54254,54936,20773,91280,68718,49201,22641,58084,63596,53324,43401,17718,41744,54384,23068,19481,36003,38623,87054,63291,59772,32141,64918,79987,22484,26527,78998,99906,91624,98015,88009,56081,94138,16506,54523,49882,90007,46186,93516,10133,12856,48229,37868,67883,70448,72995,29389,83821,95543,93974,92454,20877,35455,93727,82624,44388,40367,97756,88818,67185,90016,37787,34039,44509,22084,53091,22017,34562,14826,43768,42220,39068,69529,81525,70780,18036,60548,76805,66342,32439,26918,53951,48813,54577,23972,30536,68440,31559,17876,91417,69865,80700,49716,12875,13505,33255,38258,55123,44231,74003,43840,11624,21520,18911,28986,77048,16045,49145,43018,67874,34326,54819,19586,88503,52238,82807,34573,34262,18493,23282,29937,12025,60977,97652,12971,19858,92860,65515,24145,60294,31199,56854,70907,32356,56252,35719,37903,67540,61745,42947,89921,12394,57368,14404,22665,74824,36142,23079,86908,46643,41302,33544,55315,31436,85515,71897,56344,95886,47890,57297,26649,42986,57381,73361,32442,44113,79162,36343,50249,42052,97667,64161,57285,79456,94206,90293,10161,15352,11283,18640,71289,48216,90230,14341,48627,80096,31462,52258,90930,96903,83162,98882,28202,32050,93740,16584,65987,47220,83936,63450,95312,77689,49344,34877,36585,40517,33373,44454,63740,47801,51211,52796,89568,23882,65325,64584,48048,69227,91505,49535,32164,39401,13139,65666,46750,25495,81981,95463,53745,90273,40824,75406,79916,58288,67380,76812,34288,39807,36673,65251,19061,87479,59007,50400,41602,99044,63605,32582,36974,71682,47524,45688,43115,39593,40614,68461,52703,72784,29783,85153,62757,18716,13313,88677,35123,52877,50223,23746,35143,16660,95795,79609,56819,38246,98608,87368,57727,78594,73995,46290,98221,35698,96105,77207,42714,51487,91351,38129,55489,87939,47441,15890,82941,87744,27680,75732,22230,32903,43241,89899,37419,71232,11984,84218,13621,60409,72960,70655,58836,28511,92869,94887,29759,23815,70837,48381,41191,33951,50559,33214,45638,10582,39059,10747,98336,91346,10129,13985,51583,43563,87556,91121,72423,75169,25989,91744,68813,89955,27920,94241,17996,40243,74784,29422,32441,30005,59017,66384,21037,60836,62890,99077,55024,89979,19852,50046,67997,92605,73439,59877,43596,73553,40804,35836,79851,32993,93365,88647,66711,61471,32670,48798,51660,88844,37839,83979,37730,78673,10404,83469,83530,26486,41264,54032,86849,16054,61388,40975,53065,70546,12561,73410,24003,40623,77104,21836,23860,59403,68054,95673,92820,61316,28285,60620,81890,81506,80576,14500,95592,20889,91792,75940,24815,27909,46700,74314,66269,59612,87466,68468,59955,37806,75209,86678,16044,95631,62978,61570,84240,59974,98950,17076,49398,93697,93196,92296,18437,48860,69486,60829,23035,41371,46843,46034,48913,70259,19135,95245,74970,96856,19640,85434,94245,15156,12777,34279,19200,32218,72094,63872,13862,17917,27275,83649,54584,56856,78246,97704,12760,67074,63798,89282,32555,74509,63362,83146,18651,49174,86794,86868,50085,87261,79334,97235,22416,46296,47550,61084,19453,41999,35592,77289,55369,69787,93561,41148,41152,89238,44543,88852,95733,25122,79660,26774,83133,41431,28450,82183,60730,71190,12270,62672,32313,37602,53399,34238,85772,53078,67425,29934,29394,94192,93828,49879,15871,66948,34685,19514,78244,79211,49775,51341,30958,60877,53696,28793,79610,43353,52511,69952,88610,79380,36774,41829,89110,62044,49423,65577,41357,93456,38131,22666,69049,63799,95371,77995,44022,20071,82073,81968,33238,35445,77813,30571,53892,61292,85961,27126,49103,79907,51518,56955,88897,94001,13246,70971,78319,76660,97116,81281,22578,88888,22076,74037,88597,98201,70486,82802,11990,44605,19069,77109,92622,14479,99311,29569,87325,20094,48032,97049,12798,30576,74541,85645,40009,14453,46893,16824,60973,74522,15599,46235,82209,61619,92711,79079,83775,96835,63214,25736,27873,17335,45240,37203,10848,85156,39751,47238,83262,13667,83493,56115,52785,38519,88020,64946,33408,59463,68112,17983,22206,51304,81544,88943,96789,42426,66724,63880,75305,96981,67299,86451,22011,18483,54884,37564,40392,46686,13000,19964,22867,75513,81101,95423,50973,63465,43157,18460,46915,50388,25011,94634,23064,17288,39653,91109,36108,21181,78256,10290,34478,10552,52192,63911,73869,23859,17161,16004,82436,74784,23954,55547,53432,70695,19297,32519,72170,97794,18986,13852,88422,39781,54318,28973,79042,13482,64563,22157,59298,78091,40337,13046,14033,42328,17445,35285,32344,43018,23389,96981,99426,43462,24955,39034,55015,70960,63857,39231,13777,77493,81467,84328,94427,52236,40261,44990,54256,90863,25181,79435,27267,30638,90481,10552,41126,77712,91147,12614,86727,49503,72766,19306,91832,11995,44639,54150,43169,90991,95330,78032,81452,95601,45457,51249,99819,19635,22509,95110,30943,51294,94393,87636,18719,81271,53763,81936,78002,58721,98381,56883,89781,47215,70244,37480,41905,46882,97985,50305,23713,89199,85625,21119,26164,32929,27161,34803,58706,88759,76529,21387,77276,49284,27074,63313,89008,25179,25117,26351,32481,20846,40036,93209,62078,28225,10517,18587,15554,52933,89263,43580,75522,33102,69841,22907,43839,28468,17021,50467,77116,86950,74925,21817,91299,45944,62720,68758,85126,88091,19580,77353,64210,19876,51009,96359,42948,39730,19543,88902,48976,98155,76877,65590,85795,43044,51935,64885,70521,82614,68048,14648,89872,29246,59089,83288,97017,94734,47686,86956,11772,40798,38118,78318,81236,48268,95230,48516,24529,56869,11827,29791,92481,94150,54738,89879,38315,46240,84063,63840,32433,93770,91644,27982,83019,29676,38971,19775,13803,69637,99755,13979,67333,62479,91766,94861,37569,54916,10890,36586,77357,87992,42497,26246,21248,69033,73408,65158,92154,94595,83242,15993,49811,13452,56126,86334,30362,36880,37281,54802,41075,17452,64514,26210,62926,64712,26602,86993,69502,14139,89454,67975,51588,19937,56680,68113,92889,98292,10669,52136,93928,79726,30540,53302,47329,77363,12990,47318,49414,46263,44741,24697,15302,50127,17978,49812,58289,63825,10520,21055,52331,46319,56717,80355,71916,96953,24824,64358,27596,18555,23710,46490,62452,68397,19573,30772,95512,38470,73904,50695,84248,50877,92149,20472,97244,15426,30808,50644,43983,51487,34748,86302,81623,91685,34521,47869,43022,72927,65017,99949,85594,83357,90497,75246,93530,15824,55218,46837,45903,79441,40323,49635,87522,48044,68397,27185,47517,80218,26886,97525,31297,21683,23623,87152,41438,20306,59125,53963,91747,93740,88944,80328,18428,67828,76784,65252,34837,61911,59228,25706,34536,86319,81294,55280,53052,23682,74194,86398,58279,50351,22852,24617,22577,59823,97757,80689,64155,21306,75927,15019,68748,84316,38868,30180,99108,38587,74574,13566,97987,13853,52083,79692,25666,52174,45164,44883,22992,82275,40862,11759,75613,22524,52444,36489,37467,88984,62965,61423,83789,55543,28528,61143,84924,64741,24997,28133,56739,17640,71209,62675,29282,48048,66288,48222,19949,32910,43201,23514,63403,58096,53450,13984,25802,57226,23540,75938,46086,37869,13956,72516,78353,67078,82416,90004,61876,80872,42548,72470,37765,74069,79265,83135,94528,36539,23328,18220,47236,76555,57013,66168,82747,15664,14366,45757,86895,18756,24432,16241,86743,27077,90849,65018,11695,57573,37678,37876,87965,60903,62224,56836,94928,26908,29716,30002,16729,27854,31029,19807,73492,28735,59536,11542,50131,81338,64102,95681,62606,61047,98837,76896,90646,27213,29423,19503,75286,76656,80599,94227,11403,45307,64254,13039,80473,21963,40820,76458,92225,17968,22814,31804,40114,14359,68334,79820,62311,57971,58667,18607,21956,53841,88844,47314,85950,48686,38223,60343,68050,68834,60116,18133,24452,78285,97255,78630,97447,17438,23004,20483,93093,49421,16522,12650,87418,28236,91430,15458,26021,98914,35884,37029,84723,31025,14226,80148,24817,16162,24798,26488,34561,57468,68941,16969,55527,91015,27915,72753,64640,86097,49230,22012,84905,57185,29509,95284,47366,10837,32072,79476,45683,75692,24413,18825,72881,80359,20880,96113,74465,62666,17845,14571,44717,26072,90658,85693,54751,61415,19970,22190,17781,94939,91769,72975,53341,36268,93206,31941,62182,36135,40937,59429,15896,59517,26496,53218,21633,98296,99514,24394,91186,27182,96267,41490,26537,11465,65528,76038,95168,82672,99010,90814,90861,78232,14811,86743,65284,42909,49442,12354,78599,67865,68422,91354,59253,65417,50657,56393,99608,74872,75864,84928,77548,28993,50726,66442,40251,62548,98774,74823,53972,84550,47778,22772,50276,85100,29918,85309,91173,61797,94433,82695,44283,52858,95613,33552,76271,54856,44710,99730,14704,16156,32764,95210,45660,49232,93796,57007,23323,92785,10741,30993,66051,22766,81057,81531,30056,20826,44266,30259,96613,36948,49398,21071,63404,95367,65516,40866,58224,19094,44650,54590,17428,37596,65500,98121,27542,20458,78224,86740,96418,90093,39826,88793,59230,36809,27560,64040,57405,60206,37127,70611,54868,38546,76910,84939,92784,80674,97888,28079,98767,15576,93154,59911,38297,32765,55531,13691,95707,95236,68192,26881,16786,81080,65386,86282,36074,50712,67913,57817,67625,88472,17343,57931,23687,72969,51113,47069,34401,51524,78371,62784,40754,13683,10674,47987,78350,86330,69213,73021,32980,27011,24752,64315,23935,60186,27078,67666,85012,80652,15924,39557,86151,84590,41288,88727,44781,92075,32141,68526,46692,74575,32866,80730,47966,92660,34841,73843,19628,84347,99305,66121,80156,70192,11743,18058,67864,17614,48576,60338,39432,24761,53630,53964,76714,82133,57434,73745,90972,57709,16017,68512,83005,49837,44753,68558,39055,35044,89877,38453,59538,41092,19067,18649,65491,57979,78353,80420,34788,92780,47172,67279,61253,74812,92888,70282,59900,66058,86718,65544,90498,96862,43500,58994,57034,50215,48435,96348,96606,27026,54220,47889,60444,16771,37947,96941,24917,52194,22864,68607,25251,59836,75747,53864,51230,84057,25808,18784,98378,95825,25770,87623,90497,31860,27302,60419,60227,63645,97366,74143,96497,58266,67827,98540,30250,56593,19952,26187,85572,24657,63344,21546,47481,50647,28870,17355,41071,99152,51795,29800,66318,37970,51433,73061,85373,11786,13269,48635,79800,25753,71493,33088,49525,62184,43638,77378,55706,52126,67684,25169,87025,11849,64351,21378,10000,49204,86627,89917,21779,18017,55072,20942,61533,21733,86826,99290,40016,86268,97324,34153,49458,43763,91622,47017,69970,49677,52021,35567,32674,91979,26475,91802,72639,26513,89513,18768,19949,56770,10976,28191,18579,64611,87556,92591,22864,93171,60685,94942,99468,97809,34446,15359,53624,82980,38629,91740,68489,29507,72965,32362,64007,10864,34984,81386,86492,61957,17790,47958,83378,32751,78984,11260,41661,99885,46406,59117,82657,78172,12146,83016,88458,40015,73348,20806,28729,16093,10695,88616,37805,40407,16193,27504,79995,17671,61052,10363,15573,86109,11725,79567,57025,39077,40318,69256,24445,19493,36565,91311,94697,58346,13980,95126,82742,49382,49319,20170,96534,59665,93437,82421,17194,61443,99503,23025,16856,16703,25243,97064,22885,39673,60297,39339,15887,30519,95945,13190,65091,12120,48822,79922,18561,62843,84223,79354,91739,36776,86059,68574,31550,55162,70317,56288,15166,32302,66079,61769,29326,33075,87861,83402,38458,50987,99940,11908,64572,56784,71540,19437,38545,21492,56679,39625,15618,99084,63213,73820,15591,93541,48865,44592,33223,72173,86398,48222,83235,47630,44045,60081,94564,48102,31986,80552,67398,65085,46735,91290,63000,65148,23224,94177,87098,91168,85292,40815,55956,89052,64777,97413,87159,87878,31613,43360,46386,20259,62330,97453,81289,92203,68025,94885,37733,78264,78102,43998,27764,99399,29549,33381,12493,65471,97275,53161,10768,49237,97515,42340,53155,36940,77277,65279,87023,54549,71845,83320,58498,75680,98736,20215,83638,88981,83125,14818,65375,28795,12585,44051,95929,16049,92425,45805,20043,72215,35275,38752,53155,99885,43716,77693,86020,42551,47438,57702,98492,83572,41134,71268,55109,78013,97976,89615,21189,77137,53674,55241,54379,88422,88447,23428,37861,52620,74656,60032,88850,59681,16390,20995,37480,56857,60815,52309,96443,27209,87958,64830,93770,92745,14683,61162,65099,78500,30843,99317,17057,59128,65600,99829,15916,60146,51800,91194,92002,63516,60045,92116,54577,35948,91974,22529,58428,98794,42094,57008,46820,39119,76515,65150,98367,72908,55863,18119,11251,55921,29815,30357,14488,89928,19482,69759,46518,63716,54248,18969,28233,36957,76707,44048,14529,36542,71135,39362,88627,72931,34511,18474,68679,25030,24001,30456,34022,35311,17338,43156,52021,75384,29357,75051,76031,20675,50654,19246,30765,30651,71351,75824,79873,43623,23204,71435,80014,97868,20273,77347,97124,78704,25086,52509,52240,87806,94989,12047,21499,20559,54646,39934,36050,28935,14365,12203,52719,42972,42981,94924,10741,75964,19506,96305,14020,30954,12989,31238,86369,93981,45043,87124,87720,81090,21444,41870,31868,20803,93172,33643,96756,98239,82464,94352,80625,39188,65201,34353,50659,62828,31948,80394,91007,77085,55202,24658,36561,56822,31090,63279,51547,87408,24938,58384,72560,92105,72672,24708,88566,29091,79720,86729,21108,18259,68546,91651,60082,54061,17724,73950,93663,45549,10558,69643,62786,84055,19485,12968,33265,70543,63872,14053,90565,50130,96772,73482,76429,21236,75054,64995,96734,21825,19657,42278,90020,12555,16785,80251,98486,69235,87961,82886,42498,92096,28519,53726,85733,82274,75381,72175,70247,25522,81626,56430,34731,43832,45501,95912,37049,16311,59093,97514,39267,26514,40103,51313,18617,90577,28032,70697,49410,84603,22519,66158,35825,99634,84199,60464,22320,85359,20961,85599,46265,37371,78402,22299,63714,43227,45630,12331,56189,69189,17717,72132,46010,20340,89470,72869,21053,83816,28975,59091,78269,93007,63555,21859,28056,24010,59792,54163,27463,88183,59295,43765,92741,20855,41511,89224,88574,91933,22180,86137,18242,42154,14591,81890,76732,94121,16049,83400,47439,35538,25359,48871,94565,87878,84550,65399,94216,74823,59114,46623,50670,20067,23683,55145,39288,15886,89532,74212,39752,11741,20515,25269,43844,77189,16046,19819,40093,52825,81262,55424,43334,26141,15489,82135,27454,50915,89172,56312,98961,85438,43208,88227,34537,42588,57210,74452,40405,61419,53255,19169,81300,33043,23013,65021,23422,81906,52772,18475,53469,47499,86844,73533,18570,50208,90246,46495,62477,17578,45720,24857,23021,17943,56270,23300,68083,32886,71543,21939,43197,90940,21750,52708,54364,31092,10391,70929,13199,41613,43165,34342,49534,32082,58202,34442,93474,78544,33264,10768,85697,19254,96422,35910,39512,91765,89385,86242,70743,87747,48204,25272,55796,74996,10045,12678,92648,19095,13446,67788,58412,79152,62836,31781,27411,19282,34605,85179,26512,96942,63770,29198,39551,54250,29473,24330,45168,80044,33368,95639,26701,11457,22526,90740,70875,94582,27349,20198,19331,44934,15736,97771,13664,33950,44888,14174,12185,12773,29029,93063,49227,45569,10320,58306,58817,22327,71224,67084,73965,25058,26115,20706,82500,12515,90635,60106,15162,44754,41078,17191,94007,14303,11791,16133,58057,57415,87241,86641,27052,30789,79075,19258,54153,97321,94032,81041,20462,77915,18336,44345,36117,68098,70732,71318,53416,40760,39516,48840,84764,97495,88460,68106,75737,16282,99101,97986,95258,67068,38616,70636,31849,42775,76388,24459,95499,67358,21038,38977,86467,45405,87431,58468,44986,54690,96835,39738,30115,75464,15612,43086,94943,72700,62560,84265,96911,53066,35577,39589,14920,74943,14154,57041,81233,48768,29206,97155,98945,85999,57401,59613,34988,89492,93492,50097,49448,79702,49170,12506,81989,31376,64889,73247,43507,11218,30835,34166,44214,60403,89471,44275,93289,60804,46650,42679,19383,29789,46278,97709,40753,40390,91218,35070,67977,38541,48925,63127,39479,41259,23921,44290,58928,13373,69724,19701,96334,67509,94860,59572,66215,29751,63627,52712,98287,23330,80796,64376,64585,60179,68332,78629,93950,84957,22174,27046,58178,98369,16205,13702,49873,67957,40182,58636,37347,19930,63186,89329,87947,40084,70320,88690,33719,86746,46171,88508,52751,48510,21861,37462,60280,29962,46116,14006,35983,85392,43077,41207,76906,39384,60384,37627,79727,76001,52992,26573,62844,47860,86389,98886,62816,39887,58950,68970,48165,10766,10416,81202,59285,65071,93083,58453,88025,41449,35964,50268,68231,92137,53105,78426,58361,15834,60660,66157,72847,32067,31233,61915,99222,56517,15191,26742,79313,86426,62810,24967,24588,55886,27906,57365,25502,94778,46794,30847,95710,13844,49436,27402,60010,37980,11569,24966,79214,30799,42263,42155,61425,14328,10191,67931,84979,94092,42054,70822,59485,96586,89241,71027,66352,11049,40121,93420,39826,91525,46990,85549,39679,97916,99125,26044,69200,86372,54502,49889,91782,43245,51001,78759,27293,19570,55532,92501,75425,54798,80933,55472,18492,51843,83471,38735,13267,85023,37163,16735,23790,89906,35653,56702,43189,28593,56474,33173,48321,28493,67790,50354,21988,66566,59391,12637,13817,20330,85309,14809,10159,54433,74040,15107,32523,21398,90892,67156,93440,80417,15311,55678,15454,45264,19569,54180,39494,50549,51461,97878,83270,55692,12024,52828,33042,36602,20495,71849,72671,17423,86967,36831,15897,83455,47908,21394,27985,50253,84455,60863,72546,37900,61055,33318,65061,79218,29333,34292,71826,50528,82270,35971,77832,27553,33491,24774,15896,53775,93442,12541,61824,47777,86536,28167,95343,30668,87090,59003,46512,42320,96432,15552,68701,65822,79848,83159,32600,82795,31424,97545,78150,70647,45088,22061,76979,38993,83217,99828,98561,93718,72644,91819,43569,50664,79851,20663,73078,37052,88463,31809,96969,28062,52435,74869,39955,89459,75870,56939,69781,84279,46818,41211,39344,40497,71131,80246,19174,66884,27703,89015,26695,91030,22088,90156,86909,46364,11230,94626,64427,45003,98804,27229,12013,66777,35202,73312,78722,48427,52619,31452,23882,75771,24845,89172,46683,31135,93065,18415,10874,98561,83292,88540,39619,43321,50062,53522,75121,43960,40685,73021,43010,48914,39376,49095,36603,12062,64641,21306,95407,33771,55932,29669,32585,71698,85434,45400,96665,59991,34074,94878,84324,10540,70129,92371,63905,10565,92857,80702,48782,45718,72531,63524,40001,82490,89375,35565,15050,73170,49945,62283,46731,15129,39369,81918,88971,41380,63301,37756,92244,28795,97702,89921,15883,50802,60736,84052,65356,10929,42141,35463,10796,31955,23114,26703,70502,68168,36064,66795,33492,60299,11392,61498,69756,77543,85739,72844,44382,30845,21185,42636,64524,20810,80773,66620,94310,72676,86936,32832,54532,14255,13437,22656,80843,82333,73213,91113,63534,69256,44410,39311,58760,92682,62109,24586,25366,54694,75979,56650,66247,10470,91051,73750,10667,30375,94643,46876,26452,91889,60044,52197,20072,67339,30431,31091,48201,30478,84473,84888,98177,31765,67328,42100,49009,86259,98920,91109,72151,78865,25159,53264,42822,89004,78024,39895,18996,85229,79060,86655,33032,72376,44512,87292,57952,51047,22911,13668,76679,67427,37093,37817,93059,75186,44682,47012,45542,43576,36774,47158,55761,42677,71867,86866,44782,33621,54923,79270,41358,69935,44869,47196,53472,26006,25889,92094,52480,85367,82513,41775,90660,64909,82259,65485,99043,41343,78085,38155,63283,54725,47992,45811,42478,22121,98693,82810,96143,44924,74502,16244,41925,67325,11355,96992,30006,54490,14561,21528,93564,70872,53785,80524,98153,77254,46661,66340,93349,20776,31057,95971,49089,28600,29903,99744,83970,43262,34504,30518,43418,63619,94535,19865,90270,48636,35384,97299,80241,92602,64797,51165,90391,27232,40642,51773,82041,26786,87371,70770,72853,27756,41090,92062,91722,29416,51095,18445,69658,32620,74685,32897,50098,69814,48333,11067,27345,41141,92198,15924,70680,28187,37784,49169,93719,89619,73581,10698,69051,77666,78152,48535,25508,80375,80131,94307,98034,50443,11439,59631,23974,75484,41862,85045,11575,69809,43771,93212,36375,44999,56042,89294,37821,30394,73603,64577,88851,85489,50759,72405,15786,41811,47433,71089,85923,65254,91059,39967,66976,87339,69866,48548,78970,59103,35954,49919,96939,92554,57109,26923,35737,30376,55988,87321,27714,84403,60721,13013,14848,26339,97998,50468,77968,47940,39231,13136,75261,72740,28716,29639,13638,23720,64712,37550,57447,51245,14270,49129,55204,36905,73735,62194,17365,88830,78366,11803,42213,30215,61371,27653,66011,62161,46356,27935,55693,97569,99241,26508,47198,60749,67411,79422,47320,53372,70277,72997,55888,75831,45515,59959,80137,45612,54425,27177,42066,47927,65644,94467,72700,89486,71924,34303,70520,98411,39059,53396,79606,25905,53649,54496,32717,36390,33728,90041,27700,26270,32234,99475,42646,79631,54435,15219,75841,55557,65209,96786,14596,67022,12968,71841,42308,26347,40260,59542,53775,74249,56729,26313,37539,93286,34800,14035,25447,80357,48563,35247,62872,44207,86562,13185,30536,88567,21038,53002,31571,79900,65658,34647,31750,62471,74594,68044,62122,92588,88637,88280,55106,67762,73143,11456,20741,54691,51099,18291,56387,10111,10743,50037,85074,31668,66184,33520,39293,42368,91176,68031,81296,27926,66742,59257,81602,69277,55823,87893,20555,31866,90712,84156,29503,87964,36902,95426,79032,57202,51072,91719,88884,59934,47730,31044,37332,99122,95493,63720,90664,57837,19889,57962,10459,28758,42066,69443,29300,22883,92605,84551,16567,90032,52517,27272,36235,21487,55195,85246,41125,78159,66038,32020,96029,77530,49065,67807,48244,72832,42951,27378,29731,31870,19301,15137,85729,89910,82726,66424,45527,32651,47240,18499,21051,23797,66164,95617,88155,59891,10313,37933,64604,80228,24391,71699,35087,19423,79517,35130,32098,19969,83628,26988,22156,49821,55651,67474,46306,41951,80180,76860,78477,20640,39727,71719,39190,43717,10163,22379,33740,21083,94186,94335,21839,57180,55124,88071,30277,76237,56863,99707,66342,68890,23081,57950,54451,85391,47524,58401,89642,40120,13433,20845,88052,62001,71856,77178,77847,72651,30968,78469,37349,18518,95820,52777,20069,78487,22020,78696,44195,40535,80677,94986,50486,52475,35447,13037,78407,92970,51877,78807,51669,67795,21396,41779,13224,65150,41729,50971,95669,15457,79633,63854,35982,35888,91621,87421,10323,94146,31063,17023,17175,82836,25660,27374,50491,88076,73884,93001,88600,82077,18887,92454,86391,81789,29823,62196,13948,74809,60977,75520,49815,79770,52910,32921,59765,79776,44644,14407,95779,74926,69229,28005,37941,32686,57776,21961,91350,63372,36396,66033,91276,78880,22914,88996,68360,22728,80067,86397,16463,95853,28418,45310,65649,49338,53025,34360,46618,17175,38333,37516,72257,64127,84898,98430,31270,86097,20568,80356,15492,70420,53345,22882,71931,99390,91254,97653,17501,42967,90850,38282,63726,85758,45904,54172,20937,70612,97894,32614,31117,32798,65384,73751,63980,71856,70279,83777,97736,44831,17774,41966,76310,94032,52705,48939,17213,22784,93047,75770,53086,38307,91351,31367,47935,19593,78248,25032,73256,73845,77823,36650,58002,96837,76827,58511,57410,96208,99028,62181,71042,37497,97929,77004,29263,24536,68848,85524,38126,17562,27166,21870,62518,60061,35202,35534,13882,27279,17143,32645,37454,64458,40021,44200,68380,41497,69782,69815,45614,77035,26899,51051,20494,28409,86265,75465,71549,53502,19339,80532,55420,87072,71175,43507,75811,90716,98356,31993,71819,18961,82294,96439,70003,70745,89446,46930,62494,90010,94215,91496,80468,92961,74050,29727,88456,29591,27312,48216,13197,90896,64827,36685,65257,49457,56232,76141,55988,82114,11281,66091,79103,91133,27234,54819,44924,45527,34666,46374,39570,78822,40729,17086,99983,89242,38130,47317,68288,12128,80161,95862,98584,13477,45505,59972,81291,54586,30419,94795,91713,99437,54640,95173,63821,95731,66018,67957,98946,77649,76747,76803,28854,24990,80758,71274,27949,76234,29477,51726,51844,71775,12130,36446,90723,17029,49519,58220,12918,55868,59830,99931,90165,49463,13895,84004,52045,51996,55649,81507,42011,97373,32649,88145,99972,79417,64411,40032,71192,23432,93085,40613,71279,68158,74927,25681,53016,65562,17318,47252,83810,85429,77245,45651,96665,41707,83492,24410,48915,64873,33968,46272,81102,33652,42048,20886,46488,78505,50224,52837,60506,77694,19643,10163,94660,73740,26090,56290,73684,80768,76031,34494,60244,40703,67538,55369,83451,71451,95012,27856,67444,82032,97942,41320,37981,13753,72240,61603,61328,59004,94206,31811,31025,63803,55872,31806,94689,18599,92227,83883,31632,74837,56498,18577,82604,18871,48791,64033,57270,62219,26845,27812,31187,81637,49775,78071,88065,15342,89800,12087,34382,12749,52437,48820,29570,15586,49788,45742,43470,94334,71177,13325,81055,96423,17654,80404,74581,25232,53502,98421,67377,28002,17730,17980,18891,34248,23037,76865,26846,48546,70675,36804,33069,74593,98014,12204,69647,50194,16623,96999,11202,38787,15593,18673,19602,64893,90155,19960,89323,31766,50539,11958,95004,19801,96252,14768,80900,50041,79448,44974,24335,67411,46768,13660,44557,34984,98837,38037,60841,94247,97260,78880,57865,16425,72822,96673,78887,32009,84482,26011,88955,94249,89860,20152,59907,43786,34938,44065,51035,96199,77752,21520,14343,68309,62931,69807,22720,28814,27479,29980,76486,58447,98312,40672,56457,20950,59219,79306,25698,83981,92534,29103,28291,20615,30356,71702,89451,70496,94145,99128,46001,99401,35988,29938,60818,36854,83111,69315,60522,94264,11343,76990,29664,92418,35947,33217,54259,31798,93031,89796,50187,14233,33369,27676,63673,85041,70850,68565,33775,82799,50856,23596,34049,86853,13941,24522,78601,27377,37267,79067,74833,65287,86157,14190,51211,55844,23481,37261,78641,22197,90159,91292,33793,74827,56004,17782,93252,11270,34945,25727,92572,42514,10440,15364,98891,36323,89484,47801,65480,22237,33473,26911,30977,31450,61464,69150,23645,43723,35370,98390,30005,24102,52695,92393,63433,64083,83061,68120,75059,29496,20841,91618,61065,78809,49868,65062,79614,54669,17672,31208,24401,17086,86723,16447,41429,26633,51757,53503,37538,12723,23795,96137,44478,63902,26188,50250,16306,68314,96891,13186,90135,10682,72521,46059,89740,50945,18501,26482,79414,97356,86754,59961,33102,73293,61235,25349,60835,75237,54782,17105,65824,48242,36872,62717,30458,78238,16169,90238,44242,94049,48561,67491,87269,55259,67880,11270,49473,47390,46450,45158,44221,81162,28191,21185,42378,67314,28004,42163,42864,11051,43728,74675,46395,67144,47887,82204,36393,17055,36589,55564,27444,31661,57980,10616,88611,81459,54797,45163,38412,34790,89424,40657,39258,87073,63148,33415,16997,11935,59713,97541,15094,40961,22475,49521,64479,20362,94519,32391,87225,66582,21018,21564,26770,12438,29889,26683,27477,98819,30854,50429,57908,18824,25267,37451,87611,15171,53473,53305,59383,67051,61882,64443,80049,57754,77934,27353,54679,33923,25512,80800,16624,39786,23651,57938,97928,82345,20118,64230,59349,75999,65718,54036,70414,49171,14799,20599,45039,62303,92941,83012,46701,82690,16529,24538,51056,83403,59299,43099,22740,94299,22552,99257,97627,13036,35042,75520,81252,67846,99818,22198,79474,90131,85918,31030,58947,95613,43410,78626,36374,74559,28082,90671,43736,95731,42790,36668,56328,60155,38426,77947,77363,17495,50040,92779,13042,95466,23775,10593,97001,30717,87537,21045,33059,78498,64558,45106,23947,37522,49745,56987,22018,83648,13746,94904,51372,83940,91596,72717,75918,29756,88805,56708,89383,18193,31208,26251,21824,91000,80464,22708,45800,54964,85604,61048,29876,93347,18095,57070,19616,92095,45700,17794,12194,34649,89638,36829,50710,67326,88889,60975,85801,42200,17348,72860,30532,73198,13807,17408,34098,33513,93048,99739,28801,41522,94308,84178,85755,15162,31579,66621,98974,31419,41019,80710,83517,20104,25418,34967,26275,98717,46862,66563,38529,63750,94166,99387,78130,58239,41527,51121,30228,38507,23428,22543,17090,58700,47590,87166,30386,52263,56461,20689,58547,17563,28590,80908,51966,24726,94783,50268,33882,77721,51107,67748,68490,85337,95446,87916,90346,29448,29733,73000,37665,99320,25126,89438,18172,33518,26604,57796,44366,78772,51375,20038,92239,97216,61644,35877,86691,29727,43391,22223,21742,66297,66330,55890,66099,66867,40511,54420,13586,41989,96634,31271,98678,40052,56975,55154,54303,53574,88888,39372,53214,22708,64078,39132,14701,73948,24177,13958,44092,29388,23173,64535,83676,28083,96771,20335,67023,89943,23806,81278,53533,50251,27932,97223,60328,44254,78944,28270,78761,97027,33468,91547,41136,79563,25580,76686,93142,66027,88197,57304,56516,64258,12678,53960,51335,85730,15147,24341,12429,32869,14398,55207,39928,52007,38389,66477,40224,52636,69952,52493,19222,99396,56241,29324,39050,94783,29509,92252,18323,11908,26475,48080,59502,54906,63147,21919,13256,81360,83453,64161,50970,20958,94962,30547,72723,77164,38908,41022,98875,96940,77674,13515,84201,95781,67759,21057,24941,76449,29591,52201,94297,74415,10019,38171,64249,52455,24593,45460,67887,51450,42755,72821,56015,88907,87530,99737,28757,87165,58135,36315,55464,79321,98748,48837,34029,97783,89323,94902,52788,72174,75726,26203,81166,96973,45643,29471,55505,19265,20429,87296,37986,12226,91366,37138,56766,16543,67818,75088,88507,54194,38657,97202,21359,12457,30817,16236,11700,99307,27512,64926,70361,59500,10332,64068,78414,42861,25920,30801,99488,95068,75717,54856,84483,42809,29743,11804,23669,54346,37571,22226,26651,81904,94742,57788,41868,96690,76425,27271,58491,71807,65914,59348,84417,88745,53773,83147,81191,90780,53954,97990,76586,36807,64811,52994,59412,24931,84929,70082,15210,31636,24987,49578,21294,71153,63182,10829,12165,75846,52582,29136,80686,22328,11860,10060,95638,36225,11208,34485,25859,27140,43730,55347,48500,42569,13192,10521,11910,25841,92953,75770,87993,18289,63949,12990,53439,38289,36049,27623,28328,19960,67952,30733,18739,48500,56135,88817,61050,85670,34235,23248,63163,65122,27437,65995,67491,38026,13932,63614,18422,23627,91115,35137,29030,46095,57160,49459,63481,78145,95398,94437,27111,17217,29762,13490,77052,67156,54692,37754,13548,87348,72870,84674,31288,54341,43655,44057,20795,21431,24957,69303,42757,55952,25653,27435,44985,66493,12395,56208,21008,99746,18120,15834,65304,21879,19657,21366,95545,44496,38648,36022,27937,72666,86338,99897,80564,38571,68885,81150,70267,71427,95009,81627,91635,57528,56652,57173,64608,50092,87412,88929,74061,73126,56270,18436,63558,50559,37937,45181,44823,37509,38768,68787,56026,14495,21906,10761,61542,28567,92190,55686,64545,15941,66580,38303,99777,56467,14222,29104,42774,43990,81588,56460,86874,19574,15237,43421,17826,96037,65531,67731,17618,61787,64675,86175,47197,73448,94540,25621,35621,26370,29014,20197,95011,29265,97204,44820,34382,46508,46725,60058,25865,47894,18834,91607,65271,22694,87602,81428,22550,27826,93609,47243,29682,78877,41880,30242,79281,38684,54503,16745,80500,63325,73608,29815,86227,27181,72325,78535,90464,11022,18915,36726,96263,45463,59558,82403,27635,80214,58959,17791,10512,54254,98439,43640,71895,93473,26467,45421,61086,40475,84331,76119,98275,89804,32291,65236,46246,92635,69855,97225,73112,60301,13797,44410,94889,18866,59238,12758,53463,61892,97208,40345,28888,93828,34591,35369,22184,96839,52204,14791,81390,61860,29870,64690,84476,33049,98120,11146,21265,20431,72686,37603,71998,71224,72482,73689,98305,93721,62390,78921,91115,26838,72086,39918,88994,72180,16425,80399,16613,31361,59619,29349,34119,12953,70911,39161,72050,76726,60446,51694,13973,95150,79088,44440,63593,20718,68905,11447,37291,89109,61811,70261,79885,57493,74750,18781,92924,15265,60512,52882,67900,59581,47253,71527,10841,55633,94424,21967,11075,77112,83770,63021,68327,94426,22586,63303,55234,66181,64737,17325,94994,49253,38573,42596,94863,74024,73157,65444,39218,10722,65004,67799,49617,33940,22670,44045,53761,95008,80990,69474,13235,65216,83868,36424,34310,29978,99155,20295,93977,18237,24093,72822,92558,83624,46119,59452,28144,22691,18778,99120,41960,61013,76051,40932,98936,69811,62237,60006,18065,18426,85243,94416,57765,21751,18271,80486,91774,34898,31054,96786,75785,36401,79444,27938,82498,73554,15240,87451,83024,83212,38647,63747,56723,28888,40884,62669,94471,27821,25507,82757,17235,54989,43132,53707,31731,92456,95173,96154,75585,47160,37390,83877,90263,15630,61558,36317,37319,53648,49907,53590,33400,57930,53442,72678,85522,62202,49203,58942,13533,59743,26392,78740,22230,84411,90878,71455,12396,11115,98823,90470,78854,61600,46251,36372,66259,67023,58350,75953,56870,74758,11575,74554,27368,85772,97210,34459,77687,52321,69030,12626,44338,60326,52861,82471,11678,99720,86587,95587,62758,99925,10109,85963,35065,69416,63308,83452,14212,26446,40480,75117,93826,74001,48110,59260,43794,80008,37933,91622,96898,65059,33071,51627,10527,22105,15431,37070,85961,53869,33324,88844,58395,78023,50763,46681,15406,98955,92173,50099,31749,89400,93712,94333,11089,40572,71722,95686,81286,53118,43509,78574,21335,11346,14728,76095,13724,68023,18055,42260,30662,98036,16819,47255,96389,80646,79555,73227,74591,15352,73675,58644,43004,53482,27648,99739,28190,77321,51302,80231,20874,48156,24332,87521,63086,37963,12708,63032,35196,30232,61252,75240,88469,49780,75506,40612,45087,63177,42233,88644,37398,23336,40547,49012,94972,30432,47106,63606,55811,24722,55207,86582,70434,28297,59124,85163,54795,90201,49264,33973,63144,73312,26062,99901,88164,11286,99124,39318,76872,87825,53374,77615,62412,76765,96165,41679,99148,32427,79114,93562,28105,43971,30076,68618,65598,13971,12352,14221,61468,41129,51731,66269,32851,46187,80956,20716,31463,83408,31259,83797,60853,37886,63578,19334,92454,54481,96267,96551,36556,15366,58141,56943,43688,14335,26182,96805,48194,77476,44240,17234,26522,89026,86271,46460,56509,26387,37182,37372,13128,70787,14370,91687,78341,78270,29714,94597,91254,54328,97106,97386,47097,75651,65649,15312,98066,95217,44152,76031,61657,52383,61957,69436,90357,92186,18101,49703,80405,48240,28943,79999,49238,22423,45806,62869,49249,71643,78376,32918,14338,84970,64337,40661,41533,85019,86989,24864,11025,84837,19536,71163,14170,16779,24969,15582,40268,34026,61665,53393,33211,95929,19568,18016,73669,25457,22314,79381,92965,15413,48319,54783,27316,92354,58793,72112,97952,22705,15472,54762,40100,77153,90144,37171,13163,55733,96514,89035,94799,14811,76819,65931,89402,41153,85165,18988,80904,23974,28626,33508,53655,55106,90212,81372,20812,74405,65178,23824,93933,58744,92086,78047,39851,93962,75818,81809,20552,56242,17224,16741,59248,34969,92388,97105,83276,44553,55604,22172,40208,56421,72081,40377,75488,49600,39697,93866,84825,19825,72616,46084,11413,34748,96474,40272,12836,88168,64796,31693,46322,94869,54924,12058,82819,96332,31386,17268,95128,48212,83047,85533,73594,62008,44646,85143,66484,80892,25816,28955,96648,94691,23866,55845,63398,81669,81285,31310,80626,10286,75275,16052,57573,71582,17029,59257,26371,58599,92689,80418,88242,66289,34257,69341,90962,37099,65272,12248,94728,43015,13111,80123,97812,24344,65476,95710,13720,27750,57489,67065,32927,46736,20305,58860,81920,68156,57640,33075,17229,43791,62325,97670,17286,88779,27640,42874,32753,17480,23684,43164,51675,12260,84191,14095,11996,96097,19178,34132,52235,49512,70873,13139,31960,88129,52399,53634,61751,47381,46886,51781,90428,24891,12667,93106,64817,61979,61993,60276,51410,12928,49511,50626,53038,21865,32452,91303,97397,61493,63368,90090,13987,65806,12171,33608,48519,35420,14417,25327,80442,96600,13935,54919,19757,39565,99657,17062,16764,32389,14451,15914,85993,11551,81003,93787,27077,27922,12589,46901,73138,27456,90218,11877,92440,31994,71410,99364,87389,63645,81591,68392,65341,71666,64809,12649,38577,13280,47225,58197,51594,61571,24642,55881,20395,85747,85870,95034,77704,84264,12123,46579,13505,63570,62901,74437,33223,31074,96337,66563,56575,78466,13835,79843,30716,24446,38989,91628,55489,16545,14972,21580,97023,54732,14671,81758,34544,54486,55871,29521,60349,38499,30470,77668,16897,18570,59668,72100,26141,64030,90301,24172,69915,30878,60890,75918,77798,52542,85930,37408,68708,52470,95336,73126,21859,16775,80562,21780,28101,42285,82187,66868,79849,20202,22369,44603,50288,74148,58368,99387,51631,73676,24219,80308,76693,28037,37305,69869,10769,96140,59728,89139,63421,80273,42416,35321,28655,65882,96044,96990,96627,22081,98194,47314,46435,90329,23624,73472,95140,38462,39070,96272,88416,26968,12348,51461,43729,46877,69274,63344,57183,16608,82537,51046,20196,66269,85019,11133,25685,52952,62604,41230,74806,87097,39957,67788,94558,70935,74680,57944,64388,22747,98679,94472,43535,89854,91980,74926,92883,52767,77811,61681,46956,42622,32383,15332,25529,93781,88334,59142,81281,87945,38699,16353,45809,54223,37840,64533,50688,89946,16122,54199,75200,46274,23005,92738,51274,70447,85705,71798,27391,55940,10030,28222,94846,91003,57271,95144,97046,82737,31457,19597,23719,98411,11113,31999,86985,60212,63121,38387,55213,87127,45025,51128,79722,78856,54193,86423,28579,50618,34045,44358,85799,37323,63182,13506,49947,48374,56136,31463,39715,18451,41465,37566,32749,19218,40190,77920,43469,23703,98313,77529,85678,78345,95394,79569,91138,91238,61764,50532,88598,37243,70834,71374,13855,12330,59036,96502,78301,75203,52747,99836,59969,98398,51673,41422,84841,56089,50929,53651,32387,10233,86480,95601,90282,19423,47074,37627,34641,60192,97743,39158,93737,41643,24100,25196,18914,78404,31927,68076,85267,91479,46380,67441,97118,76436,72657,91419,23430,75747,59207,29597,59388,49943,22990,39681,86027,70127,19431,29674,34137,99687,88878,29189,41707,21314,73085,39842,52285,77213,89292,40026,48621,27228,58805,41488,90946,92011,26463,18459,26310,68802,78278,98008,63525,61713,22934,23228,96879,75082,76180,13838,28208,25291,78225,85869,51496,46310,76467,13511,56005,23789,19604,69820,54556,39635,14490,86332,63917,56691,39017,47111,77444,71153,16111,13672,15333,39992,87577,76169,23883,90258,80066,15255,28565,52054,17135,70190,89977,59343,43343,68813,14677,42320,39659,44693,56825,18526,51686,70559,24228,28720,82858,81705,58342,74851,60212,59274,17113,35725,43244,13654,13657,84957,24726,99237,38322,86178,42374,87978,70421,52952,97537,96417,31680,30511,54475,63682,55580,19386,95248,80000,23169,43914,99207,42958,68600,17448,80089,27195,31810,94207,78168,15472,18129,33547,97133,13918,33066,19889,84669,26263,26168,24920,13070,50596,54374,45322,88236,59999,67696,10153,68955,81038,95241,40772,63991,75158,11432,44340,63709,31975,42906,91764,35342,51076,24530,90620,36997,75208,28580,42126,15305,78633,98460,52183,82199,93940,80442,29773,89113,17028,45127,11097,14759,73975,93191,33589,51076,48864,51978,35011,38074,34221,14459,95496,44309,92837,51657,27954,38813,58105,24697,57056,46944,71844,42251,67484,47472,54801,46496,86286,52393,77081,96131,13764,84220,76527,78677,87882,53736,22320,89697,93458,78657,36739,42015,55319,80461,34213,71388,19762,84372,80317,44769,74558,40165,84503,88003,19603,95767,45773,83532,42027,62705,69977,92966,62781,80349,92953,21176,14598,86020,88690,82197,64246,89411,23095,18700,38221,82870,10426,45742,76445,58082,57448,18803,15620,79129,93572,51360,56960,33781,52989,69929,74923,96916,67929,76351,74535,70683,76895,24707,88441,30944,13146,79972,79396,75802,51169,24716,44026,29285,80089,14669,98211,53781,68084,79348,83167,83478,27728,73425,55278,81934,14061,91902,36928,61635,94879,86891,24370,84302,18218,61118,51499,40943,38191,40508,66860,75801,76370,23228,58819,11293,55597,34580,52848,54843,31365,89314,69187,37981,87126,40173,94308,42129,67394,10996,13336,99049,18248,85278,27787,33712,39549,19382,21731,66751,46245,29444,97556,22735,22740,66248,47230,65053,85552,85209,80646,43324,38276,69160,28139,15575,48042,93226,17999,95017,46596,24772,38887,86794,50488,96995,96097,78961,41834,40977,45230,95335,73862,36169,20770,99914,29396,78978,59806,81128,69096,17722,93086,24599,67081,99410,40722,73053,77444,12004,94271,54856,54300,62029,73560,69919,21398,92700,86825,56366,99738,43349,49343,57209,31612,90264,74206,64727,96609,21765,65578,98261,36246,69099,48911,36184,75966,49758,28717,86667,51940,46610,22550,85689,36857,30266,31885,59868,54632,62023,68259,48666,26384,54765,23267,71057,92841,22702,74455,45490,50997,79319,52282,56741,62753,57203,14881,26793,30723,87294,73947,73185,88103,59708,30019,75853,25195,23329,65376,65769,67387,82340,18392,74004,67667,82074,87387,62599,47795,96956,89436,86333,25601,37797,95009,87595,16281,92603,83266,49801,46653,22838,33280,50062,36472,19345,53277,25017,28318,26385,65016,93295,14194,82066,38152,35588,22334,69492,40450,20662,12316,82225,54635,64816,96038,42103,43280,77811,28039,90198,79827,35111,39057,31050,20801,29535,48506,69884,28214,75100,55590,94229,62487,16894,95870,13502,43163,59758,74940,69773,30345,20180,80725,32884,85481,60625,59862,39779,30174,49072,34168,37743,59690,48970,36273,42745,92065,22469,69691,50167,33818,20818,29698,17747,78395,24400,47849,50625,64827,79738,98171,74049,41866,12710,19779,50322,38097,97068,97158,10330,44272,74941,61333,82107,46034,99746,87419,98567,74431,22147,74962,10820,87361,96955,86396,21248,43790,27515,14417,21358,84339,75987,98785,55667,20161,75962,55039,71095,44721,72740,80289,91102,50095,36638,21846,64915,21548,81895,44776,81075,93974,63410,69249,51479,99844,89924,59309,68215,98866,70835,56097,42271,66230,58179,48738,21389,62365,52349,79847,89285,32339,81446,51076,27206,59689,35757,58365,92269,43992,89216,65768,26243,66766,94674,57072,33381,82979,34024,44622,63384,87715,30607,30898,11596,33462,31703,68231,37505,46954,20313,24471,54029,65708,63379,95782,75516,87344,49860,97332,23830,33228,29135,73251,81821,22116,55822,77670,14482,43191,53169,13385,90129,12835,69601,62362,86620,34518,21722,94266,30149,62661,51873,54427,22776,23385,98504,51244,37045,69004,85078,29390,35062,16020,88851,30483,39597,48546,29498,96449,42631,55702,90189,32553,25716,55319,53643,94568,16957,76078,76618,38481,93945,95947,92927,19894,93090,54845,75827,29230,12178,41233,37519,90305,72348,87833,55519,52209,15092,58612,96714,60002,28916,86728,75162,61230,39780,51303,66013,83609,39048,64603,74901,25506,36352,21032,66454,55985,17294,69717,35439,85900,28282,70906,19393,19700,53039,91167,79739,98011,48047,90690,78008,43832,11377,29320,39991,34040,62806,25212,51501,89302,23881,53011,67715,32582,85061,22872,19463,84213,19044,87930,32024,60292,72806,16320,21020,15893,92681,28992,15872,49805,71905,64265,42401,81264,59520,66149,27129,48558,11280,55308,35350,50765,40971,33949,32083,61891,11518,81544,77223,62778,70635,46945,90905,37358,42780,63350,59759,56934,90907,37658,98411,32191,72043,83404,10155,72726,77247,98313,44395,32587,98784,85045,40653,50914,32209,51729,72309,85329,23749,85036,71257,43528,53726,42670,63298,12336,84835,37267,44637,89767,44197,47365,81905,40400,87136,65215,19013,55500,86167,20669,19279,50317,65765,61658,30444,91404,85150,90954,80697,98320,39519,13673,50550,99358,24660,32607,34275,87129,89695,28478,41398,12269,62613,54871,77435,34538,64495,85836,90173,29202,63379,60094,23194,95437,83137,25067,44802,48700,48893,54893,58729,20719,57408,79520,85312,39922,52059,39702,19578,22568,27479,58597,68556,42093,51763,27373,51755,29889,45041,25372,50938,64907,44507,31918,89344,29280,47485,92274,19255,62534,46783,37537,12761,41651,54134,10268,28732,62191,93568,53250,28212,44947,64421,71362,65862,78444,16802,67859,58141,30846,71069,12777,57910,89971,41224,20685,56926,66009,30601,26810,87889,75356,56267,50132,91305,67198,85001,63740,51832,62625,49462,57557,94893,23152,14373,74853,93639,19713,16719,54381,31530,75630,96913,42738,10522,52888,75124,94958,63784,68325,27996,48669,67464,43828,52698,67156,98309,82023,31260,55330,82576,82762,19342,75897,55106,23290,44418,41403,77038,85838,11668,40368,52365,65205,72301,72347,61820,64786,67213,31060,21368,62465,79227,48449,39860,70563,30442,67058,11416,80404,90734,33556,39988,85102,65712,28204,20744,29285,24390,36351,90065,59337,73924,49187,48462,31718,69978,60149,67655,37540,28669,50318,53790,57410,71673,11658,40263,74375,59315,68667,99311,36455,31031,52303,10191,79607,20617,19293,94461,91647,62806,50500,34297,42055,54116,55957,98920,30723,75181,50419,45646,28854,63319,43020,63347,22344,72867,92022,80732,71571,24015,81978,30929,47593,87153,44099,11950,47933,37433,91761,91488,46829,28380,46513,81906,63389,86708,91276,39665,54268,20776,74426,55359,75279,57561,71863,27988,81869,54555,10839,98785,61709,90218,60234,51850,10806,95340,40710,38194,37463,93342,26683,48383,58127,54696,17033,33723,16883,89597,66578,48215,40354,32569,66532,84314,27898,16600,64409,12715,91647,63067,41197,33141,49414,99912,81959,36130,65953,60019,62711,86105,72641,80006,74661,66777,30813,50866,14226,68387,53757,99000,81601,10195,10676,97319,76219,14716,91703,21342,91633,54814,18920,70140,38350,15949,37144,74323,76336,59219,58066,26999,11130,17306,68952,54583,96660,45047,84252,84395,94831,18393,15840,51408,97840,12769,92846,24971,20785,24512,61506,57715,21251,37099,23604,15928,16261,44481,73041,67391,14314,45041,25272,16732,95302,31455,83646,62396,12707,65455,70839,65599,77829,62392,54100,72772,90302,71507,56933,54511,68424,85783,88483,20194,31695,80591,51399,99001,79328,22638,85997,75053,34708,53507,54897,40790,57180,41863,77277,80559,63175,95413,39060,75501,39703,27185,78402,85101,32044,43143,44519,65340,83674,65223,83240,64627,44128,18151,11417,28019,84846,15571,24699,14453,96497,37894,85574,12223,13651,36557,38277,31916,19376,77611,17908,66336,55405,60253,31508,54613,77594,72320,80759,24611,53151,69828,83300,80786,13782,83278,44417,18195,50541,67619,29785,18851,77800,56460,73794,55614,18521,95301,35663,30092,84820,75043,78487,89985,80552,26066,64438,91639,94464,74494,26012,71884,28924,13359,98358,62943,42530,78443,58811,52705,44283,80954,43591,42545,12803,65183,31091,62321,23394,84463,44795,18801,47387,41627,18131,78314,40124,63155,49801,90120,82940,17123,88933,96184,45928,35295,98122,81331,86854,87072,45763,74426,46322,35865,62964,14196,72823,68722,66056,22356,84762,83321,30755,28215,88290,81656,56587,87449,44929,48982,93521,74646,28854,60392,18336,12041,32861,70279,38282,51285,38489,51073,89037,39626,66866,79654,77661,95467,42950,69005,63524,28457,46418,66971,63788,46616,48234,32947,33474,66267,27293,31170,59147,52657,90932,64422,57083,82536,18121,16352,92052,10413,84668,40416,75322,40651,99628,33579,62621,84459,56980,15350,71256,92676,88130,55725,31506,83385,80068,60835,99524,61442,76034,99153,37183,69403,33771,65442,49204,72059,84469,87074,59313,20440,57995,85333,72358,26159,10098,34865,31925,44602,22118,71756,43793,20185,42888,94093,50679,25049,50820,85539,52532,40806,48520,63588,77856,41487,91647,58601,50876,14637,75198,29853,41988,74747,91690,31290,64649,95387,71988,47598,22261,16807,34163,67614,71701,28018,38553,70630,25426,26987,42606,47941,35394,15531,55002,90918,64263,96832,30345,22906,26665,96891,65717,26761,39240,36454,89040,79515,34909,94857,82497,93482,63039,41357,77288,95566,46308,17348,57100,60736,88422,91287,37218,66594,70104,73156,50057,25332,66451,58612,59340,47069,26796,35954,66659,12909,49939,46302,12887,87918,94260,85646,96314,43162,97032,33182,44207,98182,15498,14966,52623,65239,28576,97380,68986,20902,56237,92397,44375,10245,77472,14960,54598,99863,31523,71122,52593,10630,11836,67079,31952,57262,12538,92717,71660,74407,28996,18602,72520,28142,93972,56706,53668,78451,88592,24161,74896,79890,76994,34467,14792,65686,76663,18270,79264,83652,62802,53317,73476,11438,19755,33936,80998,29665,84702,55089,85244,20596,47168,29003,41290,92107,84329,11529,19990,31080,33500,45654,69327,47852,81024,84530,49917,49768,56519,78038,91728,68650,95055,86258,77618,76649,36978,81178,74954,29766,79256,93395,85986,83280,36288,30438,23713,35811,98293,87156,71363,15611,53153,92719,17180,99085,51618,85588,37265,94918,73927,99710,13745,37232,78532,57688,35394,98556,42030,84388,25777,64829,64294,20789,35600,38361,18429,73729,13274,54876,67020,74798,27842,81872,89814,21816,18233,22571,61295,53308,90547,27474,20028,79830,86627,34899,62655,37339,90070,65161,43039,81559,70834,55999,87592,17805,93822,81184,55674,29648,91084,95365,97954,52354,80051,54546,41750,65261,13359,61413,11905,58250,38840,95609,14313,75030,81774,10269,24765,82497,63616,51172,91559,14357,81657,39414,92590,45883,70344,69288,52265,90496,53029,34369,30251,92071,17093,72616,48785,59703,54870,43107,67156,99867,27786,17976,62671,39175,95970,39293,99712,84762,91733,94655,83878,36895,85592,32262,97090,40068,69883,75288,10344,69801,25906,82320,38356,52464,83139,21734,75913,58006,74602,54039,28551,86814,50941,14949,28206,34079,98553,98174,92577,99383,41359,40435,91030,77898,30056,58754,20468,79601,15713,22128,18189,61510,33816,49583,53526,96256,21579,31217,80177,48862,24770,58757,40129,36881,38871,31761,53625,68833,72550,67026,96578,23441,72382,12107,31174,90288,99401,87039,31536,11636,44021,37235,60072,34784,14197,89691,66851,59245,23080,58846,66048,82443,42646,79081,49027,19013,67664,97498,26530,50359,51984,47044,68897,47595,67169,77275,70793,56300,77239,14863,15701,38086,77829,91107,50829,23107,55775,17167,57061,63899,14544,91074,52967,77637,79359,57924,34054,23892,59093,82026,14871,29424,89693,94573,52323,50765,96148,49485,14486,87558,89082,20414,92212,21688,59118,84834,66817,13160,58794,46070,58222,67072,65437,43239,44118,77352,83260,14229,43547,67376,83591,40350,97843,93117,43591,84019,57504,19050,87022,66609,59113,55283,26590,71474,54950,25436,76698,69356,84287,50307,94114,13604,53118,64682,89740,86408,88839,99545,31389,25628,74422,73193,79872,77942,11715,38666,39269,65570,23409,31179,96147,57955,25994,35427,92769,85257,99297,43464,74044,61865,96537,22511,72915,74965,54631,19044,83332,32197,34657,93786,69589,53075,55497,28683,49983,19232,78283,45777,57250,87186,81832,70628,51646,58248,77928,55225,48179,96491,65243,33857,21497,63102,66820,97038,34053,40917,97310,42159,80636,30243,91051,51413,40790,10427,89299,31186,96260,32547,47590,16107,24990,28813,39019,26241,89807,69601,63450,91156,13473,96040,71911,28504,85469,88819,93968,14589,21381,48394,24753,28893,24639,62616,35667,64444,22666,62348,69948,88519,93089,30490,69795,15280,67944,25517,85693,60164,70002,23350,45054,64807,40526,82042,31867,59299,19619,82776,23295,17486,67487,41140,41223,99998,46052,76401,85197,18703,99282,48446,91972,39759,49361,36537,75763,14220,89544,13724,12788,29652,56224,26500,97204,74265,30477,13417,30443,95316,51582,45009,99449,40069,84289,48199,17080,28417,98959,68732,56562,43649,85074,69492,84599,63199,68576,71837,85823,14665,20262,73402,77699,78355,24765,89640,20369,63909,53717,40038,13774,89138,57857,80867,94903,43721,26868,24761,36418,76771,23801,66545,31728,47503,52038,16607,37861,42030,39896,96771,17110,51415,88557,33545,22111,74453,55405,89731,44389,47216,43967,23181,97629,81591,96614,35002,82994,15890,34509,44699,97152,48569,10215,58017,94556,94032,45655,60321,19302,14537,45994,45728,21960,68804,89388,75109,34570,10331,18779,82128,40486,90181,21808,84983,91624,75514,49712,39200,71506,77541,96683,50021,36710,14378,30534,29815,77579,13505,81339,94771,52721,42870,18369,65639,17882,54285,75345,99805,88853,79642,74874,12040,89704,64170,81619,71252,13555,12292,53408,45554,19370,54533,25588,34900,78483,31755,74871,85720,98720,47099,41998,85330,46765,79953,49531,46523,59435,68092,71568,58704,87010,60663,51782,30651,44399,40318,43429,25613,53294,84188,96323,33992,62840,72917,86709,41043,87089,57312,58041,25200,88445,60126,44082,23338,62362,60212,60121,40170,58655,84247,68925,47150,85125,70994,61942,55774,51481,74638,91631,62118,79905,12869,21603,45222,73974,64075,56931,22611,51886,65808,71228,68717,35748,13359,80586,42373,29787,53889,47688,18670,27655,90246,12094,79825,56151,33489,59949,49586,78683,19677,76071,15652,59838,15363,52326,81199,14515,11420,93111,43816,30557,66574,42226,74531,56541,51979,86920,83852,60676,22343,75825,11051,84152,25183,79665,99488,77404,68203,25458,80214,46600,78255,27581,32409,34672,25141,61071,99456,24181,79069,36585,37296,92320,83315,56922,29940,87168,74168,84389,66056,36616,63653,16351,11631,11443,28977,76362,57339,20907,72888,90439,87731,50984,94496,16989,35383,50275,88439,55596,71304,58826,48396,27829,24320,67359,65367,83571,84153,77510,49418,70479,98521,36432,91786,45203,22442,35781,28922,51681,54419,92880,41307,22206,15287,40037,35072,89409,40381,99397,27591,27013,39752,85541,75420,23574,98114,40370,99405,60318,78069,95694,92080,61816,24902,63591,16889,20289,45145,24576,22802,71238,44669,98167,65820,67334,80964,75603,94439,98044,62801,66250,71335,89662,25035,41832,31550,43059,73413,98940,12857,87315,89888,16953,36791,33782,26986,16175,12205,12430,99505,88676,79062,34024,25258,75569,60207,49672,90847,39837,52207,53984,37269,29670,30525,33388,43881,15931,87828,21616,25865,45205,74683,31743,65848,10474,95791,65927,39206,18814,11136,36448,96270,74679,12155,32248,49026,58252,99262,37533,60353,50309,48938,62318,34859,98749,77083,38403,95860,34138,23743,79451,40416,86824,56813,84980,10489,62798,53490,61465,79645,10005,21461,13978,15487,58495,74170,22883,37116,21001,45178,22594,90098,72021,20497,62073,87746,72848,84762,90404,48923,24980,20021,51041,81397,26155,97769,28817,23888,35106,32858,62332,17951,84599,35697,65583,31092,22179,10652,95994,29592,86794,99573,77240,43450,86422,40184,27101,70833,49582,62651,76527,86989,46717,24850,40366,99692,75514,61327,71530,74091,20981,35387,23238,64522,65105,94516,61064,47135,22550,12335,14315,76217,65521,42313,87308,97450,21030,14280,94722,87008,59652,20427,50126,62818,66726,78051,15467,66084,39737,72579,29664,29381,32397,43502,31418,70937,24162,22630,50589,32096,42204,70149,92419,68867,21539,25760,90180,52613,51716,24898,53028,30236,26120,94208,94179,20090,89457,29006,64018,70017,44433,21837,73246,85336,28590,19503,50794,91752,27911,96675,71606,69371,88364,56115,44805,13253,44713,83950,71705,12002,33238,20228,29181,19599,21023,61709,72055,48511,94645,86057,40378,58313,25347,39892,20165,16276,60495,38906,43018,65431,29531,40248,66363,72235,60399,57800,80516,49412,70636,65665,39357,59534,21343,80685,40964,21352,99536,31374,10192,61908,87008,68620,27156,15930,78781,74753,68676,47451,79224,71138,90507,29126,12877,10950,58408,29735,11304,18906,37599,99876,71584,32323,51013,75443,60009,23189,50596,80616,20075,80573,28473,24711,88767,15997,86931,59944,53523,57988,43147,50560,97519,24214,56725,30942,34851,50078,14677,61626,59266,86922,60647,62662,65988,67865,61340,78912,94555,98582,76634,95398,82066,36242,12845,35777,30050,66864,43028,33507,37762,80626,19852,20875,57849,90184,75524,27832,96098,88038,14134,19803,64182,51899,16399,89227,48477,28435,39477,51078,78831,53932,52681,30097,73099,26397,75017,75412,19272,53870,64015,31295,42335,45959,54122,55439,11992,81919,14643,68697,96823,36544,90248,53965,47422,80575,30560,11793,94685,13816,61224,28269,51418,69648,58598,30954,18209,99823,43101,24545,12682,68385,79272,23629,87218,66487,35637,75118,62735,16955,42750,63266,42660,88807,82616,96468,10952,88553,40810,94142,75495,10378,22960,11814,71014,64678,25983,23166,39348,55663,98466,69265,51232,63127,32496,42808,98391,58992,85833,79571,80267,90957,43789,96242,74148,11305,65170,33753,25298,60129,90719,94758,53765,12375,41489,78983,50018,13938,44277,29458,99337,98018,80463,21914,12750,71896,19347,65926,33752,75078,20518,74523,78240,39636,64586,15116,72778,24191,50169,91568,90702,91284,86034,55159,75346,52238,96967,20402,96710,72191,40230,49987,96596,93113,73020,81234,43034,61772,65085,37343,50685,45420,53361,20048,18004,65023,44132,23102,12589,86088,94473,98432,69649,58089,22933,86709,80973,94037,27321,50684,62499,86409,84069,39660,97553,75827,44767,82211,51120,61196,77671,55472,23357,43709,55975,23286,61272,37232,52478,18730,24700,71887,70178,57554,19612,73129,49250,10761,60692,38012,72032,44583,81525,96837,77957,62349,36929,77288,75456,63140,68320,88713,20234,12869,18739,11933,84433,79108,85206,69518,19683,80090,91161,22432,52700,77132,47710,29040,85959,10789,56896,88576,39246,56118,33208,59035,70285,61787,36511,43891,70722,99523,95625,41732,86292,30239,33716,88343,94959,83111,68160,92115,22833,53609,50197,32329,86913,97498,76649,48250,83188,16868,87868,52824,97818,68836,77372,99079,81315,30348,25047,20633,89493,77450,85245,12161,93251,56429,66731,97994,94949,41051,95275,24655,50273,10950,92938,69673,44215,79817,81470,76370,35382,15610,16332,24104,81289,30976,63628,64160,22416,21544,69911,67496,49137,55022,20848,54220,35587,71486,91618,34990,96332,40445,30976,39198,51898,89753,93864,76007,34702,28875,63481,13761,31821,87781,28877,69831,78680,59032,75934,43745,67116,91253,93920,85858,79227,11531,94178,46806,37217,10125,35731,68582,84100,53763,70253,51598,83496,13366,21006,85403,48872,21675,92365,87377,10043,46225,58957,69644,96383,61218,78074,66353,30873,81047,31317,71187,54165,93762,84272,56446,34041,28508,25557,90769,65662,45173,86852,13365,46688,65374,22646,26073,32966,69935,56477,91847,77757,32101,18364,86038,16056,62408,10198,41054,88501,69010,28641,11706,50450,15399,66710,62503,67749,54274,43775,51977,93547,74875,11695,10081,11095,86991,76996,84997,90395,24212,50728,59581,18116,59267,98468,35243,91236,75482,44364,59117,12088,56585,84257,83832,89879,93472,75745,80069,80852,32864,80684,17604,44552,57690,27356,72538,38905,86590,37732,10136,23873,33522,48647,76643,19480,79115,80544,76409,21830,49160,54926,83215,34429,33848,75396,18662,56966,31407,64719,52600,75251,39381,77727,83537,35727,70371,25789,24861,53736,77800,75129,33273,18158,94951,12123,15154,42822,55391,97668,80620,48968,64107,14291,25246,45825,20714,29396,74595,92301,29748,21237,79043,20534,96300,46778,86535,73176,55559,90942,21937,30505,46889,10722,27514,26114,18181,82420,28054,52247,16039,99359,38970,10972,93354,48627,78151,82967,40077,48780,26554,65536,17204,34804,65277,28515,86786,44299,76935,64333,17868,99087,38197,26648,46849,78182,18951,86999,64767,98369,95852,14491,58828,33679,99618,62673,88062,71232,33519,58529,35684,17661,28043,49476,20055,84629,56585,33035,89929,56621,72667,10503,18817,83051,62773,79266,63303,41969,81334,27086,18059,18212,99108,98826,30783,63188,73354,37830,99766,25684,48997,11500,15687,37917,25903,69623,35719,22157,71187,39644,76737,64251,46040,19576,71373,60350,53040,96520,52801,24411,88902,10083,84926,58348,69957,85022,57310,45230,97371,38626,67844,77006,71593,25770,70511,40637,32422,55555,48742,69026,13686,65873,41523,83024,84318,92288,48891,83954,51148,59600,55676,69277,32854,97554,56418,32490,30258,76513,49074,91863,85367,93684,78551,13239,36420,32638,99498,91405,95694,78860,49229,30990,67060,72341,89014,25237,63032,58837,38264,68339,89322,20961,66135,21082,35491,27690,70836,63622,65872,95602,13096,41654,33874,82770,15999,93591,73150,74873,82570,59708,53867,86047,73052,36068,12239,17533,58845,25469,96690,67781,75926,93802,30952,43532,99165,31987,66390,52744,29714,50455,25730,99463,26962,35985,86761,95951,50392,97222,12627,42156,79729,33122,97958,97781,23172,17506,55955,77319,77192,95182,93262,48020,57223,73690,38741,74565,56992,20448,60436,45920,13804,87191,78787,37067,11597,68625,83010,46205,55427,57155,15032,57847,89088,82094,15522,23908,39807,63376,71552,43270,93676,10464,15065,31805,93054,24702,79561,45532,72157,97976,61487,11681,65239,34101,81501,46711,50194,60047,90030,97810,80451,38011,16548,39054,18167,65486,57172,25951,23486,58839,61802,59206,33400,91157,37874,51408,36106,95698,66476,74485,64534,45743,46658,58692,45595,12747,94339,74558,34040,22357,92448,86905,70415,45665,27359,77505,53174,84838,13831,69619,49545,96027,33804,68163,79901,40276,77641,94341,67494,87258,62092,88249,67188,45336,77191,19825,77712,27949,52084,36525,53113,78245,39758,41178,55079,74485,15344,30192,74822,67194,64117,43198,23075,60816,92796,82113,97021,27862,28267,95456,76261,16958,50460,17932,72923,75847,13694,97206,24786,79174,78992,30084,90597,96104,46413,40137,24728,34166,26157,65308,62759,33662,79872,13094,82265,43193,15459,81477,24750,31766,37145,91625,48469,17566,85493,72480,11371,68418,63876,13067,53951,91242,79434,99477,93915,93004,66190,56748,91180,92151,29548,42534,38525,44841,20270,42080,20034,82807,81579,36211,72792,87254,12337,45678,15456,30350,51229,73504,89578,31285,90024,91103,23866,57867,68623,10378,41499,26110,22779,61664,61251,62478,69032,13136,30496,32679,48437,94479,64129,43383,63578,64847,71339,91645,10061,27087,75145,64915,20897,94967,45669,82196,86763,32305,71845,14712,86712,78336,54497,80853,97023,76886,60278,57520,39736,93599,99071,83879,19021,25761,64112,64269,15011,91279,63761,24517,86356,64246,57665,84577,57697,14964,75227,52877,77055,91503,48358,24607,87372,25316,75346,45348,82870,66691,32177,19662,18814,78946,75508,87524,70375,96241,19690,55950,58769,24632,15582,35033,70898,29726,26985,38342,77142,52211,24042,38134,11922,59553,64536,80626,65052,51993,53009,50049,61537,91705,70235,96346,95289,54538,82014,93833,97734,80950,68253,51169,91775,72313,62481,49215,54291,62436,12424,66830,39220,13193,99177,32901,10389,62808,66542,17441,41706,55561,92823,76669,49967,21991,95824,37960,30264,48384,23715,36663,75039,14002,72714,47950,70043,34767,26078,28507,33278,12908,38086,87313,56921,71024,86172,99648,10162,37194,77962,62436,53281,23745,11063,85408,56082,60187,31540,42898,72450,90592,41946,14857,35061,86979,38078,46638,42130,56140,48099,13120,23527,25598,44883,13655,95184,96426,39070,98538,35234,17820,22270,47072,17006,74605,67933,64615,10094,97961,39923,69731,18956,96728,95680,57245,94779,73283,59766,10653,57974,13082,83678,81319,97640,52930,93630,93000,61011,89475,63641,33928,65806,80205,16924,66974,30197,95898,61507,54139,81866,40601,12060,92664,97973,50426,37281,84982,16760,96207,31892,91381,47792,84767,40035,26030,23437,79394,61667,98878,15236,79913,65671,69991,45155,34470,14305,66654,23816,34482,80682,61586,92595,84633,93994,60624,14410,78198,66571,39561,89677,63856,60560,17779,71749,45736,19531,97271,74880,49376,11764,45811,50465,19413,92747,58878,63284,59262,30054,69911,73835,60281,84081,92969,45475,83109,60947,25799,59266,55605,94664,64459,64890,85591,50506,23426,92948,14288,79622,82692,44717,21359,18151,61018,49260,74514,76195,94546,83478,95737,65648,22743,46765,11888,20199,66619,66314,30400,88473,18654,88445,36087,23330,97003,36782,99025,68530,87024,88055,82024,50041,27588,79354,51942,59667,60629,46125,98860,45636,61421,64821,68026,56740,76428,38026,28035,41603,16788,15743,35656,23895,83700,42004,70236,38470,90847,26152,22553,93138,20517,54866,11465,97871,96206,21037,24276,73662,69844,77051,94217,78191,41706,91999,50878,87834,99867,72457,49211,36209,66420,38404,46075,20266,69981,91243,37939,90239,76637,38887,38049,43312,42845,84246,57003,39797,88713,35917,74277,44824,49485,18915,84739,65209,46916,90865,96853,74992,36620,29761,87046,57989,98641,97182,10753,22737,68674,23689,14221,83646,57301,97922,83460,47308,71033,77821,91419,20581,47739,20926,56216,56206,67770,64558,54594,71610,90937,86050,73500,67988,47973,53389,51934,92687,81652,74258,79509,32002,39162,53297,41368,90651,96308,18490,94232,87769,74507,54413,93623,14107,12059,13097,27362,75960,84221,37314,99433,51541,44100,20677,48242,41084,72972,46976,45557,31062,69392,13348,43312,52838,70919,10901,55685,95497,94393,55693,85131,89225,97590,77795,15053,26700,18916,45959,37909,64022,73943,91944,67775,82748,97293,59866,74549,41226,63482,16865,25213,17336,70435,67704,75205,71128,35645,93270,52980,74581,17270,97239,64467,17133,57611,14246,67921,35268,11021,29399,50347,73521,77683,70205,85041,34666,90884,33002,69451,77848,74634,60979,27951,90044,99299,79718,33027,41050,17941,27047,16365,68162,81387,58624,40986,55251,71046,18336,56682,14980,41848,22835,49503,47733,26540,42896,65955,11715,22486,50333,94543,26458,72201,44500,32506,43445,70754,50767,58420,41445,52170,49836,82759,42139,62242,71423,44936,48219,34961,37150,61098,90081,41844,30330,96024,94385,91258,83743,26484,70306,30239,99045,40886,67411,81446,63268,42768,11137,31079,81319,99387,72423,74499,28511,44125,79326,98184,16714,31663,57948,73843,32838,53788,77226,39015,42485,30564,53248,97804,32281,74493,42715,77842,32737,96380,78063,71119,89553,62905,15547,64444,25057,18919,43151,71315,88364,34532,14472,31629,25852,95437,75519,62251,89494,38367,39272,58387,25158,79571,84407,18005,97271,65644,73622,89851,27874,15991,74284,39931,84220,41875,25466,86865,95007,23158,79274,70583,43679,88460,50929,69361,41993,65562,60836,63485,41350,58132,61480,34086,48033,33955,16966,53127,71506,41919,38686,28895,85728,13339,26217,89120,41930,40301,64360,53634,65875,60627,36319,76917,79882,49299,65638,20738,23137,29685,98136,84385,83180,61337,86003,61401,76585,83019,37922,79600,82360,17800,76417,74699,79067,28105,63135,29152,10197,43433,89456,35587,78373,98257,49481,28388,20490,35184,56192,70802,35989,93355,37318,36470,36728,24773,95146,84258,73011,80191,98368,28317,13884,39643,65146,57525,15373,92987,19349,34163,16210,53221,87114,23806,60445,38262,24333,36054,15539,22139,39144,14748,88286,10565,26626,68772,30159,42739,25655,65692,91690,28815,37640,93155,29473,11722,67080,22392,98432,38217,16491,88785,86308,34418,23722,21501,53208,37137,46404,51620,75094,39543,24616,73173,38582,73696,81970,36884,74795,60282,82267,81434,29442,91949,55435,92084,79576,33848,64614,32537,13056,53685,55795,73348,99352,15855,56637,48765,41335,15640,64761,95041,37804,41135,96945,55988,75092,80444,73922,31260,49628,80037,67310,70919,35321,87851,10961,83402,80640,94797,92531,95236,22968,30868,34960,54972,15509,92367,39037,96040,90281,66550,98639,54678,90076,52002,42414,95917,66923,50040,78779,87228,63101,99504,72592,84006,63627,64287,22110,47561,82680,60918,51929,98122,50145,67550,56424,75072,82118,51560,50248,90697,78177,91004,75902,80076,51897,91503,75563,26367,49752,18985,62450,64828,39175,61234,24973,29306,75189,11582,36418,36412,69189,92114,73226,58410,12631,21838,38917,41965,69886,52124,96540,94573,52526,81996,16701,88837,80885,98553,94401,74040,77808,54784,56554,37111,79253,18687,27464,78357,33188,74087,48471,23313,10447,19137,54320,89119,10314,62871,55738,96086,93620,52950,35839,64297,40751,22186,33665,59419,36138,10875,83534,60717,25662,42425,50326,54835,72162,51840,56360,86069,46698,21028,32881,73702,76488,37901,59777,19788,33742,18260,35191,48301,68883,23924,32172,86945,96994,29415,29511,28402,61663,26534,15385,30163,23615,64431,83275,63828,13149,64414,78853,73729,15631,15544,28992,76024,10764,63497,54372,71596,12966,92310,93348,57060,70284,30042,37788,50204,39490,57237,74337,90310,71509,39760,80596,71031,18286,87573,88362,80758,71740,20227,42800,29974,32713,65651,69374,72560,25933,82132,91176,87050,61188,60659,85902,22412,52518,44561,60621,60750,35826,59550,96944,32471,54312,22185,51653,54201,40711,20310,21809,77170,71722,31384,52612,56069,14442,33886,17013,19572,35106,95258,19151,33815,48694,55775,85689,84336,71664,14210,84249,78419,90394,38214,21598,23338,54466,39588,32885,49005,26469,42719,22599,95510,48998,38327,13907,88986,83568,39162,59441,98833,77168,69937,81998,86763,12715,66120,96635,83909,89226,53479,71019,82021,27136,67769,75700,91798,12827,50919,87676,83747,21613,40895,68129,83731,35832,55691,47705,90651,86535,18793,34276,70596,78283,25552,83291,45268,68540,10257,86938,99485,69120,34191,57311,87345,44034,85475,87181,80331,59573,26345,63981,84774,36929,93543,68442,78001,36315,44009,41215,51571,49314,98327,79060,15312,65400,20979,53520,37051,72057,67880,13477,64435,77694,60189,85086,31974,53856,43910,93592,76067,83756,82381,45014,25515,22356,75524,69347,17259,56364,63290,48385,77864,23017,23915,28828,12038,86666,98346,58174,82929,60513,94544,30991,26549,29183,82466,42858,16951,46356,28498,30978,69384,41887,12898,55547,30819,55696,36073,76004,15021,69305,18401,83819,31304,52147,11598,52726,40089,99822,39464,56845,41585,73161,38749,48980,13107,93625,98436,69858,94282,63480,98184,36139,16325,30342,55544,49935,74264,10475,57833,60970,20718,17273,75096,38859,60876,12738,61410,98258,80310,37820,24692,86068,10999,85161,82611,88579,15603,72744,93088,39179,62978,32485,28826,77791,68877,59959,84613,22232,19034,12391,82717,65398,70000,93485,33701,90830,54874,92929,47737,25305,65120,95328,33613,64508,54848,40293,36155,53693,64558,42701,59508,23601,41325,68015,64017,38350,39339,44766,50892,37796,82232,91036,10101,29315,18827,90693,95459,17964,87532,89535,48086,89045,94824,24317,16451,61261,73732,91561,66015,45819,35670,28104,52023,21404,56728,23428,98229,21191,38235,52098,92820,67484,28711,12666,68623,65856,68814,35652,72847,31757,87725,16550,54115,41164,82898,18589,73565,51024,62582,80582,72785,79588,31689,53142,24464,49023,95402,66795,38540,42161,71106,23127,71630,89003,59496,31492,81506,66538,35138,24480,96257,36774,64787,30005,23674,78931,46859,66176,78321,70404,92816,28333,11506,17408,51594,41592,86940,57935,36551,41858,83869,93838,24241,99394,71644,52473,87125,52597,85312,88796,23713,10261,60397,41304,82699,98377,77756,98032,16456,67868,53035,53639,42820,50972,86964,57242,20853,15602,21017,11777,46780,89469,44253,52680,98442,33022,27385,55467,44687,49942,95966,63119,50869,22783,94376,29755,60686,61256,31505,32799,16024,53148,94364,81902,57453,39938,65948,25218,50901,21269,69539,96026,12696,69257,29588,13102,83698,94705,32121,71290,36824,40934,55466,36851,45185,78607,77741,15277,36129,83070,83566,46594,28351,62877,91155,10544,38750,85413,58935,90324,62391,89550,71919,32512,47724,78602,68003,37099,31380,65219,12847,94773,99974,59507,45206,46116,13334,74819,63795,88930,93319,49546,98596,14746,87939,46976,93213,61245,59912,96575,76151,35920,70679,12195,36275,20811,19654,70461,89700,96132,76100,52393,77328,65331,15432,20316,73602,83834,64890,22113,38705,34415,80900,45503,27894,40017,44977,85491,54461,28919,83741,85152,11528,18366,73880,79748,53731,79770,38099,66336,34103,44440,86860,11280,36695,97146,80329,30302,99671,16021,50915,13315,55991,65833,56814,47974,43101,87998,52355,48789,62668,79170,24702,82016,17782,72990,79623,18865,59939,87672,30184,58395,38767,70560,63204,53503,56896,97702,38282,55200,73401,66562,39063,61110,74890,65326,84698,63913,67674,48501,71672,20199,34914,24110,15343,35764,41493,55131,63016,19956,31989,82848,26698,63459,91798,69755,44195,96256,54706,15902,66037,29110,92402,78709,39156,58758,79436,34121,40573,96268,99511,50477,88603,36035,35976,32184,15912,10656,69727,94378,78058,44538,90393,43135,95813,44936,61397,93196,51509,20932,95961,61687,11484,86352,81109,87658,45683,40134,67163,77355,17591,39971,17593,35506,74187,14241,55802,89313,14111,86011,43439,29302,68604,35435,56812,33540,18725,86111,82745,22808,36606,74644,19227,24192,72327,53740,56674,61140,97737,40391,77369,15364,67431,69424,52838,21630,23704,24278,77603,77174,30963,71623,89175,30789,79808,90027,80308,62594,88349,96887,34964,18178,77755,61954,32229,79356,98891,51445,63381,78903,99051,41479,18274,12837,40167,91522,27519,76063,89187,58629,65334,43809,62887,32000,33980,80486,16330,88573,60115,60919,72907,34013,31158,90764,34804,48930,64309,81304,37481,79509,45675,60066,11477,55353,11602,60322,54643,88686,72531,10911,83820,33315,20437,19761,75391,34475,47735,97755,91257,49569,62311,64783,98999,57726,91609,97287,45847,15033,73287,39954,33050,14334,91856,67517,19074,83923,44156,12664,23717,52702,45930,48636,52033,78552,31684,33666,53553,79189,75049,45353,20103,35688,84642,24615,74407,40518,52951,58833,42743,93356,33764,79856,55631,52175,83463,89428,74519,55420,46867,19701,41908,96560,57317,17476,13457,42560,31490,90476,90531,83056,93696,50128,20184,40375,13600,22479,34651,11999,88003,56899,86030,22327,61033,39858,68276,34339,14889,41428,44456,77679,76034,84174,45256,49295,13438,48381,31025,30427,23210,31862,62593,17906,62076,53461,50671,83977,20706,82832,64802,84329,60166,77422,57697,89687,69509,57356,34227,72889,79307,92579,73124,53051,32925,16680,21315,36784,42429,73730,87804,97332,62924,80716,66574,50098,92633,82439,89884,98456,93552,31337,38243,38816,26073,30904,74925,23516,18689,75853,53528,93573,51770,36391,32625,30946,40343,33970,58627,97502,98646,55423,83744,23212,23385,54779,49801,90204,84166,63973,82799,88510,76861,10219,34370,54423,47640,71494,78025,98395,68334,26871,49836,79260,67991,70678,55160,42994,39591,72477,74222,15787,21306,67976,80800,88247,49964,66959,50398,47604,45419,97077,47649,52384,76553,85334,91465,51147,47143,92538,43260,34744,53678,69573,68724,85042,64254,49241,69260,22800,71238,15475,30127,39534,69725,85529,48370,37978,20061,99616,45772,67128,46810,61790,86845,20034,63005,73377,41643,96477,39926,96938,20976,56137,52475,52354,85628,47253,64461,70499,21645,67149,97802,72902,66064,86532,18742,77422,61402,89901,40236,87666,83926,26271,33428,27775,41723,17275,30240,63744,51394,68079,21804,37997,19194,88256,57930,33332,85092,37002,34555,93649,34992,15710,89853,72777,61521,15321,31358,15562,45934,59462,55756,34026,31985,85462,69447,97387,41858,58035,86397,34630,25886,52987,75833,82043,87029,82842,77914,94170,27951,97963,96696,32893,55354,88849,44460,37549,91834,68709,92721,44473,44423,47068,99594,46751,69455,30045,83241,19648,48150,23373,20602,21555,69394,76351,76383,48080,26969,11881,77838,78913,58423,12182,25547,50801,73183,39130,70529,96387,99407,91225,63782,47325,28741,64354,68784,77751,16577,61849,21200,23230,45139,33977,77216,63565,64368,88607,46532,93995,89722,36909,34057,10684,63608,76764,78783,30539,64133,26618,22278,44273,34386,64203,25655,72652,62868,92773,69329,34661,32117,17174,33463,33536,97187,14310,88815,82321,33893,56423,25885,80341,98368,29954,92112,65027,26856,70145,30339,17345,39331,49553,61039,54517,26083,45740,14033,44498,22509,81311,55990,20510,45803,61134,75252,82037,93400,19665,50603,32689,66376,17549,44286,67880,85617,62758,87450,59580,89764,28553,17591,80185,41561,19878,74757,44845,16114,80148,23394,82214,51128,43997,37016,61194,94904,69389,48665,62221,49955,96431,14758,89952,20854,39302,98261,85296,98507,53195,17585,67577,22598,24183,43519,47536,24193,84978,74470,30930,63635,68589,46296,90667,38294,79602,61620,65024,69241,56575,96687,79711,52776,23712,97215,58582,88605,61106,95428,43180,62501,19290,61729,53345,46347,55345,18353,58703,37461,44498,20229,37508,95694,66111,52309,25094,83586,57109,35022,41557,97069,14568,35719,88037,86460,78895,90104,79259,15599,45066,32367,77575,43019,30367,51055,50005,90878,77497,11200,34804,78352,24601,17009,36003,77234,63955,62195,47890,68861,59458,63030,97085,59853,56507,72434,23649,34854,38307,38928,91903,68136,56332,12417,49721,81380,35964,63976,51652,94098,24887,75975,79443,95932,69760,74855,94342,96329,83857,54391,47377,41579,29238,76013,90839,23827,98206,30832,64738,36898,46140,31615,15795,53839,80223,80767,56241,77551,32899,49949,59026,73682,80271,12369,40023,82134,90475,56750,35858,37777,80593,89374,70043,34579,54577,74638,94188,84280,61742,89291,21984,14684,45575,91512,20804,85255,51900,73559,76095,55183,93683,76247,58698,13474,86866,69104,90843,78640,85980,16866,84342,10281,80253,35154,36090,99847,13045,98530,47710,62531,10530,46173,50689,17073,36562,43630,17290,44127,38256,73358,44638,79024,36295,57200,82196,14838,76046,37718,55572,63226,78904,19464,61961,14684,83762,98374,15985,17053,34521,16450,70822,36190,10440,63471,62373,31406,42920,56368,20837,23940,20736,89254,46020,83997,84180,30631,22129,20544,24539,56438,13697,32135,88380,96091,96801,75296,30591,37340,55540,88832,22943,28368,33531,51790,52515,51947,15981,78373,64741,81321,75507,89614,40719,36644,48990,89156,64300,53899,87495,76711,59601,67353,14539,29585,65747,33415,16737,10972,79389,36208,68062,73716,57585,69503,88235,55128,86535,44909,10304,83647,35361,39795,38894,91880,61271,83333,92588,80514,26809,99701,98307,11583,99879,50970,52285,82605,68352,36166,98662,70649,47030,58271,17331,66032,28938,10535,48023,54379,83261,43957,22199,91472,35420,24150,56095,47581,48955,71282,74742,46745,77629,39286,52059,62374,74404,64892,52392,48877,15854,62001,82680,59541,54705,56291,45917,69586,78035,20211,24523,95289,71464,89418,17987,19009,33639,57796,61910,52618,85313,35696,37895,25780,28597,72043,58215,40792,47242,95807,59283,66084,17970,55716,11896,37385,21695,94603,94492,45803,15199,21386,78798,49340,28059,71052,57448,57274,86736,87710,94547,84552,34876,19663,12890,81757,65218,53983,92280,67587,24384,82247,67117,69056,51179,19866,67596,16923,96224,23897,20008,19679,74882,52592,68597,96855,38271,86320,49985,91202,27744,35186,51640,51165,56836,70679,49336,44745,25879,38664,77070,27366,37059,39338,78059,52970,33322,17928,71525,55588,48441,97793,54145,93592,15551,92518,10697,74507,43454,44989,77050,76381,58912,38751,59626,97133,66930,26297,58623,94035,81214,54869,38401,59861,99686,25085,57473,34137,86120,64545,37882,18614,92590,72467,45859,56207,41480,69061,31168,87851,22570,99420,59275,30809,70420,88247,57848,45897,36061,53117,30334,23299,98448,47041,35296,29688,20325,82912,36357,76450,15446,77394,35239,37090,81172,70172,16443,28911,24124,65790,91067,94925,51836,28550,99865,13674,66167,34576,99903,94999,47419,57769,85197,93467,20675,79118,42329,34700,17029,65298,66634,53506,86380,60331,91926,39259,46676,28178,95360,13322,26702,75135,93902,22179,44064,38717,17396,86788,96366,44595,48248,41570,94918,55354,51651,20094,58303,20126,30555,50942,72232,33043,19558,97802,98493,62052,98971,52345,64888,21834,37760,98851,84431,22544,47054,73042,92075,85936,62601,87213,93967,51016,67656,11058,98471,62495,15928,54742,57601,36845,22631,45743,42069,17727,14022,29533,68291,50767,71605,32041,37556,30451,94769,17660,77089,69954,26080,56107,60446,72664,32851,69607,71253,15778,19057,50820,30909,22213,57021,10158,76038,89287,41467,49307,92367,26455,98428,66479,81631,62880,39909,35739,57055,42914,78267,85217,38497,82961,49324,69891,32289,68740,50333,54855,72261,96484,52938,81670,13791,32057,76904,27217,73564,43269,96229,38783,55728,86385,18416,87928,40470,21764,33088,30277,44184,21048,75331,75257,98370,73717,82226,32523,95083,26271,73436,11730,33687,30917,14717,49763,65109,34621,13165,54128,69218,47674,13759,36444,37829,40372,74267,60256,91735,20620,88896,85413,11865,28580,21330,78642,55386,18041,26622,78166,41816,66052,44282,18661,30768,16096,64191,25064,91720,10641,50703,63070,29054,55477,87083,30652,96302,82845,64374,38016,46423,34077,86444,62823,99717,19630,72618,56865,53686,89987,64015,76091,90315,74624,21827,55348,56165,29242,77192,65598,93849,60711,16685,92091,89136,57947,73696,98775,74570,30869,75211,41419,44806,47502,78483,73889,47271,58520,38692,12122,57211,11980,24503,54486,44881,88134,49017,77153,12983,83752,59544,21104,71176,40195,81457,52516,77213,66349,70462,56262,54863,82130,83682,13837,98682,10280,15245,36860,12094,57403,83069,21348,99869,50430,68760,68386,51606,17092,91188,19476,34065,52418,48385,60981,79843,44146,13752,95559,81540,73917,22198,58537,73010,83385,99291,71964,79771,10799,69707,59945,52974,22958,29936,80795,76856,56487,92741,83822,11264,72319,68145,73504,56757,27082,49077,12296,85702,75882,28318,53098,73271,52092,12581,97693,25139,60961,54853,89837,43413,60741,88449,56385,43360,88084,24572,77124,38233,42573,89834,92505,14099,28650,93673,34696,62750,32634,59676,82140,58952,50953,53342,92335,62945,90766,42108,41747,15436,69096,40703,90137,75184,49815,80530,56993,60593,21502,94552,68385,46730,63010,64813,83962,68021,60603,44780,37622,75977,57276,62207,65798,44332,10529,46224,80297,46075,28970,75763,65573,43026,67220,69094,39878,58995,83443,21599,46048,80392,54390,20665,82614,21832,33263,48173,82726,14860,70099,13546,13204,36047,10964,97928,66130,57493,53689,61022,91969,66448,27999,83174,78187,78959,34129,11444,21501,67769,51605,25747,53673,30560,96857,54091,18945,15198,55761,83970,31700,71561,27713,12759,26273,51864,95521,65862,21202,68309,18005,11893,43279,41222,21469,71925,95609,84311,53723,15371,39853,27896,24612,37223,66353,43791,51677,95174,50442,34978,81553,38540,97558,52906,16053,89407,36334,80042,69270,16843,76708,37524,69886,74534,83382,57907,22902,38667,30646,97196,13541,80254,45390,21169,37458,68080,76450,32730,62018,38209,38057,17267,16571,42274,99600,17039,76188,39940,75510,56770,93445,12783,32680,92264,26492,34761,30754,12265,69523,95623,79699,83403,19784,72564,31118,93588,22020,37254,46063,46933,12996,45275,60923,98202,26051,43980,98555,15966,16568,57036,78241,11105,71668,20227,83028,31395,70622,32464,20114,27907,70865,32149,62689,17316,25183,51113,65623,36959,23810,89109,66707,26302,54090,19710,73055,43151,17479,29247,34368,12924,25262,79291,54538,55796,34417,37921,63374,14889,53757,18133,47338,51483,91634,14120,16611,37107,47703,76118,24120,38275,91121,74647,70692,80899,89670,17148,63637,72799,71601,82548,41325,65764,74739,73846,43932,61442,21665,82324,66762,19647,48828,88964,62449,18307,35579,41006,89338,11105,87284,84361,11764,48795,50149,84590,29593,43263,32240,96730,86626,79242,91718,85343,14743,82373,20550,16441,54188,74972,68428,26168,59320,36351,94933,61843,16963,42501,59266,17525,62303,87224,23336,11318,56735,11747,91946,50635,96326,11568,81566,56380,82797,69011,30429,46916,62825,35334,51670,61886,52990,72598,89065,44778,39824,69817,29581,69382,26456,37210,71906,22229,54585,81986,13364,58416,19026,22903,31000,92171,71625,61591,15545,87887,66677,82807,20507,47323,98047,38999,54164,81258,47287,13906,48314,30941,74876,10963,25099,73658,54639,56927,40366,13657,16705,88939,45344,69341,15353,90217,71842,61921,26919,96598,10387,16545,89663,58198,95678,57374,73874,99328,90528,83086,60725,63937,84507,77364,72285,74760,29047,13413,42066,85666,44884,10762,31132,30713,80539,74545,49930,98288,59864,44248,77378,86504,42807,31912,59768,15973,96316,97633,75362,16751,97713,47548,28315,62242,50656,21828,57860,77936,21718,73839,59967,35860,49840,38279,19321,29899,15862,90901,67754,47023,44846,38239,14760,60395,61687,77662,52894,55176,10093,78458,69016,51401,87381,71574,84690,99571,22924,64906,51800,98321,49436,68219,85530,65968,70528,85462,22531,93211,57406,94601,43949,50212,93306,27729,99652,14014,90284,31317,62660,26953,90530,15068,58266,24237,15774,90216,82124,62846,53512,85677,55151,85114,92880,46698,66216,59053,94755,94819,75841,35651,19250,88699,25551,65283,85451,86366,85915,49249,66954,25022,35945,99256,27102,56790,47616,86777,69323,79704,31895,46589,73048,91156,15794,83686,70102,10997,36176,37690,24137,65558,73129,93071,80447,17764,37159,17301,59131,22901,82987,10768,17019,56652,13847,41381,69054,85736,94913,91444,21932,45864,97803,94227,69873,97037,50884,84062,30458,68947,11371,81537,74860,88844,71293,29822,24646,42854,88961,34544,37208,55995,64817,28655,80925,68361,62130,85824,19527,92797,99517,89349,46518,33711,86167,53930,79210,23452,23339,73878,83237,27075,85510,72050,75079,24963,58448,85101,56555,89904,80243,37115,41631,57888,78383,99370,67185,46417,63787,97268,42966,15992,73880,71790,76459,29427,88843,86971,91973,99588,11340,29473,72116,18393,19966,28784,66994,14846,12993,65941,80941,92997,54492,63663,50103,17065,69464,82908,67740,60489,19122,68424,71963,58497,88050,70739,77963,14648,85870,17449,35161,74875,69069,78401,20416,82683,76775,31979,89223,75530,41006,97635,48924,36600,33761,12209,24054,25416,58759,12322,79980,97450,29415,40837,16156,16277,91530,16399,53147,54535,13862,16782,64443,16425,78462,69858,15454,29710,72343,65750,48265,91375,33429,99595,86507,72021,62623,72651,70043,10736,87994,68838,92904,79977,36569,23981,62669,64788,56712,71536,30836,26427,32376,68737,10605,38797,13814,30328,54824,31791,77826,12676,60592,52069,94520,83785,16080,22574,93101,44499,75545,78388,44516,12088,14601,77075,34602,22600,70777,66051,75753,23311,32917,75632,58229,43958,21159,73776,36734,85278,13594,69174,63436,13953,13096,88994,39224,59110,69025,36680,35092,20141,80628,49686,91084,61198,79214,65488,21307,23188,30895,86215,12071,88280,37050,47577,91866,68701,17979,60847,48213,77211,10030,61611,66109,47998,81795,68571,24367,75669,24482,34387,45237,71640,38079,33896,97481,44120,46254,11419,99472,93982,44752,77559,76821,77219,39060,69537,97977,22911,67082,40508,26148,49714,77742,59133,79495,98104,93748,69507,73386,46780,48529,61801,58138,23383,26112,37446,60859,10739,92233,27535,94212,87179,44628,50079,12041,56244,60074,78937,40043,19829,28536,12139,41513,92869,29719,45817,66864,17981,29165,28021,50223,44386,63486,99495,60082,88402,88176,41039,96479,90335,38465,86674,54189,94386,19353,58817,58705,76904,26347,18637,43550,44242,99087,90491,49851,29481,75445,13216,58722,13188,35336,99849,21506,63013,67183,43285,74013,19029,57359,86414,26823,78835,72119,87164,59614,89160,95074,75953,90979,42821,91189,83524,41902,53916,61840,34990,42412,65116,65680,82121,90594,86946,97666,31635,27328,34498,13045,54653,44359,79241,24116,44552,39382,79849,21983,74757,56932,44429,66067,87776,10065,17303,83136,99694,17334,89824,98423,39944,90141,73268,63829,81494,35413,45963,65377,32604,57792,68819,94907,62774,69423,46367,67155,98378,28527,38681,39030,83158,87169,54703,57466,17475,33499,94584,34352,69194,20194,49004,88668,83732,27352,33920,14023,54858,25012,41063,36633,50580,53019,34303,75928,89651,18787,93194,62710,24571,49273,86458,32336,60882,98977,88133,33036,18472,28530,75249,73194,86312,80744,99659,67566,40213,62255,41906,79747,11711,31151,76663,44068,48812,35075,94794,83645,60531,96286,20043,47290,54777,82439,77324,70075,89628,38755,33565,40377,15040,59300,50455,80030,54705,95252,12601,52079,51348,34343,75481,37249,92237,27963,65535,65014,94212,50304,50808,88704,66755,99247,66595,24790,92226,34476,54436,59325,80195,50935,34439,54689,45888,36402,15814,46366,55474,92184,89691,82035,81911,34188,33110,86568,91774,62172,35996,71809,74366,46995,73205,58694,49640,28260,48222,54641,84161,23853,93420,34919,54033,67715,66148,49273,39216,16535,55311,49344,51719,41814,19870,33539,75820,23683,63856,12349,10784,80709,59385,96559,77219,73172,12246,82042,43506,35923,30092,10964,13212,62243,55062,90462,71504,44410,47790,21083,30997,93749,90488,40825,98531,58103,31008,99732,42502,61818,54103,58590,82062,51837,58890,15705,27188,25281,82746,19767,60964,18421,66958,12028,42531,72297,72723,56715,45806,66605,41940,67358,67262,87961,19006,40965,27285,92255,73246,51371,48017,33088,24331,63811,92979,80904,28047,49395,17308,20816,43210,57458,35466,25003,34420,97962,75471,34956,88069,38798,79019,75495,56594,24086,44454,65236,60193,12514,26257,77711,27138,23479,44152,77666,67771,10720,96867,46770,12975,99486,17467,96072,19840,39190,80649,82422,53477,34836,51524,54678,51454,40996,49568,91738,78619,46232,16335,67180,15768,57499,91320,93657,84626,74605,40242,35818,34797,97575,68930,53931,77645,50407,24086,20729,75304,82058,78867,44830,82493,45627,90924,97938,28982,58508,77250,22676,60479,56863,17261,14262,39404,88050,57674,23209,41364,37701,59373,81346,76476,60839,57009,39622,72366,91544,51129,70395,85340,43490,25113,46163,62923,79884,39305,31019,58511,52761,69922,72409,82052,12484,67473,74708,60294,47360,80194,12157,74528,83032,44839,80952,53696,82933,40257,89533,43099,55103,50764,83973,55213,90478,83576,36832,96298,63566,29270,89882,31266,58637,63196,86217,61629,54689,53632,13737,23319,46771,62862,62241,91729,28639,21659,86382,60489,60096,17611,46144,49566,12097,94169,59441,70592,17582,35697,55344,86348,70519,68419,37509,39013,32688,13829,31090,25965,21773,55254,55969,98685,96917,60740,85247,38384,40601,38202,71984,29216,75925,46729,30143,21506,51895,95279,40530,66846,70651,56370,73905,38372,84853,81331,49432,34447,49153,94450,46518,30070,49065,24233,51804,53375,69270,97598,70586,32998,21037,32288,50177,87281,38342,73571,62181,16927,90397,62993,73882,32174,77243,14348,14409,88495,84850,40673,13717,89069,39500,31713,25645,12383,85204,75253,16796,20520,83116,37518,90041,58234,56374,32442,37476,57550,89420,94019,54011,90100,45638,34777,74225,95275,50302,74772,39037,76138,16254,67356,20137,94784,36027,63150,45679,67357,70205,79054,63749,13165,23644,74906,73495,84242,66858,38659,25243,51697,96349,14176,37676,10172,13077,94360,13016,31191,93143,20127,32017,24689,48744,89405,65303,63358,83312,39585,84202,83902,47024,29554,31377,67833,51866,67093,72887,33190,17421,48143,77466,76052,29264,10505,77066,73493,50201,87642,54300,21113,72822,55348,28755,14912,60275,37006,69519,86177,38201,56699,97614,12590,91743,63296,75111,73853,10461,37488,58181,46710,63567,42310,60472,85662,44532,17472,80561,26367,86896,40860,24332,69287,47236,62879,90338,92209,57390,89549,79121,28680,26134,75781,88350,72914,95261,25671,89305,57114,73934,19872,52664,10203,63307,67608,84544,80073,48281,82865,91279,91050,30861,17813,57477,73919,75017,42697,92057,23292,82224,95737,99766,74951,14255,40761,79414,49864,89181,53978,61374,69671,61409,80546,30330,97220,58803,93808,40784,49371,79072,22380,26218,58215,14641,33632,14287,46893,16814,17556,25149,80207,93966,34770,53086,28947,55843,17108,54638,25274,90870,95234,29119,62115,37436,89510,30769,39450,82189,96996,70361,61082,54179,88818,66155,40667,62862,69641,50432,39461,64933,91025,92974,86673,51102,78797,84078,68941,44236,83255,28485,14193,50347,66317,11221,83745,49770,79091,93560,12722,35353,98626,59106,16404,89754,48020,57890,66185,91044,17085,48670,34808,18266,66520,73403,72701,85989,20249,23466,28636,19509,59805,30112,12856,82993,15728,28313,81556,32344,83748,65045,35413,71835,61705,30968,84860,33613,66078,44927,11100,21149,71875,44878,93650,14474,85936,89727,13934,58226,30099,83504,54637,44894,57665,90166,51697,40276,37667,86104,35692,97349,62296,57052,70246,98883,64549,46042,64065,45633,55282,54869,22917,62981,69907,85792,46125,86645,26084,50220,54123,95977,33035,73777,64379,99500,92573,52122,97144,39490,87611,45487,26181,27427,47386,60702,19144,30688,94664,20681,15378,13891,17469,95270,30962,16090,48724,19033,52564,80220,71058,96144,63471,30544,90375,70037,74809,62485,15641,51496,47582,65157,72256,80576,88529,58948,91799,12018,24123,99943,77284,54801,39288,81274,57947,96815,23629,48088,62896,14288,90697,14821,49766,39143,81562,94003,71751,25705,73338,97554,24923,27806,10688,61391,45979,76704,72172,33652,59045,36318,63414,21518,99688,61816,50353,33061,69937,45705,88165,63774,79852,80715,25894,99541,44110,20912,30544,30166,84019,41796,17044,90338,89154,87290,42794,42482,27088,60214,13987,39749,49177,29817,98211,21676,10821,90406,63279,21916,45368,81928,98351,88711,17151,36293,93643,91215,79914,41580,37289,85659,56744,54690,81119,93433,23683,52568,27658,60272,47286,31704,68232,78724,14172,46098,49254,11659,34142,61862,25676,36196,80702,25823,80218,86075,59731,94684,46911,62755,97978,72524,54419,72711,20698,16992,47722,51158,49378,38161,32998,77856,25381,42965,96249,76326,20487,38014,51650,19178,61968,60457,55369,34042,27373,13792,96185,15900,12511,60475,68210,12734,44401,62641,50519,67537,60045,72174,91547,97725,30081,92514,81891,85976,80275,49492,81491,13378,99115,40575,75683,17849,54420,94456,93745,25079,97430,29706,25103,16584,19891,83915,26032,46871,70042,24247,75422,69971,21252,49538,75297,12334,30610,67534,61553,83740,69331,15073,97531,20830,48948,86428,97696,95810,44655,96599,10448,31100,75675,12943,55812,57533,59212,91180,28064,79285,34710,57891,76936,16091,93497,17556,10127,78987,88639,56134,95056,24243,77229,23977,61125,43831,16606,70160,80056,65908,33523,32421,20782,10768,69942,69159,22342,82356,80567,97902,64585,17402,38336,77557,97105,89992,54661,58705,77869,13116,35754,51668,17530,28328,60926,23769,79514,22915,73462,66904,89946,94662,81312,81595,60169,92141,98380,47128,42098,88010,26503,95750,81346,39958,11100,78556,29217,69956,44801,82341,33943,55131,95807,79689,83683,73030,84302,16076,19008,91085,29389,20566,13299,42010,44560,42421,12483,88912,31073,91110,56798,62364,11908,37812,11239,95090,12931,57087,24125,12634,25261,11796,70990,23315,33923,49168,95743,32326,29482,87034,96288,44479,59316,95322,19790,62291,17339,74964,77622,18519,63018,82280,89543,63027,59477,92114,82281,32789,42266,35950,10527,13365,34849,12311,10550,74369,40090,40508,70672,17578,71370,71204,17470,49590,19220,20855,61095,62578,29520,73088,28740,33931,81530,50443,34148,54671,24972,50542,44779,18786,73114,63358,50750,98782,64806,38789,12915,46259,70778,22659,24812,29854,45709,16096,27384,34931,40693,27445,31528,44915,73317,71478,42644,94450,50456,27795,55943,36824,76823,72948,90215,93414,15240,37049,40218,75563,12397,76921,21897,91900,14261,66891,98733,87006,72721,82731,61018,79694,47610,97733,34203,10721,17785,61238,65830,98602,14850,26631,54635,69302,58459,30677,81112,56538,51255,61184,12136,37601,71870,92818,47323,88809,12423,56402,88716,15524,41335,65352,66275,38968,62979,34191,49389,32001,55033,18801,92400,88605,79972,75905,27080,67403,21527,43375,23757,97129,32013,12904,58552,53279,39745,24876,12004,89722,73587,68460,77490,15619,48324,92343,16479,64787,35632,34020,76344,65754,65741,63423,95124,83800,36453,42556,21483,15340,77452,43925,62754,68629,30397,52619,14836,65391,19390,76616,24181,85015,12909,95854,93835,89928,49381,47846,56587,79219,35318,60366,59569,18960,81441,50473,35533,32951,91100,63429,38149,41231,78476,51300,67847,11239,40470,36435,53519,35230,61771,12635,70292,40443,38346,82846,60648,52320,93390,75924,48954,24308,58624,77618,51027,90524,84255,92763,85591,53099,45860,78916,80599,55504,49429,79175,31965,34135,15763,70121,10968,17557,44436,93701,96910,92560,26504,30108,13929,87070,94525,96607,59597,26668,16923,68505,84845,15681,25456,11051,64324,53594,59602,35031,40799,41945,38908,90296,70868,43311,89960,52782,48418,18665,94513,91773,92882,16531,47442,39062,54892,81584,14344,13338,62223,68977,13113,96561,54533,33313,88211,98823,14673,35945,45740,67327,96815,61296,34994,64886,25831,61501,85251,79066,48134,76994,28348,21588,79712,97776,96640,53972,90846,40421,57226,34183,13007,33359,19765,65875,92566,18153,19648,50300,34467,16218,65224,56091,69380,72010,44937,49245,41124,36521,80882,76714,12903,50478,50867,97739,78586,70649,87186,43994,57509,70673,62010,30904,27912,60001,12436,89909,58314,52823,72886,79929,17361,79082,30412,77467,11190,44258,56765,73050,61196,50552,56943,98599,74530,36847,94696,20753,66408,76089,83213,52074,99157,10385,19184,65988,19683,19507,24266,19656,67843,45535,53892,83449,30358,25322,28106,64376,72992,84817,66032,71083,38319,88345,14962,50855,25597,64274,39715,21338,34339,57084,36810,64822,21355,97546,22146,36722,17586,84127,61418,81117,95540,42225,38952,56036,97321,96242,49278,50905,25373,10679,63493,15046,69692,34142,36299,84912,65139,41678,74400,22553,48397,70822,81545,23320,26622,76922,26963,87192,26348,80848,48164,78958,78186,85490,94312,24408,43401,76526,21311,37318,87720,63173,32196,88736,83652,31974,19964,78023,96222,80120,12386,90678,62430,69031,82074,38402,61215,81610,25333,42725,31332,68647,76170,62234,38409,61374,37255,21906,15208,40575,43434,27698,21599,32742,45795,78203,13858,54676,68364,48481,12551,12250,59368,31331,86355,84959,68495,56579,57912,72575,24167,88546,22138,71288,64341,50547,96709,97007,61044,12268,24429,18818,27618,60579,78878,92411,43216,90712,20379,72131,82159,76014,97469,94641,51835,33614,38835,84750,73917,30044,42662,84075,66845,85098,42239,54428,17972,53016,86276,22436,25823,11470,34424,34170,52733,69071,89945,61729,56903,22435,15373,30172,76297,17755,82384,57594,51043,22286,60415,82420,65304,81992,25523,21965,29345,71878,95053,34020,70755,85164,68164,31465,85685,75538,33684,79210,33047,42346,23032,79115,17282,51004,71110,33145,49665,42993,76626,30931,16623,74754,39910,58219,48193,27130,16294,30677,37546,63187,59831,68054,10771,19872,36107,37967,46089,63213,16432,84682,19065,39548,34943,13972,24014,24868,25007,57308,99378,30120,82281,60764,37841,55884,39396,36655,59736,49514,47041,62537,37003,18054,41301,70535,57324,51080,62716,83842,60914,22875,45552,20909,26403,30777,39338,25884,28471,96617,16809,53392,41058,15931,60856,18866,81796,52086,37180,59815,64175,55630,37272,32515,44228,84227,32987,40174,97785,88036,68804,11123,37375,36824,66692,11843,72619,35742,53517,39774,53397,54521,72316,43011,24077,50512,31823,29540,22405,31643,10670,88462,83665,64384,54900,55543,22344,32036,70619,81836,68191,14219,44077,30286,57835,68710,31322,52982,89497,99798,85216,19581,58832,34593,11700,33952,90151,16347,34935,54998,70323,58585,11837,60461,66246,21725,87635,29766,65493,94505,47629,79216,75487,37156,59298,45805,78353,54218,21874,61877,80541,87784,93080,83082,64481,81768,29406,55352,96029,84156,50958,42800,56476,72013,82239,30116,89173,63109,15338,11429,88579,92264,66652,93357,19194,39010,84498,81922,58449,94601,72042,17349,89885,47557,96366,11245,94908,28859,35397,91043,15412,35998,62024,40600,13501,13546,48968,24565,69161,90394,71468,30873,52801,10039,32579,95249,22163,52967,86384,69191,63809,25107,46505,21689,58426,74801,42251,79682,26640,42660,31066,69945,71512,85515,61835,19329,41434,59131,49441,31956,58074,67063,30795,75712,67577,31716,76250,35484,74727,62189,76660,18971,52391,28827,68821,49699,85944,78829,55604,86152,21950,23979,10279,47846,55780,81823,76336,22190,28308,52928,35294,81808,88437,90462,53761,51818,98711,95817,44573,62203,12353,82607,89376,77399,82277,72274,70778,56765,99691,89374,62381,26031,92578,12402,89368,95871,63442,92762,65831,80709,12143,92561,95379,52103,85704,10714,36139,99946,52095,61220,62652,54779,23394,49840,11755,41998,91742,34513,70037,60463,20918,23051,71538,70747,30107,72866,76218,39934,14965,82220,78495,88325,80441,86893,80255,38551,47945,89880,92013,26879,59036,36781,51856,53563,96864,33027,24415,40578,73782,45651,34866,53388,78305,45483,82040,50888,70429,94498,36595,99085,92945,55268,91433,19555,86338,19041,25855,42164,65357,52607,86282,52584,39143,27904,85859,34011,87867,50323,55249,48298,57909,14042,90519,26332,79614,94425,60479,92591,64573,40995,36421,79716,28731,80723,84818,13732,67787,97317,93253,15994,71901,22890,37525,57572,43385,52451,65218,25300,64582,17321,38496,88937,83216,40540,30275,58031,72336,40331,68853,21404,98723,12777,11977,96199,91719,38772,20129,16198,47082,35010,94889,67242,21244,10521,30311,85392,40992,37068,65306,66153,67356,28679,23133,40618,26015,37179,98888,98117,54902,46125,57456,85134,48398,59297,79504,75472,36329,33000,78185,55453,37972,52270,78923,52662,23583,43079,68775,11279,44579,62649,58877,10985,27959,25859,11769,84334,82895,11969,37358,55584,13692,66014,29184,61163,27421,64136,51489,82094,21835,80654,73485,30193,51984,90253,36335,56062,99117,22901,48020,67288,33458,89776,89415,26818,64283,60892,37691,98870,93786,57852,61193,81746,76909,60070,93969,40658,62480,68327,37472,24238,82737,56635,28105,61719,10002,89000,86908,97412,74777,54998,46126,28546,76164,41356,48246,99632,26125,28062,11897,72732,77191,61411,87263,34786,65783,35248,41318,17700,55738,26740,64433,39673,21570,10432,57495,64338,29234,23413,73711,68355,18356,36993,20404,70167,96308,42976,81337,28345,71982,30801,61299,47733,28376,80928,38149,29874,50645,59528,20568,12662,17742,41469,91366,41298,43381,79033,52227,47739,43170,91480,81650,15120,25392,79823,99822,29518,52366,41182,59127,41256,72495,60383,28254,73747,60605,12806,63318,21763,19610,51041,62405,47634,38826,22300,31900,22685,72134,28209,42402,33172,53811,41422,40206,76794,22802,32900,21748,52245,54870,40598,11610,56604,50548,47981,89203,27206,60436,47918,46048,42434,83933,43953,45742,90533,60606,82931,96680,91935,18812,28593,50189,85940,95144,55174,22676,12786,53846,20814,74915,57235,28989,17174,16896,84374,25702,51704,56503,92771,77563,52627,75397,15912,28284,13185,22602,34615,70892,45184,72667,50446,96904,55782,94265,51910,43793,12702,53134,44972,17074,97565,18836,47636,73796,69922,96560,43152,75388,18746,77955,23002,46103,16822,58519,30070,71040,40426,42207,28152,57880,65590,26654,73361,50301,80321,70669,31687,65934,86496,29355,90849,80143,84325,59789,38376,40235,75722,50239,89373,74879,77108,11092,66429,50867,14013,54181,28814,18325,41591,31297,17159,39678,62849,19556,52848,21839,95931,60407,50507,47055,19670,11336,80535,71976,26587,93286,85179,67922,52919,38928,53696,58416,73529,45674,44047,10308,75905,31493,45913,38313,34071,79427,34608,37977,45231,11588,54936,19220,22889,89758,26548,81485,84315,41240,10875,39024,12927,78893,49697,66589,17582,34367,32979,80208,51760,49378,77867,58275,87672,63668,54176,44002,88785,73086,24429,29904,54596,28853,63092,22336,61231,21679,99901,78209,38411,13027,33589,70881,63559,63402,15985,96415,11427,55872,21728,66792,30687,89183,26301,97747,42448,54421,33057,98447,63841,30645,13929,32468,58605,95006,70407,18469,76756,31610,52814,62680,62251,47987,60903,42066,59556,46682,94502,79925,93495,25321,15616,38403,27565,80587,81294,24286,23606,73558,13421,97512,34733,37103,53698,66488,75096,52848,43911,15684,18447,52393,70305,43150,60942,12987,15069,89705,33527,94060,41218,84683,49245,77870,96724,32999,55016,29422,30242,84031,11630,54237,25900,31352,71982,14726,18242,59344,34447,20048,57691,28976,44300,81681,77252,23158,69000,56047,48309,62024,68977,37716,59724,39771,62963,73870,49116,60742,35462,21639,32785,45994,56346,25799,16322,79213,66579,18329,54682,98751,18003,85535,90574,47343,10933,98741,35817,41126,38547,57199,31696,10508,54446,81615,57325,42742,97719,85937,81182,19004,57920,15445,67470,31802,13168,10753,55491,28507,96267,53470,61393,62520,47063,15757,33461,46610,88033,53115,16705,85566,13648,57248,36017,76750,61165,67524,16534,20181,22166,25710,42267,47566,90370,90797,77515,50422,33658,34563,54377,91626,83507,16136,34982,82495,93104,96029,17175,62222,37588,36064,75521,70501,88043,99827,31602,51655,62210,51793,60856,55439,98613,15718,59028,87259,56834,74188,83661,85886,64237,22485,22288,53128,31059,81981,75225,78344,20550,26772,74520,97391,79802,44741,62858,27221,20019,46638,59851,24415,53777,61829,91095,61876,32235,13839,46828,33173,89258,87214,57311,66314,74482,33806,17711,97596,74138,83249,47690,91665,79741,27255,25626,34837,91782,59075,70514,66981,73260,95170,53849,89137,77109,57609,27294,39183,48958,43570,40644,57664,38669,26466,47915,66013,72209,46123,34542,91021,16765,96183,13159,53997,61121,20505,87347,76571,70564,91014,42059,52247,31649,40483,40990,17213,45224,44749,33117,14822,77925,85364,43493,95234,84469,74149,29463,68347,22959,94140,58333,77965,94250,24546,28644,78716,39732,89102,36143,17970,10885,63931,10635,32295,84293,12825,54931,73189,86109,19601,89481,52552,32356,86689,55967,98313,39306,39835,37966,85110,94243,50684,99616,37322,11440,91856,32017,30354,99717,93206,36895,62847,98164,64928,11885,46097,73850,50984,73981,84954,12117,53014,81473,39807,96669,51030,56763,87171,84397,11296,80171,34582,67826,52920,70995,77248,98709,35902,51643,82796,71619,92322,42520,41508,68145,78117,72622,24267,92016,58017,54733,42355,12613,26148,11144,69534,58831,47882,73291,83253,66668,82683,49819,68543,64372,59920,21788,64561,89203,31990,72361,17590,92927,66481,86441,72604,75773,79237,56420,12070,35931,79989,35528,42259,29910,14631,17149,99874,19731,56748,72922,39708,60263,62868,99405,94941,73967,36284,95173,96418,33934,14956,11018,34204,36679,24863,44744,33875,70795,15785,91858,63839,37751,13446,26905,76639,18034,58776,11316,35592,55082,16004,34536,36605,26927,74359,75436,50824,13406,23343,98523,19259,56069,11647,85561,77801,34210,55803,37989,85656,46206,41656,28517,80612,86085,95639,42898,39130,27336,13850,34658,54380,52820,14686,77073,54942,92006,37030,90902,16914,53772,39223,77395,11808,42423,49720,82325,53845,82556,87723,60712,64434,29741,93274,49203,73059,86746,86037,35970,36880,83643,24673,50695,47681,27464,10027,53922,82696,56630,63262,22728,97890,32259,81611,13174,32061,72984,85418,54517,19127,17619,38381,17609,71379,93136,81020,45585,39011,59084,28676,52861,33581,59860,56969,54356,50078,48569,85826,74719,98904,16710,32802,92502,12400,17553,62020,68046,37272,22844,85138,98217,86750,59158,75381,34256,18536,45606,25456,79076,21061,37920,28596,99861,80673,52250,35989,13748,62809,37672,32504,22218,85939,73557,52817,91705,75575,71464,29463,80969,50943,87901,63548,72799,75467,38858,62243,32727,33303,28477,28706,77142,73069,63912,88100,32210,66254,40229,18256,23594,31155,99230,43750,56658,75269,21355,12817,72344,55437,40166,46140,52770,44180,41625,39414,31729,43735,61444,19863,48342,75696,45664,30462,62530,22223,60607,10980,57998,37114,76255,18309,44198,66045,27848,59023,51293,76204,79935,86801,59730,21569,64491,72321,27178,62991,47043,28182,81284,32495,44124,35142,68661,46440,63853,59571,42612,67803,59110,68687,59636,27333,40051,52101,24183,78737,14837,94093,98420,48026,17033,37070,92982,39317,61412,12870,84625,30950,58635,36157,66205,71222,89293,83862,99384,70223,33852,23689,94505,72780,33707,49441,62772,10539,70656,73637,19458,83813,68628,78833,65601,63270,19603,15263,36255,96047,46579,12050,63089,31517,68086,78652,96722,60475,48392,41033,98984,92015,91845,92158,27780,31854,85097,85847,35755,11020,27789,24466,56225,57097,25639,57219,46595,27201,75546,69960,65467,35273,80098,13471,60202,20744,20884,66121,94161,20167,19082,77474,98141,57481,37308,91709,58311,85497,54913,77933,18985,58340,97868,80683,83237,14138,74838,10870,93407,11029,39335,47922,12574,54878,60407,61218,35154,32699,40105,16183,17430,45047,86588,49763,22607,92198,66722,67816,52965,43393,41944,31442,39378,72394,49860,10328,19118,15429,18235,26224,77077,15518,47382,30660,58498,73169,27493,67924,72064,45128,43424,27099,93546,50630,58762,10491,43244,53339,84007,39356,75169,93405,58202,30617,14266,66368,42842,24441,34409,14618,68586,48016,27364,74047,49669,54259,34805,16114,83306,71447,14039,69048,60851,83582,96775,59719,61732,86977,58942,58689,82474,19917,90761,92468,43768,18504,25050,84424,79961,82184,14342,97920,58875,83641,66168,85001,12509,59592,52674,11566,33886,53243,25312,15685,65354,87639,84214,44536,95379,81869,14480,90887,34859,99777,16174,65103,20495,59924,30585,99642,92356,35020,50545,95587,30472,21385,21286,18001,40831,26586,37449,79207,34151,23479,62575,25204,21705,78267,49233,91124,27117,82316,11724,16743,12217,33442,78162,20851,19172,73435,97130,81380,70813,54249,43473,76811,96334,78402,37729,23330,16733,53131,59893,16468,48841,80270,37389,60242,23514,71791,84860,33736,64567,86181,29406,32778,65215,13510,74502,79445,47178,70144,75761,86088,75872,72370,41439,78774,87636,47985,94627,86468,63212,32561,16980,85044,81842,91719,19966,74131,25129,65591,82597,80933,37640,32166,65064,96680,38982,34223,37849,41986,39489,73383,55565,47212,56442,90513,75569,80619,52573,68910,93463,24805,64888,23325,38199,59727,68672,54101,72477,39525,34748,82543,34967,18271,71424,64378,99489,77109,20594,28600,73082,55914,51130,19105,32185,39441,91499,18605,77459,73614,43666,10435,45461,74833,59806,36901,84313,14607,97597,89282,72377,64148,74253,34346,85182,75734,15489,70508,94628,62609,21749,41131,85547,38680,48171,69111,13878,36668,65432,55949,19848,36737,45228,20604,34419,51381,61502,77844,32647,75347,38414,20424,92578,48264,46876,38570,52469,16130,46124,52451,11842,30763,17940,15596,72963,34682,75714,10285,42733,42413,47999,15798,39215,67847,34792,39240,25508,22455,89134,35907,84245,62619,94809,10830,95815,21482,50803,50548,18892,61085,47386,34708,93572,89419,55950,64377,22831,20622,55454,27382,57286,39063,44646,84027,20904,93297,95227,30611,46847,82706,12489,59650,53244,13259,13919,74800,74621,59942,23903,57371,67909,54036,42455,85494,28856,77527,59595,59142,73096,12504,18415,13554,60185,87747,49037,44642,35123,89636,45786,55450,84796,12206,34942,91716,58188,39051,54630,10132,74600,89996,57262,49873,87541,27017,42312,51188,12272,73773,91896,61071,90034,56706,40605,53101,50616,32867,78163,14741,42879,51631,35677,81860,91528,94216,14427,22902,76330,80206,54385,11935,64065,14052,87723,64352,64262,35885,56178,96221,98084,81562,59567,47517,65960,16334,52182,29342,18381,92868,31344,98879,72357,18172,27716,25350,31491,80795,16022,80997,46285,55643,44898,52921,20553,14603,78474,16033,17084,56931,90590,14914,20162,49452,75844,99909,27704,93384,65126,48027,16906,11296,39037,52003,98124,79953,92556,84930,68465,84329,17924,49034,22572,85233,27214,10044,52351,17697,90257,99743,39968,59888,11587,44198,13179,81224,85907,43145,82729,65629,82929,84528,60665,20811,89376,67476,99929,54150,81069,40376,71739,22116,85042,54921,67224,38725,37230,35556,59466,11835,48561,56339,33612,30454,33904,70686,63623,44512,46461,12657,38456,42972,89226,50896,41311,86828,34932,25148,93425,22067,72162,54777,15459,36570,69995,75188,18791,70131,29584,55086,13626,94659,27018,29146,44596,20182,26408,97779,54175,36741,36846,15427,19624,10636,66131,15784,73840,38084,68132,32170,43394,77620,46837,46313,51242,55505,23194,26430,21884,99911,84893,77387,16322,65436,73622,43712,66757,63844,40086,52432,45480,28921,51885,21055,60243,98627,62276,81816,67692,28609,11603,88124,58699,34517,81738,44913,13759,26855,14675,27632,24305,39540,11890,40284,14601,25398,18875,28943,15722,51439,61683,66332,81277,38988,61456,73043,67828,37892,54645,19734,54566,84015,97929,88754,49404,58247,23396,14685,61049,83214,11505,33189,16720,18987,38839,36721,85166,70009,42373,97237,44407,15763,40655,42580,56663,56497,77247,50023,91476,98082,11960,21108,42089,95689,79637,46912,12625,37413,24364,20303,87121,25541,41395,23817,56904,10665,27525,14847,56451,78045,44223,89607,49089,84177,40087,90274,81268,38229,14761,68750,20295,74108,38770,24293,89590,23532,78158,36774,84645,15417,73794,60449,32702,49178,89063,37878,64725,19682,32535,90281,89655,82823,89075,94187,96522,92088,10373,77105,34855,28243,86589,56456,40506,79128,29599,70070,82502,41415,21498,69075,23335,20165,24332,27744,88224,25075,85714,86236,97469,71450,48947,31358,15313,93074,45161,51834,39762,39385,49075,99182,99175,19422,86556,27397,79223,56039,18844,90452,39195,75507,59048,89934,84806,64456,19123,60831,78987,83992,58327,56302,22540,47573,98131,75027,18481,87454,12171,38361,36243,64409,91149,68591,26909,54345,48533,26958,65445,97038,64136,17283,96629,54771,18009,89709,44794,46755,75572,94574,45537,65592,37230,57220,60830,83289,92532,23174,55113,19368,55939,69942,39408,22514,12732,88130,15101,21124,27769,79135,33803,34785,54530,20292,29927,98188,14677,67513,63953,72500,41513,91069,14026,17104,78908,85779,44331,64017,74952,36713,29909,62796,85008,89227,97170,65064,82078,49883,25930,18062,99591,57642,76715,21750,45175,92474,32187,24575,91448,28937,41367,54519,73339,61522,87009,85399,91334,76335,39315,92629,74181,91272,85375,82173,19895,77785,11121,70363,35980,81214,14923,82866,58428,14634,73911,66825,18512,96638,56753,27716,28249,61883,17871,74365,70223,67268,54936,78621,96645,43892,92202,58862,60911,78383,23731,83501,19068,64006,99193,45430,52098,15091,16904,39606,35259,18684,20064,33545,89171,53237,44717,23453,70793,90192,74637,64075,19667,73719,78743,28587,76140,62123,46692,48814,56310,21367,76940,55356,87086,60338,29218,41238,45743,66148,71050,31037,55912,52290,69720,90003,99152,93672,18665,83464,43991,26157,76353,55574,38037,82877,18960,26844,84955,19359,43109,45810,85610,91324,72793,63640,73446,83363,90300,79773,69089,41164,74112,21166,39205,90961,34455,28492,83567,90270,95338,86815,29412,65112,46660,53084,33625,82071,89347,13416,48239,53005,73490,49727,62065,69143,19409,39916,48110,41113,95207,96597,47909,72175,32244,82043,91322,72526,41697,92396,76852,76807,78915,34258,89993,77307,41956,11366,49242,63164,14243,82802,98164,83111,46456,17920,53680,10364,49805,61673,98566,17938,26212,64612,94114,71407,16515,56980,19711,40066,14221,79249,28954,88446,63957,89658,19463,25952,50624,62203,40292,11869,28693,46101,44369,36353,33543,92939,45194,14650,47292,65800,60877,24230,30911,64396,95261,87059,36604,46120,52775,30259,74484,42216,82482,10816,86532,40192,54375,67489,76469,87137,58307,52966,23849,95857,12142,42498,20449,45534,95998,87247,74911,62846,79809,26009,54885,84398,51213,77041,42767,97002,19947,54470,12861,89420,56140,51644,26681,43959,77643,84297,48140,95051,89366,31878,45672,82434,35962,56671,62063,99786,64086,11678,69927,65629,44055,65240,12474,51245,36185,79778,15842,67419,43875,17805,17688,19726,85901,63215,73314,62299,16823,23862,45800,70912,46772,49585,55167,17893,26832,87206,66843,92334,16318,88643,17601,52956,46678,98624,94801,14384,34010,84183,21477,16146,18546,93149,91164,61655,61886,22659,38188,67514,91004,26547,32113,85643,92542,59362,75608,65385,84172,29616,66137,31422,94956,68540,80676,67190,65524,39660,83623,50886,88107,62766,67654,54836,38494,77991,56246,32076,85876,10966,75886,69961,35984,36571,82016,57276,76467,70108,22715,34937,28399,51694,90716,94808,11288,84327,75083,20082,24920,44792,76106,36865,78832,32249,37855,31213,63731,39239,69251,85846,22027,51958,84446,19278,66795,82199,76282,65495,93588,59135,70633,64965,44982,58491,30122,52745,91523,17520,53843,25689,31543,36349,33636,47834,67635,87650,89112,81500,13184,53136,98397,76456,94390,43183,56513,12172,37228,45617,39731,46660,92457,23247,14265,36208,46812,38562,41978,32404,89781,49710,96977,27489,88148,44944,19034,98629,32306,66883,46116,98756,73359,11913,45462,87243,47110,24191,13838,29846,50435,63806,49198,67891,10820,35227,37527,11136,35031,32692,23628,20814,37570,27621,86137,98285,47596,81155,70266,77142,20390,82920,25821,36654,57161,13854,10067,71355,69469,51855,63395,48347,27319,87795,81393,33789,86675,24276,65730,54151,21798,84038,85403,78143,84774,85099,43910,15237,11264,93408,93129,79838,70453,93566,97697,29045,17633,31693,22713,32267,46486,34903,90991,21894,28866,24111,56594,93454,26105,62738,58882,96582,60941,44748,57004,71277,94840,24651,45797,90152,55303,96520,14708,84399,57481,22083,26207,82750,61039,47986,33350,70192,11691,85708,19047,63941,18093,38929,58129,74159,71662,50309,65506,96673,93577,52873,20233,15509,48139,27496,34975,92024,74876,75821,10384,73699,36488,77925,20927,65161,77923,25253,88634,83046,45676,70067,38651,88499,64618,89615,45600,98167,87938,42377,39792,16622,72159,29171,84719,67305,29403,19094,35015,21974,31452,98468,60485,79741,52473,51747,32531,90127,84615,33238,97220,37923,91768,56058,81018,19096,30782,65782,27076,84496,71445,29935,37318,35468,42745,80624,96904,76728,58119,85948,23217,42124,63747,17523,13416,74891,63655,63033,29620,98190,39822,94513,65236,59999,31988,12835,88875,30552,89315,19620,77237,46451,27175,64282,38380,11005,50042,10538,41060,46954,26213,61374,36081,63537,19071,17966,82852,18744,55350,92234,96850,77384,77919,36804,42864,74373,55901,64134,29082,68035,57391,54285,92195,67027,53907,82972,51318,59323,73466,61798,49886,68680,74635,12958,84458,52957,41360,91505,41831,70554,51583,89036,86596,39060,95285,41619,85802,45524,39160,15669,61715,53952,54820,82514,41416,31634,61009,13969,34511,30335,38416,59599,87081,99476,47132,85361,84961,40110,46648,76775,38586,98653,54576,73243,81148,42146,62878,96324,18840,21951,60753,53857,51016,53524,91030,47485,66858,25047,72469,96681,92661,60507,57409,53463,73173,82978,76694,18738,27870,99114,81954,58102,77652,88818,66074,35651,97920,93682,28037,92679,23748,34451,12851,10711,87900,53247,15497,52003,86010,80302,70734,63367,19502,61463,90461,53433,48113,41378,61130,68404,21329,20124,57952,38698,59693,10499,64266,35253,83037,15025,53702,43267,48464,70100,62425,19579,23297,84053,24760,24672,10155,13297,40468,90132,81987,99853,30462,53555,45489,53862,47518,61643,81065,66045,17669,64721,20711,12309,19118,50495,43317,28788,86822,86215,69645,20750,40940,49708,32842,83225,68655,11412,37882,58710,16624,48549,15556,19166,51201,34381,10140,40443,96737,34370,35502,80631,52316,81565,31199,67823,84649,44753,33406,14349,33377,98278,34676,54727,62924,57092,27536,55877,85934,66395,95799,92424,20994,67171,44312,80938,35687,90587,24526,37984,59152,42663,26846,49286,72982,40240,88982,60645,51594,68438,75696,25088,23164,42236,90037,31588,97439,53385,40669,10402,90199,65106,13903,22015,58892,97422,48620,35100,14913,15048,56800,68011,56427,87370,14074,43530,47609,63439,68698,42228,68188,17712,49737,44886,63572,13070,17727,38598,55675,25393,20992,97973,23875,51499,24777,79890,18581,36290,78271,52775,34390,41285,88902,34955,61282,20203,63400,25479,62441,21184,62172,50593,93626,63563,50496,52991,59451,13605,50197,55684,39080,60154,99285,33060,48015,94612,17751,39000,31069,91315,35688,21714,52454,39905,13381,33933,90881,74076,20461,58816,82532,50859,86755,60086,27793,17152,13173,60387,60878,23827,96768,69316,47808,98101,37156,65987,51473,61443,70210,87171,80951,14861,12882,23700,80482,99640,70626,21665,76996,25252,78757,92388,46220,66824,58129,86179,35157,23665,93747,46626,48155,18188,76115,54805,32930,44910,62015,17128,78031,13270,80944,75095,51901,54058,94072,48781,16668,34492,35724,54168,92094,97499,36033,24279,73805,67082,70197,11015,44078,14693,94123,78438,45067,16615,59951,93312,61375,54857,57143,82922,68014,39124,25441,34574,62022,11725,41756,20319,86744,18282,16042,26652,83228,79538,74643,96881,23077,67709,47465,85020,18306,38944,66761,12806,74448,75245,45612,17328,63665,53350,86993,28612,29874,73007,79961,53730,11277,50280,16340,97820,68091,48819,81881,94459,34800,77723,14008,78082,82396,95813,40601,81845,75014,40061,70797,88813,21459,77219,60500,39089,57878,50155,82086,96051,85151,96189,50962,58691,35489,86426,15320,61594,52625,10559,87213,22991,78380,97055,68132,55761,28743,56675,90643,36470,52319,40993,74443,26727,57700,56758,41092,67000,20562,24092,68852,21563,23851,55209,59947,86699,92492,98272,38404,63375,73475,59631,60672,82358,68815,83028,91121,31460,27298,99639,26195,73883,92013,54467,15089,94116,84124,97463,17503,85151,89249,99692,50398,65968,35186,11717,53842,59891,93167,36893,50727,70425,37392,50406,42663,36893,17123,85686,32803,27957,74862,47918,35162,94776,85261,21692,71213,76954,46849,65686,57810,77983,28497,83494,48686,79125,27695,22058,37904,10061,95714,87225,82547,68499,61424,54521,49885,17109,29345,95476,66354,19114,12226,20306,53705,80987,60451,75234,13064,59029,79725,73669,16075,65240,41838,37084,82447,80627,73167,70514,73667,56283,93324,57555,40722,81981,98508,51379,56324,85689,18818,17954,71063,30811,91606,79304,18429,31133,95850,27228,69573,34246,56422,85576,45796,53046,48604,70189,28023,83964,73677,24643,84567,23228,30896,17315,65256,75012,21070,36794,31727,55646,47389,65467,66679,94055,51481,63658,14063,86267,53181,10732,20964,24336,30180,39587,81879,40198,44737,11985,38452,97855,25890,38778,92392,69321,25361,15892,83910,91509,69288,49566,38214,36863,76710,18098,81799,62070,46681,45538,97327,31507,19013,97474,58785,53086,52797,55554,56569,31472,85236,88226,29959,74334,84885,31011,99923,70261,35861,62842,85445,84034,67354,31624,51647,81886,93747,38797,86066,17156,77413,75735,87839,91680,72835,69015,83552,61981,78618,76629,74353,74667,17431,11443,98596,20242,57085,16999,30573,22570,42712,40942,73197,36048,67767,74007,60838,67449,26014,97433,51654,77738,22595,71839,14747,77452,55362,29205,93736,26561,96244,11353,72928,16057,57691,56995,38759,67842,13264,55584,86238,64780,12210,69223,23779,45984,98453,54376,21795,41730,92923,37319,19474,85389,89573,81827,61180,95370,33229,80317,18586,11500,73531,93676,52644,85800,40619,56177,21204,42082,17918,13606,10104,27439,32753,40884,91623,91174,69999,79896,78961,21622,62563,98290,18500,91583,37766,28025,10292,61926,10026,69664,64058,10796,96031,45437,86594,21262,12869,28207,80583,49591,34422,81202,79790,54066,17736,72786,22131,77158,10567,19561,93026,18981,57576,37211,33092,78914,50942,14361,35204,41265,39571,38226,88609,56573,42054,33720,43579,32684,96287,51680,35635,65745,67454,31365,91765,38198,51372,24445,87790,66979,57517,10548,36305,37036,56094,70045,31061,74632,66774,32342,31276,90797,86618,73590,17530,88088,86441,16246,27842,97601,56151,61332,47256,24429,53618,99490,73747,13917,85577,21407,59369,24321,16875,94067,64952,90883,33137,53540,12077,34356,40828,63883,40445,20939,42092,21502,25237,36642,12564,15864,94113,18993,28479,58049,91549,29710,87522,87134,51844,47940,41526,51846,12986,51342,96531,30545,56225,52932,44978,10241,13688,23606,69341,23067,92180,90688,78546,37918,84819,76655,20465,87788,98036,84348,56762,73065,69695,88605,33951,88490,65870,21126,14389,68779,33957,19682,33694,90767,15408,46593,92828,89049,80155,12427,37149,49565,94646,33542,11080,91246,25161,12732,35974,21702,49170,49324,52616,45975,39018,12411,72874,78027,73242,55111,35403,56707,61218,41742,18865,92342,41096,61821,17457,21403,39836,33618,96899,40241,55454,30897,80069,42997,29559,27002,52238,85186,16221,24360,25716,46157,79846,68548,62254,65292,41789,41254,73851,65418,34782,73689,68606,98859,70136,72821,58902,59073,83258,48499,41338,43841,20473,94473,91729,80461,75973,74110,25146,79997,35771,62189,60531,17286,56182,51943,17813,68498,58307,43187,85753,18706,20545,75053,75150,50996,38765,22551,55461,12812,52214,87150,37709,70314,99781,25000,74841,85708,87032,49235,35313,59594,60983,51024,44349,88709,57437,18931,49707,13827,48882,33238,95725,88818,98363,90134,57718,52190,97512,36305,75003,28423,10500,77667,28722,92257,50247,66503,76109,40699,53344,29102,96856,46053,79500,45501,43818,18200,74405,47047,41282,77157,50067,88136,33094,56116,67368,22290,31321,83824,88834,95095,87856,84454,45658,17756,57074,38395,32810,77052,64868,59535,79568,19874,20693,91861,11836,29546,84989,66199,40043,26692,27276,32491,54611,39098,46865,53395,51323,99705,87141,34138,83332,79412,96738,59122,74381,44364,97919,28663,68258,78353,13062,83978,60975,44222,26340,44479,92746,38915,51297,68043,55533,51564,78811,32754,53611,77231,27947,86288,60177,52275,70877,88170,87001,52455,65552,97492,90032,52324,78433,99062,34136,45061,88555,68451,38744,54043,44995,84594,29076,27938,25693,22763,98527,99811,33191,16059,38693,69471,69473,53669,67771,12135,35878,44092,39660,48011,94659,21578,83388,77439,71233,80380,71872,67809,99337,46361,70729,82427,84612,38534,41912,41034,99255,56011,32840,22643,90622,27993,32340,84568,35113,43702,86520,28177,58207,98447,73452,41140,70231,65179,43541,70006,72697,39275,20528,70588,32302,57824,51155,52607,81687,24711,92018,53919,10339,50301,46039,97512,47361,46466,20059,70811,20357,73881,43349,49696,50944,13451,23837,95334,66908,52097,32263,88380,96781,19817,29544,67505,92483,26279,99713,29747,75288,92735,75913,86900,68633,70290,52807,92700,51101,90354,90740,12310,65937,33253,66781,49567,89613,99237,82971,19337,92182,45907,27030,13826,79564,11266,57597,53186,28826,55831,70470,74658,70854,66568,16360,73261,60473,13260,76548,49377,37313,29546,30211,66541,36448,71303,92406,11922,99516,40880,55668,39178,17236,19660,67578,71165,51768,71436,60880,83033,34629,77327,18101,15910,99494,51925,94705,97612,13210,36701,20509,58405,50940,91794,93234,97359,52551,90784,94939,34205,65529,90193,95201,71582,79453,19624,67540,65945,79709,32819,67699,43119,14257,52027,72646,76184,79866,74089,51904,48163,28805,50660,75619,75675,58745,81801,87378,81952,96155,42482,36390,71665,37923,27252,99349,72091,60534,64185,55737,52541,13626,72596,90428,39858,73503,52465,40343,66982,96407,35481,98930,51940,95683,40516,90488,90710,98555,39798,31906,34939,43978,33900,86695,81924,38045,64117,33293,53191,75680,39205,30969,93221,96796,74983,45098,88627,44803,71842,80692,82410,53852,29776,23749,77894,19043,28964,97183,98311,97648,62193,44216,23050,84727,87978,37827,72499,54860,31246,67329,30458,86793,34376,62224,75754,18419,99714,76445,38187,44036,15994,38337,16421,22908,51263,11104,56932,60740,40024,73420,14122,16369,30002,99453,97546,79655,87205,95354,75427,42523,69737,29596,93013,45304,46306,69222,52581,73170,29914,57417,12003,71293,59268,52965,74427,70891,19884,20765,63358,65859,69622,87461,92639,86178,68832,89415,57789,44822,46191,64285,90650,35227,65962,92730,87807,66572,45280,20623,69507,64880,56145,68072,61766,97485,20059,69949,67339,40687,51598,50586,39618,94560,46413,73385,41556,75865,17038,25613,50387,99127,55273,57881,72858,20605,31129,45055,84907,53495,82863,92805,65821,46269,47683,12156,68096,56277,98344,83443,45385,18280,99730,87106,66642,83002,69730,51586,91834,50513,15441,62423,27523,67710,93176,89773,24331,29324,38654,79523,35172,99687,86868,74782,19637,86956,87002,48821,44202,33311,15371,21444,95312,98605,71485,68219,13138,75015,44492,49663,89989,29898,92181,95822,94296,68324,14936,95046,25014,62371,40824,27507,43038,92114,95808,89380,88131,75234,73191,15074,99253,37683,90469,85312,24386,28561,13492,65128,33703,10636,89863,38636,67596,51289,10866,50395,97796,59243,80222,13627,48023,77383,90894,45206,26496,62942,79744,68875,12657,53186,20023,12839,73960,32171,89275,66184,90037,29074,15683,43831,59081,34551,80399,50992,43336,53312,63768,62687,43876,80886,67124,40234,33397,63796,84342,25094,46033,64592,75934,65324,92691,64555,19713,12531,75724,51037,50565,28002,91070,20953,80469,30387,33430,67224,95141,69381,97916,69387,24059,35208,84100,74113,17118,92167,43952,62185,89073,12859,73690,18206,32644,28165,46991,90899,85038,15942,27464,42358,13604,56943,42488,53473,82699,53216,92076,68420,96551,51017,64230,70682,67101,24651,36102,99317,12164,72898,21063,10812,51786,82168,35699,51334,34040,94660,23440,43339,88408,70043,17639,62948,36372,96099,79967,13986,40757,15100,88620,53023,67451,12894,96524,59740,61056,76681,85815,96621,63719,29535,26638,95778,18331,58197,67276,69298,55515,84935,91184,72706,77307,18018,84026,53228,74754,86070,58827,29870,21697,27918,19344,87873,66006,66696,37654,99814,26697,27543,55294,36558,93823,47292,17542,73199,21600,96939,44337,12636,25267,62516,16416,76507,31713,56110,32514,23064,74900,80568,73549,78776,63638,18157,67440,90436,86255,96548,97698,35858,41499,81245,48603,20760,95961,45310,80056,38413,28018,32992,39928,57773,39053,73092,12870,11464,87010,80107,52865,90533,97847,81750,65191,41337,37636,24736,10733,26090,60672,33191,92198,61693,91201,40813,37728,67869,54708,40308,50213,20360,31629,52399,68573,41229,98076,22587,13074,54831,92191,87794,28690,13277,68158,22811,19316,47549,89082,95646,97549,96966,10980,39535,89511,72854,66016,39660,66209,19337,27504,22925,40856,46954,38852,63680,99543,78742,54243,30242,57038,91763,28583,48443,43311,66549,48260,28140,24665,39743,86554,10167,87116,47880,89393,29352,37408,22714,29969,72394,54451,86422,47828,33668,23150,74568,64834,79610,64897,51725,63146,16316,64114,34650,34637,56398,10908,25817,95239,86189,51221,39524,62797,90506,12865,90149,91692,66163,99178,95570,26679,44258,56853,45901,16721,45743,29308,40745,25094,79604,28335,17549,19377,82506,78343,51685,64843,58321,51998,13423,36524,17821,41208,55057,79416,91606,95888,65652,56497,83984,78016,11148,22423,17683,91821,13945,59328,68608,34980,11507,87782,15915,48704,73034,76148,41909,29825,19850,79433,23016,63645,53635,36797,97316,49571,52559,89417,24147,15828,67889,76227,52051,46193,76966,57810,89582,33096,32209,81477,50353,33351,11303,92576,33425,52048,47103,64334,92311,96843,86388,59756,21230,96531,91383,14875,76125,10584,33482,40913,29819,84251,75169,91720,62807,33191,72320,97121,51237,23951,27339,10511,41513,49160,81415,73429,39884,61320,64899,24332,95160,21328,37770,15770,79704,20927,63385,33825,10276,39624,55895,20551,89299,15705,29087,27690,39579,53789,22597,89631,28938,72518,79904,82810,92819,95343,21311,43834,50713,80482,53960,47056,33904,29165,90071,87171,14931,76112,97384,11776,61502,57076,55733,12942,71730,39063,72541,65880,59829,53265,85012,90646,54813,19932,94814,49022,90068,96051,55719,55012,90027,18357,97075,80784,63884,31398,61393,96727,86375,81122,43249,53505,56895,94405,97703,30988,12210,96577,19120,18287,37703,22199,69125,92539,98360,29051,23789,73594,48419,99741,80332,22364,87199,20422,19323,23392,10602,66453,96632,56847,78000,19799,47317,82817,62741,32870,81845,17941,64577,41197,92122,99119,37440,32872,75747,70786,78748,47342,51385,63702,87757,47410,94187,18476,60962,90549,78089,46864,81455,13647,88903,13501,20898,10191,19248,84254,72504,27879,85017,32568,94306,93554,88405,92249,99503,61800,98054,13496,68013,15612,29693,51764,52687,97986,72160,53357,25290,71614,41298,33162,30368,54918,94949,34495,36530,65194,46387,55998,91385,86506,59998,20991,35396,25467,46069,91581,62983,41433,57203,71670,31833,48224,53987,65372,29037,94997,12087,23767,68846,86124,52665,55191,65232,19163,38002,78000,31193,87746,13999,19091,54344,94008,28437,90583,31403,30257,49310,56319,68526,75410,57923,24379,86016,22064,44811,65759,88370,86456,29415,77553,85793,77106,95493,43400,59063,29038,24066,11306,26425,41355,41966,42200,44722,33937,90214,29415,86688,36082,87824,20639,58590,25099,80463,87376,43380,25233,90793,14254,17867,14986,78482,78331,78115,32877,30326,21903,11522,41937,30605,65773,83276,42584,19408,18727,71380,21094,65022,98769,67343,25658,21873,12768,21712,79546,93039,67265,89215,17630,40157,87893,61096,49039,39541,80115,51074,90062,32624,57310,86109,12706,72556,66109,23684,80350,49546,14308,60460,27639,81417,80787,57502,93863,36047,35728,81386,25502,50639,65575,85583,28016,99926,88274,58829,41216,29296,31890,76763,84899,57796,67672,86530,26916,42226,43000,36241,57877,77862,37396,50381,53837,78321,69190,90062,17242,41079,63174,23341,11517,51384,74058,85205,68907,53017,98844,69402,13073,89121,34272,20683,64782,71240,92606,81341,89262,78936,48487,63734,78627,36718,63406,55720,23190,50653,44748,31048,92952,51535,96244,22170,71155,31553,55360,85442,72918,80359,82634,21800,12867,86810,45491,84244,35057,43979,49844,62565,20461,55812,92663,83886,99513,34906,78667,93213,69448,64271,79784,31955,25196,53506,83599,94657,35508,98071,82786,26732,11831,20539,39190,17785,37500,32163,72964,27464,39789,32997,20106,77771,83972,33286,54195,70932,13762,32754,39377,89193,80504,97735,42560,99620,35411,41057,84973,97155,33323,21497,28274,39014,45293,99802,61368,18390,57313,54575,76690,56841,89552,66521,69830,96548,81506,16090,96698,58469,17592,34890,56428,17661,60519,44189,60900,22575,63269,73149,88044,12435,13876,80024,83858,72974,46264,82994,70600,98420,18331,75255,54063,90803,41861,12735,99431,27489,73479,19524,29885,89707,82933,22881,12066,13288,81799,61779,55145,92892,39750,87740,97690,98516,22940,68787,62724,77572,63664,67381,65210,15617,53021,34171,30911,80421,16321,35837,78860,30652,95309,25761,47144,13132,28809,48255,64639,67654,30529,90206,36724,55389,36818,59608,68609,91063,86779,31860,31027,35029,76107,93963,59751,12664,26626,86874,72411,23760,91126,33623,91657,25149,58970,53253,70316,41986,30887,65721,34351,17281,60604,39122,84697,72303,36496,45802,52457,52072,68490,41929,53633,80297,80440,89387,21178,50635,30317,13305,13824,46036,88410,46621,98703,98831,53831,22279,98935,41874,60084,90125,96462,88592,86959,13918,15621,21035,31277,67997,12016,28304,38186,34295,39787,87756,31129,96276,44076,55605,43992,52254,56935,52513,82964,15939,79134,56413,60752,91216,52508,72899,76156,76287,19395,96648,26747,59247,67501,21184,48523,31039,67782,57539,63202,36193,91304,91013,45586,86863,39795,28268,84179,38443,43957,45918,39010,68071,32518,23279,85492,70786,47443,90002,70644,51441,76444,86439,30298,60180,91364,59803,95403,71529,65113,49555,88953,25815,36577,94021,78866,97135,38976,73509,37150,40993,73062,88718,43072,30739,22602,52340,91298,47817,13078,81855,92569,30289,28179,54380,72774,29690,11576,55628,72076,53663,24261,16231,91350,62112,77827,26480,42077,31163,54763,93767,76266,16785,75973,27858,17444,90702,16225,38262,50942,53878,32228,49051,83761,74951,32172,80636,99450,38042,78336,26688,26556,59626,86880,34159,20271,17591,28049,21915,56802,67155,16853,18217,78547,73483,45261,46638,68558,16625,98611,13185,96379,40517,79050,55301,44871,71390,70341,18020,54617,75003,90583,24441,21243,86317,82732,96948,64642,48862,10244,62980,58300,70520,46398,81535,25111,17814,86285,39979,20598,81068,14805,39137,95524,43406,56212,78768,34661,33714,66755,99778,97556,65507,83565,67346,98032,98160,85633,38380,11765,10200,40895,38342,63301,73646,13054,19257,82075,95029,92238,16563,45391,12430,19974,61004,73089,40083,12552,70545,76199,71345,16465,10389,87506,53270,90950,69198,77872,90658,72380,39027,59196,34943,27805,83482,14485,42261,28387,93512,49573,20958,56541,23418,53857,93167,78436,93221,76821,56050,23243,49232,21718,73363,35026,89172,83493,51139,67388,98717,11884,23107,16869,40310,68031,63535,16963,66209,49807,21826,95350,88588,29338,95808,74017,19048,78706,21988,73117,15712,25359,43025,36712,17257,79670,14502,89275,48332,89364,17861,46157,41681,61403,73107,97460,26678,21098,68483,17747,15658,89148,34621,15371,85250,49723,41952,90590,20107,13504,28637,85341,26638,62273,19574,17397,98806,45949,78145,61837,81851,74118,64455,87475,39293,48067,97189,61115,72168,64896,92827,61988,43260,74555,44600,93510,44358,23322,39323,91788,51518,76346,61272,75771,20868,14059,78141,58630,58762,33184,66016,75287,86880,90389,47370,88747,68906,39569,58868,71934,72127,83948,87932,14986,80924,46546,97640,28351,93642,61405,19340,23116,52947,61972,65627,27613,66674,44120,51320,67651,25449,86551,84960,29845,29584,73432,77338,64373,51919,66189,79708,88167,22637,38137,31134,32193,68393,60155,92047,37003,97523,84623,35722,27263,36388,98897,82394,96473,20237,43468,43367,60727,30888,69288,42358,40474,49385,44181,59943,91719,23533,73326,97599,25915,53030,14659,39559,85519,34633,72650,14376,42727,43849,40969,88937,83011,18728,43752,54318,15015,87467,95148,18856,66018,19541,17362,78871,36978,25912,66637,35681,46936,62532,20494,35060,93423,71726,25680,94312,96105,45665,95984,83354,22722,63756,70363,73685,10896,41689,21493,45822,75830,55874,64639,63583,78965,39959,88856,55630,46633,14139,67939,53085,71487,63483,97049,37051,92983,82559,43123,32841,79499,45926,27209,64601,23958,97242,91197,44593,32563,44990,20106,56613,50359,61995,39208,46631,89868,32530,17744,64987,29024,74257,82630,92957,55893,58775,54302,40586,19801,18042,53987,49365,31817,65677,35348,29530,20566,65225,25496,65944,91886,45155,90798,66619,57113,87923,49576,94310,92612,67558,79648,79750,88212,32845,71005,48744,11081,23025,41074,83770,56811,55105,49379,90929,31760,58942,62317,73651,63663,19468,81072,51868,33943,37444,40856,55584,50435,52485,18599,85053,28805,41106,34175,44298,48317,67622,63144,86468,12116,30450,43775,94154,55515,10649,50388,15295,12717,17691,46610,76805,35429,25960,15870,25031,88470,88878,56356,40664,52143,76660,37591,39462,12765,74254,29316,35365,79545,88212,50196,87937,40858,60944,20324,15805,65669,43266,59352,91963,35088,71652,64597,63145,89699,13608,12591,87570,96891,64599,35565,47945,29986,77908,20432,78458,27446,99348,94151,54531,20127,70541,25284,93697,73982,42927,24764,50527,15707,84631,78219,10372,26781,76247,24807,27180,19033,60387,30077,61283,23554,18538,54788,43941,33253,27193,22821,25502,62601,66790,18464,55750,82667,56828,40911,64361,16341,82736,22147,83576,74464,79217,31666,52272,14661,96658,85746,79721,71955,47948,78423,54338,99356,21281,16538,17837,98852,82857,50110,86696,75507,66176,69192,30634,41287,61556,30343,30533,12625,77597,63912,35826,55968,89159,64361,34821,35886,10201,95693,22983,88476,68990,12534,88821,75226,39461,50147,53211,51751,10471,24690,99764,95018,66038,52004,98963,95752,65908,75059,73593,89439,35202,45330,85501,29516,77487,72910,32816,78807,85809,36679,42815,49377,97583,77636,87743,68393,25833,52894,70266,93377,16844,93668,68046,69531,55683,54928,75332,10198,35985,30366,13388,10975,45833,69700,12166,82312,52388,21170,98219,79086,67245,96631,44598,15853,57075,40619,88727,44290,64056,67592,98960,69901,33698,76666,51145,67306,22366,96752,30466,58936,33157,25772,46431,85681,21569,76149,13600,73925,45085,15074,84925,80402,86231,86114,11029,98114,35517,70522,25585,77449,76264,26934,17708,48426,77538,73801,35657,30546,55671,12361,23925,10895,32246,64737,29521,75196,91143,13463,32547,59921,27705,58460,31690,44468,25813,54595,58914,71420,74272,23086,91182,27276,37569,94873,48280,62272,45685,32061,24473,14652,84130,76903,89136,56066,17499,95243,69298,99840,74794,92143,26571,83580,16492,64268,40894,54211,16526,74632,30240,31142,77728,45606,66711,78857,45039,29336,71082,24381,46407,73107,73475,27273,44941,32672,71477,54149,88817,53417,32980,61100,28121,27331,50365,77665,68870,28206,36378,44468,68387,94062,43071,39973,68907,81592,65935,42112,71922,23753,45343,47923,10771,16413,78778,79274,50273,82615,10004,47971,78729,74804,64116,68547,37944,42906,31411,88588,98713,34489,84413,39566,95054,52860,24289,20991,80551,94367,79057,87368,89332,98751,55831,79386,29598,73822,39711,26394,17568,37775,20045,41490,84183,73835,65523,20412,80245,47348,24038,68856,18034,51107,88376,75369,77801,62579,57389,14913,63915,76544,82811,58370,29613,49671,34229,84061,69159,83202,34950,58782,57756,42898,45711,97694,97142,26378,58026,95173,63757,40229,17801,80371,29198,95767,97677,13914,96956,14390,14570,26468,17546,79637,45527,73482,30481,10882,65497,56318,21454,19472,57113,73927,70133,72336,88805,44890,42330,45214,46843,20950,78581,16782,96732,97610,53337,27767,50586,33415,74806,63708,18118,79163,70819,59471,89861,92978,75641,32538,15243,27530,80441,45609,75752,70602,25636,76293,76705,14848,38295,79179,24527,17950,69478,45802,51664,57836,93851,17471,74159,39574,61568,18100,12980,32164,19686,66975,61613,71094,85538,14549,84249,51974,16922,76699,12471,86074,99628,79370,43707,30141,15121,89296,29601,59150,30507,64382,65929,57501,46254,20823,95077,34562,59591,83398,14990,16678,46524,87977,29814,97312,20943,81337,18524,49065,17559,18555,43537,56666,45579,29853,85564,27745,59994,61097,75114,84838,12457,17413,11460,47742,68420,99417,63726,80300,54861,89269,28585,81577,45158,60109,58594,40822,70624,96136,80245,48348,33955,77108,65431,95028,75658,31152,81230,58947,37368,88850,84491,96240,70298,49955,18218,55619,78096,11726,34569,54786,52975,91715,58176,47522,81352,57739,59100,49603,94963,21106,43970,81216,52185,64517,73913,27429,75509,59936,82003,30606,11658,23750,82224,18855,94850,49252,76768,42101,63961,66879,84997,58316,22487,16665,26186,84414,76781,72492,81760,83856,72852,28086,74974,28111,76293,27578,94605,40320,18987,27494,55746,35437,95140,79094,31696,59113,68992,38074,45404,63693,87659,78681,94586,30727,38171,54216,31709,41732,30099,79061,70060,87168,92970,22045,72972,35125,38407,66284,46082,10748,85337,23460,71028,94403,90972,87559,31873,43164,28823,54059,91730,67681,63858,14676,95688,40068,15963,40423,57446,70306,78820,84706,21385,35335,75665,26612,99610,18087,86683,33500,18963,42476,27094,42208,24059,50527,77841,77818,10942,70035,28280,90712,57355,92208,80641,71833,99318,44518,57924,45740,34945,98049,41622,12037,67345,40434,66840,30889,40631,96301,14397,65098,69352,34267,11288,22363,87504,49848,91707,38761,74038,10072,29211,72851,11451,37667,21420,96578,12731,81112,25365,74704,67248,59100,62756,70740,20913,54867,68752,43168,82933,65614,32286,23497,66524,66266,66276,47692,75232,40589,56674,99632,57845,48302,38436,34736,36514,43779,61424,69866,74097,74434,93292,66405,44384,23100,99382,34307,67903,86490,56142,88845,36651,11837,55901,23462,64136,70461,92455,88271,31424,45557,60113,69019,29956,98122,85575,17276,80086,49838,87569,26904,66988,93632,35266,62898,62586,87630,20036,77931,21347,55291,86815,23120,17647,50939,48038,24901,53748,53051,28754,39783,70840,27986,99620,80664,88488,72351,11684,13653,14719,82912,92523,64170,72415,22387,24956,32606,19889,24181,21158,25229,33125,21553,67691,21957,95537,85135,12500,54803,42499,92738,88809,28212,69937,48978,12311,65266,72867,32206,17808,85632,87308,39619,79825,75141,30699,33987,33372,72846,49815,48466,76099,71685,34802,95965,67126,72683,40956,91179,88895,35395,46682,36235,20678,92347,27575,29702,96728,66129,23685,79432,19947,69374,63723,24826,26753,80507,84525,97883,47650,51006,93744,29681,60024,97920,96265,90309,45414,12797,96228,74750,13035,78541,28127,29928,77765,41703,98812,42576,47444,11199,20405,53836,33147,19893,29651,28288,50970,79750,10172,95019,61220,26140,64758,38942,24779,82170,48272,17758,60070,82234,74548,27662,67875,61162,45043,67897,61543,50446,46183,46243,97101,30773,56826,82799,86039,15286,42074,58147,36141,82769,35228,97447,14082,63820,70990,98096,52971,86333,53591,61577,56707,50582,61513,76216,27371,96538,27451,99107,44305,49452,70013,41424,87929,73622,59468,50341,55067,22756,58408,14766,19267,12618,33517,84494,43313,65420,25667,74414,51138,95657,68228,60132,80580,77261,15661,12510,30540,81635,88557,89874,70712,21056,31207,44703,21968,65582,49507,49907,60703,23745,40893,84021,85140,95504,80314,15277,77473,44981,33921,68233,34260,93232,89704,95585,80356,63363,94256,50561,69314,96351,39161,99610,16574,92787,51479,99171,63661,68847,62907,25017,23886,62506,20258,77746,53077,13389,25687,17320,28670,35972,42034,26539,22728,48714,93005,92513,62622,69598,35429,36483,50593,55684,99702,46220,95036,96152,25818,97905,54232,83909,20591,84464,18131,49630,65756,96376,64812,37236,53781,54946,77225,11118,55781,49031,29395,25219,83234,35969,28453,28128,63775,42189,34039,14595,34227,30728,64698,27899,35290,46347,33114,88061,21664,47143,49085,54102,98714,69818,31044,86576,85358,54098,96472,19188,17149,19518,41787,69723,18154,28248,57926,63018,44039,28332,90228,91625,66369,54478,45014,55696,57710,97321,54438,22117,94467,66221,16214,21017,18939,13298,47620,66241,85418,79993,38384,49986,67222,19418,95993,75728,21171,94203,34645,99678,81443,75680,50717,36687,20038,51992,55289,45311,39940,61342,55719,14945,84466,98963,58384,73365,34687,82132,72410,96149,11914,63749,16942,86724,86049,89210,65916,52872,34287,83370,42768,22320,41352,68910,96624,67721,53991,67654,77334,97224,16984,28586,49677,34391,89208,32596,15098,59661,87494,63646,87032,93984,64796,47757,35809,39229,15030,33933,38391,97403,86247,92848,39958,98335,19831,22523,53026,89705,40555,44118,27563,12797,87214,81292,39878,58723,98124,45931,65259,53426,24468,49011,18740,92262,62622,45716,87685,90803,19056,87160,14735,85716,93739,32756,24909,71853,52603,50333,33295,92820,16833,38526,29603,10055,57755,66528,44237,96578,73713,55134,53070,13069,32862,90398,36308,61349,73835,19100,29643,79120,76571,18820,59716,70178,77795,95388,27696,65945,93543,34185,49936,85745,37548,49672,48809,70837,23648,11422,32234,83250,76025,99124,80556,73248,65349,17398,99663,68013,44738,30504,97448,39753,64904,17565,51133,46963,97026,25441,31309,51906,11528,50692,45349,47574,91790,17316,57748,69174,51338,53283,46817,40539,33426,62711,34274,69039,80068,94173,71198,24726,42405,45039,10342,58257,53910,91438,78278,84455,79360,34136,65105,30316,95354,21636,34333,20260,24176,40551,36885,89370,23913,23352,95445,67654,89430,71695,71577,16867,70924,46029,10609,59240,51678,37061,92856,26714,89879,36519,87077,96229,85631,82830,92522,31154,99510,43061,22295,15142,60779,97886,86191,55044,48581,11582,24115,91969,81057,49281,92630,31945,61139,17500,42722,71399,87455,55825,95708,77306,54339,12660,63108,12275,98914,54525,58855,82789,75865,85464,10910,84371,21821,19843,15714,35114,65653,11795,70939,99588,98081,39173,17059,31913,86382,61200,33291,48225,11478,50647,40872,60735,26376,66438,76832,15373,54332,40809,96045,63494,38048,38567,67506,45577,90658,75651,55254,55054,89474,33709,26768,89265,33004,33777,92883,59153,75312,94087,83714,35667,62161,25784,48849,33188,37142,57725,56656,38833,41737,47394,27043,18595,90986,68513,38855,31160,11128,55187,57819,81304,47055,90899,82170,51211,99972,91026,48806,75221,45371,20349,88293,56432,51520,95519,50539,59210,51228,32929,13428,56396,90651,49581,30999,78061,79077,71887,70477,67039,33361,62842,80919,92016,56365,50149,49903,12349,55291,58779,85357,43604,66243,71377,46050,18881,53643,47096,42728,75907,20142,94750,57688,17335,57236,49180,12668,93736,17778,94084,79462,48284,97923,59471,67359,24865,32777,51136,55057,72463,85690,42064,30446,44575,79415,70954,83076,46058,87205,64259,73859,22896,69013,73296,80522,36070,66954,73276,69714,87825,51840,12389,52860,99409,98315,73143,39035,53953,29995,21852,36006,22848,91165,54423,92990,12468,78018,96053,43106,44500,50713,58281,94881,15545,58945,20072,89599,70346,49686,55017,79987,80145,27955,29512,20128,76398,35078,53390,68254,39139,41377,32118,92054,24698,16593,29776,37537,69131,94310,98148,19365,96300,38928,94634,38822,69562,60218,57220,96530,47179,33599,66124,41354,13518,11438,57970,54671,43572,90438,45132,88268,80474,44268,74252,65665,56379,55721,26074,37056,13900,52917,68070,89388,67287,21809,99070,78112,37759,95079,28570,70510,29209,26437,32292,55772,64222,60628,81028,70691,75609,59829,68319,18122,88342,25747,54148,93058,81319,50758,74342,90113,86493,70798,20095,77777,31082,68947,68789,81317,53892,53756,83275,62554,15614,44860,60543,74908,17465,42390,77148,24746,66444,71151,15726,88570,24334,13220,58415,27344,46671,89388,64082,29041,14413,63388,60466,35887,12131,12371,67527,94703,69432,35176,73454,55360,35860,86010,94690,48451,82660,28106,35221,24126,10032,22553,35513,40710,93283,70771,83015,34398,72114,13156,29950,89987,46847,80554,13806,35934,46333,31096,37617,39353,66094,72852,81200,89271,43050,69861,21517,30850,58442,37188,94422,66712,85471,99527,11048,95350,19292,57882,50067,32261,80379,84949,66603,57961,51045,86860,32913,99560,98475,90778,60445,20086,53226,61339,88120,33469,97761,41570,73993,90199,40680,84211,59802,38902,23105,97143,97277,92638,76745,42153,34812,27143,71573,72472,25414,40584,12456,96962,97324,43834,17793,56834,17917,54214,19353,43717,57116,19276,86044,40435,39410,56442,49145,55138,15382,31667,44880,72693,73544,78600,34681,17113,95377,84432,52678,81672,95330,42987,16522,99148,34998,28453,71501,71309,37288,49209,46127,97682,41701,51514,65598,86368,74485,18736,36725,31521,84855,26472,13703,44299,17170,86991,61427,72152,80585,29757,62433,15800,76627,33641,34560,63456,41890,45407,28336,12162,23368,36108,58926,72029,56552,55684,54433,49123,91619,24542,15099,42277,55332,21232,40137,75363,96188,32507,71184,98192,55041,11355,82960,29492,63184,60811,11563,99986,99741,79935,58998,94929,60549,77586,87979,73874,54794,22616,43505,55827,95465,80364,52664,49968,52527,13852,92638,84067,91869,93008,12780,54513,62068,93077,56248,24819,19517,79829,34499,41422,16935,83169,22006,50938,26009,19733,25892,20962,43678,77338,46239,15111,11854,12120,91004,23955,48602,71160,19484,83225,53738,24742,85375,73786,16174,75493,22896,11026,58455,47678,73936,35708,77900,95308,68295,11375,13519,88653,45958,58335,83575,29379,60548,72193,20094,75178,84662,53024,37308,59938,91558,36795,40015,75307,73021,76727,74268,58161,61387,20567,95691,50417,21339,41721,29471,52694,41688,49208,64449,29596,44975,35389,54006,34290,44554,15756,84952,34672,79336,96285,32015,13616,48675,70752,76828,97466,76976,22684,95040,47465,83465,61253,69409,30742,31734,53271,28279,52427,81835,56087,47937,79663,52040,88260,39193,13886,89892,85062,74633,71158,96070,49278,62714,30227,90262,14037,30191,24867,50837,34303,15545,45925,50491,59723,87761,82334,41228,87834,16447,27828,88320,79172,65470,69104,54417,68586,97227,51175,28399,58798,88937,11884,99133,63205,38141,42261,14947,66755,62053,81033,28396,47391,60229,20181,93210,52273,31622,88161,76402,11588,64012,79219,19012,24133,69777,48491,24565,35858,61132,58812,51980,27663,46304,35230,89586,61044,66698,72119,51606,58465,17681,98112,31699,50526,85471,43020,87041,53088,93169,64367,32458,89171,87406,43553,91166,21459,67193,55033,39957,84814,68197,99575,87976,67506,95525,51435,15593,18700,57967,68244,49554,63068,98661,58309,73764,78158,52111,68017,98409,21201,45294,32109,71269,39743,20441,18871,91180,27781,75845,91551,68788,78702,15260,51509,46077,27391,69806,64342,85273,12064,70139,24432,70572,77625,16047,12955,89273,48346,79510,36233,63369,39540,93742,91774,30627,95167,38712,51230,89820,90097,31515,78220,23170,10891,68098,61280,66365,11078,45805,26836,64743,73875,53913,27752,77768,16357,59556,21275,43842,65044,64033,36288,64695,54294,19184,85596,79932,39507,23699,85620,87471,41516,76940,82290,55962,47177,80228,11690,45386,16964,41074,76107,60303,69369,50694,76965,24317,65916,79373,27587,74549,35877,64604,13028,14370,95166,83362,67825,15087,33793,50438,22845,60926,24792,81237,62173,70759,42859,63724,11925,19567,33103,84293,56986,38723,36744,93117,88024,25164,74003,45234,83741,46502,14556,16289,53024,95206,16475,96070,73458,92841,89981,73818,69824,69382,54819,42923,75398,96697,83065,28146,27072,51774,80596,50361,95065,30722,17521,20068,65633,39974,27519,64292,38425,21965,95542,91242,11078,56785,64952,47978,63277,36190,88034,99662,45333,67033,52675,66608,40167,30688,43507,83147,49518,74477,75144,54398,14514,21162,35338,14740,67264,60017,92241,86587,74391,61251,80142,79602,90376,73116,19948,30680,38459,92284,62306,75516,25268,70153,87168,16074,39039,57975,37971,37911,11936,43212,86302,54378,54761,73481,36132,96304,46594,53419,81044,58954,40291,18178,54158,14167,18786,68046,78581,15019,49864,58364,17712,63778,47014,23495,54777,34205,22085,91513,56908,88610,16189,81525,67151,76767,74557,85574,33479,54139,38567,28073,38477,58489,79664,35663,54227,39310,94148,11424,42811,86786,63912,31249,21872,19432,77784,46197,51263,32881,32586,11915,22676,23490,30829,18117,40609,10649,68262,20485,97149,67014,34527,13791,42056,93043,43806,92269,71650,90237,15855,83132,51768,97940,92101,59461,67146,60332,22770,35176,83491,15959,68719,47198,45771,39567,65843,21614,40233,76969,92165,94769,64411,81233,44213,85176,96094,36679,41333,37201,78505,50328,52079,62755,68697,15684,35533,91917,73520,28777,42906,76065,55136,68021,46559,92637,96921,20612,86630,17927,56449,23739,84680,67416,96734,99518,76612,93225,86064,11675,79416,42216,51302,74311,27186,94580,78241,50179,17716,10496,10593,78777,74234,18115,89836,37778,24450,14368,43005,65947,82560,93856,34825,38348,35885,32495,30623,56085,16208,63977,77707,53056,80286,31519,18785,42586,73027,63339,48301,15203,75077,67890,30901,21872,30541,87206,24220,34332,18482,97961,69356,85229,25774,81359,25205,26287,94473,70085,49795,69018,43341,12045,79814,48654,40631,58703,85422,45845,96164,95395,77159,87074,18745,84367,97775,75728,71616,60845,12412,25668,64617,34088,97215,99598,47983,52843,13441,93016,40957,27778,18547,93559,18320,72237,54748,98455,58947,53490,15219,47531,74993,81904,49192,34507,12500,90346,18332,94004,57706,54343,14247,96059,84604,38559,39412,17343,36820,24180,76451,16649,75795,97206,34575,41697,54475,32586,19727,43016,60871,16521,17879,37935,47727,12679,24602,13377,33732,20861,94913,74657,67171,76891,74546,24168,97521,13015,31971,48839,38088,80923,23599,67421,89199,83302,33695,92775,35789,20005,41436,79916,82317,63881,13980,83023,61511,44291,60350,48325,42142,81476,87803,87507,56312,77914,36406,68900,71328,42457,63258,53159,35791,61612,65121,90070,59259,73708,80063,68093,76711,98287,66338,99318,45967,12088,14299,14731,51964,65592,13670,55031,76857,44525,48790,23261,90970,44578,66953,24140,42426,38940,46270,21940,61415,11515,38434,47035,61370,52821,19891,20838,30842,34227,86136,93716,79560,23359,99546,37133,72676,96057,88095,83926,10227,42968,57012,89692,84876,75962,97273,55542,38348,89770,25092,13945,95768,85806,34671,14092,58148,24757,95274,82613,25693,76602,74884,11802,66898,99752,66181,88917,33488,48109,60463,53110,51950,78609,65786,56490,61577,61911,30798,70571,25045,95668,67146,43379,42402,11068,41054,33861,35125,16455,23976,59437,28067,75384,24462,83997,57691,18975,38110,87228,92080,15974,73168,21598,42241,62557,52200,36448,40577,30744,11230,56527,83860,68669,82890,91345,82839,11285,18672,81319,16455,69025,52983,73901,58335,74115,86055,78308,30455,44654,80981,58061,55644,40249,83112,79028,11659,21720,12643,87904,80742,11091,12243,54064,15980,89340,18237,52378,38682,64634,22311,39686,37451,96389,47681,32292,67862,75459,58454,54916,35798,73240,38762,33900,77073,50801,54859,91161,26959,58378,84745,87873,84411,46673,37016,26558,52161,35535,51823,85909,91393,98298,48038,88380,47907,85017,69102,46237,93306,87702,86141,73381,96480,67995,46592,94432,95512,72724,28607,98007,79008,49690,68686,52726,28649,14433,48206,54493,96606,52480,32233,64888,73927,82645,11558,53912,49663,54505,70613,38430,80649,66085,66214,99774,89208,15430,81341,84423,44289,73326,28665,27761,29991,79003,90718,56053,28672,68302,68170,10125,74895,48067,69650,79936,59049,59389,69439,26415,43733,94510,63887,27051,75632,18412,22987,86126,93066,66383,66288,14956,15283,32616,84932,20143,23405,89796,52113,22119,86118,21013,70991,16474,38859,67456,35605,22685,50243,51516,64016,24868,99436,12389,33867,13133,22951,41900,73976,61749,89551,82244,85252,56076,66975,93937,98708,95117,14682,75147,82717,54761,22818,62228,88453,26230,62788,32953,74408,74597,92502,95183,67147,28023,53840,96791,63388,76478,13113,98737,91317,87914,13613,83208,70042,49465,34678,37822,15846,55261,24460,22621,59027,73941,82049,36207,76035,59766,44841,38199,46103,62208,14153,54777,21961,80227,85440,16700,73808,21757,61369,22005,26872,82055,45267,38243,43017,45034,42534,73188,88945,74855,62823,58222,22937,34735,73528,54540,32529,57767,53571,35849,87890,69831,74857,75972,64910,92729,61440,16631,34902,22250,83512,74917,70345,96846,59590,33947,71046,69597,99779,49446,97928,33178,72300,33211,26440,64344,98975,10270,84741,35014,66099,11768,32963,51340,45757,15047,27289,45564,86930,81336,52231,87598,59151,70535,87069,22029,15639,81118,54496,47405,28534,72231,59752,76993,57810,92266,16500,47457,46566,94952,26754,90293,35068,27755,20935,36623,96570,18272,20394,20957,58391,11722,32749,12843,25803,81399,23382,93293,78796,84293,64267,53899,19676,17187,50465,63185,21275,22670,75119,35400,77766,93759,21782,67993,48620,63968,41044,58429,75485,95528,62880,98021,72776,91874,29551,38909,17402,75242,99454,16209,85789,70625,89349,37992,99776,34621,10169,87411,32590,77388,64160,86145,30452,20228,67582,31229,20755,75065,69854,80606,74420,14674,73528,78580,79332,86592,31955,28372,10145,18856,28195,70307,87415,10500,57779,68657,89079,88256,73104,66276,56367,25499,78737,57604,50006,21367,89430,45538,13020,46424,51575,77375,75905,32898,79771,24472,45109,85604,51200,24188,31637,84434,99739,98545,75221,52273,12321,85488,68236,31782,41927,45512,67234,33088,74462,72722,72589,51971,16564,40123,43778,90112,60245,31620,43594,13632,42417,67181,54770,26617,64321,50215,15557,92896,85807,92555,26962,82649,10563,11568,55786,99024,15510,71072,72253,17256,31858,86233,62726,61287,29460,79298,58014,63297,53646,76776,62797,36119,57488,68986,67303,83141,75162,54044,66404,42476,56321,61215,56209,66908,35446,33501,70973,52954,75689,44744,26684,24877,79241,87810,99096,89634,30303,14193,56589,31367,74116,99049,52701,28057,20119,38451,93545,45675,71215,53784,26773,19695,53296,21377,10981,92532,61770,11646,86789,35335,62998,51907,24238,43444,80935,92155,29706,95641,18054,94973,55830,37988,35097,41245,63289,67976,10618,32280,26688,63189,50884,72572,35756,55670,60713,24094,99563,51798,14967,17734,59629,17354,65837,87042,41315,28771,86224,98879,50690,76752,38139,38996,23686,69093,88510,96852,23457,59189,94701,87020,58981,78000,31267,84090,76196,54016,14599,10815,67244,88234,30105,83463,33776,43234,10710,77400,74399,36478,28078,88792,81181,76478,76919,24211,94057,91095,38634,56490,63510,26464,20819,38806,89127,21741,64802,81638,39656,77505,45907,15128,62317,10194,12125,86411,58729,23936,67648,26699,47978,73761,57253,20759,18434,61084,49870,81211,41368,92883,22829,32303,25263,82456,14616,25538,74510,94889,39529,77830,33692,83900,28750,52851,70860,98305,76104,12009,19342,35516,83194,59388,70866,79955,81595,89800,76972,19504,95030,92378,52684,71812,38520,69265,60915,76079,42918,83699,60171,77640,38300,43840,81260,76713,78943,17043,96387,92760,84412,44215,99374,75826,16181,39982,26254,74179,14630,32782,37770,39430,61270,75554,13972,78397,63868,38546,88206,39407,67028,61773,31087,97063,66289,44366,90824,94586,19754,78735,40240,69346,71729,37904,75978,84087,70155,41677,60296,39557,47054,71887,81532,72513,42704,11329,56985,36509,91561,82076,94265,36687,52109,51294,55728,36221,17842,73988,44468,15855,16400,32749,59669,44410,29325,65668,18540,77467,15113,86783,15585,29174,16919,10240,33861,23943,92435,82626,54100,47101,33633,29290,70277,64045,88155,67190,82997,82918,41227,13553,24021,37435,32620,81725,53168,47351,54494,24939,95018,74792,16940,54808,50481,58060,35212,76239,72197,69555,29485,99413,71394,91994,13218,21991,37119,33157,67686,56991,85959,83067,63534,93458,77518,61957,94237,68914,48973,63751,48268,58055,91272,71578,52884,98263,86845,43610,42530,46359,81684,70644,76231,79435,29765,32930,29429,32780,60384,19465,71672,49680,98174,57749,60949,83518,59294,97663,25043,21347,38301,12362,22849,72524,14798,98039,49221,70627,25985,67539,22010,10173,17523,16230,82634,93975,84091,55320,45261,71155,78920,57769,31944,91715,18780,18688,21024,56721,57899,53822,29100,18985,95384,17070,25283,10199,14820,20302,94314,80190,92387,51552,89485,13879,77943,40960,21149,58567,57664,72330,30002,99232,30361,50978,75958,95397,71924,13011,88656,76887,25592,80474,36929,16782,79987,93680,27557,77450,36910,88592,74935,65409,96273,77554,41443,18217,90229,29232,86728,91492,76329,43038,41875,42860,12917,31347,43119,81975,95116,88107,39880,30090,31720,37010,67201,40330,17083,30812,70893,94130,23221,49191,46308,45137,21165,17824,18474,16582,80329,95884,29055,41318,15789,62901,18172,58466,67553,90216,98340,28617,46849,18930,43637,11569,74957,36735,62142,36341,71973,48631,93320,33916,50295,21846,61086,83890,11548,50429,69041,34870,87049,18578,40467,68516,59409,37830,47774,32703,29794,14451,15370,26885,63721,82038,51224,83121,67159,68389,57054,75506,46035,67807,57659,46585,45484,42472,67921,84435,84123,78614,68123,11644,74855,99073,89196,87071,25216,89033,65680,40643,92643,34535,88683,70959,97659,17643,78389,46872,17450,68111,11065,91776,87914,68093,47741,73446,21978,50172,27038,76190,56799,85038,98006,82386,54427,85195,33322,35020,69705,78499,96407,10037,99498,61024,23446,49341,13258,17836,15802,13910,65360,77896,24960,24512,88139,60502,40626,29900,51608,87235,85820,28691,63148,45074,95727,49958,87437,27326,51842,35939,94757,55538,38075,76379,65994,98931,33320,68391,51140,53896,85232,73904,27594,17466,45951,18695,89839,67839,49826,26568,89833,55240,33745,43051,19233,13781,47416,55994,14226,15537,28758,48138,15707,14377,96173,21478,25258,47699,38249,51220,82580,37364,89765,95368,83456,42919,16800,20756,36940,10289,38010,57247,36146,82261,16987,31527,44602,74493,99297,60648,48665,95951,20698,75308,78308,58779,72982,66126,31308,45806,37781,38346,14294,11021,13393,98675,85024,42480,80277,28535,68640,89671,36966,29649,43401,91351,81276,27247,28589,69683,40071,88403,46642,51579,62082,11032,29737,46291,41758,71097,81514,44830,18054,94988,52086,91200,67528,48936,56150,76540,27923,81570,74994,89525,92344,47147,75393,62436,63962,47226,48241,81257,44210,12961,37520,32118,33552,47132,14984,35590,93779,74750,41134,15448,37461,47866,87440,92249,29582,13394,30164,93583,52934,12520,60803,48497,99161,21875,61361,29671,57172,29635,30395,37595,17141,66776,73035,80706,68578,66962,80024,35521,96404,81031,95583,50664,41333,47851,20080,14025,53994,35242,65023,23660,31290,85173,79467,88374,71267,19779,45099,96060,75730,10501,99350,43094,35488,75398,80928,71270,95701,41779,22023,46394,70229,61959,84378,67237,86964,77521,79449,85057,90085,83935,47991,85787,45800,58968,75975,15654,78337,84964,91762,26950,31703,34689,94006,44244,18153,22672,33843,63923,49013,57849,25733,74171,63310,49641,85563,73509,98635,55709,21318,44875,63340,76399,13332,39397,77210,54951,88593,44724,51712,95989,45345,48012,95426,12039,72994,80035,88040,24579,33392,18666,26672,58093,40778,52923,78422,65187,34841,57966,19300,15501,79835,83617,80761,38277,42538,69707,81552,63756,20683,41100,63394,41455,47054,56012,12353,64128,54581,42159,72132,17853,61404,29796,96419,94655,53534,22852,46428,62522,38351,74000,79382,58194,11541,24829,15626,75602,34168,15717,58726,94404,44018,16416,83182,85396,97506,62562,28055,63210,59566,20314,50005,65553,34297,86854,43058,85745,29201,69865,14720,10799,28284,45645,47244,90128,13122,33209,90695,42943,35916,25604,66141,37208,24940,14940,12763,88932,40358,52560,34631,64860,56158,19667,21263,14444,95622,26144,58466,61160,25087,21746,27901,84005,45778,38439,57605,44794,96270,52576,43148,97863,63387,88037,22464,54123,43144,56646,26635,32398,64249,57351,90927,59117,68445,71294,46296,35583,40625,84110,31618,47832,14289,84433,11485,11456,75662,31686,83220,30945,62248,17561,26852,25485,60300,13873,12219,94802,46576,69750,65804,77655,55555,47175,85999,51688,20093,74855,53274,57491,62974,29176,89402,29559,89439,14357,88905,96081,43841,55733,94180,51373,49117,10623,75542,77781,30392,94737,54721,71767,83269,53805,68109,36926,83528,61051,54942,35126,38204,80516,10459,80667,75860,41299,71328,21685,95915,75537,24005,63789,15853,67068,81345,10055,87152,96265,95566,63963,12879,23909,21174,83635,52293,96653,19578,64160,29597,84412,77748,72266,22155,23521,83373,76923,39994,63574,28432,90824,13230,93312,18739,66174,45711,96742,11666,55624,19520,92394,85703,64835,74916,18602,32082,15019,31738,67986,10082,88687,76191,29419,81996,63739,59611,48061,71599,95265,28546,28262,55961,16907,59903,10766,45035,83287,20417,21897,66013,24129,52235,98269,38568,72446,83456,14304,88718,62865,16075,36545,68441,25531,12841,57835,42863,68830,84764,89121,71136,10910,61839,32854,44323,32992,36019,42696,96009,32354,51205,20268,76345,86461,89019,37473,66204,27447,92630,42442,10988,57810,76251,51005,78985,91758,98920,30975,28935,26371,13697,51212,94277,90859,24699,98449,57383,90083,92696,61755,88719,62309,69565,76973,48604,97349,29092,61191,56869,76097,69617,27030,28365,64176,22395,62700,61409,40245,72797,97002,14133,78055,85495,96217,75681,26367,41536,83608,19220,25789,31562,92639,64459,45404,45898,89300,92152,24068,63688,15649,27515,97084,63625,89807,37789,74746,58958,10082,22572,59570,98900,47903,93170,97703,57443,82046,62523,46233,99863,60500,74421,53730,65733,60003,88097,50840,25076,57766,57616,43858,29373,34768,65458,34468,58862,43341,77289,77849,61780,72353,32287,61149,46163,96500,17332,79043,38007,48207,76254,80500,94274,89196,14275,26020,16143,37536,64197,82542,41511,42175,95263,82114,69098,71267,64036,14354,82033,68818,27472,22806,78377,82811,89398,52882,75027,90959,61746,29925,60007,66162,54103,58079,18248,33414,16678,17177,65540,91729,70132,17258,58183,46175,73808,64605,72626,55169,73596,30698,10657,94074,67762,38615,89167,13806,82360,47514,23278,36806,49076,13365,32182,98896,25487,78527,54424,45357,79350,94336,89457,20351,49630,17513,11732,72287,37637,10802,39649,77922,55450,22423,68928,23598,85623,98859,16919,59688,64389,11548,83811,64512,28647,51360,63490,40536,78025,23605,42275,95140,49086,98525,41089,86993,58668,82959,18821,15078,20693,68804,93523,49049,50942,12805,56738,67418,57913,10161,71674,57858,73450,99656,95332,20731,34850,90098,38210,96799,75105,44004,95665,30626,74179,36124,83433,58569,18315,15494,80021,29772,74218,59294,29229,50376,55432,87470,80568,42561,83163,29626,41452,98547,11336,23852,69609,12794,61517,83358,26706,79534,98297,36171,41350,75215,77795,25356,20571,22100,94037,85185,44835,57607,75970,55049,93568,15963,21824,95533,80816,11192,88441,40594,22065,51641,96455,50282,16991,10076,85834,42463,35980,54603,47320,77379,40919,20993,50925,99068,74976,56336,18729,61083,38102,73380,99552,96502,77759,50022,81328,10650,71913,55788,32333,42294,84656,41468,16406,87340,35673,93363,66858,95025,77216,42214,31965,23612,83107,62338,34915,54946,30328,34826,17182,50569,68596,81062,10937,82667,24901,46031,52283,19128,80520,76373,86012,79088,35247,24852,64091,55287,42625,53817,51370,59208,90147,49616,98935,33878,40173,83442,71973,14120,51023,50824,32593,68517,50082,73463,12425,61367,66010,32798,78261,72979,21208,46045,38504,91404,92349,47826,65095,31920,52729,90934,67997,70976,36516,83481,86405,67393,54125,35320,27460,82734,46110,84356,19342,37761,48374,80366,57175,38031,69148,76156,70807,76863,50976,11380,27484,38119,53691,99538,34196,24120,94432,64082,45064,92957,78915,91647,33720,76810,33449,68770,21568,52686,36572,72985,68500,42709,99975,59117,17676,47936,81691,38835,66837,84192,82012,30855,71461,25570,65512,75041,12220,48358,17654,40435,65102,30973,45193,70132,53491,90323,26871,97213,83759,44703,16640,11637,95496,48047,84488,65667,47787,86191,37951,44401,77303,90154,71256,75809,24253,33022,51881,90860,41677,14220,96616,99668,50154,55017,52643,90413,38025,68451,38242,42413,94257,22651,22368,56994,32108,80385,73390,34271,80088,43450,93880,56035,58733,82775,49929,71016,36154,48054,32068,85019,61987,82439,39058,28329,89562,97267,24403,99603,47125,76025,80206,15145,14976,86055,82363,23754,87338,22415,13376,43309,73624,37883,78941,20233,42972,97204,52594,41446,20935,80641,58144,44174,85912,97710,31776,53824,91729,43449,89540,88238,60104,80037,20699,96131,56740,48857,30887,29791,67790,11391,40591,84067,68318,36925,31827,30706,98248,96662,25287,14107,36625,42279,19770,39221,90308,10024,20243,16682,54719,55590,75028,22890,15099,70820,69463,97056,79625,16061,73062,55737,90884,91323,12107,50126,15952,28724,17069,34147,48364,64836,17773,17676,63262,25705,78350,85150,52681,27117,45304,56354,35512,78779,84866,34431,42180,79318,87462,67323,38447,18399,24536,48095,47386,49921,96160,99482,47285,25478,35348,82023,45282,94503,42298,77094,98609,64993,72200,48339,34795,73298,39222,84970,55531,11784,81847,88237,47582,73482,23476,35103,78857,31732,97831,45340,87977,89051,11913,13513,44310,87535,34590,75300,10924,45841,49865,57844,96870,96817,34728,88389,72815,91080,93922,14827,79688,95971,65467,70297,14302,12185,79878,92390,59605,80906,60573,17629,70644,91558,11039,60251,40142,77826,90656,24230,43365,25139,20520,80118,32733,18370,95258,45574,59123,94071,10721,54539,56066,45401,55735,96295,78786,82379,25353,41438,59128,24604,27883,72850,20858,75968,13974,38507,14206,63312,22686,64268,42564,85525,61510,26289,96755,83285,18432,78848,92692,47361,78603,96735,17584,90800,84394,20387,49321,79565,19189,31755,72456,54648,20780,18652,17018,90134,34642,48618,15563,63988,24104,35599,58982,15145,44415,93070,90538,66631,35596,32064,70256,86003,41714,41831,25494,72696,73489,48458,63221,11056,46677,16957,27313,82974,88180,11033,45069,36873,38905,36244,23301,92808,12137,80719,33556,48638,20851,20468,14665,82869,47491,30716,22748,69560,14612,89641,27527,81869,68727,13024,28539,18662,50420,23088,44385,76986,60046,38320,25311,93758,19853,62047,97737,73218,77396,48350,46243,82249,40813,40591,47814,90418,61885,61859,85618,34882,14066,31378,74797,20913,50082,37833,94108,84168,34582,88450,21926,15326,89674,94162,34907,68439,37493,57644,88005,56084,30501,40500,90526,28351,19537,80386,48636,68686,22355,21630,90632,13768,70423,88661,59635,33220,19641,87595,39994,66400,35124,22955,23591,75317,67330,67698,38986,86127,11018,66463,14107,95209,11206,32604,97691,31068,34559,83316,41932,75855,33765,53934,22083,26598,45344,96078,14329,67343,96546,49383,22330,79341,20284,32810,83281,48816,31766,67913,70388,77004,40258,18631,84824,19317,95773,20010,76145,43348,55673,19658,78685,31036,22723,12656,74049,62271,34126,17676,53450,94272,63589,44629,45897,73906,92625,78413,38821,71016,23532,75477,62321,41837,25662,52667,31969,76523,18890,24121,32524,98120,35917,75839,33560,42485,11239,95802,91438,80282,31713,30989,88051,24209,99231,15272,31938,45530,42061,83576,58733,99385,72448,15348,42088,11053,29928,49153,67649,89561,67988,74875,90251,52534,40675,72831,12279,34417,52113,91367,99107,73072,93582,98474,87727,56546,37334,80784,66394,23043,35350,19395,21451,40571,18835,91978,84033,69630,63104,12581,77586,52140,46191,70349,75283,65576,85232,66546,39655,69683,20861,61016,23176,57213,52716,88035,68006,76237,71531,86852,32737,72656,67963,61418,81807,35738,24265,31300,24138,53345,70141,15394,30543,77413,47624,22661,73553,32685,66046,59602,22939,66999,29596,11684,44652,29859,96542,91705,93107,86190,68135,40943,32197,70591,99424,79426,86594,50798,48581,12117,28739,93310,55425,73228,75081,64902,36210,14867,50827,34374,21285,65578,90424,34419,45293,98150,10551,59252,46835,17167,44252,42369,95211,43097,46162,14563,40056,35051,84706,26036,31644,29522,83870,97162,35024,34443,62772,30142,74442,92147,51878,42196,97229,25992,88298,91989,74715,71356,60892,88125,72373,29701,93700,37160,96697,63519,63162,72517,54384,72038,20136,82841,43120,13886,22549,79867,94435,26474,78226,26471,92911,10668,19886,55682,21013,73407,95180,98143,30496,84254,69245,21082,53621,80860,79214,11112,73145,98853,26626,36531,98540,48285,37410,46613,55178,37071,97885,40325,57625,41406,78508,72111,59086,42114,19036,54749,62575,67510,50449,78312,30632,67736,87524,55841,26157,32417,90174,83583,22250,91715,25995,34908,65939,50320,56531,47204,50053,50807,84824,94596,11452,61907,79558,62612,58736,11263,83053,49509,61553,63047,28383,26800,76537,65090,54206,37410,42991,54628,31551,77499,85521,35891,26294,71173,77949,53003,20529,82679,22890,58280,25421,65973,81511,27258,69321,55228,56216,23574,16661,74148,74656,92999,87419,42454,36322,80869,30385,79653,61815,38754,64336,94398,97143,36276,12464,93059,49287,39557,20612,41691,52735,70652,30894,22361,12784,59906,46161,41064,24485,13320,46351,17650,84149,42821,61765,72101,98293,25378,46794,69993,93046,66778,10582,40024,59685,53915,26316,36804,95467,28477,97936,40720,35133,48057,20327,21045,68817,71636,37791,30483,90515,74398,72646,11081,45197,40014,26616,82995,14874,22870,51352,21471,47032,21366,64779,88073,30528,63472,81549,89598,37869,80770,86716,48566,60967,70190,23038,32948,13911,20303,30148,59642,81908,23615,80072,89479,62022,79772,85994,48121,85140,29216,99623,28331,92142,90305,78399,17600,40054,24364,35253,54126,40619,61558,31407,58609,95647,86336,31457,96660,31569,72312,34309,77085,98579,73292,34927,91945,87044,48540,14682,21883,78685,45554,52555,27391,77951,16400,40259,53306,24862,41414,43420,41274,27882,33265,18155,86184,38225,15503,23645,59556,68438,88637,58535,36699,55338,79633,51270,29146,58862,52097,43187,81969,94576,13650,22862,43756,29701,27186,59571,32060,11795,39639,52461,35312,92167,53632,31624,24855,49684,36936,82689,51980,31661,61388,30330,54889,74085,41635,50535,37461,44512,84136,75174,71597,12652,67165,88394,33580,28678,18155,23093,21722,18968,59645,18651,96694,27118,41736,42148,48266,48359,14647,19051,42772,37426,37837,30693,31884,87488,53993,89948,74491,63704,51014,41557,30317,26761,60851,91969,95308,26980,40296,31035,84923,78694,85542,95701,59295,81442,42139,82020,13202,36751,64182,34506,17650,44260,50813,13673,25236,77483,68402,99305,65137,26308,99623,86518,97600,56611,60504,38171,62143,85744,97583,53447,27094,71504,86378,19364,77898,74776,19669,11695,33890,56927,49525,59307,22573,53576,89050,68507,94706,41863,25687,42230,34084,34624,75277,53573,83477,48339,98847,86497,40780,79782,92564,98579,50723,89440,33804,22086,74419,36008,43402,48320,54291,99974,76011,89907,80456,18651,14119,80577,52337,88463,33263,83365,16996,75307,16369,80706,34580,74651,20592,63129,40324,60202,21306,84348,48602,58181,20146,19515,56261,24566,30188,23485,25514,30015,89283,58211,66869,23719,40365,53520,60376,56828,78540,41826,83965,86670,90993,38055,59592,16089,80731,93838,98140,18715,49239,19606,66461,65545,94013,52159,35041,87222,63149,23103,37283,39568,90871,83507,62803,91849,46152,78382,73016,28407,28873,12014,82833,74333,60917,45486,87240,67008,63542,51168,73532,55523,39686,41257,79086,44431,51489,92172,93954,49252,38467,60086,97018,12658,25422,22385,66551,80062,17042,95674,31287,17969,99600,43205,23469,69528,82319,67624,66688,48297,57595,75235,46664,18453,24206,18273,69070,58987,15404,55785,89351,47308,68094,76267,64885,96823,84824,36168,11695,22250,42132,37092,61638,67858,62238,58608,95312,46512,49063,56117,16908,62827,58275,56339,83153,60929,59606,40859,96791,99108,63627,36811,40579,99243,44663,13380,87841,44514,34926,27493,99655,37717,98175,65615,61856,33495,91662,19924,84493,13698,32070,54654,50342,98276,99523,85277,24050,65039,51152,45076,73853,84727,39870,75074,85173,94373,97725,40565,93342,92860,14803,96395,86806,43869,39987,20317,32213,49494,54025,78389,74259,96203,93363,66955,62824,96596,47793,79880,31561,42480,78390,13480,94105,99947,84193,89521,79380,73149,63122,44999,34740,11744,83712,87329,26681,76315,91132,73744,27753,10244,56286,26057,82176,48189,94582,73216,72876,40610,55991,71299,52107,45587,48506,48589,29870,53930,85929,75080,73191,36369,70621,37606,78642,74077,86968,91152,79566,53514,95043,15004,99404,42766,30204,93103,12410,94180,13795,68513,48556,12992,44267,45015,35547,18053,80014,48873,22033,32140,90426,84842,35837,12508,41649,38626,79085,32552,12907,47687,28056,54140,62524,67923,68858,85655,82263,32178,13914,35356,98253,32929,20757,72045,81052,75035,38523,99107,13281,56183,78537,31083,26700,60885,99670,43870,57682,22067,27787,42432,85919,84579,55896,54594,40624,71519,79852,33082,97760,37769,94668,12211,82680,62893,14278,99620,40709,56721,75443,17605,72198,92847,85292,87310,92617,94216,10051,95653,85391,56411,32337,99808,60508,76404,24879,30865,92625,13871,16722,20920,72609,61730,49012,94191,22141,20669,95367,36686,77221,13333,99739,32535,59115,58625,49956,96375,64599,75692,56837,28618,34269,81500,17876,86050,39435,27945,92626,54700,48976,90146,52820,33129,29337,36542,62592,21079,11940,22158,66682,80701,68949,28961,43425,96384,25179,91276,38463,69381,33915,83546,64883,17629,92419,58505,98047,97218,10263,76932,71093,42060,46695,20982,75308,51777,95306,97958,30040,96307,16224,60976,59210,73408,31716,34298,45774,29661,46528,53199,62389,38910,36066,96216,32399,88327,58661,67398,39812,67191,28052,57684,75447,90818,20979,26397,18944,58508,76938,98831,93492,98889,91924,63200,97097,92109,79265,44800,83669,54487,59247,44818,19894,41001,73503,93872,28545,77995,94700,77423,40161,31096,58205,92847,11296,40065,77750,18085,77148,50226,65693,79502,62595,16891,42631,22807,38388,90582,15502,56065,27283,39079,10109,66561,39601,98058,59144,34635,15930,89543,64057,81330,41231,89284,33084,76732,74108,68079,81605,59037,23356,86973,50443,66597,44459,73322,30148,15122,62359,28055,58485,32595,43285,23110,30837,35088,86667,66493,21619,14244,44461,60723,63214,99395,48170,42068,19307,75912,84458,88725,14674,72451,83188,28529,26260,27087,97446,66768,14126,56441,14782,98765,37653,43502,57112,95385,54723,62607,11314,85388,41269,92526,66531,82898,81686,47573,82096,20785,58547,67079,37894,18945,16742,68914,68214,37783,21364,39000,13032,19984,74810,92301,42720,52167,87161,25376,82497,58571,32117,45117,89186,83774,52975,74386,71400,92648,75919,26367,98844,37254,41174,97105,21924,68505,30664,94964,83028,14072,94603,32939,28765,49773,94509,38654,78602,35500,11513,38289,81613,20938,32501,62587,82157,35416,57064,43866,13290,31394,15655,87024,14388,49008,10941,12291,61516,57673,44536,56643,96705,54180,96580,82555,90123,53920,94855,52270,14966,11598,93487,20997,39639,42653,29714,78776,14524,28205,58091,94377,55471,63366,52457,37894,14442,79455,49674,30368,14215,71921,87338,44146,76749,18628,48890,34275,90040,87176,41009,31339,17605,32863,62152,88631,16991,39250,45801,33049,77090,43148,18174,36502,30774,38302,93024,35198,77755,94227,90156,82835,29955,35518,37219,70217,68575,58066,74947,52304,71630,79509,92178,19177,84557,47058,69509,91275,99302,34993,80043,56315,23344,21276,47568,46822,26701,37912,61295,94904,12487,45398,69355,27743,40458,32105,89458,47075,79383,14500,46046,40717,15025,12263,81704,51587,78616,39546,97528,65534,14423,54390,70065,29670,79561,92803,72562,45361,22808,97421,53706,73432,14999,94938,22911,53983,71029,46218,82013,41341,32556,34251,43376,99847,39489,23638,24593,14866,90914,13721,65630,64140,54016,16861,82299,42557,29937,19938,68933,33005,87399,81901,15910,24903,23298,58194,63842,41649,54841,27792,85014,46512,23026,30900,76337,41689,55795,62477,90982,84935,84368,48926,41170,39972,42811,47831,95881,19287,60477,94376,46226,85555,10842,74095,38551,19497,70782,21616,18584,52998,44444,23788,97111,22417,81470,23955,40995,47991,25119,13539,49849,44734,88435,60132,32356,68402,98311,30523,49006,64238,42166,30556,13998,40303,50313,39190,37325,76189,23188,74328,98698,24809,42435,65989,57485,72168,88608,82257,66899,43145,16794,99605,98789,49775,38841,54659,83370,49088,71531,91566,43712,74093,42478,91032,71233,72465,16308,27131,52416,73467,61124,40642,77962,58212,75934,96159,91992,96164,15962,29139,56450,95844,32847,25818,56803,71158,96155,36801,48066,91378,78376,25966,28150,85535,14883,71995,64132,38409,58921,88375,98294,65015,25831,61895,90009,84306,71790,29120,67770,48145,89740,29730,49337,58426,50152,64265,65590,67658,17328,84598,99019,65079,98398,51995,52007,49207,78420,59955,43185,78706,96650,93447,25534,30711,36132,80918,79043,76039,19670,76852,50044,21065,53638,93895,23928,51865,99060,53667,13421,43655,80820,39666,62335,97901,74006,38783,63904,39186,28085,45319,34196,36356,23856,43209,80537,93465,36900,90005,66824,21168,95642,36607,12985,46667,55390,44679,54688,12074,92736,38572,56715,52403,88331,85569,75316,88955,34639,79368,83071,54568,48358,59874,69848,43763,99387,89161,18060,90557,84823,23326,47291,21550,89123,48134,81446,42257,59204,30028,33537,55587,29031,95118,17892,62861,32249,55382,33598,35319,49102,19427,31690,28450,52141,10474,69412,63109,63440,78600,45334,19754,46350,97099,72388,83786,74154,49322,71121,66546,16440,33730,53896,42858,86603,37521,61758,47057,78233,94772,56734,90574,64548,44896,94227,71210,47983,23917,47073,38203,31717,24510,47544,56752,79947,67453,35871,23141,97756,66680,94782,43048,33500,72406,26371,63210,92145,32398,36178,21335,83565,84516,71095,53095,42316,99842,80001,17440,77135,95412,76801,43227,64008,30148,53902,50163,92785,58174,24395,85656,70319,98680,29267,90889,28634,85767,39427,45932,28609,81832,94962,38376,40795,42949,92309,17316,41298,74460,98173,21072,34287,41308,27555,94524,91987,59973,42513,19323,79659,91563,90774,60834,51009,33835,90447,71229,88003,99897,31234,82856,82933,71570,71792,71810,55136,75313,38051,26057,76587,82536,68988,28160,21026,87244,51854,98987,89300,85348,42246,67158,40661,96768,64468,10061,41123,59402,11107,88053,34856,60045,15470,21098,96912,55512,64479,23316,66099,70901,13926,53759,61597,51288,19044,63866,89302,52780,40732,17629,27688,26606,47008,59563,53210,41157,76047,83769,36337,83635,71061,56767,50291,30100,84807,65137,52865,66218,22961,94344,30113,41102,12949,78810,71603,15228,44821,71585,31905,40272,22731,21131,28145,95466,87471,23295,38700,53051,73151,21843,60611,69364,86351,75005,60359,83171,27226,93273,65346,73800,97752,64649,97222,50157,69724,40493,67109,94421,42311,94635,18978,56528,28524,32234,61818,92273,93744,19580,37596,76841,15733,14864,83124,14506,38667,49623,56526,53939,57768,52855,36481,83761,76920,99007,82570,93041,67934,19409,87361,25099,65852,96723,58592,81338,89517,57655,31060,19210,27586,64983,70006,42309,64364,29187,11732,99664,25801,90987,36651,14605,95718,29661,50473,65595,97688,90925,18660,93910,26311,12410,46921,48370,90586,10616,57228,23286,72777,99300,33276,30816,18340,88185,25360,51584,19075,67917,99002,43814,57629,53211,20889,34079,91308,15967,60577,38461,24575,36753,73302,69337,31608,14851,63613,24440,73979,15883,19114,84946,81583,71139,12539,35111,19021,37930,45142,58536,32668,17482,49958,81689,22760,61832,78067,97789,78572,89073,73454,62085,90490,59159,13681,52011,36280,42440,61170,91517,18444,52193,39491,30213,55730,27498,16266,17248,85208,48484,16978,81936,43905,33833,13818,10912,54074,88743,97098,36106,95903,98726,70271,60556,48866,39021,55551,77995,49743,50852,92897,34020,68387,73618,71433,65297,51925,58524,46711,51878,23311,97121,40877,73578,84491,92851,74933,10640,53468,92330,58734,77150,47378,28356,61078,47390,41852,21788,14912,17727,23023,89616,91235,25542,16211,15036,25516,97779,79140,80609,33631,14563,34964,65506,10831,76322,34171,19022,78636,29668,70835,60902,34687,58614,39511,64360,55843,36566,70177,27192,51589,26993,84650,86415,71700,57946,72374,71626,37064,15313,82786,51205,89947,11716,25470,78996,88767,18324,72755,52940,76838,91054,58612,12609,99530,48031,87548,96347,49931,69736,72768,85505,81690,14607,49898,27811,32802,19409,58674,49589,75448,57773,20245,99502,11057,90559,31317,97144,73203,18793,23627,16368,64227,37988,97895,98792,49391,76739,70830,35766,36924,73333,45033,65609,60554,20753,25822,57246,32907,98763,55673,26641,32276,24887,16954,42426,35531,83045,85591,91919,93924,22834,87873,73176,20388,19197,91476,69255,22365,64464,15371,11664,51835,47622,12982,49383,44797,76472,68261,48516,46951,60245,20563,59022,82776,45216,44899,19665,97866,75334,52248,74094,24350,33756,38689,35705,96069,34301,51282,37079,69184,38346,33656,72709,83564,87644,13214,61982,42132,78920,19708,91611,82717,65521,38528,23545,88131,72544,59352,88791,10986,16101,59092,78279,93940,29956,30003,89260,48914,42256,68087,99622,12949,38563,40834,54284,55056,91802,48531,68465,36920,92828,20989,98712,25697,74432,63799,81512,15044,57048,61135,15151,64391,18087,15795,15224,43064,10653,49664,91225,20296,43712,58816,84254,94159,51755,14973,54727,34109,62362,95898,13485,84257,30323,18519,40790,42326,55168,78248,39775,60262,97089,53486,11526,77735,24839,13605,92546,88274,36921,87425,84868,23100,31803,84493,27887,87297,52025,61561,79310,56670,74759,56838,52058,89527,81901,15551,74190,57198,84667,69849,79070,48536,60584,92757,17018,88270,96286,78472,35792,70848,74469,64801,88932,43149,88757,90928,74014,93328,75195,48437,26900,71855,50766,60983,91304,40432,61884,20393,34743,92312,99333,94400,27331,13431,94280,31439,29205,63780,70454,10329,94834,32140,64751,17742,94194,68331,39214,70249,57201,69674,96978,13089,54799,78003,66359,44575,29607,21337,34432,23386,28064,88245,66305,81859,37813,18751,42661,36754,53536,30585,35040,10565,89202,95090,78383,30164,31236,30685,70943,11820,22239,13037,75973,95529,46202,65818,66768,45350,40026,93403,54203,64913,13252,34092,54918,26985,12350,44882,13781,82320,17272,47476,38535,27516,11781,21175,47190,19309,28469,18906,87609,89502,59698,48959,19884,62948,96256,47277,44623,80691,70749,25857,52436,12407,16853,11332,45108,28269,90546,65405,60394,48135,97243,86230,75163,71871,86511,46746,89274,10475,94726,15277,87022,70239,20695,34161,40551,53550,65667,30503,54616,96683,73035,99241,75628,71188,74946,76945,95029,20167,38381,23677,69443,65542,16466,48582,52401,85343,13080,49725,52024,57256,27899,65844,38681,41833,43050,11040,77122,19477,18804,37646,97651,93312,83457,69671,74062,67914,73130,54875,10889,51449,15389,56773,11804,38875,86399,44890,86967,66251,52225,87266,45905,75741,46365,57493,80390,25859,25494,21369,42884,96718,32124,90745,73409,67667,92324,40723,20429,32024,38197,29845,56864,35572,10673,53944,18667,21350,90543,11653,98678,89290,10920,22226,73850,27450,73091,43065,72804,76342,83907,36198,63597,46214,71450,73925,70106,35367,70078,36661,53052,26271,38624,98264,61655,67810,43137,62119,52304,25380,51472,42551,51211,60477,60881,44401,77533,35268,13775,38090,99968,59291,33751,16535,18883,83427,96319,51485,86468,80030,19582,47492,84353,46350,59514,58706,83066,86154,41373,24727,66174,43190,34258,29011,77965,31005,46372,67359,72296,68060,19428,74671,42032,67406,58777,23618,38073,18012,14371,91013,15175,29527,81124,85140,59271,51403,12033,55852,24604,84045,50099,71409,83974,13535,27106,79950,84208,23990,51899,99678,90393,33308,38884,87655,26142,47973,23925,13747,80766,51282,55463,17422,50581,50931,69083,63595,75565,90953,33551,80654,15386,53665,57735,55890,71252,29076,70373,29407,24271,89937,54230,30368,13752,64442,34483,65365,78683,40682,44104,19377,79528,36327,23088,84153,25002,79656,76736,63961,93587,56857,71332,15762,81184,33176,60710,67246,94211,69820,96090,71300,44132,29537,91622,45892,16370,45275,86674,63691,21360,20213,87990,39864,71401,39420,44238,32463,70400,29228,22656,91596,17185,42738,21545,51635,50379,38372,88642,21594,32011,58449,97818,97983,63070,50124,87001,66367,68482,89495,62899,11540,76369,61595,53538,13848,59602,20474,59320,41806,25882,15623,12532,47364,65385,77787,15180,88155,41990,91352,11044,91069,17628,54321,12153,86315,70572,20568,30622,54107,21623,76062,77438,44239,29350,48040,52617,30277,93617,15647,40610,95743,33298,90075,58408,28005,75659,21795,47776,54808,78736,98420,18614,42473,53437,19141,85610,53423,31041,55975,15595,95833,83412,19517,89854,69289,41672,15178,86836,43610,16017,68460,10353,62865,65279,27517,96963,81722,32929,24647,83132,41249,18675,58101,31032,31512,70071,18033,57326,58919,97336,95693,50634,63170,69030,43203,56071,50856,78168,76552,29363,14239,42762,36724,84353,96884,86551,33373,81711,97165,90009,82534,26414,64457,17116,16837,34702,26710,45492,32561,85448,56887,37535,65947,22598,26964,75597,15454,71228,27919,44988,58557,33230,24212,19763,11756,89792,53563,58200,82218,56753,74600,92369,23057,98274,70279,88849,19816,26100,59752,97394,40089,32858,20144,62067,80866,56035,46745,77735,71257,75119,84485,26817,87324,34844,55710,11922,36314,75750,99742,89871,61869,73915,40363,34440,38445,98158,77040,88118,62107,71980,23339,27844,73492,12581,59385,77433,16617,57948,90269,12135,27904,12139,13085,68860,72105,31373,92621,80604,23103,22639,18611,41630,54627,43653,40783,48339,88224,71079,13717,92800,33563,28937,85243,29889,16353,42558,31534,76752,15978,69064,29064,19793,18572,34367,64884,30684,50531,22673,78302,65552,54920,43201,89968,88285,95445,29927,98772,32905,40850,26211,17863,54911,43565,46495,79297,59200,73565,30787,94904,19673,77210,45753,95334,26296,18635,68767,51757,22867,51276,14031,95125,31247,86439,33706,76002,41426,56235,67126,14782,88230,68400,97568,60345,96308,37997,17399,65429,26345,94640,47433,57422,90611,42141,73237,23567,37017,43413,65971,87423,54214,38884,58066,18055,95177,72040,59096,54228,62326,68671,38663,81724,70305,62528,89186,11221,45641,36874,89066,98337,82721,48108,89533,32257,94812,24841,63811,37492,78779,24986,47188,48468,91927,91200,44524,74948,60046,19306,62856,44705,33512,61184,87443,92320,34595,79250,98912,76897,83514,84375,54623,84130,64437,15643,31881,54722,34382,52956,13943,70734,79529,16829,74408,65075,38862,57537,35393,55295,51190,89485,76693,25669,76941,60410,91992,97452,55740,95141,96939,67345,95835,19180,92738,47091,44802,49660,26756,84923,47791,99977,57669,96801,94113,20220,69580,29040,62582,56590,88021,53189,21294,84720,56655,17117,95019,59067,49115,50931,54519,64028,58831,33423,94343,32900,43551,77443,51369,81954,44868,77073,79261,82620,51269,98824,47645,81281,15302,53119,84978,77151,39977,41060,66718,35472,97419,19321,72475,57587,71541,59923,51473,51173,33664,86361,78650,36306,76906,53202,82517,90612,11390,66289,80766,70257,60751,15945,53334,92011,23458,64869,64788,63642,25901,51690,97325,67592,62490,31518,66767,56637,30961,52672,57785,64337,52276,41255,31221,83268,16482,89384,17919,98382,35355,78047,19789,59803,50717,17629,23113,83861,98393,41451,19428,14246,47110,33054,14725,82023,93290,71030,53453,16063,85405,85722,61093,89790,20249,88818,95313,98747,83982,24756,68618,95142,42366,16772,10465,86182,21739,88685,51717,77217,46559,21286,66554,28450,14897,88013,58592,11388,65413,93484,39014,61240,12845,95916,84226,38620,88879,83841,37394,62967,48069,75904,36015,65013,97120,50937,92779,54994,84690,83923,90753,61023,94316,65964,79045,39610,12141,32349,75685,92202,62893,43997,46293,82803,15133,30019,27487,92498,25489,87176,14444,35061,26316,74059,85960,27459,93116,34072,87199,31797,75608,58455,23985,50248,93385,11464,13894,17941,42912,90734,96318,69478,37679,58886,79665,68971,37074,92055,56155,27950,51129,98760,98400,11468,20163,36502,60433,97245,97824,52869,17084,75650,99676,17535,41841,57257,81163,77136,99460,11461,80409,54818,66295,46761,71091,36799,64369,21556,20496,80153,54622,99268,26166,12782,66120,79971,52888,15877,21837,96475,82717,44131,27524,36572,49999,79540,85424,79404,62065,41320,88512,57926,41718,23273,73730,15992,83077,81041,46405,58059,42895,91356,73635,36663,94555,48260,75121,26005,50012,63205,40341,21350,32395,49034,88446,43006,44243,67401,23364,51046,30626,81730,65015,86322,54239,94496,81309,26297,66651,27534,25206,53834,37614,36871,68850,16448,74425,99289,67196,18624,90066,11983,93862,63031,17795,53145,13859,44088,16611,57886,30958,64423,45723,38439,26086,42897,62410,52771,21617,14453,37874,36944,63936,93036,24233,28795,35583,96438,27827,71057,90947,94962,63121,11383,13723,91751,92586,42959,15899,66025,19712,69749,64123,41916,45650,50210,64919,16590,51933,84621,14885,43915,91144,85459,68608,35172,63837,22741,40899,27122,32762,71176,21797,89185,69123,59666,59121,90299,80220,99483,55590,19360,71931,28139,33545,74610,45943,43205,61556,49675,13721,13136,48950,57570,20617,41461,17009,81587,81218,37776,13081,37826,64343,30724,96738,61841,53830,59627,42506,26156,17788,23874,90168,26330,45276,77040,75219,46962,21278,57077,31990,16598,89976,31851,17536,14242,50226,27740,87617,69497,17650,70402,98149,94529,74877,95469,99126,95354,68302,79307,91206,90918,34376,63558,76048,47817,29258,36594,15515,49981,41841,52088,55679,70842,15352,88452,48266,47147,64204,94927,51329,44457,12579,76194,94302,10984,61074,62257,74755,28799,56596,16318,61671,72155,53055,96105,62930,23391,65883,56827,68544,78059,14816,90225,40207,76080,87646,18312,44096,41350,61791,20452,85580,60200,69466,98770,74862,45851,22207,21816,22913,16033,82914,37091,30845,65989,70021,70974,78566,47406,96735,25049,89031,27601,60566,54521,85859,33534,31711,34769,65814,50121,35166,60014,84797,92618,62896,40537,19615,60782,58531,20602,37914,64308,12943,70930,65103,11571,78722,27913,21784,63951,58291,84702,77167,32831,46988,90932,59713,39855,27831,49672,81769,14130,37185,12268,47334,38089,11608,75882,27313,34519,82450,95307,94277,65671,50708,26723,24402,68565,85919,84288,96610,92406,32308,21188,65711,70980,87313,50316,92282,17978,66477,37230,42406,93892,80160,36604,95842,89268,24152,48629,61018,92040,20284,91721,35842,69648,60794,90281,25324,17743,92480,96685,72050,86179,42681,54714,25589,81069,81141,15228,45479,32944,92278,61231,62559,36158,83508,21108,52221,95783,35754,57280,11483,94166,76084,25171,39647,77439,88006,14914,62205,24381,73100,98247,51811,78932,72622,89142,85473,94494,18228,52024,51086,64931,83990,49389,22762,25774,76951,45299,83319,89617,18995,97108,64359,93796,87925,81442,32092,68174,84294,72240,98276,42867,80597,64041,88384,42159,46048,80854,27962,46139,91408,40240,32385,12680,34274,30872,22123,88979,71478,90302,38274,44743,75479,37338,83160,23055,47007,85394,12899,27885,11222,86645,76030,93184,62391,15488,38586,74884,42935,45600,43863,25480,56039,55078,86607,84725,35747,22056,94972,60863,88987,49712,30352,90779,63350,58382,56313,51181,15067,93655,25962,81259,53989,19318,92528,65231,80511,58010,20464,25453,20054,58720,35383,29158,57257,64732,74993,30069,43392,27035,31878,76533,59614,31096,26580,63277,24015,22201,47739,96409,49520,90445,63733,13696,68117,77462,25327,94600,14971,17780,79384,58830,51186,74347,37854,42264,81255,93549,64417,93633,91135,85349,75954,41710,24576,37893,76935,38396,72616,92278,29928,87901,68212,75796,10989,37537,89344,21077,66416,37899,80076,98909,87827,59017,55216,77720,55855,38008,41401,59950,57378,64753,32570,83038,85289,36596,81570,27440,56639,98096,99139,47503,54980,86398,38431,51347,85113,42476,25747,86021,99771,98437,89845,75114,90049,64483,77817,71930,36774,78190,25302,48106,38550,33781,39800,13858,26148,90913,28649,57154,87102,85061,33660,13778,16697,21898,67980,97112,44616,88429,97387,66912,98651,32811,84758,41826,55012,12448,33543,89526,54236,75270,93849,85240,24007,35628,70116,44995,84355,86265,82301,58779,10311,11400,41812,74568,73455,17266,61125,42283,23335,47635,33245,29153,79648,61713,94831,23003,72231,88803,45755,88786,13243,35123,83398,57777,37642,20186,97871,84032,38980,43010,18433,26659,71326,88106,73484,64983,70939,97523,99880,61881,26887,36301,73203,83751,45556,30738,12702,28261,65548,67843,77949,27819,74590,79921,89836,46215,17102,77779,34152,98925,77500,94651,32969,32412,26627,47823,73841,41054,20754,59008,39357,87985,75898,91244,46068,95261,11552,71057,10394,27501,25576,15053,98945,30454,45624,26986,58703,28494,77143,91731,19763,53757,66409,32884,22019,95793,99755,85800,82942,67291,37062,37459,80390,15572,28905,49411,63586,21923,60222,95128,77803,75218,83888,84821,41213,76282,46431,64790,45539,89003,96094,42588,99308,74954,48756,97560,30509,50843,89596,57796,95462,19943,38474,73913,21371,74963,59716,30089,42481,60640,25290,94342,26222,87708,97976,22866,11218,10731,95201,41835,20523,18845,97184,28803,81146,54286,58263,20786,31077,14803,56538,94928,70057,42521,50118,16605,18081,39478,99603,67756,68326,36439,54450,82533,29965,83838,23641,28142,33318,86238,83147,27122,26745,92956,32054,63551,83811,75118,61016,35349,50567,60121,19020,24949,63788,48488,37026,79314,60955,29258,63409,19648,11235,69626,73230,87691,76104,35442,90890,75257,42287,71907,21988,48340,56126,68090,81761,27832,76699,58227,18351,35448,98425,34222,55175,13522,51088,17863,83254,11988,27874,88008,19150,34314,15765,17236,49883,15068,89529,79995,13838,61361,86633,85988,67457,36103,92864,70337,30273,58028,36833,28559,23114,54492,46318,46766,19529,76869,13990,34374,81751,50165,84540,58295,45174,25364,25400,78161,70313,54236,93361,15224,38723,72235,41879,46030,28513,29262,28359,76409,34715,50776,86293,74881,29513,51464,34371,43056,98968,51919,48234,97888,22570,32355,51906,13021,62932,76419,64864,85413,14411,80508,80398,99273,80548,97807,54167,38276,56300,13692,97924,97116,49977,99811,21607,71440,40535,81635,17302,29987,49230,81406,61426,65083,70982,25730,71938,80978,69029,91737,59065,28645,20019,21773,24578,84430,33023,54601,30593,34185,99801,69125,42674,69230,63965,14632,48213,87054,53009,87373,18861,89963,86806,61829,61719,87966,15190,13876,97137,59245,89321,54867,47018,13745,36518,35621,12888,96031,70712,36607,88194,19264,14423,75854,89558,98515,54846,49625,53163,18621,95257,48111,88952,21485,45229,29998,44279,29218,73557,52055,88252,29427,81974,16053,82050,57723,26903,49334,76896,34781,52232,29057,94942,51241,31073,82921,65788,65358,66955,24604,23839,67652,34127,89311,73941,74622,79753,33096,15758,32320,40852,92667,46407,67103,16522,71710,42521,73131,83905,74995,98651,72972,23402,12079,88079,57018,82042,91962,18493,76108,14041,52380,50330,52170,43813,25156,86076,52932,22797,51596,17978,60453,44290,93769,90972,15370,53753,65958,48186,58287,50886,17053,26467,55618,87455,24002,38633,81341,77590,13764,67581,90956,75824,38500,28483,39552,60080,35604,51401,98368,18772,60383,59651,76481,27650,81756,61853,33625,15846,56586,45986,55465,35767,85260,42447,13589,71199,37340,46610,37903,68782,58015,58721,43167,87982,93666,63568,85921,53975,59359,87655,52566,23352,92071,29807,21241,69471,43399,87930,61041,82699,80425,33214,29398,83366,29443,39419,32649,49664,58692,19832,68600,63329,66831,21373,13648,60839,81595,38118,80386,79353,94782,34889,73667,83591,75286,33642,15940,20804,86192,81500,62398,19926,64520,63965,36497,52176,32264,84119,90335,84327,42302,59244,12566,26076,31615,12406,69666,15325,84291,32273,18271,17517,96869,65280,90415,48130,99410,77555,67977,86154,43525,36493,93640,50410,72399,12513,24519,66807,46360,22421,64595,15426,94872,16149,53002,51894,58812,95673,51651,30159,50729,74337,13746,18582,90237,76977,95483,78284,75279,52867,37224,16021,47894,70595,25074,26858,45144,94722,58317,50954,37991,19901,30672,97000,31059,90864,56106,84124,49805,61346,48718,76216,53926,89919,44240,34035,58466,46402,51295,91765,73580,57118,84622,31553,60857,86637,60615,45713,28366,41225,46584,15552,66801,19224,83078,93365,37585,58603,33340,40443,70644,54736,75939,10909,49863,27297,34828,42648,19017,27845,61118,86784,38724,82440,49201,60655,87899,27452,22838,85388,94404,92694,36672,80469,18604,63970,67693,47991,57958,85466,68422,11226,60198,57489,72786,38778,84687,40311,24788,70277,59097,18210,51918,23015,26488,88618,82785,13009,36260,61148,55104,59923,67989,46866,54575,69540,62436,51106,85034,44258,72160,50810,91646,46583,23829,55188,60635,79151,41971,40012,85762,73835,85371,74204,17610,78331,20254,11712,77130,41856,28367,43715,57842,49930,43552,99524,57644,96304,40945,35632,18563,81761,98814,96324,30525,90523,90363,13515,35331,63348,40485,57323,41850,60225,15370,47218,77371,37510,91727,38588,12972,75591,25597,59962,46662,88534,29011,53080,63092,82420,18105,77217,51644,80166,25067,43349,27996,39084,96048,41636,24375,34546,30559,67889,96849,12454,99968,41280,40320,52023,50582,97995,87105,86949,92672,23864,85008,21060,90041,90689,51121,15751,12585,61487,24082,60600,12903,94911,35116,14944,56708,40669,25071,10812,30174,92164,42698,91500,52603,29140,99943,51674,94881,19099,71286,66342,32888,28541,75339,73732,73309,56791,94310,57043,96854,62533,54706,84973,44367,89700,19644,50943,92233,63610,27307,28215,38662,27952,49892,83070,28212,82795,30279,92210,53714,18842,15974,52241,89609,11178,98574,37990,25146,18385,73604,42956,18800,64098,94168,26693,97560,25891,45938,96640,59225,64218,11274,21605,86137,88380,98152,51121,45308,41697,56320,22447,41194,37829,39015,58107,19840,85071,61894,68614,12306,69602,57694,99675,19047,95695,97505,13432,21247,48342,77281,69891,73013,79452,76544,28377,64725,35624,12400,30716,26003,19951,82669,95973,90860,47180,81350,18703,36836,46996,39110,29796,34844,68838,59544,68701,86454,20441,72387,45258,75193,12288,17532,81439,32764,45727,87679,40640,58984,60597,36737,44878,63727,65719,86117,82965,44958,44198,16562,18775,75917,44713,64344,43446,24975,48522,19118,89517,41131,72252,85437,78848,21644,86838,17474,88637,85100,58578,75268,93610,89892,38414,98023,63421,93364,72341,18067,48595,72316,64908,81205,29069,24481,65503,39377,12538,74533,23794,83403,77223,92920,89872,58354,47716,31939,55003,62082,90496,14601,97346,33113,77047,66781,20645,93616,32383,66278,13716,99941,52155,32922,94613,80709,54382,55643,17739,39065,42826,29811,22763,46130,24199,13620,40373,46506,55921,68041,45692,84308,41943,95560,86804,77170,70020,34520,18433,14173,36175,27780,55273,18644,21279,81370,26737,68585,55097,64424,95112,25244,92121,65618,42180,20467,67746,67478,37297,93837,21902,37056,92536,30000,31328,38303,79648,88335,24117,11748,78230,25232,73194,65052,40440,22663,73535,78569,45015,68761,51587,58546,15313,46404,12488,69588,71473,23546,99383,24481,87222,91736,88672,32625,39638,75571,45299,98891,42483,98420,31148,86607,54937,83617,37358,86232,72455,11276,66620,28870,13273,96614,68728,68610,31356,87237,21815,71609,97986,42076,35426,56350,86951,97583,67608,90138,95511,47783,37536,70947,45055,98191,33329,64475,39771,82930,42763,11392,79604,31297,40625,75047,78710,48790,50208,37018,59900,97602,18902,82628,11470,56448,28888,17193,22363,23387,71278,25064,18974,63006,64358,61599,46049,43554,47560,98504,72500,11165,86043,26998,44115,47987,32263,98276,58651,29516,17655,57686,33145,22758,56840,46491,43352,80328,77757,24274,61671,96165,59815,34564,25149,87450,65678,65795,26184,51898,65529,28707,13063,34166,69607,14999,47096,84957,80690,26839,99852,88514,15517,72276,25623,93494,35724,53543,66799,90110,87721,67175,11260,86678,58359,62886,99707,47441,89119,65471,67863,53936,42128,44482,46413,59094,70726,94587,62333,16724,22532,64771,28903,54635,61466,87156,75255,22083,15211,18288,80711,74756,56498,39037,46281,52027,35995,13281,39257,96012,93955,13939,30707,41788,95227,63684,56301,89156,59349,53350,13774,72122,88154,22015,41488,30793,60578,70568,53827,65881,38132,31291,69539,23026,39663,75017,79330,67235,76630,62730,13748,60143,47872,16511,25730,99745,80798,52611,18638,94034,99609,61720,85519,99476,67061,39511,23832,56789,97799,34904,47154,51403,27542,70765,43878,58760,96929,98051,84780,47107,54444,79242,81303,28620,79340,48581,95372,35956,88109,74571,59779,89207,77323,73881,35956,62536,32078,78415,17376,10031,49891,72186,88445,76751,67460,42992,15225,80095,48171,35526,39681,34744,43091,73182,89505,64639,36526,38336,37365,84090,74887,74216,59832,66484,88854,86939,47829,97434,60208,20095,77538,20580,95786,33942,70059,43282,51673,48476,41645,13276,70051,31889,13725,14131,20659,60139,36123,24895,91746,38288,32980,81311,47710,85359,80819,23580,29044,40047,78353,51989,65224,21393,39496,31118,54308,81588,97866,88335,97900,36348,72566,52721,26278,75694,80582,58322,31106,45960,47196,31514,14957,35086,72489,34679,55642,13495,78763,25985,94590,65626,64124,68398,57736,30552,48899,26939,98430,87145,93069,22719,82828,89345,18771,35427,19977,14740,84936,58000,36782,48507,65650,82322,25113,24352,15714,88947,16512,82881,13137,49575,73073,30977,27990,39324,50621,73735,57879,60420,15677,53056,17332,85042,70722,76287,83611,32094,47250,99872,58800,83553,94308,54743,72933,97502,31712,50414,85098,38247,21632,65376,91634,33706,54989,17333,26318,64332,87595,14003,84898,46681,52101,34615,30002,68400,29869,18035,11971,96381,96991,38716,39799,11347,90858,19758,26545,63027,19019,62245,24379,86729,56426,15449,89738,59034,16510,42845,14952,75617,79632,14344,90786,12416,65659,97007,60000,81162,97086,60873,54762,25049,30148,34124,89497,80538,62319,54867,16191,61979,25970,50548,24819,63550,81892,71518,54496,86242,53586,87030,44925,96134,52473,50084,22944,22695,60599,86712,21721,74880,66392,97813,11538,89107,62740,87913,11686,92300,32155,12265,86375,59886,21188,30141,87305,93049,15311,99736,89612,28227,80227,21756,41498,10884,94166,66143,20660,39814,80704,80544,61576,79514,60341,29725,10808,39846,60318,44243,52785,71944,28723,50353,72777,97676,68079,71958,74895,46242,23947,53855,26469,96311,31173,67697,14680,89583,36450,84011,92319,65610,61430,60545,49103,34932,50701,95863,82344,49727,71313,65557,56981,62049,34394,67713,24490,62873,90287,43826,66480,17441,41706,89028,31215,18316,47176,96293,63833,40188,72577,89210,89187,34405,26480,65546,87137,11414,21525,71543,99275,10304,88888,82508,99822,34618,99501,86126,80703,70570,90356,90087,16219,65296,81043,32728,65327,80221,18366,10164,15256,72337,93644,15381,46199,50717,67494,24101,72268,59001,16641,80120,19927,82470,96517,12113,97684,55202,56483,82712,78208,75840,44495,28740,62913,51208,71295,65658,63470,55140,74423,12122,37246,42557,57351,77620,71245,22113,63788,80355,65072,74543,56593,32360,94843,26009,84266,92910,91837,99819,28587,64342,22180,46742,83663,99871,76890,68283,91864,18400,77123,66520,45852,97193,90192,15424,21354,10922,36009,62380,26492,72786,68096,45256,17112,31784,89575,20518,29056,22014,14173,21085,53810,31602,95138,37407,14167,68387,99107,44401,25701,55206,38541,72296,33694,27074,80404,21863,35491,73579,14328,94746,89059,99245,85873,36172,44927,57303,57133,86419,76829,24386,29065,30800,76024,96223,27615,63842,13572,56733,14431,12689,54551,96561,81743,47432,63997,99229,33177,67060,95981,68163,82902,23394,48298,46113,49619,19395,93099,15926,48461,75433,52266,24331,89990,39826,19645,86556,17187,18944,33623,52616,32907,72744,64611,63975,96533,14608,79327,59430,96722,24182,68214,29667,22624,61839,38321,48890,66665,70094,41104,27036,50832,30586,99683,76533,20716,74177,49717,45974,43273,64520,14901,36900,94497,59293,74541,91133,90541,83535,17829,53086,44391,41546,25603,62465,61196,57851,83461,23012,30121,94770,45268,94927,14370,94014,94018,57845,39899,27936,95998,16474,41393,59436,93832,82377,70566,90328,20602,97143,61216,16866,13384,53287,17123,64770,49304,62826,74008,44321,17980,52143,15123,55236,68784,94332,11911,68138,23434,92292,61824,65895,63354,51497,65812,79926,53853,91614,42157,39145,69955,98034,70518,58655,92360,39855,59581,67387,42850,97645,68749,39567,61476,36197,25090,28680,39827,66122,57558,16230,81431,44710,85144,46898,22762,42739,23459,38173,25390,25058,31390,45398,44532,95106,50403,51996,84223,23698,73951,47326,28817,97257,25919,65501,67551,14161,79809,33906,67531,12643,54176,90691,77352,22927,45880,63878,11332,13727,77791,96468,66188,57131,66923,78843,44032,79010,19853,76088,32219,63787,51789,79741,66628,91371,25109,52063,80682,65350,86937,40212,12599,85347,62897,82236,13249,97417,36956,81127,20888,32242,95253,11938,71203,44865,23137,69498,60613,90320,51131,54968,68247,86767,45031,93409,20717,47059,37738,15098,59277,51302,33409,47740,74504,15881,53465,24108,36507,66209,19250,45650,88175,37559,95213,72724,70128,21786,48556,34109,96561,40648,15552,97020,45461,86227,34096,83946,57630,56985,75250,53975,95430,87648,98667,38495,58203,28345,91018,37915,32733,90713,88505,60111,61949,97117,71931,20297,11689,27564,68159,49453,97482,13559,99215,24934,16270,12758,60476,35457,38063,66147,65953,61292,74949,58800,38123,95476,35284,94491,61165,32013,49303,31511,81125,67487,28954,52530,70839,86858,62623,80049,91975,35585,69912,44889,28024,19168,78822,70359,20575,55496,65782,83410,36063,31761,49698,68586,29299,30611,66737,15287,31348,97192,67282,92785,63991,35088,17210,63665,75997,77410,60967,11183,77179,19025,75310,61139,90719,35827,71956,46863,70996,62847,36240,78589,56572,93018,61329,14525,49590,11013,94595,62165,44239,40193,53657,64589,70710,50783,86926,93617,33711,40322,34520,88278,89012,94520,22826,32824,43426,92678,89050,64785,88261,77661,93945,77983,65916,19264,53080,92500,62678,12323,14323,86716,15373,11189,63203,34427,82275,99402,46344,33031,47636,89600,39944,33012,18852,11244,61374,75428,39480,50398,19465,40736,70347,87142,87962,28421,35373,42512,67311,78050,53175,30212,86688,85400,38036,39339,11587,14405,11705,82419,47894,73069,17742,31663,47592,82783,22968,23920,33148,36367,44431,85396,73923,98123,11783,23812,87873,26996,43873,81062,55445,15777,84389,10814,35341,58846,98882,16862,88396,48287,25693,94373,66745,79388,73598,25864,29869,41146,61960,42675,89480,99988,28700,63141,56767,53616,34095,37813,64127,23686,20665,85417,57136,62210,75813,46004,75467,85191,84574,62178,90304,29871,58893,36996,60202,10717,70154,48371,13448,79026,79768,53461,86202,62263,64111,44272,12949,35563,65583,55878,40624,69892,89900,80683,95772,28219,30266,84433,67758,16774,26932,19811,89834,32323,48872,44625,80057,80974,32874,41314,31777,84952,64249,90691,10914,83748,43571,95598,12775,53868,84087,88827,32147,78620,82613,63289,39854,33340,50704,20551,94478,41684,39856,15970,46301,26366,65995,77364,82707,22761,76723,97772,52263,72995,37876,68205,42723,77161,61794,82194,32737,62460,48185,92260,24055,73470,96728,69687,38265,48839,41359,33936,38752,22065,97122,52359,64990,65890,71319,89452,99112,76167,53345,93101,90794,61851,42243,95613,38826,14929,75600,93701,66756,80675,41848,28376,33770,47153,71531,23214,91091,77838,18901,79176,58028,88064,66101,23603,61413,33640,39309,40816,83135,44983,15637,46579,12047,68198,28548,51782,59972,99895,74278,49986,97408,28688,90551,15295,89777,67914,25311,50539,56001,36192,10906,80244,86217,92734,34303,83420,40999,42141,53006,98964,15729,15180,32763,30974,14548,31533,46875,86470,71565,26184,90915,77632,82900,40453,36843,63695,11194,29139,71123,34071,19538,18990,29961,81718,58313,60164,57857,83300,61628,11572,38104,37472,56528,42577,43177,30343,49472,59016,73019,18015,53066,13417,41260,98499,90519,59810,10949,57010,16745,67189,27938,31009,12424,90135,12546,19820,35894,10978,51850,10232,33157,21239,32689,46146,60754,63165,79051,91562,75623,99892,65381,49904,51225,82251,23913,13371,79458,48637,52599,92230,87447,54760,65023,35427,38376,57066,26174,90732,30169,68981,47196,33058,21690,20106,65585,70075,46541,91379,56047,72227,20251,87939,63156,46356,64281,60110,62753,80666,91973,66911,12925,95377,26359,66564,74508,64539,14737,73210,70367,78242,74741,67157,86715,14909,60806,16927,21929,73266,94594,49516,32491,93630,41358,90063,92670,42662,14371,51967,73249,49887,87606,89287,40549,40898,74685,60888,99208,83280,50400,22615,12534,38386,86574,94820,34883,23836,84082,46358,68233,17390,41924,80818,74383,13817,29294,30754,63215,60506,84962,25992,14119,61456,44076,49514,98369,54261,52011,44582,41277,76432,17872,82815,90419,30771,20360,60912,17937,86904,75893,82786,40649,82346,50792,10648,26511,53931,32423,18562,92044,89288,26338,63299,48262,13137,57026,35549,63997,50030,71548,24046,63089,33006,15006,74560,24466,21028,21134,76410,21007,13846,41895,52607,71794,78362,95890,51650,46863,91245,22496,43916,41467,70741,73731,40589,31859,82097,12981,31307,91445,51854,62431,70211,84714,62035,76919,98565,97932,33290,12987,53715,98016,97246,38923,83008,88131,79677,47227,38715,40135,18409,36647,64257,86128,46042,12427,15049,13840,32869,57415,75791,89319,15329,42157,86635,73537,91357,74730,36420,92359,51120,35882,15265,30848,61263,99354,84414,66025,41432,86807,65224,31165,13859,82640,14748,82502,66571,77232,13418,51038,42934,33822,66493,53633,23782,73757,30818,18098,79428,32393,56820,29346,71893,11287,49519,61682,99258,70516,52713,52206,90304,43043,38394,53237,51693,68081,72154,43206,71166,15358,48141,76344,97475,52455,66359,18096,41167,26367,69844,89221,32702,19560,37639,28459,22168,47295,54889,52623,91091,22291,16388,12892,72090,76226,16343,78675,52244,72967,45915,85389,95530,82131,52636,29878,44578,26605,79215,96719,39033,39714,26843,30137,40564,75285,41339,97717,24706,19759,67374,24936,12251,78662,11711,78185,11618,82300,34176,36227,71590,80750,52182,51870,27597,73306,51776,71456,42355,71476,91980,91607,15204,67637,10053,35967,74863,45235,34900,65033,39009,45335,37559,75076,30664,43475,37960,66061,69477,13777,85355,37218,11847,26700,91177,17001,21078,32777,74500,86635,87298,36267,75979,49099,41698,63488,90577,70951,28185,92618,74074,75886,96437,49968,55750,17743,18577,71345,93366,28338,55667,86304,26445,69082,61266,54928,15073,59346,24012,65157,43149,62848,70166,31902,46328,78484,24894,70930,45843,97378,93001,98770,13547,22771,84360,96816,50473,51421,75167,85592,96842,18719,15720,66914,10069,62944,95487,70078,87111,43251,60946,67927,40601,90482,98244,93019,49555,73804,94988,45799,76938,16262,73706,26292,55858,14360,19646,84160,75893,65922,13853,49073,73441,37534,38671,63560,63609,97049,21441,57160,93291,17668,57012,82082,88068,49691,46785,62412,95373,90261,14332,93574,91238,39504,14174,18711,71782,16655,39327,21001,29162,15428,66145,94745,17188,81564,38753,29580,32764,11526,97060,68525,39224,40994,26633,75717,39293,18528,97581,28467,89970,47811,50798,80007,56876,74302,74712,14073,98827,65091,33429,82588,48032,91892,35540,47395,89455,78102,58170,52681,90460,19344,93873,13808,72034,78444,43859,81221,20166,68475,87313,97048,51518,96683,13230,35711,47476,48563,82937,21358,53751,42561,49321,63471,31574,58387,69234,88511,44967,23555,13525,83671,16390,49653,84172,61864,74988,36798,17884,20273,69814,61908,83508,36543,23896,71809,63011,54365,22303,25671,85651,87002,70045,16144,58684,32486,99945,15476,88842,59719,60518,60380,44153,31962,45224,53374,74803,95334,63282,21395,22419,22673,30078,90812,40814,62460,40680,23016,12788,92366,49470,87599,84594,87218,42878,95937,47483,13190,90231,86675,46538,12526,60094,63893,58024,69883,79986,95187,26842,92906,33374,66842,19195,95072,44343,33990,78889,54870,59139,23156,57266,82922,46481,92622,94260,92606,11341,67127,38361,12895,73248,16109,64060,83328,27145,92536,75733,70169,25880,33692,81522,60109,18730,59485,82370,52384,54748,10181,69421,18638,85500,21974,57657,19996,34685,34880,64676,78545,96505,77816,29885,25347,13043,44342,83388,35272,55268,42701,18772,14390,34730,82094,19480,89571,95790,78522,92676,55975,27315,57277,38455,26108,95250,15777,53792,11544,88818,17821,84662,73345,70437,20673,18158,31314,51033,55331,27358,60971,69035,21240,89124,47242,17952,89202,10629,41302,55125,12941,86427,36282,32210,76305,86566,83576,80022,67624,58813,98426,64666,29040,95684,43927,86715,86980,22445,24982,14120,46133,99315,85247,94498,42383,98025,43460,40178,14332,25425,20378,92359,23166,44332,19200,37866,70338,64193,90053,98076,86745,79537,42524,68408,80079,66868,33472,35753,17558,97950,64033,90794,51529,70228,85808,49852,30362,55348,11372,81960,43093,50492,18764,95016,90062,19256,98732,62140,13406,39462,49874,78639,69340,42287,99744,64678,28919,28893,58322,25948,46447,47834,71404,13237,44367,76598,58218,87186,27170,20741,13740,21641,80094,11744,65267,56997,69832,59133,59004,40407,24445,88260,94822,61438,15390,58187,16032,76558,21870,60365,44233,98455,19547,95110,43066,71789,61304,56160,31293,44344,90608,85378,90516,28200,75229,44756,27883,37287,44281,11864,77798,37625,81947,39928,63753,36460,72657,50648,32807,98813,33056,37388,79058,81204,46850,38206,16793,30019,60445,98546,35458,81675,58981,88897,87800,54971,10457,26034,75393,55296,96561,33627,11041,96471,50600,93406,69483,32196,94876,84848,52105,58224,58872,61208,42164,51532,65129,57615,16071,45018,91927,31611,27670,93828,60175,51167,38561,53895,65008,79754,80032,84472,57311,59216,68656,52185,15628,93773,68597,65687,81919,76157,61667,89191,15501,94263,86048,32719,27997,74862,47424,67634,28637,65403,47102,96485,94442,15157,75935,16360,14584,10801,71984,18256,90892,67285,90914,24432,33664,67901,66459,65261,38630,21827,60621,56153,71011,93234,35937,86171,23993,50674,49547,86254,11461,93820,65164,44965,79064,46880,16413,50388,20877,86585,78667,55757,71656,48080,79900,73634,81324,79515,87397,68952,33737,78284,62316,21404,68327,15997,47943,17113,70854,21693,55442,15409,97890,13278,90990,51507,51528,90396,94434,37856,21873,52041,72875,46094,86652,32676,62541,55254,11683,30946,82252,46144,52794,87366,49390,84445,30598,22276,89826,66289,60299,99413,74260,55571,11960,21695,78802,36434,20260,43752,50710,64400,40460,91956,56221,23967,74024,75623,52582,35420,94187,61986,93388,37270,42284,59174,71360,57160,67245,43956,29257,95390,54920,50629,81090,38576,11823,23684,68594,54566,27393,50284,12253,19085,54566,29459,21397,77797,84425,98025,60027,30782,53936,87561,30014,93597,77015,92627,89215,57246,96495,51787,67794,10070,71352,86008,87743,12592,34279,23796,41346,66224,44195,37196,68100,12124,73635,54572,41332,10238,53621,87387,45026,62502,80201,92256,29594,97330,16688,59663,99781,82279,65911,11125,42056,76107,75790,65472,68491,99855,13995,70226,30902,88936,18240,35106,51718,81455,59601,95191,46326,36268,36888,98770,65524,82153,62910,97214,81256,77319,89578,16263,68683,86313,45431,46238,89309,43773,96444,59525,78853,87340,80230,90893,90067,58224,32404,99567,27429,80619,10862,66116,54274,57627,79122,31023,39184,32935,41140,93796,39948,77902,38252,78014,57392,23496,43465,97834,90675,53211,68268,29870,59691,52711,64197,75171,60579,46159,50059,76738,14789,19086,25167,35684,61366,23325,63860,80730,79333,26953,43504,67169,56766,24873,72503,50605,85820,92749,71196,35016,37818,63157,79330,99063,20499,98338,11850,25331,80635,21840,97565,90796,65365,15397,89031,87464,34405,19149,94439,26311,66759,69123,65432,19909,55559,59341,11064,93958,95716,62242,79017,82515,44689,48107,79303,25555,93737,25008,87157,43964,38258,16258,36531,29534,88707,20928,44359,49797,55766,19989,51671,94460,37843,85137,85952,69212,51576,49887,85632,47366,88788,31046,36469,33318,44150,67372,98689,32025,36148,18254,12884,27272,46046,26990,89638,92393,85983,13526,42314,83269,15793,27569,21142,71349,45758,76878,28534,89274,24540,83624,39684,78049,62101,18235,15054,99810,81122,29861,52069,41928,43379,96695,31351,96320,92381,31708,24304,61095,36233,26785,68901,69001,37435,16814,34105,92105,50333,18723,28519,14289,26243,52850,20157,58690,28800,63836,12715,38047,59907,22242,38410,58530,84766,63478,75453,13278,39623,35177,63435,50770,72100,20104,38082,18883,36514,30945,87146,48713,66658,75059,82718,33035,21510,98939,94289,22228,77498,12057,49868,22003,91279,31627,89059,63895,58525,73226,70404,51754,62714,55322,65372,38672,42386,59155,36755,59716,63012,76332,33189,45027,80018,81478,32811,93799,57549,23689,92128,76752,30901,52648,98710,69314,54254,85013,88118,59067,22423,93641,39911,24954,44506,95443,47801,93987,96175,49225,85709,45305,71751,72009,26690,22538,35863,93015,95031,21725,47675,87895,24986,61814,80486,97657,40514,43553,69611,43405,99117,28324,14306,35921,23843,85624,80327,54670,32398,90184,87582,13529,31420,84867,58883,43072,85998,30552,80052,25642,44273,29612,26981,80781,34518,76171,64321,83721,31415,43212,50152,18189,30040,32941,99924,32453,69835,44679,81450,68212,93976,54867,90989,62086,34992,21724,63688,72633,40132,22975,59430,30202,91766,82325,89965,99393,45880,19438,76091,69037,12515,60573,67015,98137,28532,23579,91187,94374,38578,26965,34047,81470,52532,20959,95938,17085,71642,66077,19314,26410,79834,67021,23599,42573,36051,26552,87180,24161,60342,82268,92279,11732,99303,20945,69835,11913,52712,61431,90974,53395,66993,24073,53512,56162,53175,19342,29545,64696,54672,54768,90786,48190,77398,93180,82790,42429,56054,47039,74510,92886,32513,63501,32708,90018,49904,67710,14711,33689,80736,73762,61520,23868,43749,10833,69837,25124,30056,31874,97734,73110,48523,52297,50446,87987,20804,68800,59374,53415,34602,11818,45570,77305,14635,79284,31451,89133,87629,21391,43145,31905,80357,86298,26075,36672,62462,54272,40415,79804,78950,96462,94665,54324,83102,59764,38322,90017,84020,41227,46340,19565,86140,63715,26440,33101,46425,75708,66551,41264,26786,19862,86049,34230,56548,74775,16191,23724,10738,64410,91952,19077,19993,10207,35474,29398,49644,50043,87132,87387,86256,24667,24578,69622,74782,46432,68120,41482,45704,66398,89557,81808,86614,35245,36076,63629,86702,80574,28180,71271,92533,63096,37235,61860,76893,27490,73468,38636,49517,70889,89108,84841,75601,78888,74387,70430,27033,18758,29748,85199,18420,80055,15218,54908,65692,65265,94122,66464,18198,30713,87578,28823,54321,77267,54789,12872,47108,77569,73278,47444,83561,50171,18190,60224,72955,15480,93845,52634,27383,72370,84623,16438,62881,51935,50159,17890,47590,54328,18281,38039,54455,68749,47068,89713,96332,58523,98383,84406,90692,76581,70658,24971,33490,55643,61885,93647,34723,50065,12853,48827,46175,91058,41933,95043,68098,23379,36023,13188,39746,84237,30369,37247,24307,25011,48813,21874,33843,51249,75668,82101,89698,99327,94147,85190,15025,12834,25381,66281,56024,92779,83430,90744,24294,90469,23097,21875,12502,65106,80120,12835,81737,96238,34852,11328,79080,78576,20502,18018,84718,49017,11535,82810,83851,55803,10321,36769,70777,50133,68885,30191,45804,47464,19327,24019,27654,78876,57307,43290,67778,11064,58242,27456,24202,79253,47432,10182,51459,80800,12293,76506,91899,97059,82517,13549,86191,51890,28762,84948,12718,96998,88931,15535,86199,57973,83059,43168,52540,22289,93329,68210,35111,44877,44258,34483,40672,29027,81551,98496,48037,33816,53263,34101,45971,24868,88640,19023,91186,20470,46311,16529,44444,88994,70000,43397,82255,58234,18327,85126,60929,33310,66924,62115,97459,37027,31586,17500,91253,62699,90721,45205,11033,36253,46581,29622,74966,21027,75861,49216,27968,82877,38163,59448,36221,98331,97309,33416,70863,47558,91688,98537,40329,76359,62878,28474,91216,56662,69746,80946,58633,64074,71439,95644,97759,24788,78487,60672,70633,29160,72627,70681,33389,40620,22737,62272,90480,66423,88385,80469,92036,76342,92944,28778,30758,69291,87857,59772,60261,27666,12887,52377,94068,39608,21453,43954,98169,54176,11843,43325,74780,96700,43814,26051,36987,66015,37504,24760,60833,79822,61367,57992,96347,38563,46469,99859,20549,56102,94107,58848,49910,72912,33645,13626,19574,41292,69374,53211,32702,71278,40549,69661,19704,66308,71664,45305,67931,51624,46229,85735,34203,35890,31813,92437,57842,95585,94568,85756,11177,17582,34132,71454,48173,99592,42911,85438,23234,58360,24560,91886,99436,44972,43856,24595,74474,65527,77621,67653,30355,94438,71356,67762,87928,81034,98163,90270,48840,20924,18367,17321,49333,80057,24433,28772,90320,29611,27032,47408,97593,74553,44224,61686,88508,99332,57106,97509,51838,96730,50321,21678,95401,92444,74055,48304,37979,82187,44348,73565,48875,61869,75728,31670,65406,27944,22126,50009,94427,55642,56127,41860,45666,61614,19442,65079,67231,24017,44257,97179,63558,38753,14071,21674,46672,17302,78403,77583,27644,30761,16369,65485,56926,48405,51778,41367,81724,56152,64958,46183,26220,34725,38459,21995,34662,82256,78705,23038,32415,16934,15376,59744,42308,90264,29978,46136,43262,36335,17778,91512,25885,30326,76970,89876,87598,29143,32174,96160,72488,36872,66519,36782,62234,83864,58464,18427,88491,50714,51357,39494,59409,55097,84662,68785,37311,18096,17599,18987,97918,44360,89339,21290,67108,33159,25832,48015,35128,46751,37203,35445,66681,27815,16653,50521,93815,92179,17049,12236,14355,39292,67662,42462,28424,17159,63068,17374,72105,48701,75106,38506,99392,86492,25287,35609,63676,23769,47472,75743,90118,21628,90378,27172,64097,94187,50029,92350,36371,32806,60424,86034,19138,57445,60992,59550,48582,43550,49508,62848,72928,96473,99968,86852,43749,44850,88354,44771,18447,55717,19642,71494,49085,22226,59170,63052,84357,62079,69206,27692,22965,92717,57431,18731,72932,22144,57417,72812,84341,18917,80123,80713,93905,42653,51945,84574,23956,51221,86607,72114,99982,11562,48139,61750,31476,95118,39857,90118,13900,52769,51294,22995,96013,24826,72555,61079,69945,16447,80859,67906,15609,61656,19012,86210,72960,91389,98514,17320,58099,45565,45674,54378,73709,56565,43562,73460,58495,94781,58567,51770,92211,15611,47066,14671,85668,11989,56366,61274,29383,89951,99783,22395,77333,65388,83489,99964,56126,18047,51245,96546,54154,97490,98703,34393,25727,94737,51455,54309,83747,10131,22344,55318,24017,79448,66884,73825,65588,58093,65831,71484,31827,56082,82645,16413,63526,44405,58626,83841,12249,11701,71730,94123,76811,65646,75427,35850,39805,79836,37133,24720,92503,43418,27765,64682,96740,18587,89531,98748,77198,84869,16701,55607,57092,24584,15777,24903,54915,19265,25307,19579,24243,79073,83035,23464,49301,33622,40028,96281,85475,64763,98198,30588,36603,20671,65758,50200,28239,12637,10769,21071,38859,97899,54735,52417,52728,20330,42122,44083,29767,76431,34952,19338,63136,32861,49523,99942,78031,33695,41475,42040,42609,99757,11363,66938,61767,84708,36677,79186,98663,28243,69687,92178,37057,15926,45303,63642,31223,20939,51890,76202,21534,46488,47754,58748,52900,27495,48907,57473,45416,60828,19365,55329,35570,18688,64183,71782,69494,74149,26502,32765,69116,31120,73899,32453,20372,54817,79076,35353,85027,29333,75740,81931,62121,31211,10673,80021,43676,99412,77222,95592,13765,70150,52778,42173,59044,49041,16139,99034,58955,32802,49501,37686,52113,16829,56188,47059,54040,82681,13536,42843,42422,50350,64736,52587,76097,11133,51570,34697,57338,97265,40099,82104,98239,86988,94791,51917,36497,35102,93947,12357,60022,66169,16182,44975,16474,47644,14261,83373,55398,86169,90310,32571,39340,70389,83914,41742,68748,93212,65948,55832,45128,36232,96970,88343,25769,25812,20005,81709,88847,34155,44625,77411,26260,79048,15015,92190,97833,93136,51041,65391,24023,12823,10806,83641,42158,38052,54315,31052,15258,24350,59294,95615,70320,90744,87631,63952,42640,25233,92035,41110,84081,80640,97058,16187,47706,41296,39808,37799,67148,31235,22669,26998,80842,76544,67563,90979,11792,49878,90663,36577,39270,65328,20621,93721,62954,77984,31565,64876,22920,96090,63267,69999,11754,48982,10077,76184,34746,81295,46541,40891,20341,79773,20314,36782,77892,41094,13452,11080,58698,86001,39766,49247,73242,65820,77881,21482,53796,50239,32145,49113,10388,10836,12202,11874,17884,64039,30062,45825,70618,62727,45068,30360,26970,78628,43012,63544,49931,66708,72509,71547,13838,70964,92064,32372,11900,50708,82176,71749,10139,73650,55460,85692,39866,81845,94490,12291,20706,93347,48680,26417,49487,56602,42653,27665,12639,14797,15456,82884,99881,81897,27867,78763,51625,30601,26359,31154,75401,25383,35843,31615,13533,44754,46462,62265,37990,83181,14835,31810,20457,51289,91242,85896,11498,81000,86415,66900,67033,46511,53710,90840,87151,30695,12829,27845,38679,73365,44358,60224,10833,72917,12902,70560,52911,18884,13312,42572,99908,47836,42011,53621,93659,50072,98496,87610,66400,44655,51199,89354,70717,80783,15802,49828,99848,30857,19208,53819,71827,70584,20369,16583,88596,71782,86100,45156,77437,37411,49164,27289,67260,19038,53146,64915,44668,31713,62208,52972,56046,32428,68243,37870,27374,65414,33224,84788,34295,60130,72094,49883,81290,46248,45208,16604,83308,10652,91417,74227,78144,90731,90109,36155,20561,40764,28240,63305,98189,31684,60272,67441,70133,72373,64318,36363,43654,84875,38432,40573,50110,79646,13096,40313,45421,96012,31744,23280,16529,79004,50857,11414,43045,68040,91170,60225,67920,80390,59524,26891,44413,17311,98814,53849,90191,56119,43327,78285,17043,35399,26097,60431,29031,26420,23104,87741,63461,99673,22096,63008,76268,43934,11053,88898,81901,15720,96658,90051,28339,71123,30436,92395,13490,98176,68452,80285,87550,52030,32450,73558,87930,41089,69471,29064,26829,28500,23063,17570,78878,92239,76566,94053,69743,53341,93392,11411,40127,17209,64963,59228,89001,30399,41532,93313,70229,33007,48767,81493,92338,29681,18274,71326,68129,43387,25528,59211,74886,83564,23212,70060,66861,50817,33518,76784,85888,84201,60004,42545,60336,96266,11908,98479,46655,41422,25725,47804,52808,77864,14372,81721,83992,95687,95816,46825,18874,16239,87510,50700,98677,33905,79992,17625,67464,37883,91371,60462,66776,39329,69263,29306,35222,32736,36188,94037,88272,73052,68856,12184,15876,96913,39682,16115,91518,85204,70136,84022,90749,88837,50654,84729,56332,66086,62300,15607,62741,53707,23767,73492,90952,59980,14617,66551,50919,48628,58647,65391,48666,52457,56288,95266,95778,63911,35803,16680,86617,90146,33914,81834,35840,16954,22676,95065,72213,54922,43168,91793,86267,95283,85552,20600,77973,84095,49811,67948,74952,85044,21890,41910,50944,85690,33823,69878,59167,52708,52166,68708,57241,78334,65412,59218,66663,89458,96818,61987,39655,45645,82334,32429,82153,74275,35429,98107,54540,53357,76039,42429,77470,98414,35626,36717,61001,10420,59209,27698,32903,48513,97810,11653,88825,87954,43844,94730,52980,35926,29138,51163,53891,36414,15135,42382,48838,64560,26200,25475,74277,16182,50402,39924,85496,85241,76143,51161,40667,84792,14364,16610,60543,85765,26566,91755,54165,31116,27197,62917,36899,23119,36036,18928,29571,23774,43679,52969,45920,35927,15454,29042,85475,28968,59066,43503,26835,16552,62291,92345,21917,31266,81764,57194,30559,31865,29320,89609,25661,47875,59564,46808,36978,85558,70142,97566,33224,50180,48415,69276,56191,99857,10280,87883,46562,44683,85835,57357,19269,81214,19693,84694,14646,92588,12630,61187,51979,53972,35130,14463,89613,35280,84070,32634,40487,17487,60908,37867,38434,97479,52742,58578,48202,66827,71687,92427,11143,53859,93226,12161,64140,77932,86182,20749,29772,36356,79119,28587,64057,40656,15724,47976,12606,99641,86250,97495,35708,34734,97361,40049,27600,19675,30366,74564,83412,67610,20663,72166,99231,50260,59798,78764,63097,71383,30591,37672,16466,39314,48874,47904,44337,72337,88346,11044,23405,35589,40492,49538,90446,97941,79140,88852,88009,43474,21252,23910,65493,83311,20614,87412,88871,31190,90633,53113,65279,42702,85451,55335,95412,54180,61983,30180,43745,94782,62142,16578,21152,91607,55634,70215,57406,57545,36216,76249,60443,70162,66705,70790,96400,50738,36920,50994,93364,96570,61891,84523,71919,85805,15857,39140,52173,87647,11493,47898,80617,39748,86373,71972,65920,32757,22630,18714,30671,60050,43118,99603,27816,39366,39296,75205,68581,92360,35316,84955,15818,27072,48745,13398,24603,52299,97291,20225,73694,19741,63747,24584,97756,94240,78888,93142,96288,83316,65189,51911,85937,10642,61593,75934,55476,58567,40240,30425,89128,22880,67454,50958,51759,68796,28009,40150,32649,20468,22720,80409,22373,93895,93503,36278,51118,44021,85001,12524,31465,30924,72154,23372,51007,61655,55059,79337,93196,73730,38938,31024,93602,64972,86619,14842,26841,24378,37933,11639,74254,49070,59601,32457,68261,65192,46857,47531,16602,45540,60379,26374,19242,21177,51470,37946,27201,68931,47374,33382,41451,28392,69739,94332,70073,96311,83520,30526,29069,48950,67235,89654,55153,40472,76864,90633,55297,77831,66320,72636,41482,16864,73486,80460,96393,88789,63061,29557,39176,46214,10242,73757,11303,80492,81459,77347,21302,80412,50644,97065,86419,53572,69962,70332,44595,18976,19060,46505,91098,95302,51150,86601,25311,42227,52198,26936,82961,90489,10608,40676,86630,56145,16792,16078,51086,43289,91152,55183,39462,50895,40239,77326,88529,17491,71645,44174,52142,67921,55346,18488,76570,93302,58536,45630,46634,72591,40520,50643,73352,12633,84544,59905,40571,12003,99633,25327,11818,94122,21120,10052,95442,20994,82257,75208,43863,58039,40914,99397,98515,74849,94372,99611,87923,13837,31913,16309,69784,99236,21874,48294,47122,48100,94060,72949,47369,46812,91243,58144,84567,15210,81047,86731,17793,49682,99415,71587,95614,60699,77594,44276,24443,79372,19361,66734,82808,32607,97593,34809,56134,40883,12098,53803,49831,45145,26297,77074,32421,76954,38964,21746,12006,18534,73242,42507,37926,70977,13994,84293,17027,59175,82259,37224,80533,59974,43017,94887,14004,44816,76715,87635,98205,69612,51976,32173,39719,48583,95288,10964,65379,42070,22517,92080,75099,70345,37470,48365,52898,30146,97979,76253,69086,74067,15106,77905,75251,64901,94998,55063,49803,50430,40358,45326,44978,70248,42733,25821,69082,74323,91574,22979,66008,75323,89599,27658,54833,96295,13445,97336,81159,24995,37344,29056,78723,99382,58483,28412,16459,16673,86749,64171,66818,83892,18554,50685,35157,90228,73167,42484,43797,22886,71256,24753,80815,69251,68454,84844,74209,72133,13406,19553,58281,70772,55832,66027,22821,22642,72678,94928,50113,43605,90966,66792,29263,37835,34083,42279,30439,13234,60630,50441,91313,32819,34837,43564,12121,35813,34405,65967,92657,68577,62678,69116,30358,55410,16521,17159,59003,94536,83264,33463,18910,33636,32646,45772,50186,61587,72256,19098,33306,14250,85280,69998,97658,59392,67741,38860,33020,72531,53125,69855,46060,52033,51045,38174,77468,47251,28896,56138,73556,55234,58770,50287,67093,53891,48764,16168,79864,67979,89063,64430,18336,28429,86145,97804,90277,43170,64325,95372,29505,94649,28443,50974,36782,14932,24315,66838,20116,62410,51901,50952,40611,19086,31660,98321,84601,35674,15431,56727,28459,99010,16500,28993,40304,58922,12499,99143,67281,88870,33038,33825,45716,99643,42797,29101,90588,12884,10499,92389,59160,69838,99187,78252,58453,51896,37206,22502,80361,77538,83878,28483,55013,21429,36957,48228,87260,51454,65505,40792,28436,61662,74527,60050,27067,73139,36914,51539,63780,20251,48165,83649,59269,40214,13290,71440,94279,25166,19904,98719,53123,86941,41839,98955,42497,38007,51336,17143,42094,40403,29224,56418,56364,55365,78946,84570,56859,43393,78914,97215,56310,49460,56894,22395,74861,77756,44886,50048,38102,85218,22581,37411,32878,17028,32807,26307,56694,14880,36598,59847,90304,32865,71368,57395,29761,11438,85380,60614,38916,18830,21342,23024,99822,24714,12483,72420,78863,15446,72041,15820,85476,52631,58045,23784,16315,79707,39223,89299,54388,33098,33711,64943,62788,94828,16616,17790,88719,65631,72773,59927,14067,88254,94901,20085,16018,14475,38330,27898,95515,92064,95788,86828,51581,35368,26276,58540,41476,17697,85251,36078,11933,10134,15231,44347,58197,70170,14718,13556,37649,83600,99124,13272,89758,78246,66720,73767,29064,55468,27993,32506,70477,48348,21207,97921,50033,74863,62445,55366,81841,25775,39102,54471,35733,22250,72484,85430,78764,70968,24694,83758,16983,77698,41342,64626,98984,99281,32933,90966,12307,74484,87209,22758,53966,40644,81449,42544,19138,69944,27364,52438,18649,14957,25105,20105,18568,29133,24590,24520,59553,91069,82711,98324,49509,23868,48799,93805,45910,51316,82210,17579,28520,66387,29660,85308,43268,79001,84303,30370,90786,88148,84503,48559,49933,62164,92532,68952,50885,22697,64077,84827,21128,86740,57005,73822,68787,86594,22484,41702,68124,22817,52864,10975,73143,25986,27182,12881,41350,28419,16580,70630,97968,31919,19430,75155,14566,34725,82254,19011,64344,88346,84680,38257,40760,80477,95569,30232,61083,74746,57273,67161,80051,64986,52869,42619,13054,35449,15772,35826,37043,33227,92058,93742,54501,16898,56015,71143,82688,94871,15492,11690,99655,25303,74591,14799,47647,59712,46672,34396,15719,81400,34848,12196,97575,26384,92830,35500,46278,63006,12415,29701,26443,48992,58866,62066,44773,56788,66870,23251,66284,76216,89061,11447,93684,20309,78580,46899,80839,90135,57034,68867,39444,72391,49216,34611,46741,16834,23819,44606,57890,60247,92662,41225,78144,85693,56053,71505,41104,62054,65436,54210,89425,48750,85515,44091,55584,10878,83768,10286,88330,60314,28609,58887,61309,79856,82828,65751,66176,11700,65765,44487,64646,15953,60631,88141,83727,50930,76407,94552,83686,62969,98921,45447,63010,41669,63977,18354,40965,17150,32781,69755,72900,85708,87244,62097,44883,47988,59303,39875,34871,57619,51575,74847,87878,58804,96051,35659,63836,56744,93195,46403,34499,60751,47871,31611,86265,66461,91115,24590,52907,94570,41605,35669,24059,48524,25368,22477,27323,64910,37675,20032,83689,42665,34062,25665,44827,45942,29331,96250,97080,33876,89956,46299,15152,36702,61227,92075,42118,16351,64710,87821,63486,99307,57680,19882,49832,67585,69834,97599,45299,45461,25037,70093,96000,92600,47707,80517,24466,91917,26670,68733,26143,90698,33426,71150,58756,96837,67601,54948,63066,31320,72643,80299,28989,32664,48979,80355,45797,24026,86594,67536,83281,17600,86970,57534,24112,61469,88746,11227,13911,94683,50151,61513,92839,93972,47359,71119,94926,55818,99024,55671,81598,99054,33331,17033,81375,51941,33270,52071,27882,33510,51600,88082,86538,96181,14391,64431,67093,34352,83478,13088,62929,74190,58621,95200,34654,46835,38704,83124,75346,38104,34018,10408,40557,69873,63366,14158,25527,21135,66372,76573,80884,46348,44105,23147,45196,39191,28030,32284,94992,16465,88377,58842,50095,30047,60078,69585,78557,82917,59715,99592,84462,39127,84874,17158,34760,75318,29762,95490,54769,82610,96621,60561,88335,71639,35487,86421,72316,50374,44737,97124,35035,20599,46853,47527,55584,43175,22587,73244,66486,29295,54230,49913,55867,92799,38749,55941,54921,34425,71721,69556,46912,13433,42651,21967,63276,94497,78262,33116,54157,54284,95124,95542,84334,60562,95657,43064,51372,84145,50637,35841,98957,39758,16430,82488,50645,32596,12431,92734,28195,77631,68301,17687,77752,40509,89890,61978,26935,55774,13234,31531,45106,59375,77042,85128,64708,16335,55927,70039,13710,75282,14365,39247,61057,17750,19681,50109,95695,43482,84504,68525,70774,73488,10816,66198,39410,47393,98648,80969,65161,36069,39474,73607,59641,99474,17586,72974,24283,21862,39937,77985,23373,64236,69628,18899,33797,72639,81729,41103,16686,97925,85817,32387,81270,73771,26226,86946,77392,10008,37051,47602,35363,84316,58467,32037,28629,22408,39872,57177,61358,54454,59603,72682,79576,87639,60587,20604,77117,74677,91999,29285,74730,88382,71693,30184,83157,47403,74247,27647,85544,27699,67370,17295,90937,69089,70233,48618,18581,59599,70457,38310,56064,58904,12042,60126,21195,96723,58686,63823,69090,63245,28654,55834,64731,64811,44245,11187,18743,91134,17465,33231,42794,37653,77990,12165,55663,74685,73830,18600,85437,66961,31001,42481,55561,60890,47304,41838,79644,69211,85445,85427,70247,71941,63408,85118,28363,36606,62866,68958,80780,30264,34101,37193,37288,15614,25438,75850,95116,91903,91531,22057,57873,61237,18133,80387,29060,36383,37823,65956,37188,62584,75747,26811,55430,93882,68038,52942,22743,87581,46161,39017,58641,19045,74129,12299,36265,58975,14935,20405,67435,22727,76447,41729,55376,15122,52098,96510,41491,18330,62703,60895,70222,38302,35305,78748,74470,54047,37490,66663,72549,80805,34268,10624,48104,65779,24668,55821,81241,72819,80816,16012,67732,70561,62034,16584,55538,74859,20295,70704,32770,14606,55027,14200,85675,80010,35076,27784,91479,17208,30066,22289,88681,18026,84808,16261,85368,67243,75881,95656,78548,60550,91804,60052,45514,69321,55787,82463,67518,76370,79647,76707,36878,40745,80486,35191,91478,61842,92307,58836,94496,59231,47380,25249,84196,31457,98099,72571,55082,81912,85665,12189,34011,40759,82784,29694,18712,85737,36671,26460,90440,87180,91098,51102,84738,74810,59370,80955,19092,88517,65420,69142,85479,61755,51968,43546,69803,43155,91887,22462,45125,86601,75370,43533,46146,67332,93115,15298,79016,16577,99922,60921,17301,80352,40942,62179,82045,74774,50984,53047,48179,18861,58192,72633,54198,40583,30378,22405,32755,17762,51710,53958,47049,69934,46845,72808,78437,61920,82515,86649,77364,73803,39650,62403,35902,59769,68311,29020,26654,94515,57582,97952,96221,68246,53170,19749,79635,20945,11199,23574,23888,63273,19570,32076,68206,54524,88387,88746,53523,75530,26123,55663,17268,72761,26562,66995,75387,53827,49798,94160,76786,98375,29334,55939,18825,44225,31673,94925,63999,15267,29539,88700,69849,87352,55111,67434,91511,12753,66675,19811,51646,25784,78273,25705,78713,61385,47230,35668,19801,92196,54555,87799,37446,85172,73176,86900,40513,75476,98794,13337,75835,42277,70031,22816,79838,48987,15661,56797,11503,40882,56853,29947,32561,41791,47337,27319,44494,62160,31127,24062,97648,70745,50176,74658,33796,62736,27118,47149,28475,50606,59959,36458,73452,28934,30559,16246,16462,83652,72132,69611,24012,60268,76735,39505,11678,44199,36762,36963,93958,95376,60931,21360,81432,20015,96716,11875,79006,40170,64307,72841,25449,64049,76011,46161,75970,58888,42255,44921,61731,11153,97803,87482,66809,36833,77800,56121,52312,74270,90790,21568,72490,32670,60408,29515,60007,71477,37666,79138,39764,47462,12880,91943,43686,36578,81682,58894,37290,21314,30674,38842,90594,69633,51454,26450,61009,98463,60537,56265,43809,43840,99412,97203,18662,28190,32975,28226,41132,40357,11181,21576,36243,82977,20560,12550,51764,50439,19398,57248,47883,69963,90119,35815,93387,79766,54606,56523,94406,14370,81623,87317,18089,62184,85711,82567,21230,63739,35784,76512,20764,54887,32130,88219,87542,97710,85724,28263,58945,90324,69839,97389,58484,45135,53760,99338,37986,47052,34831,38438,84014,56647,14324,68809,62363,28305,71329,86846,32291,95869,11118,35891,89940,52704,51360,52718,90062,17000,29585,24808,50690,25491,35818,96908,15245,48205,92425,63926,64395,14420,64076,59904,83247,75045,80190,64145,26256,47902,50021,33900,70784,39429,51191,44606,45645,73263,24281,85016,61077,34446,20742,87159,98712,49379,18602,99592,11249,98724,98693,46200,51066,90930,48783,38238,57700,58430,68735,63290,29231,14099,28334,60049,88206,94180,84050,86130,89809,85674,56142,13375,40739,79211,84886,33304,23685,86703,57896,74337,26636,98667,27759,27775,20671,44152,50140,47303,17679,36116,68439,98775,76737,28025,96659,69869,91374,92226,16974,88184,76800,53583,67760,85210,41252,25702,70731,83261,69625,49941,82619,66950,10604,10311,99806,89962,59970,44717,23884,87158,26595,55612,28761,60915,20769,78277,63164,40058,29404,86336,79844,45962,78548,59119,15398,72889,62718,39321,96929,58777,93793,77992,55322,64311,90101,98105,69713,56750,51127,11776,29977,95867,42478,48910,32573,82031,35875,61879,81775,94078,21674,53892,46753,63505,13836,42436,19226,65330,41006,16634,33342,49577,22326,61381,23032,19101,50715,16492,25692,81942,22091,33823,74275,38682,37554,48381,31490,54870,40174,74702,19622,33355,56925,99419,58365,85134,42198,37127,26859,83145,81103,70048,46780,63785,41361,34313,11045,97138,75414,57827,41551,73628,10565,44314,39572,38931,48759,28018,57419,60420,62727,56869,59510,11540,13628,86589,93455,40428,29134,90993,22519,47326,56197,46463,54654,73055,95999,42217,82013,95045,87521,57032,89756,69064,41009,37457,28597,49273,94550,64652,35437,98391,76417,31299,96592,51025,51176,78826,10460,25885,52759,62666,13942,45833,40601,69247,39344,88113,22088,92255,82946,45941,36471,67359,87560,60015,95374,41642,41272,96252,45020,66529,94344,23663,26105,92994,61356,29885,56221,57751,56313,29574,99092,52322,62959,68546,75504,53939,14477,94192,95454,58540,40179,12482,74462,25332,32921,78683,74767,72612,66938,93610,67470,85823,88519,90182,76026,75059,70273,42945,41932,82304,49980,82245,73574,33207,72773,28868,41279,91283,78119,32316,12612,85839,54373,75470,21629,40709,92279,53156,75943,68767,40710,52689,57996,86020,35358,20999,44308,75844,52960,37456,74665,96664,72230,36206,75659,25922,33723,32395,56559,93165,26132,74626,76122,97648,67716,72129,35125,86752,35062,87051,64866,45235,71419,55838,53732,55362,58293,20305,77495,83116,53656,89762,90661,46207,63779,19922,20834,18244,78670,84496,51192,57743,56082,58044,18831,95634,76500,19564,74925,59379,10044,54415,94919,91055,28245,41560,30937,48122,63343,36691,14695,83843,17254,47233,88149,99739,88433,86457,85471,33646,71734,35161,80899,49037,84060,83107,73518,35466,88545,81138,52152,11372,69634,90032,82236,61094,20248,22741,38557,94359,88932,49975,34867,13385,23880,69801,16229,14324,18808,95174,33057,66406,31091,88802,30691,13053,81571,18743,78980,99456,18145,32904,68701,27217,84818,70987,50192,13672,51273,74644,43615,84295,90636,66121,16503,10192,69161,26291,84424,59449,73218,78455,63320,75579,81135,47429,96893,92176,10540,55097,37368,80927,67844,63797,59402,53459,87507,20169,80834,71804,47666,22854,32458,37024,52431,39092,79571,11373,51052,17164,51454,62599,69414,23223,41165,48575,47122,54508,17455,54544,86314,94250,51610,53292,41699,33795,25975,11133,63111,26537,15118,75480,47281,98749,50042,31446,48075,25173,41763,14437,83100,15591,77052,13523,39759,45843,24523,74990,54524,40228,87619,65807,35562,98827,38144,52007,16413,51899,77993,17737,78008,32705,43918,99130,98978,97143,32950,13006,24695,94747,30919,18615,38997,55088,86681,32970,12653,29473,12130,10024,15364,23022,28308,95198,15485,75366,11745,84955,58609,55319,13778,78883,68325,84474,67166,25956,51390,60352,91011,82018,57803,95778,82118,83014,58663,18778,56916,53527,39294,32925,85645,64119,69027,19090,13140,75482,97204,46394,62774,62868,35179,93593,60901,99268,56589,53894,16573,46582,97587,39831,20614,54273,11364,74764,11133,15194,17001,20801,47804,77471,52377,61711,64934,56509,95745,53406,29583,81396,35004,33296,87684,57019,22935,31406,79478,29987,15742,86117,71846,58060,93306,10144,98605,98594,87301,31568,52231,91953,49482,98567,51221,32689,41246,30693,95970,22137,81708,49217,20831,16354,22353,36111,77384,36638,81086,38285,53479,72063,23848,98590,99384,73316,90835,96159,85299,97972,44956,24857,68167,13090,90122,37947,86309,94189,55658,67164,78907,61207,83301,43078,41616,39788,70037,55739,63775,12827,10074,50065,86901,63908,67292,90483,29702,74242,48235,78574,39676,60053,62802,35199,74190,83656,43497,37024,49003,24112,20816,88736,55137,56158,33841,17087,58591,27077,28736,80932,51634,18323,82039,99410,78154,26760,38543,42206,16048,85096,51316,65425,97281,83834,79082,25965,94298,53901,94443,21723,39604,71873,24557,71538,41520,80847,59516,37064,95728,38689,70959,94297,75608,14687,46587,62501,63144,31828,59518,63563,31029,64591,40364,19073,57363,50142,54040,41646,99344,44912,76353,91089,22723,75242,96232,40884,59884,39953,96762,93088,12025,98617,80404,72916,34264,59254,32432,94029,95342,19855,74949,86237,46271,34426,43410,42977,98187,72508,43800,90596,84414,93068,65365,87153,89979,41910,43195,48293,34111,70029,43240,85041,64066,11467,86592,52682,39646,82087,27190,18421,81965,77482,51218,69648,12842,20782,47849,21511,65231,30807,56944,34861,93954,81541,69427,87263,67121,94346,34764,91795,99786,40895,21743,20893,45087,80911,55161,31387,67338,91983,35673,41392,94589,97886,26215,41172,99506,26451,23142,84925,22605,32681,82890,89286,39981,79871,52008,90506,79807,41971,26913,22160,32546,22554,11525,70745,31944,39397,19304,19567,10924,28912,31384,53432,68346,55272,96193,95531,30278,90786,65374,46811,54770,74220,79878,86391,90555,57199,24151,83579,50447,36015,65804,53328,30101,28154,38176,87355,76433,41583,69724,85105,31791,41502,89796,88615,67461,46091,88091,29631,52438,58910,20773,33326,47655,37518,17067,75075,44598,15215,64159,69930,13500,46349,89035,41421,83184,41302,48376,63686,12550,20504,80487,45135,24761,30534,37873,35460,48557,67393,60349,86844,62212,88192,58667,38096,53006,75190,39191,10223,59882,73978,85515,31681,69563,43049,46886,65725,82560,66737,81072,28565,71760,31919,28380,79348,40886,65717,32348,44925,52238,57933,51040,39629,34145,62560,30785,31930,94631,57150,26720,91152,94581,96617,48511,12122,67138,16990,70883,26158,59006,48601,59442,20359,21256,88517,81010,49054,35909,40230,67134,76257,42921,56881,44009,51762,91651,59754,97608,20369,27066,91977,23042,46568,36842,25232,71605,61709,38156,77432,89918,13134,85446,52363,69095,78676,20145,36098,40859,29499,70895,30188,58583,50854,67080,42684,54498,56469,91870,84154,30856,65634,68256,96075,65997,81789,24828,78128,70432,76341,70513,48209,40165,59468,28396,59255,11075,56886,11855,18152,83022,32515,97742,22141,98509,37738,92214,39577,53559,20379,32538,11320,99116,58914,87372,32133,79514,85256,21736,47456,58859,50973,48129,83046,77882,47660,75437,39902,55673,92762,87529,37666,71484,82172,78635,75704,10496,95910,36394,34036,16725,73665,61496,97643,65783,36588,11829,82516,41603,69917,74639,17339,39607,58001,74806,38643,37961,20495,96862,84654,15190,22490,26138,83992,58417,62472,46716,70204,83023,46669,18998,34997,87097,89075,35488,52229,42260,22802,19339,31147,89162,49232,14468,39392,24078,98634,74609,26807,17216,91661,56223,28342,69185,30818,63528,78560,22077,55812,92939,15815,60030,56732,63676,23300,54379,16835,58381,33608,30496,41564,88692,18761,80275,21564,79946,46724,62877,10600,89870,27836,93365,87153,51284,33700,96699,86811,93449,79370,50759,80638,33251,62612,47478,87048,21497,61111,65910,26216,61946,79178,14209,18560,25884,82001,48569,18033,25736,93279,29441,52768,21162,17152,31728,66734,44001,25407,49514,55953,78353,93949,67641,58317,65148,35093,50387,81422,98492,22167,38572,63419,95863,18611,84823,58717,47139,74132,62257,96839,22774,36013,63010,71594,84482,99985,77581,79215,45056,28384,10907,84896,50793,53410,93268,22245,45838,26631,99413,43535,53294,88332,61172,63823,85449,21883,43712,19501,95449,10378,76150,66911,77752,22860,17476,83486,23224,14911,35900,23638,57646,55384,47621,74371,72477,42757,66839,90492,48064,69952,26809,60859,66804,30396,77740,57289,54801,58180,61181,66582,54820,31851,10068,69093,66070,72247,38627,52022,18121,63627,64057,19812,77218,46994,55331,91802,74719,25150,21321,37323,26890,28087,59192,19088,90294,82197,23839,66147,45982,40825,62273,12816,91538,23141,40222,68139,22431,76059,82456,78718,67634,39425,59362,38874,25445,48839,92220,27360,32628,53781,68396,24400,25771,74052,41779,22702,53885,23911,96315,29433,23485,20990,32006,58277,72272,22705,69696,42443,61131,37425,46125,87955,23023,59757,71502,68708,36114,16827,71084,96127,69001,10744,42162,48668,89662,86194,52067,57838,48282,17867,67015,79806,54695,82553,46313,96766,57323,97246,13760,76260,33903,42055,29326,22745,33517,64237,56474,17177,17601,53639,92304,74741,22691,10499,89124,68502,56237,86874,56744,81768,21195,47525,74656,45092,23576,47285,96958,75066,99585,13119,68784,40788,31113,76145,86991,66036,79137,94205,51269,35762,32790,51617,72387,69169,67464,18876,92496,69478,57106,76079,47735,21449,91279,31965,15762,13358,97553,63661,45018,46345,43252,40712,50950,98152,51598,94014,93574,86883,57020,72750,57893,25772,46561,75165,77985,10461,57525,99141,10510,53971,29531,53965,44804,46326,78108,93508,68806,42746,38457,81882,99252,48753,35144,86921,50033,95708,49282,76041,26985,98894,72222,96303,77384,66652,16235,15188,81542,62274,90910,95246,77287,63812,43832,97202,78196,30593,13218,65098,54352,39193,42764,73694,10796,16938,95593,56953,47758,55740,41468,81539,75735,39478,89549,73901,31934,71650,45888,66544,35903,49201,89076,46286,17127,50295,28779,21859,33808,72900,67360,71980,17647,10665,37756,70228,46955,10682,57836,50812,88934,97424,22743,32289,54296,53315,54909,37060,14764,53173,45793,23822,37990,10197,75887,85769,53853,23620,61509,61969,27468,86035,30093,55749,20671,68731,53581,75375,23401,17436,52527,67462,89061,48795,12740,41977,26592,70898,86647,38861,95082,16989,96174,24370,27759,10618,54544,59548,37103,80440,84190,41484,94829,46637,16196,89651,42783,36897,77027,27769,11171,53059,93510,23799,62905,95057,53122,70840,48330,33285,71321,23760,21125,43230,98861,18565,59348,32901,41199,67556,29395,58121,20822,26970,64343,60560,80689,97394,74051,60953,46459,31981,60279,19732,86824,13620,29006,74640,38426,62371,48047,80954,65206,80646,18393,78188,13867,82436,53778,54291,32289,11083,23736,67147,16515,69763,33304,38071,18167,70371,90635,89026,78442,65041,47140,82218,16536,98380,62125,57901,72770,52256,73653,20542,57613,63260,53274,10346,94174,79386,80092,88100,70300,19963,18953,75832,43306,76378,62024,66361,84245,77639,46645,12077,60712,24581,88463,68742,20974,46644,93825,63777,55396,94219,74685,84942,93044,49499,28845,51219,53176,99080,93210,93508,29782,66007,97920,80161,12834,42272,60758,73068,63810,66861,63223,87859,38187,46457,29377,10816,31313,51045,56663,52611,93761,12353,35830,85955,45779,78077,35520,32308,38006,50015,31544,67210,11201,50180,66694,93302,28884,28764,12072,28181,48758,20467,82746,95441,74459,68704,17714,27280,82311,54561,59099,69948,55033,70847,31190,95546,30066,38340,60857,13110,84530,42773,47227,32023,20065,74438,44624,66364,44170,56329,25566,47943,40635,65454,16929,49922,56425,97634,80791,62158,52614,48661,88937,31601,28523,46332,34228,73617,44382,74380,90851,46290,29699,89417,76036,96618,51790,78589,12086,50587,33635,83863,77456,69033,42704,40010,34458,79858,80382,11467,58352,39467,85397,64041,75339,77338,22047,75604,14811,59788,28326,60795,79546,61379,55228,10242,69960,38705,55119,18905,70037,30972,50691,75651,72583,57016,88242,82460,87244,49940,99959,75263,11820,96401,86539,69500,28765,18768,46769,79750,64850,47510,44081,38845,39418,71762,15107,57858,20121,92865,44837,35792,61355,77029,57837,73145,94063,16145,94864,12847,10527,62247,52801,26197,61058,54131,64622,98004,77774,27193,22143,74734,86203,37266,21726,40237,89988,77193,34107,80699,39179,34000,53763,49561,92648,70880,39038,62879,37857,38224,94541,56229,11749,86810,43449,80783,87101,37639,63633,28086,90935,28535,17669,88810,51529,79499,54518,17836,74526,57901,96306,63625,74226,21333,92291,61460,66186,23813,83079,48084,14884,88115,93541,59943,27014,81136,29472,73054,36777,86591,53536,99681,70762,39912,81122,61847,21374,94559,82756,56575,10266,30312,41311,69429,96795,98763,70896,22568,83289,77439,73149,32850,58113,19834,52856,77061,40425,43841,50294,53627,25293,92910,60746,14485,65515,34781,94125,58339,95901,66615,99112,93404,96781,65330,89088,91617,26411,10718,50202,84552,30071,83982,76164,35881,73652,81691,80821,14764,18040,55893,81767,90878,97631,89795,68182,41474,91131,55456,78748,98441,75329,87445,89469,89609,45039,68472,20379,55446,47034,76775,69973,37964,74797,43045,81448,69537,24958,80305,21025,12593,95392,15506,66297,10535,32039,72907,63369,89861,49098,44085,43106,30972,78213,32879,27512,62947,20178,75404,37430,48053,45330,11070,94632,53018,44315,42242,38957,76473,46414,72391,17548,77639,33871,59567,59501,66314,83864,86298,28961,26634,77199,49839,65155,27664,16397,42462,39604,59652,90609,12098,29814,96609,30518,64845,79029,37051,57405,37508,84133,84223,20219,22033,82815,36779,37444,29305,27676,42216,93732,39872,17864,64471,30400,30444,88499,85411,83554,61332,17108,10975,76539,69903,98520,95613,25692,40242,76040,46014,26725,87996,99690,74458,95682,84194,57439,76586,45419,33701,76390,63153,18349,60681,99357,34374,80332,22720,18549,52320,39626,12210,54977,14067,56401,51303,35981,97166,60504,61013,54499,81007,75511,38341,57944,91109,60658,64503,10983,44789,43493,85468,12140,84106,94506,19371,41209,72183,79459,81486,76086,75263,97495,69888,82430,49203,33991,55469,90744,68398,50952,46239,63608,59755,30135,89598,63947,24706,63839,61152,19689,32384,96801,59200,28239,21219,88972,54646,32899,17058,64665,46069,91921,35691,29726,21371,78462,44567,35352,89843,47010,81475,60215,12419,63904,92308,67816,41711,85107,15159,43278,69072,82778,95654,29510,73400,79256,37346,26858,29865,11171,31078,91875,52332,47383,71869,45308,77014,30317,98029,95326,40406,62258,48387,68118,46664,32641,25911,34032,19836,98991,90890,84358,25114,57741,53609,74776,32393,86067,20990,74398,94034,41154,81211,96835,55888,88285,80604,49583,19763,66383,81994,15447,89525,62553,37385,17542,87703,71700,16058,48176,42638,85275,45956,87555,42655,80734,63365,33762,70761,29119,18091,28126,32871,60814,52097,39634,37538,21540,89004,28341,22065,12409,25027,50581,89048,26088,72063,17929,71637,43334,83769,51604,30444,63197,55938,82454,76038,29457,10024,83231,76367,63549,61626,56120,51564,31374,21148,18289,86483,76516,39250,72900,42793,98598,39647,55447,68516,33812,76864,88242,86848,64276,36649,26589,20683,86609,74901,78880,38461,65907,45399,16307,18802,31481,47565,80896,11508,13891,21144,17820,10633,22536,72620,84650,18125,85215,57940,58264,47245,97292,47671,16382,63543,68329,28842,85512,83404,56089,27735,69266,93743,45637,52245,91058,81917,72884,64132,85087,22986,36865,93103,66111,36524,59245,78879,27570,33292,26999,29778,86999,60194,50130,37436,80723,33501,74528,85727,52749,80036,48361,49594,61440,45768,82907,65357,28535,55582,65832,25796,81726,36380,74640,25062,80173,92616,52289,55380,33520,72090,66837,89466,73662,34815,65170,26020,57710,15700,81955,54225,40758,50909,76222,84175,83525,62196,35034,89914,79074,94846,76642,50431,83676,27840,56827,92092,63600,18474,27162,30031,50777,73287,77178,24705,71588,10188,96091,44431,99190,66968,44131,80658,28455,77108,91658,32661,48594,40253,45271,16156,28530,27773,54699,83211,88463,49723,21588,16166,69630,88739,31250,66410,56116,31864,23674,77758,60594,32877,93035,51270,37594,43311,80005,44167,22370,93568,66488,77309,85020,50930,43310,51696,90480,31264,53017,71217,32490,74676,69865,74111,26176,40463,32613,76530,30194,98319,37561,93521,84558,41070,23684,85233,33539,75661,50108,46552,15288,27138,77219,92683,68972,37187,90389,82603,83662,22539,93012,79328,17694,78196,55423,63719,25892,97092,66467,97499,50162,66978,91377,85002,22348,81843,17659,31090,45184,36572,69344,32956,92649,60961,10119,39197,65833,52183,59991,72988,11191,54041,65575,47338,47339,25047,76234,28402,96429,83680,17885,15062,54603,79817,99808,79812,71928,22139,17100,76290,30792,83165,36600,35470,19233,28979,61886,46669,81291,95228,89062,11077,68988,28108,92132,74600,47263,57595,56772,83492,65941,70452,42051,82438,15080,67537,91772,59702,70804,90008,12466,62973,86100,13008,51430,99598,75058,87547,57858,10037,86777,66946,47000,82403,97882,21175,49324,16817,15026,94411,76858,98183,39214,99490,56960,55177,43661,65910,57917,91382,20783,97275,15986,85294,15037,74775,97282,15404,84223,54445,87197,62854,73566,10965,42261,80350,85421,91074,15952,25283,57992,41072,43677,29765,10419,63534,64136,67375,25966,62377,89859,24337,29899,69366,79812,98433,91767,16975,93351,90153,18836,40916,90022,25032,83413,19804,72391,75374,76648,98142,17494,17796,77823,10215,27339,41993,48025,53075,36661,47510,86033,20763,56561,28018,42354,67242,27775,56637,52946,23417,39135,48248,64693,72843,51875,39709,42944,45660,51883,91929,74686,56521,61127,84559,48052,54483,56159,95727,63713,57731,63865,52624,83103,34340,56881,64492,86411,50265,87949,65685,10466,34458,62213,60364,77042,29624,35104,25746,65412,89623,39631,92533,86911,70905,92650,73256,83116,79841,16986,85388,32421,65126,14024,34540,21541,68434,68420,71955,62732,55511,16442,21697,70467,40464,33986,24553,61732,27672,80753,92005,94472,66808,86611,57594,19451,41261,68601,68967,40695,12839,78082,42889,42381,10729,68505,76725,15295,56026,17648,17462,80663,99570,22985,63084,38772,14671,55664,80888,70465,28902,85111,92823,58449,50337,98132,66373,20741,97184,79652,19349,34893,57890,48997,75129,38127,58460,56810,51822,25084,10115,21566,86341,97232,50255,50416,66223,58989,41143,58485,82923,60820,90735,37428,97056,77157,35060,12428,64484,17635,10851,25080,48939,78661,34231,26189,93552,32036,22526,28628,66988,64865,97767,34693,63303,30547,85789,46279,85419,25454,30546,12243,91920,54088,31550,30810,64103,47144,24476,48546,76576,18281,81552,46525,45253,25663,81370,61153,78090,47228,18675,86658,71436,94035,72151,37335,68690,40077,81642,27388,99444,98765,40361,78478,20098,15406,58164,15180,89075,43430,50279,28721,91390,92429,78354,84879,46642,47359,54128,83497,64802,33466,50468,41958,40951,31388,54744,96062,82740,20873,33536,24140,44398,22985,55629,21338,99784,74250,39773,38055,36467,55671,41193,58597,16995,59239,65062,25317,68393,98992,12944,59412,95191,40314,49918,96370,51901,13628,47653,71311,80530,27041,88848,36004,81752,86461,41136,56831,28928,97734,62412,46351,16124,92182,88974,72739,60090,96761,28761,91084,13572,34794,80314,36460,60481,74129,58050,55271,25158,83036,26658,39655,93607,47399,12910,26806,89476,69839,42317,36461,48224,86181,36516,29703,60790,45243,35388,35614,49561,69683,18736,32348,24512,75446,30856,34776,97758,95171,90936,71821,16334,99028,32693,92109,20144,86933,59605,20571,13265,59659,93266,78002,27739,70324,34544,25296,93744,17513,12175,82309,43463,42440,74568,23506,42052,49842,14143,92579,68544,73452,18740,88135,55311,50566,70110,94523,31903,51752,65473,77134,85445,69248,86349,20891,56292,33218,53360,94953,96866,14413,10314,91916,39105,31569,10958,20025,49639,97588,37801,30759,59542,17362,60170,32619,43942,61823,51458,91607,92318,50830,48224,94301,16065,20051,47742,25462,72305,93430,21503,96975,13076,78136,50012,61307,30276,71916,92511,92162,67752,34074,78000,33930,34015,25230,92057,36781,69168,61567,72005,80049,16598,67948,28858,30028,27573,46528,27453,25903,91932,16455,81576,94042,62706,90695,45247,64111,58031,24734,39477,42605,18272,63291,46595,76677,83868,64077,61897,64973,58999,54930,29349,84394,87018,16612,72213,88823,26989,13829,10360,22038,12747,23882,17686,58861,60363,52833,53229,40713,36068,92126,31354,50989,74522,20147,44836,27444,84802,80352,99033,37605,92673,68482,72761,20043,46430,60735,76009,27750,93565,79119,94617,13351,88144,15934,92932,30131,27447,51084,19941,63698,52884,99219,81475,40451,50715,32851,91052,60104,56496,92394,97980,19671,33162,42428,76928,41154,90101,21243,77304,31361,32959,83299,18941,74363,56065,59524,12674,71513,44954,76339,89550,86045,59275,93120,36261,31834,29912,40465,72303,82684,63176,39727,48159,76629,81227,74392,76754,54863,16409,14877,25854,84007,21237,73621,81680,87061,13229,31269,20922,60791,85034,93586,86077,74820,87219,22755,72707,33629,74490,99486,57796,54929,70689,13457,19072,29116,13244,30071,93423,59903,66487,10419,90601,52538,45467,29100,96766,54282,95542,15709,58421,63670,65915,55750,52725,16289,85679,47189,35548,64152,47187,79515,74767,67296,50250,77489,12725,47379,95775,17866,21518,52942,57718,53037,63573,63802,58337,85506,84622,44464,98215,71959,33479,87503,30248,91549,90616,17870,73019,55091,28639,25130,50309,91020,29809,73881,92981,51476,40964,63997,61384,53044,12699,67705,97813,61356,44594,50484,17481,17148,25366,81714,11730,29514,69699,22886,68342,82494,90455,59466,21841,69737,71261,81576,96657,41922,18681,16964,47169,88829,14589,68285,71812,60431,97305,39022,87878,56649,20398,69961,16681,98689,55869,22908,95793,37501,24109,63675,61866,39401,34854,84718,56021,16945,46328,95880,19113,17975,70478,39297,92607,83315,94548,49129,58483,35924,87445,25562,40750,55757,70002,28574,37565,13649,72437,19615,96210,94661,79095,39018,92257,81291,77211,84241,48374,45174,81147,37538,60558,47045,25658,58314,84756,21495,71448,34417,61859,52609,23771,86212,15403,82508,61249,16002,12690,90438,21739,27039,87306,66467,20155,76240,14891,45706,58527,89862,66771,46293,71376,95503,13887,97300,16955,20153,65481,55922,26065,94166,12502,45673,11970,72712,84091,42409,43061,71932,51926,74393,60887,32574,15488,72897,97811,54598,24047,66993,55068,63366,80788,81291,98672,28938,70130,58514,68122,73784,52828,48845,81539,74012,87752,37060,83909,86303,25465,27036,54052,86220,50889,92858,50799,24024,34362,36494,32776,16392,93314,48685,75134,95868,98846,92883,49174,24549,85907,77248,16484,44883,63574,64338,93239,63405,47124,21542,47146,97254,25121,59772,56828,53325,78564,67796,15590,65571,92384,40216,29514,36899,62264,41685,33985,68096,15963,98402,66174,10384,23030,86109,59076,74913,61728,41842,61617,66318,62938,89337,51812,31743,63174,44948,77150,98925,20148,84369,73854,43242,87845,96067,38852,19062,48446,99397,74916,60197,43908,83529,51536,69526,48028,18539,25995,87987,61027,94018,33587,10183,51629,44194,71484,59902,93410,83377,78551,18209,16839,83654,92107,59638,78077,89886,31846,10646,63730,60891,47544,23339,77833,22373,59402,96830,53383,32285,38752,92730,11498,18752,26877,18217,48587,61408,47312,80570,48410,30573,25766,73865,74108,86632,46965,78257,57934,13762,33948,57859,65499,93259,69606,76818,77166,37691,33003,46542,89771,43736,17836,24451,66383,19423,15181,11784,46511,22301,55393,91362,95532,57719,50968,19429,82906,96749,99598,28363,18671,67886,54658,78728,36053,99232,45692,96801,33180,52278,18716,30058,52581,11583,14019,94593,62315,48637,56230,44788,31610,30249,96626,18661,99769,58693,68405,98198,55310,48278,38155,98177,67139,44520,60062,67030,60937,16119,13492,29813,57287,15680,54483,92124,84428,72882,39181,66024,50691,16166,77464,83404,56545,20815,99654,31740,78799,27948,24027,73357,14805,22075,38996,57338,82519,29996,69543,40437,72583,97037,53051,35196,24980,58639,88105,35595,99682,56318,22714,54700,77035,63077,30589,84782,20295,49366,84456,70497,28907,23439,41625,72251,16910,32084,38899,14081,97911,84306,28555,83441,74349,47369,24431,58810,29795,42678,95978,99108,48395,85787,27327,60285,27001,59159,86772,91398,29776,70146,86253,82558,42840,58225,46247,81894,68546,50522,92101,25373,74268,84387,96610,72233,36006,74172,85943,37390,52724,45247,53149,53054,47741,93157,80659,76157,69730,23383,41998,21727,91505,77580,69321,87135,51860,88678,44853,82800,63022,35748,15582,64679,58695,51063,36571,98359,81160,61069,41471,26133,39814,24845,61426,85743,23091,67554,95606,82126,76891,50096,11315,23664,98748,71306,30248,66087,76915,58911,36369,40384,32205,55252,92167,12571,65353,20437,39158,43767,81424,44723,64485,76955,97879,43218,62447,75931,19734,63820,20900,68199,16179,21107,44385,54937,27896,95749,32911,27134,53282,96221,60637,59490,39060,48318,39924,12506,98314,97302,61596,30793,49842,98749,39969,61588,62046,35373,11096,90451,31826,59566,81229,14889,86047,82658,45154,64436,67948,82863,58257,43797,83681,34100,13130,53343,93235,40579,77545,99789,26467,43366,38947,93602,37869,95302,39111,97965,50560,31621,16563,61682,47951,86651,61540,76037,14786,49511,32986,32486,32338,52976,46386,55554,60924,98717,53819,88797,99137,59571,12775,18403,89062,34167,21709,98113,84724,46313,43750,50233,65951,16489,81323,85779,89192,87205,97979,92963,86948,49628,71039,18406,31666,70873,93994,73239,47855,73390,44691,50146,10080,19519,11048,65121,70617,54574,91419,35170,20521,95067,47866,52477,68795,94805,35358,33412,63327,59148,47840,29154,25118,37210,50065,16810,24132,80763,16681,10379,10836,35245,58149,10922,42222,63993,50156,68658,41066,15532,39618,62825,42760,10875,72878,46361,95445,53455,65189,95506,43982,21335,74903,61059,68095,83134,86878,24841,65910,46685,51827,50923,61127,98323,39823,84128,90995,41299,45657,23389,67959,21073,92970,76854,71323,27574,87812,81329,84111,75356,17027,35732,17890,14057,94874,72173,96664,35397,59868,44889,18085,86905,29162,20256,25147,61534,79874,26018,66622,67697,16642,57455,76277,88503,12924,15268,57139,44407,93864,17500,39234,43697,35415,19547,33859,96108,48277,90745,56009,63594,44741,96801,50235,36845,39462,27886,94308,35993,88849,45184,94230,78973,81052,30531,92414,22600,50816,24456,13892,70492,15322,16638,90046,80823,93902,72609,48131,31116,17745,56071,60716,24104,65467,63577,96320,92293,79063,35779,19308,63781,23749,23223,43053,92136,82193,94984,98218,55245,18289,22909,41314,38139,23547,97315,60859,15819,27732,37074,24030,40549,60300,32523,76894,11846,58452,41710,63276,98889,97122,30976,44611,35527,45549,22545,72453,15154,84563,16179,39205,46686,87616,87648,94785,33361,29560,97713,39792,81599,25370,71915,52758,17695,78740,92475,67823,99755,50223,60850,37278,41509,59339,28160,71614,33078,12830,22582,16218,21407,53337,64638,46517,99965,57617,90829,43485,85329,35632,69612,96204,60360,55678,26457,55871,82139,27262,29368,50354,20937,77081,22329,94943,74259,56151,81708,50751,28734,25721,24257,33539,94921,41487,40359,69487,22133,14703,70958,58411,87376,15820,73679,63145,41184,34551,89931,58581,97466,94343,57249,90101,77433,93072,11726,58129,29127,80356,18994,23723,45493,93253,79762,62296,94075,42944,53901,69688,59290,83004,66156,99124,16846,79399,33839,89126,25753,60782,87717,49386,54630,21931,77753,52927,49044,35422,25540,63884,71399,36043,54839,61744,42429,91813,61543,31112,56858,65945,53504,19091,59037,10622,44985,98177,68006,78029,39323,66799,19575,71643,29003,36413,82379,91532,53135,39660,56752,25215,78941,35611,19626,93367,69869,98238,70268,46295,95082,38981,20266,15290,10393,15415,66987,43624,44223,26991,15486,52601,98413,50907,44469,39690,32531,27920,86834,71041,85371,12713,59838,64165,11183,77326,98097,60496,66850,41100,36413,13820,88228,45995,88336,67094,41988,34332,56129,43625,95557,59777,92148,30809,22599,41605,62216,21755,49002,72823,37704,36691,62942,10889,46710,42651,60044,79115,19904,84840,41735,41068,81389,22194,14995,14871,34404,83434,49292,10611,57660,36750,35619,79337,31274,86234,15821,96782,11257,58371,17428,64830,35127,60890,70110,53047,69987,87173,62404,26511,70415,50396,91742,18519,87975,53699,55751,12994,96612,13395,90685,12731,50112,50527,44814,88585,84679,52748,51703,66740,91231,65532,64805,65709,63903,21814,21803,82213,54301,65324,23060,95518,67024,18605,88148,38958,50080,11817,94043,98949,21414,39920,35527,35927,89733,68710,29333,79251,63781,75575,85936,29800,56373,92300,92321,18134,28289,43090,55710,40981,37031,78145,15887,98656,62627,69081,70729,76839,30231,39027,39151,20942,68338,34887,83063,73536,80678,13861,89428,15366,48945,75805,56414,29574,54771,88084,24828,62912,93726,85101,32762,44843,27209,48143,21582,70379,48033,82802,56304,24075,38214,34830,87657,13250,51001,86044,14281,98089,80749,50885,29542,11896,16338,30569,33575,40359,69890,98417,66836,16920,45963,97174,98931,71101,21794,95942,98602,10540,57718,16657,40528,97828,79120,76012,65029,46284,60543,25701,95568,11800,11434,51181,34569,87414,23717,96917,95636,56264,94513,26136,21102,74767,55075,30396,64472,10430,66738,16139,95822,24262,79070,56721,65425,57200,45536,53339,91666,33459,22522,78164,90302,70045,95955,78882,23771,55674,74893,34890,95507,92992,11133,19646,69114,13717,46708,65049,87817,92827,73324,93759,22362,65537,45641,71750,48490,15772,51399,68872,31830,69310,19423,14187,17371,97228,36075,85567,20981,13083,38122,37194,93808,62495,32563,54680,55605,56435,37127,71353,92692,71944,52433,99625,99417,43282,26302,99461,56661,55654,11249,83122,91159,93929,67582,21745,42329,90146,43873,17989,62967,72186,40922,87874,54273,52647,86283,47721,10993,19077,92631,91732,80810,60857,33922,73814,36794,25013,59549,12838,52784,13677,81962,53038,97039,43888,25488,97754,38839,26146,76639,25779,40932,47729,27163,52556,65755,66873,35001,33398,16587,87144,10496,53769,12269,52269,17768,72589,94664,24128,40600,48808,47450,78098,99691,13804,12940,28283,85769,94982,79776,99447,53158,85886,34303,25307,19394,32108,90872,53294,43077,95591,35717,57243,97102,99328,56797,89545,58789,67794,11218,52439,41057,76372,23047,87580,26265,74223,51018,42716,97656,11921,41799,27169,45583,18982,81285,80304,44769,41309,47201,53927,38659,73130,56049,56780,37395,49409,98524,83145,67428,58170,18850,37274,59636,14724,80697,81066,10569,84265,25083,41738,82043,30309,61074,14053,68033,22190,33453,37493,95586,46784,54916,77214,53149,58730,71387,97964,98686,10192,91224,41198,49662,59696,17167,94277,22969,48695,16568,49125,82911,53145,35884,71352,86379,93520,97973,83116,90355,46318,19731,27294,95841,99135,53866,58331,63013,69663,99424,83314,58879,87006,79763,59820,80478,12483,75326,93122,13225,97715,55332,24260,24153,67860,32863,43813,96488,57791,67821,71898,48740,36565,49345,61214,62236,91178,46047,65462,16721,12078,13125,21506,36525,95325,70494,60486,52087,70087,45447,44865,74773,32110,61709,46433,81713,31609,96205,60022,71952,83154,15149,20644,91883,86270,62376,27059,85433,71720,79064,35097,80286,53642,73616,15538,49587,42982,13798,28804,55843,22330,46077,25289,90128,97830,92627,19156,80138,78210,64068,29864,40859,82646,79195,26886,71873,13880,77792,14991,40487,10765,45376,50599,86417,29343,24063,55550,14158,36797,16400,80999,14717,43657,43835,45079,46095,84867,18445,56539,34048,53266,42934,20111,97556,62463,92044,18352,27890,37558,45054,48410,85372,98471,42993,65822,30196,40057,88994,31339,59589,31105,55018,28356,35335,49006,47182,60920,16444,23053,64802,21418,79239,19679,63741,79557,20159,80196,99705,21927,49852,42327,34190,39269,12991,72328,90857,25153,35806,59212,40671,98100,62129,60109,55506,39204,83085,78123,30946,93230,90126,89281,93652,20702,82701,63884,34043,97083,70567,29462,57138,50887,87670,43382,29795,87315,68068,18153,73160,14939,12126,97002,55002,90952,85201,27659,55449,22996,93341,84634,97927,13274,89496,40423,90415,12637,57254,20836,17450,56343,39716,37149,46035,58363,66064,32278,62810,61083,48506,93393,85991,22936,19384,60023,38347,15059,58688,23875,27461,31924,63563,78168,30476,24661,52114,65610,74101,95913,17464,84348,10748,61368,78087,25873,77606,71848,66855,98197,27540,57818,53328,77118,82798,51195,22569,24053,47780,61252,87957,48114,16711,18285,40163,29018,72994,29637,23447,58430,79764,31479,51634,81967,76644,64686,60128,66287,35075,56448,83944,30924,12246,93856,42662,61435,49587,74647,85590,24009,79965,66859,39881,28222,87850,45618,44154,34924,75658,33054,64745,10566,83726,86911,70851,80024,50818,74968,87980,87275,55106,24611,64666,71603,14275,31018,60320,22650,67782,74880,20310,78571,21800,24639,79652,66907,74174,94814,33895,42472,44122,59714,94984,20697,95489,36675,89954,42630,63908,26582,45538,15296,13030,72245,30866,37130,82023,13539,57817,72954,35835,33310,90866,99105,42606,85103,31561,59172,36312,93099,82497,49352,71523,36372,20424,97834,34380,76173,39949,31024,81662,71578,46449,98008,44928,39099,60312,90595,95200,67742,72406,44805,91400,71210,46511,51978,67146,21786,42588,95478,72796,74871,44037,15761,23394,54628,48840,50895,74495,15088,57384,28451,19748,15488,19287,78953,77314,46475,77189,55089,80785,64209,87760,71984,92496,66552,63103,63241,34129,91593,59582,52265,17807,97351,41922,36453,79862,86061,91774,16187,39020,20717,42539,53473,61913,67499,46112,42123,30238,23441,53953,34337,92462,76154,41071,38253,66398,67597,80277,90349,31508,97426,51495,90996,48098,95818,85991,39230,47543,81919,84225,38942,23652,82096,15178,58126,32608,33822,91407,12123,26050,74256,32608,97220,31343,52376,88646,11974,14658,18641,20412,17633,83505,22199,61737,62779,18920,38731,88554,71148,40069,98650,11583,92335,16340,46955,82212,75617,47128,49222,65248,36931,47998,50480,82062,59522,83266,97421,46229,48287,27752,45562,89585,92446,85829,23585,14644,33524,41804,93614,81689,99099,30469,14077,78937,43034,81538,37151,60485,14057,92720,20083,67650,98790,93438,35095,86285,79004,56680,46224,80460,58685,20875,30857,65220,15935,37345,97084,63781,14527,88384,38651,66380,43259,54724,99582,82371,92538,54550,13662,48212,94376,88590,16828,67871,44844,81686,24140,48618,12206,60807,11205,25924,47963,96616,99581,35903,74785,44825,51091,60511,22526,35016,66368,34590,90910,67027,40831,30500,49137,95261,29034,83835,79539,44183,29428,85052,79411,47194,68471,87557,40132,32472,87445,20685,61009,36656,22452,39044,10144,70117,29278,41698,80072,44122,90543,40491,18254,43793,32959,32292,93930,29906,38531,16342,32059,18013,44825,79159,99059,42427,49029,86105,78013,68206,95312,49160,81661,43065,77602,23784,30838,20098,88827,57307,98030,36983,74348,88430,45081,26469,57176,72347,49736,72490,14468,78885,28649,62898,59106,92558,27354,45380,98809,80756,13663,54103,73739,56367,55792,65533,74671,43265,76586,89344,80358,67232,61672,60420,81554,41330,51539,73951,24163,87969,19986,38347,79786,43933,60314,75731,18976,84481,42120,93814,60175,41816,51044,59053,98076,48368,40836,47758,97145,22157,67734,37296,48088,89314,86816,71893,15875,46001,26484,37836,78650,56400,38552,15342,35839,38328,93369,52267,78985,57749,44291,68898,72483,95648,11566,57869,15693,60003,97310,87046,19703,12375,13482,85506,21176,81680,51135,29929,66931,96222,78186,62815,33765,25441,46224,78911,15937,86636,51725,27920,80473,25938,83736,71825,18755,26149,77035,72369,23594,85944,53183,17907,49545,92213,99841,42632,82011,55983,22538,67362,87312,84781,49181,39177,46920,97081,34593,63029,42063,89844,41152,64920,10135,95299,16766,41759,41960,17773,30324,80132,86654,88668,76056,62795,53262,62602,39156,52533,97072,54066,15308,60108,10912,56635,27908,16323,26812,90334,78130,42008,83293,15581,46643,46199,87234,52643,82690,85789,53493,33580,85201,40838,85745,59803,36402,62232,69008,87916,91004,82890,35418,57769,48443,38777,43102,13804,36224,43778,11848,23994,99935,75103,29628,84848,65624,23160,44544,97858,13303,83645,26948,51221,53916,12170,18620,38464,19444,86250,66171,19528,20854,33208,34557,96284,52351,79229,39324,89689,48530,81844,61886,41079,16384,82019,54336,79909,20831,25007,60778,84955,24772,96553,76955,27901,86255,71231,82282,97046,64219,70839,75271,81579,58782,44135,30591,65500,55605,93585,61197,71473,33374,45465,14293,63770,88184,89237,93678,85456,61693,20505,20412,58747,69352,77898,65659,44282,35378,84770,81167,62391,63920,13536,13772,14624,72595,44212,21550,22990,42395,18833,69563,31882,88157,88169,78702,56546,65392,63546,31553,64331,51914,99924,27574,60689,86173,87815,55513,18283,51079,52134,40081,23605,78170,62908,30660,65612,37872,71171,48992,27644,63598,32984,82327,51099,65360,18704,37539,26328,78144,85618,62788,79563,11150,47834,75978,44299,13398,66950,29532,35878,83011,82860,45423,55010,95359,82967,13779,74586,93509,51804,89613,18553,73938,78734,57734,47135,40747,51090,71017,47106,41591,38660,74527,72718,27280,11911,81019,52629,25873,81649,56262,13479,81469,15044,16680,17234,93489,23353,29329,66878,47919,98958,92167,63997,17192,27256,92273,91648,89839,81723,52490,65665,35139,53128,15354,42200,17329,41185,42482,99882,52690,59187,17277,48733,67725,62433,93439,29031,96374,21169,60503,52456,97940,60906,89149,66069,46241,30692,69821,10109,19042,36745,16419,26971,60769,36460,45956,66977,41761,43740,55595,88286,38734,68037,65116,71392,56073,10344,48122,93060,63920,72825,19192,10880,96075,87563,79727,31728,12873,68712,97567,50337,57363,75052,77827,77440,17228,63629,99608,37321,98942,52950,42751,58314,78922,32166,16977,96765,66327,28527,70145,40278,99213,40990,48024,10169,54539,94913,11151,18341,17359,63854,76484,51699,78494,86560,46971,72228,24064,53250,15790,40283,41858,12567,82285,28550,84564,97549,25394,74878,70650,29906,59696,20179,80878,49885,46172,49753,77641,15139,26965,31328,67754,15867,71100,46018,13088,49528,11457,34399,41449,37870,75283,37370,83100,83479,37350,87798,98812,40489,52552,44178,58833,70143,30375,96271,69322,55085,86666,52645,59148,34814,67825,13777,60505,84541,16995,73825,17216,25545,58033,83461,15907,20820,58988,53536,10494,77421,93207,89087,93272,66270,55350,36707,56251,21070,81328,63043,14072,24298,39640,10617,45740,28985,58174,45354,70787,82449,72631,38681,35847,18088,16449,13739,57026,42889,91471,35822,24474,81503,31035,87165,89680,21392,46925,63039,36576,89362,47247,25466,52187,14329,60504,27915,42311,33531,63401,96334,61449,51348,99776,11833,43216,88384,65827,36243,18348,58276,42444,81473,56134,26841,56546,96944,35923,59901,58576,18323,54906,47980,29379,21023,24429,13075,39764,77635,31319,32467,24193,16774,61921,63877,72906,85000,16882,49283,27591,75986,15574,99958,17340,58124,45525,61686,67579,67438,64384,38517,96825,42509,93052,81259,37395,53065,18629,62922,22877,24423,62866,74637,95930,66461,62268,96389,46076,82682,70105,11532,85869,75435,33161,91837,43663,36154,32718,34670,19098,64754,44761,17010,76087,33797,31846,92486,56769,99405,90443,92298,46861,48133,39769,99081,80132,24011,83194,14630,62528,46817,75919,98714,38388,23247,67651,19937,88604,49579,24742,11751,27290,76894,69776,60380,59619,91371,76891,14810,74524,81741,36654,25064,44473,19627,43292,94513,82050,73906,24009,60339,76825,71747,46362,46688,22905,89160,94310,37430,82515,50459,92400,35877,61285,93653,25444,97379,80766,22276,97764,43940,48783,31369,43298,17086,38893,76355,80332,91634,97349,71720,76245,80726,87548,54801,46186,10315,55802,90222,44250,60487,13606,35270,63772,49623,26230,52031,37348,30392,78097,52538,86024,64261,97085,14731,56948,74050,50784,33276,64270,61037,41827,28727,39852,64645,66812,96291,17524,25773,50868,87481,33922,85248,63795,80929,81462,38954,27988,54100,22546,59078,44682,63811,99669,39835,87552,28533,61069,73802,61123,89651,27336,73429,61505,99736,18266,98470,36220,37066,99663,32653,90051,37597,64562,19102,60744,54351,31820,21006,82403,66098,94335,58940,67773,28498,66798,55426,83533,46078,61178,98477,90571,28884,89876,50405,85850,49105,77354,25955,78321,48021,72139,48871,61024,92447,47979,39832,69580,72888,90514,52126,37703,27680,37123,19383,44255,98761,57116,20077,61743,25490,35762,32441,42718,13576,21567,11159,91457,50154,93549,14514,16996,77185,50761,84335,76691,90603,53697,74133,43499,12005,10620,39050,87515,98607,83932,26068,22551,68022,74498,50313,25119,40139,95028,51081,33841,27579,40923,79781,88742,87119,29638,75442,48674,25202,77720,34961,40039,78097,15685,14035,30239,11304,44735,46507,94780,34864,18245,63952,89938,59372,10658,55164,49740,83377,51916,91300,23241,69439,12055,34910,62258,30466,88284,81684,86375,81647,89109,95904,38943,34297,74620,83607,26176,88137,24148,68462,23964,74619,84095,21705,29150,55481,88477,10536,42127,41998,64269,40170,85206,42965,92390,57630,63573,91480,89546,17256,70297,41644,64548,23009,35351,36808,84787,73887,71116,96390,14980,61867,97656,83582,89542,79477,85891,83530,56831,67135,47197,34702,22866,16441,69269,40806,96174,94242,93930,55427,21823,51702,84773,61397,78964,89233,39753,18658,18562,37612,59608,33506,88555,12373,36419,85248,27096,47545,82841,14887,15778,72812,41606,76240,18292,89218,49001,11775,46379,80051,59008,68869,98687,33431,55622,18788,53286,16096,96691,58172,41470,69067,91315,39202,77249,54397,59735,64439,69366,53434,22601,36681,71351,70698,29397,53328,91472,54625,60009,45559,94176,16068,74642,11889,36781,94180,83081,23562,45916,75600,16543,46077,78382,70075,37605,62605,10626,45434,18235,20701,73627,57743,55164,98649,99513,19953,42042,23875,82372,54497,92993,80306,80838,42296,86662,23549,88919,80279,99014,58952,56838,99860,48171,82422,23977,91321,72870,60331,85600,19965,44807,91496,89337,98157,33921,96136,90325,24345,85061,54034,19044,56996,58741,51419,93591,42918,50746,68238,20418,22040,47023,61675,76951,34936,47541,18301,41403,14976,60514,60719,83015,95772,74416,71726,90192,12154,69544,23443,28352,22587,33138,39821,20084,18729,97029,35991,97864,97175,31551,77006,51015,72026,39709,79293,73055,64973,35587,78659,78609,98256,33541,10869,24395,72440,67394,89611,40026,33689,93039,65457,68063,69390,45541,49145,38928,49963,90725,77610,10908,53906,88324,88186,63681,41186,26067,99465,26705,50346,81003,20133,21601,24172,64910,92279,55959,69269,45772,19293,69238,59485,50653,17434,48358,86334,34847,35072,84456,33583,55662,18029,57922,91093,88277,51250,67061,34533,87140,43148,29890,12897,28882,25920,27539,80396,65693,45320,79611,39732,60199,64256,69718,65676,98616,22613,10148,73973,97929,27580,42848,45857,83512,45698,96561,25254,62421,79718,55484,95877,47059,83656,47211,50651,86119,88957,29335,81479,28818,32661,95083,92094,88333,50858,76818,54353,54950,82906,86861,28183,64309,36202,32143,40907,91050,82335,82118,20230,30946,69165,36089,59174,85268,97270,78459,86252,77443,19582,59493,32556,88881,74771,10585,69644,77069,66974,75600,83064,69472,27280,22986,75530,49150,76985,51370,15844,93349,98241,99200,90456,51501,58611,85508,59906,13428,37899,33029,79475,14739,19009,86773,72442,41340,47160,75549,80043,22920,65724,59701,67420,69093,37777,72758,58341,86909,52966,37870,38673,82448,18075,38712,96300,81182,99111,85808,78913,71999,44725,33601,37504,29569,10750,62121,20416,58860,23468,85605,83996,68840,93554,30675,22596,36034,35227,35059,48047,91007,33427,42427,51520,92011,94456,64315,16704,28776,98337,75721,10871,73659,94380,31690,65167,71539,54650,17376,98575,98678,92162,63525,13393,93971,29987,14282,86133,62256,75817,52169,13083,80833,39759,21451,29273,58730,45346,94524,27271,65187,15902,82213,48268,64108,21279,53016,15984,19112,53038,67033,80924,79636,38898,32614,51936,51057,30495,73102,90421,16221,63959,27697,34379,41183,61421,15877,97955,98844,37127,75754,31970,71912,81550,47949,49923,14689,84611,31911,16099,26522,64911,18347,46990,74558,87217,93191,39819,88598,66082,96592,34192,72738,38592,83464,97529,47851,47098,81945,97718,53613,11291,56494,84829,12622,38896,55462,94564,43944,36096,71464,67914,94971,48709,22992,98213,66119,16869,48845,54705,79041,88924,21684,61647,83130,60239,79293,15692,30109,55663,71929,21072,69512,86449,95093,80144,59213,93426,50543,83692,36484,39509,27620,19313,63306,64262,86313,30507,68901,69428,47515,85911,56909,21127,77719,11468,74447,11775,58901,81739,38798,32833,94989,95154,25564,61283,29558,35462,78504,24747,85628,43279,48632,92335,96001,86705,92389,20960,33521,46699,63724,56916,71190,12372,17509,81567,94988,80734,67476,88923,10311,53890,13783,50598,27795,52957,24457,30504,12189,18854,45744,34713,77938,48241,56853,32870,87429,92319,43757,48079,81842,53061,11333,53161,55902,88476,25567,33283,59663,47347,82347,33232,26200,24685,81312,20664,31642,38941,38156,97757,42935,27903,57703,89823,58302,61917,87921,60121,65129,11810,58639,26990,86911,53191,81238,35995,71718,51131,55398,56027,73900,21229,77479,72251,48739,54144,39639,47754,68397,42199,10009,32662,29148,93520,48799,90451,69913,70711,41720,77610,49585,94929,55404,98538,36549,98534,64323,79360,43156,48327,33693,40162,50314,69311,29688,74427,85339,27724,70537,67854,68765,99824,58548,90908,91614,47780,74071,99157,62184,39858,50462,62632,56534,47015,33738,24871,49648,84769,52997,84009,61652,71349,98523,85843,10458,91988,47512,34772,14812,12280,27008,65210,87491,28700,63710,67686,18597,99214,28691,83039,56095,19847,61996,17227,71855,81623,72792,46266,50662,97148,28737,23435,74192,96945,55120,51731,80173,66950,37659,27866,74421,52098,32017,18770,22934,45715,66475,61026,82674,98938,86173,14835,34692,64568,53447,38060,20450,32233,88612,54650,83132,30257,47397,64059,82370,27355,22670,18695,55067,75186,45628,33270,76219,12976,88754,50521,47005,66868,50428,36059,66780,49013,24570,48160,30484,86722,53336,52253,23805,96171,83225,97533,50476,11569,67380,24692,91173,67429,54687,34265,23811,46209,43600,51768,12437,57719,70424,85642,97646,58610,32340,61214,91748,89627,49532,77112,30057,25700,66156,39306,86228,99093,36111,54057,52101,25524,37989,33388,81990,94369,32119,31148,38618,82547,69662,33441,17150,37355,56088,90190,20487,69527,65252,78284,81128,61152,74249,19043,46002,81624,26967,48836,81307,33324,20749,33661,79761,29518,33107,80420,57492,47227,44432,87814,36412,92258,35062,59193,15096,22158,88389,99306,72234,85376,73378,91871,27623,15684,50106,16734,83058,41963,29717,87534,75571,48807,88980,39259,13734,16347,28892,72947,30146,16054,33663,86894,82930,36544,76746,21799,52457,29281,40277,37422,84771,36154,18120,38814,34395,76575,10858,88262,48688,40726,51456,83679,88905,14798,70705,49733,60275,69779,41043,22275,65175,57568,37042,49198,17724,75618,65090,49684,85776,19324,86333,45792,95276,81587,86768,31896,65747,20882,75904,22428,32469,55789,97887,71633,93737,67157,50058,72178,39945,95443,55909,14359,26440,27471,14004,96994,49214,97676,84734,14009,12539,40087,24766,22864,23811,20029,27881,85349,29972,60162,19173,31075,31510,81871,64106,95524,57336,62578,87930,79667,37235,19314,71187,41487,41748,77463,70007,57021,23744,14141,67373,11088,35671,83102,79148,56906,91725,35996,70780,32326,37715,94191,89329,62808,70134,42552,20549,51520,28007,26607,41550,93661,87691,71010,17365,40507,84339,40719,61388,13140,19366,80843,76356,21543,65022,13135,88681,49524,15387,69577,39832,84379,24651,39974,52122,64409,24331,22549,65664,87237,99085,58512,89349,35665,56362,97124,43672,92007,73467,76437,48744,45631,69736,52008,51311,89873,61111,43035,21285,92558,73104,88998,39036,15851,39827,15989,50181,74691,66806,65411,70906,58302,28946,51227,69852,30252,19516,63066,57069,23252,58877,16208,14837,45112,84930,26277,22044,62485,75808,31403,25869,86576,34311,29595,38196,35331,85020,63459,97680,62244,93353,79276,31870,27538,28113,74184,44985,67200,57286,21931,17067,93438,19168,44798,38015,33231,77045,12722,64480,37659,30861,66079,33091,53191,65575,73655,25787,20598,90028,69430,35348,70785,11334,46624,88796,86956,50747,45706,99611,41365,14576,81307,25579,37317,41914,49496,33640,13481,73594,83555,47696,61610,89135,95917,20587,37771,34798,22187,45185,31385,63166,78999,92487,57420,72631,24207,85660,91241,41908,71864,30998,88237,47603,24140,65601,78507,28152,24519,43125,12272,78332,51749,25597,59416,10042,45991,38908,20510,89648,88283,77626,54002,10743,48768,76316,95956,40784,16616,51469,99824,60289,34778,13215,56346,79415,80019,75922,42201,80522,46437,69524,95116,53183,53748,56118,13006,41888,99987,26458,78766,40930,33108,95365,60472,67658,58903,65901,45043,51519,60476,96465,45124,86133,62184,92804,68725,51619,29654,80577,72553,38747,57322,61485,70997,86410,29665,61413,57629,71279,95641,18320,60064,24800,18933,88123,36852,87085,86044,54362,92511,79320,36010,77987,44023,66054,38872,14015,11330,77545,40229,62765,51292,47643,44065,19999,18083,56355,54730,52380,11200,26740,61787,48168,14216,53036,98350,21881,71453,98186,96244,79538,46521,84255,76362,57157,99614,96075,70965,64608,85943,31271,77479,34297,18213,74891,65767,23274,99401,32085,39982,86498,53092,64839,86178,49800,20337,75662,97707,88940,34322,77501,76872,94572,40895,12750,89376,49264,54425,80352,76670,56541,81351,40588,93318,35013,87728,62784,88210,54425,24324,66413,56940,61182,24075,95814,95907,42417,11310,19961,71805,51516,43580,96767,64631,27318,29121,22224,30213,34838,42706,33914,27093,26792,78890,54866,68375,93956,14274,30321,17342,41634,51570,44539,22014,85405,41458,30960,80239,69079,25213,11624,85616,96840,86939,39688,62444,20941,31419,52857,10499,99061,86471,68955,32481,15172,88733,59130,15701,89790,54824,30452,46897,75295,40995,12530,54483,33434,51460,81894,35784,36638,66997,87588,71253,66871,60793,49527,97746,62289,86675,58764,99273,22772,90682,21985,69181,15544,50355,24300,90086,48109,45609,96124,73896,43145,74795,27969,94179,51594,80737,84516,28985,54896,68657,62936,71554,42800,44447,15360,65525,17288,67088,81392,80618,43768,38560,64004,43721,38773,22294,93605,76726,74349,12780,97226,88170,89234,83148,65204,74041,85545,38623,46179,94660,24785,16229,55972,60518,52634,61204,39981,23313,59839,97378,92420,23477,84754,72013,83241,86631,48463,54272,10591,20489,61848,38051,14220,84845,88726,82808,94991,34725,23971,82359,15147,96457,30551,59918,66097,71661,56535,66432,30310,11502,31280,10889,59985,42142,88593,73545,94095,23673,87522,51375,72687,28195,80805,64066,35948,47265,96299,79727,69817,76635,30939,47410,23158,60061,70783,44028,27400,98862,22760,39113,94272,29119,98034,46396,58969,80759,23925,21292,46134,20863,59534,84696,63748,75739,79814,12375,56246,59177,56346,14935,34091,29787,38162,46186,16459,50617,65803,76674,57421,80572,39307,34908,43524,72212,33872,22595,64878,29172,93038,62840,70597,85924,72192,91658,42960,97314,14982,73660,72196,83453,28378,44941,30510,88471,83261,49942,25758,82398,77087,97223,64698,98757,73130,34020,72290,37562,84887,65319,24938,27884,48453,40223,68192,86504,25663,94994,87385,69475,88537,67825,63816,99809,89617,85632,81358,12939,41801,87497,21834,50616,99663,91163,51828,48429,13282,94221,90220,16344,91383,60298,35879,54208,32756,68329,70117,61979,81838,31246,54784,64424,22936,50221,28072,24485,13730,83611,79161,52765,97893,79438,60814,90527,31873,99605,11353,12727,94599,71825,38686,97163,41313,70094,41649,88847,18261,70536,29610,70956,33427,78802,68632,73762,99877,78743,83290,31491,67823,68305,47211,89214,79375,93087,94891,34853,46934,64047,33761,14503,31134,55278,46982,90838,56833,65921,66958,53326,26849,98779,63817,96034,89337,77380,52134,45496,85757,22795,99452,10934,99887,53845,76176,89283,73748,52582,45741,17918,75936,91473,41352,47991,97591,57215,29041,77464,63365,64431,20399,72444,33643,91228,23620,31188,77746,91596,83337,21558,90460,39157,86817,40140,28466,62732,12601,41813,53999,91173,58713,81975,51394,10894,82568,39986,75416,82555,43560,94732,30976,88634,12780,21879,29652,95140,63367,64376,40888,50305,19048,95255,32729,50991,98220,59699,36659,99053,66701,55946,23150,60726,87113,64038,66698,85589,81550,95914,81280,55166,45798,41697,80506,59040,17473,38721,46979,10452,96125,29479,36258,67114,70392,28071,48137,27443,32238,89233,36358,25279,71856,92311,30923,36088,87337,11383,64333,41055,46199,36773,82534,64120,35401,50177,40503,53202,62256,72800,69623,60528,21913,50529,56221,31604,61552,41838,87287,74317,57273,20594,16023,82731,94858,71157,84995,92657,31029,81285,53916,27833,36152,42830,22017,49083,77933,81660,19111,80342,91971,41124,69304,53945,76888,99041,23598,59950,27218,99247,82607,25223,45929,28935,72927,73697,13337,34222,13781,68210,12448,99662,35648,20766,23539,92611,81975,67499,97089,94017,24037,32111,23081,80266,89094,28109,12845,54018,95399,57811,65533,65648,35153,69337,38540,79649,13474,77891,80191,55637,11582,52454,24751,80416,95738,59743,65582,50152,16824,50038,54747,73087,17245,36904,59195,98303,83327,64963,62752,33921,14897,39162,22046,67723,18894,95773,60313,21870,69890,68363,64368,73118,42847,35100,75797,93281,46558,69029,18164,16489,29869,64141,98540,92118,85836,36160,60424,73647,18678,26699,61303,38264,10275,38056,69706,43760,41091,35565,12380,42062,81605,95706,55579,12743,80032,80599,20555,17474,17359,32830,33680,73244,20975,48972,79454,64876,88379,24506,24781,62684,34331,61317,66998,53997,62360,33523,41649,41241,51587,97667,38256,83317,51807,56883,17560,15191,13359,64864,86593,66069,23117,66609,37795,68958,22645,57202,89450,88514,44627,26529,41627,79687,21335,51053,77928,31276,20209,21379,90048,21757,61893,57841,32631,42902,33198,41081,59483,24650,14528,19493,29608,38370,45273,88967,30936,77227,24432,50931,82321,12252,11438,18322,36335,83379,46885,70013,94620,16309,81763,54467,30568,56913,53170,68818,28503,51929,33786,33154,94495,41691,46875,70288,51094,97627,15202,43952,35269,80288,46656,28900,17230,15018,96340,95726,47593,79508,59788,98502,98840,33202,99035,82301,21677,61842,56021,85921,41651,52847,22369,82410,76091,55418,34784,83575,72374,95563,37630,86788,79850,56544,13625,27641,14508,65311,72539,11861,96976,92450,59973,82821,73116,36223,71970,87947,58750,86359,45256,52336,44572,89799,59543,31124,19897,64366,77261,75171,15386,57394,74258,42404,65445,37233,21572,44293,26867,61795,10928,74253,33656,92255,27114,49736,67375,18229,58974,27269,10335,12980,26788,46650,34924,46219,10140,23419,26729,57536,76099,98221,36265,91608,69140,66625,36306,70294,54630,21935,70046,43548,40757,32731,40483,78053,78028,92178,57186,18028,88564,18646,80615,37362,88490,99777,45419,48229,32032,74599,56709,59463,27051,38993,87980,61684,39470,19865,34720,42951,25236,38840,63185,37380,12401,23402,78866,10573,20003,82972,60552,89686,25103,20443,67615,31247,52930,67657,40599,40779,12888,82832,20826,81075,25338,68484,19600,48577,94787,82583,94838,68717,61182,37759,35740,29253,66153,79065,82315,95189,41521,63797,78521,69932,31152,72633,40198,18796,24744,38030,96129,53149,28596,98173,60201,41333,63474,62920,67199,10218,33131,18853,12009,59959,60441,74423,16413,59307,39755,46056,31111,19964,38033,80133,27721,25157,39123,71391,98907,52112,71708,61133,38843,15779,11664,53103,36598,45290,62382,46823,12928,10385,24134,17585,64746,34142,13168,82885,41738,22620,48020,99987,90243,67778,47747,83923,90504,83647,92350,52144,51827,36258,66317,70765,85331,34893,67066,79261,15670,71221,49033,15307,50704,45697,68513,19582,77256,21258,56717,26595,30725,79035,69721,27734,75410,16805,84262,62367,89042,73945,44769,90786,11605,39205,30033,32353,62729,11248,64978,30524,80827,55082,94581,48920,49821,35522,45040,82368,77891,23514,11523,82506,17046,42651,25904,49474,74776,24688,54563,12130,23448,44834,23275,17192,33379,58813,47855,35638,17713,29029,28965,39319,39046,39467,18083,44772,98481,82782,12989,65018,47655,68286,69745,49887,30582,73508,44584,61301,86167,69479,85686,28231,97548,73524,19464,93946,26647,45040,75691,51435,51272,36297,42807,70489,42155,86108,39808,89628,34119,14607,22494,45803,18288,90823,80558,74137,78898,90693,98697,19820,13231,64297,55685,85321,84330,56188,73331,14301,51578,90645,60899,43611,55394,92727,35454,80244,79958,64102,28135,17649,84147,71618,74435,56386,58055,24570,99532,73260,34438,31554,77678,47710,78067,71929,41186,80310,57794,93974,73857,90700,49744,93006,35124,64926,27600,33125,42817,71814,14919,91334,56504,31161,24525,18935,97391,74515,28026,75852,89026,29427,30580,78710,81643,66799,75974,12934,51597,58697,99839,17971,40949,31289,95638,97557,58412,58502,71225,45553,50740,21904,55680,88852,13211,31945,24600,51563,64926,19617,33548,22355,26646,95180,81402,72920,12066,11658,50131,83329,89751,36511,55293,95895,84815,50683,73292,58105,91471,13773,20464,31980,15580,69305,53917,13694,63472,66108,93988,68662,45523,56090,59104,66447,97212,36730,44442,22251,77291,62180,41272,96658,54134,71375,21141,22978,91298,20943,46862,38555,67664,40648,76131,40253,25976,18676,78670,31845,31395,10453,26313,70266,62964,81827,38558,85731,72272,38852,88786,64332,52895,24103,93327,28816,12156,55863,70837,21771,13291,94962,13901,87690,20527,72587,38761,30528,70754,74650,37461,72469,19911,96442,71683,10907,19839,17506,84788,58507,67809,49820,68378,41560,73040,89842,79263,78071,53104,39515,55183,98873,33090,62155,62006,70096,38816,44703,56549,33672,24148,77188,26231,43546,77314,73167,84351,80155,50586,59604,87176,36975,44389,95426,43440,52446,29804,40493,74594,70094,52509,83152,33833,56907,55864,54342,10382,31814,69781,31482,97356,66559,44283,84467,61656,35821,19497,70335,69207,26089,19452,23486,44306,28489,17783,11007,57719,11745,44006,54925,58922,59050,64207,85773,30877,80571,93790,92941,51706,69645,83190,97845,56637,18190,40800,41143,95007,11450,83764,43494,57359,59793,73115,44830,50849,59518,54101,17651,84828,28533,55527,43068,58215,10304,33460,75426,24899,94403,64285,31288,69673,65028,96708,70661,41564,96903,84724,66199,60155,38698,47579,57982,99065,63357,98921,49712,68221,54358,59706,78748,74507,46223,46201,47912,75134,22513,23554,71079,68565,14815,50631,14358,90621,13788,89805,27652,82637,39693,87042,30084,26546,77032,70445,31959,38546,18950,67114,99569,61008,16841,88615,14196,70192,57083,78652,95042,92796,32435,48909,48136,72510,86759,76581,74264,11090,46555,20185,28656,31899,27417,56324,63824,39856,33658,97436,14488,16322,95360,28784,11532,43967,80950,60635,29295,12871,40750,81133,56693,59808,55716,98762,74413,65232,29485,85349,77288,41253,35893,67708,11108,85863,74818,61895,92953,57798,51937,28036,88972,13988,60106,43069,64016,45771,30311,40121,54126,72538,29374,54510,82534,43619,17779,44731,79575,26278,39909,32163,26098,92641,33776,40988,83922,79420,25474,91623,39057,54602,31955,10895,75135,15348,46117,36154,20855,90115,43657,83107,15776,40392,32857,96715,86813,72183,11540,42448,94190,10250,79118,22513,61959,68772,36021,64689,47182,90091,12530,87133,50501,14648,81748,85404,32417,92977,69065,70248,20270,27673,42336,72966,67766,65911,61832,39067,95856,17360,23343,97970,52808,33312,20637,38178,22071,87513,27064,18458,11463,38527,89383,71500,93468,91205,71507,30986,82074,25363,38106,32450,59550,81030,25396,91773,94674,34524,18982,85336,16319,56025,89139,34751,14213,70324,40551,20623,61640,51574,65472,74847,88787,30569,78019,32860,88648,73086,35199,55750,38274,27312,15952,14314,12699,25543,65836,16287,47802,82210,31760,90757,52685,71722,62004,24781,47430,11959,22286,63557,95290,93063,26134,34473,54296,29695,18246,55981,49024,38979,49429,44617,40984,65087,55045,34039,95690,86532,99143,27207,59838,38302,63484,91744,98309,28239,56646,71952,40643,93693,82695,16998,97722,24778,22100,13925,25940,44590,36378,93155,95024,43057,81476,45638,16629,48202,36792,21602,25289,46411,22384,12595,36799,39860,39015,87259,52122,99052,59611,82580,48242,83062,80125,68546,52705,17318,99867,11204,36824,60254,68909,38837,41886,46631,29509,19880,38592,72095,72965,84766,18881,18697,19655,35888,48086,50914,77090,61411,13104,76113,48762,57933,20459,61093,69051,36316,86916,25764,41498,22059,76424,91874,51206,87302,65854,41067,50235,68068,40964,55521,16151,45295,19011,15572,69777,80172,47988,39108,60809,36255,10831,25954,50049,31718,22458,83186,98531,78709,37637,99689,64092,38732,36148,94545,81923,78530,60386,44924,33740,30393,65213,24617,34898,50520,19742,40914,15826,46138,41817,12266,97221,12898,46569,21327,71739,24393,57987,16957,51984,50339,94112,71430,71363,97519,49739,42086,76508,81095,86993,99154,21884,54085,73713,77474,42866,82664,33456,18550,79595,79759,89299,68115,14789,34397,74244,39995,97120,57662,38200,88382,70257,50789,61871,30876,40144,63731,47898,49830,46164,24257,75529,69454,46368,81509,44178,59679,99076,39626,18314,35737,75731,12382,59752,92125,20869,38459,35323,15402,44770,19759,67328,44390,74635,32725,96164,95731,73806,11657,48034,42274,75693,27991,70060,65099,24978,53424,38902,62412,96253,27756,47263,71772,70849,82317,24921,12869,29520,18131,12070,87330,89699,54032,72619,34571,85619,39412,80184,83768,33012,71927,31164,86595,45080,73923,10633,67693,83143,30579,87569,27570,14483,10788,68350,45663,98971,35807,37388,77579,52986,99166,37040,82944,30992,21386,44657,30647,69460,95237,95963,29051,54443,91018,88192,54587,25739,59926,27128,60302,58709,45914,66302,41659,94551,79178,26635,64314,63495,18781,86030,97508,65042,97828,44427,49014,88792,51655,23502,11646,76839,51327,89585,25095,50961,57237,54417,34928,74822,84389,71843,72518,26997,23088,39382,60018,66287,34118,90200,86287,87986,36099,82356,65250,39114,79243,65865,51000,40746,12413,33850,68899,39551,40586,70820,36013,80837,21921,89235,83553,71272,26952,58346,22184,92566,43717,22791,56258,22986,10176,12321,84203,59053,14063,43523,75641,17827,63330,38561,65266,84606,79682,60031,46945,79605,46036,67372,64808,87362,81417,83499,52436,86649,82915,87903,42035,26278,80107,50412,97160,20094,91068,96108,15908,56697,35274,57560,82309,62122,40146,47673,38724,30972,60817,54434,38746,85032,42562,19882,84475,45421,48142,84795,42710,36928,84283,88494,51141,19490,92476,15756,20284,95880,68284,38099,29804,97028,11917,23920,47622,20412,57234,19007,74274,67625,93940,45781,84604,30856,56431,46351,61365,29342,75861,28043,60423,33677,94267,28227,52738,10515,18037,75337,69291,79502,37853,38051,22686,69861,80655,66397,76014,29380,31275,37344,13263,31628,87319,18687,87388,81300,98121,69431,93524,17691,99875,64137,32188,92545,52959,15731,38130,16555,92125,72201,83487,77765,51410,93486,98868,97419,59676,75499,44434,83106,25997,73071,19174,58620,53049,99231,30234,20307,63615,36780,49487,79212,28071,66887,86698,60175,38827,17774,90418,18243,80654,37761,67987,54879,55237,36579,67394,39852,12990,78765,21032,40650,78133,53261,30905,28433,95583,44299,78911,73824,84632,10870,70054,39250,23134,92126,77217,60155,76889,20098,47739,87296,41139,56038,79424,65565,86496,86656,84855,84394,17562,92660,45902,67914,82866,66866,49144,44234,34505,92503,19935,19428,48378,71594,25750,75833,45954,73637,55706,21115,73904,78193,49234,87315,52457,99612,92304,93420,23907,36014,77847,76796,51757,59732,47404,47759,21569,72569,91220,79908,27928,64975,51288,12946,86506,28983,94163,89502,29658,22769,27491,34308,18642,92794,82090,37151,22998,52255,55587,63560,95974,52411,12768,61984,55425,54664,28188,11603,61236,29009,45724,90409,26174,35163,11316,10406,26458,13287,65069,44929,79230,75303,29298,15972,31593,85285,10273,22069,47019,38368,74042,95737,10635,94920,76145,15856,93315,34168,66341,23772,12840,69073,99423,87409,91432,71426,24228,68808,27392,84143,42445,55861,56072,54915,58102,29532,38608,55089,35420,87370,59769,28738,58925,32272,84647,19592,96944,48487,26703,37739,36708,59508,87277,73820,94631,16616,44661,49876,56323,43183,14693,48105,43584,98830,80563,51729,73611,45452,19355,33636,91227,43289,91440,62700,99967,66393,94183,35303,66239,38868,72796,92696,63519,96954,81682,80447,90023,40079,83667,50004,18624,80683,28252,11789,47668,24591,62515,45927,91296,57935,76771,14701,95735,74258,54934,55732,70930,79965,75247,60678,14136,86015,74511,51118,13023,70217,60694,48255,23114,10249,99528,80495,80335,40288,81069,64123,21398,75792,86207,75827,45518,94671,26707,13183,12257,79918,80746,93311,52557,76111,41197,70408,65970,79773,89638,42767,16919,47260,20526,33560,47253,50846,35083,94117,11735,47185,88017,96697,22712,21084,69649,96971,75567,54583,40574,66023,96164,40675,15100,83785,50166,75339,87961,51424,17770,58155,76151,89558,54724,90314,78416,36259,30779,85824,95051,18787,94425,68090,85568,66091,82547,96583,90049,73458,66060,13539,93636,13113,66170,92688,67446,17825,53683,21122,52286,57764,94288,13845,96044,60196,82807,63912,53576,97819,65865,81098,43242,50382,54467,14374,75038,86939,59193,24019,90059,81953,62695,28644,26534,27237,81568,63100,97338,65530,54623,22689,44615,53135,64577,65434,31533,64317,58342,23832,11402,63587,91894,20079,49500,76020,77267,18643,19291,45759,76463,72956,15355,54709,27580,61395,26625,88332,62235,34329,15328,53065,91206,41553,21215,28381,80411,61819,33588,49705,37127,38596,37631,24148,74078,36983,93821,93190,27226,38952,70786,47481,68778,85163,50907,46437,95198,68521,16030,13910,44420,45721,18468,63507,43905,46118,52034,66247,59440,28203,17748,94435,33688,28191,86691,34650,83115,28332,87708,26583,82830,69895,99790,93639,85571,41939,62460,81940,66286,70858,45617,68007,66523,33196,56326,18315,72068,53188,50744,93886,64969,32201,44932,93013,31403,22987,54134,20166,84271,14712,75442,26168,93224,66290,75403,69627,17176,19418,80470,30494,36721,20723,55704,22369,62187,81504,32148,52379,63461,86253,67776,72606,54929,45158,27635,22862,75964,67135,28380,79231,15868,60681,30528,41784,32782,93928,50535,11151,96738,60419,22109,33604,27652,32109,95823,65519,29839,22112,76460,45930,14555,15242,35818,15396,77935,78647,10022,58607,57473,92150,19436,24334,68338,55132,43978,37763,87048,20559,12515,57757,95802,77892,76794,39992,61212,31024,58025,34652,63253,86136,76584,80367,75968,41181,81547,50907,41021,21479,88607,95419,97402,26620,71196,61942,71470,39058,25667,30156,15386,42915,11475,76942,67679,51497,98476,41287,12578,64475,74911,42824,47632,73932,42994,87507,53496,52532,68533,56207,96436,67760,48356,43816,32014,41939,93687,16488,32110,35953,10134,97431,39880,13633,47080,96771,85218,22371,49646,55228,23524,75932,69448,10931,28839,51631,46164,39364,24962,44268,41988,68680,57659,70672,40360,82297,57923,61326,39442,20880,51743,69018,62797,36017,57071,38043,97141,10906,90536,56920,17342,34368,40857,47836,66084,84011,79082,85524,15237,40645,92658,52877,42732,82943,29630,14025,84031,17748,43946,88495,97530,86521,80316,31241,29327,36012,76091,97985,34329,82530,91132,83473,25376,58369,82781,68222,29044,47572,53121,88772,13925,72331,96991,16802,28444,65517,50014,36502,40789,27501,47592,97535,11172,56074,25004,17919,77409,96127,67716,79398,41229,21056,34790,32943,93564,11930,15731,25913,76832,30504,49812,41703,71459,41016,89713,58139,60757,36557,92474,63816,44191,25554,74765,54058,14028,99920,75253,29372,28407,19204,18057,66396,96942,88795,87068,37418,98657,59393,48120,98479,83648,79979,74431,80870,99181,15886,27870,71109,56975,72858,14829,54506,79425,29209,95385,86142,81247,74224,56102,45146,10731,76119,12628,52018,23297,69499,40055,69641,62715,13651,34616,79716,83582,17904,75364,89486,34753,63511,18942,98884,91074,56751,32346,92236,98103,66011,21860,42864,56657,15263,18975,45169,95389,69657,20039,43859,77643,74635,50485,45568,81147,45240,31431,61178,34779,95303,95747,73475,57093,31624,81519,70056,52942,28337,58253,17725,53476,35026,92580,81492,88222,31535,64921,96131,44756,37990,19902,84166,36182,14148,79126,50734,95570,36153,24569,20852,33697,70506,19641,45820,82036,38677,48225,61566,33207,47558,82860,95355,88106,82184,46825,53897,15465,45637,83616,18145,28108,99817,78913,27830,77668,76970,57722,87201,23072,95409,80339,75770,90598,25928,25821,88167,48035,82093,37959,91203,90953,22242,36904,28213,28259,25418,28849,95532,35707,85724,69106,88334,99410,72761,71550,85094,35032,91939,27345,33180,27257,79264,24039,55458,67632,34794,93659,70944,69342,28932,90831,15660,80666,22191,96525,10221,82362,77902,79619,54928,89376,68666,53806,60455,58016,42117,54402,13677,89514,43771,99188,74912,18546,69739,25693,27941,40006,14316,19938,93819,88037,30593,83980,29123,82011,76632,89111,50598,37676,86412,93968,14581,50349,85605,44701,63067,64462,50814,95540,61039,11312,49978,40107,36779,10395,40283,32012,57207,57915,31507,68356,15510,26756,63928,47863,60167,22986,35533,90357,51403,80342,66104,30758,81227,79016,42505,73564,37859,73280,21717,81575,11056,47759,85801,95346,49659,25599,44342,63640,67594,69164,78630,87115,92844,14261,17297,72561,66112,91148,15769,91620,72390,32823,90360,68530,41906,89909,28225,90903,10436,49208,34835,72020,62664,60058,94535,42867,22525,82676,67539,10495,44841,23276,85938,21504,28022,26995,72118,19183,49063,96979,70248,73721,30595,87005,25156,66709,53201,22142,94063,39309,90839,78234,94749,25877,44849,90877,64598,31393,37051,16774,11062,63011,73598,30836,54982,11209,17661,77711,70000,25867,30150,89292,50577,33210,24625,28596,99079,33313,33291,88530,72002,47607,89485,80670,37339,52179,37395,66453,56200,72950,80099,61677,16419,62109,84653,98953,30643,44638,59713,56684,93312,91738,67030,14898,86696,40802,13510,89381,79065,74990,47275,69910,44666,92594,22778,48382,59937,28597,56530,48103,51160,80180,86236,64725,75829,23960,69230,73685,72854,81655,75917,46007,74576,95759,54071,32197,35220,56580,82577,25896,84410,94024,80674,84460,91915,57882,96746,13833,65577,23485,27409,10812,88105,99734,20192,56284,57304,13862,99253,63549,30636,69972,58983,78901,35368,22295,66522,63770,59799,45349,60230,79281,23112,35109,29722,52343,62303,12014,37026,55805,82674,94209,86904,31249,72739,35629,48192,67794,75273,67437,11577,66867,35136,18648,37227,86224,73096,31466,62585,33616,83914,90093,98314,60332,85571,39369,30172,88297,36433,31641,71398,16243,53650,17550,15290,63211,43062,29157,97526,62955,86291,35268,53154,13302,18030,35813,27479,88288,21014,70384,33200,64070,27396,28886,77679,83035,19575,17517,56575,53073,65713,51328,96596,71400,27090,65494,53818,99964,63225,45718,54225,46920,60643,35009,96804,50562,39529,16380,50918,21275,58354,28608,61159,17804,85036,14911,41415,40160,15903,60927,13525,55101,87562,71541,10106,28871,52534,34390,56182,76229,80910,29174,30544,98437,52735,69663,30439,75387,48405,26571,13945,71300,56367,92681,46546,32425,15084,88376,24639,28159,32226,13127,18030,43428,57782,10919,95324,42255,11795,45022,91350,77475,70328,49300,52452,72965,88192,42583,75611,40467,86851,30575,68316,95376,45806,11823,62034,72182,51596,78195,99495,57919,60416,48631,16138,92789,88109,61941,16862,79515,23607,13347,92361,43408,61139,10287,22531,40970,86339,27873,44831,57004,15849,34244,12454,64392,23013,14775,23048,10948,65949,68316,20712,83693,85639,95020,25687,90128,25463,61722,68786,11220,42979,24445,56473,92530,70741,20640,62657,64087,46702,23623,34051,45757,36531,79366,22984,90229,86549,79823,60852,38120,21318,33409,47921,10860,77811,78272,58752,59775,78464,47894,63265,24717,55375,54203,60921,13424,27715,22706,85521,48369,95488,29643,37931,89188,52061,28957,76722,40117,41549,60286,15224,60992,16683,87781,30519,65449,22217,70447,19945,94516,63668,97355,42997,39035,20734,79844,83322,95790,86922,73674,87503,14052,40330,10493,37941,63906,30652,79752,12124,67688,65695,20696,60304,70713,16091,59304,70094,27664,10411,28512,47523,41387,24369,54990,56604,17219,40085,79475,21007,59605,40863,44586,64028,90159,11235,41454,98254,26092,93221,34398,62055,91308,98504,83770,26791,66397,51100,23536,35835,61254,56249,93377,95502,13216,42339,44407,17544,51857,29967,60371,33197,49462,91477,30728,15853,12263,66850,75711,78184,23037,70006,84435,83556,64991,18860,55103,49392,46190,47519,57764,99068,17225,95332,87528,14146,88567,57289,22966,62242,75968,51629,65690,25360,53493,53234,95227,62448,74426,19456,55580,97838,52259,54161,81597,76703,84619,76467,85197,81055,63725,59646,12799,75110,72670,90831,52642,43966,46339,18625,80514,56455,18017,93246,92938,43273,62787,49653,21253,14758,79594,60577,92421,76201,26360,73855,75627,93236,33640,20088,24012,25543,44610,77985,25164,50955,84822,37871,73077,45452,67124,74767,42507,79902,42773,57201,52601,97926,20550,18708,98403,85621,28352,38122,72716,75592,18082,61762,28906,16865,17984,67041,36523,30385,40596,54336,12272,99302,93621,75934,49207,37320,79666,54091,46090,48353,96029,11679,52692,93766,43178,42657,51060,57241,18630,50901,99877,60311,31684,87062,20446,42737,97031,72162,59660,29351,62104,34415,39471,23418,80364,45563,71350,18346,45158,10993,26417,82080,58380,12335,13579,30601,84932,40143,75294,21148,51006,41504,99698,63953,16616,84582,68481,78702,32414,97232,52005,96715,84042,88205,50713,40600,79634,22965,92925,43986,15667,26071,63741,27085,31194,87922,67407,95501,80786,70825,54680,91552,65208,31342,22948,73335,15333,61966,43602,15885,50614,42444,61527,30962,41313,58723,88151,80243,54378,69834,19472,77246,47749,66529,76975,11612,11178,95036,92947,23846,74454,30263,80890,32491,24036,48340,26087,65148,51719,50080,54554,80611,28537,49435,14307,95436,97599,89955,42634,80163,43361,82670,80087,75668,54982,98728,42411,57636,55725,16147,60253,10224,58997,92498,86766,82128,39765,99800,91552,69524,52653,26873,30718,31251,60906,91897,22728,11453,71983,34475,53189,76823,82943,67259,67989,29861,22116,96282,53740,95758,12902,12460,59443,79145,58140,95610,99696,95526,75797,11863,46769,61603,36169,13987,74098,39310,43157,62136,62803,15037,10920,78016,91236,75781,20732,69218,70877,39710,42661,90200,56484,25123,14059,76145,59930,97965,21529,29223,20436,94455,40803,55631,68983,89349,26885,57915,13475,80621,34717,17138,20354,83821,32905,52367,67734,80096,36095,43679,35482,43986,90363,34499,37134,41332,69740,13972,77899,38147,15652,23164,93641,46740,38738,33028,54503,42376,78932,31776,24007,20004,15835,14826,80259,69828,14312,96176,98832,90912,49412,34773,99170,99241,94277,35369,39807,76200,52276,83689,96292,41934,78249,23696,36525,38706,92055,24539,59123,72722,38971,63469,21524,89365,85583,94449,47434,79451,75060,19303,87614,39275,29186,14539,41568,72503,91425,87855,12657,16071,27596,76677,36090,73426,52810,18679,24103,54780,26254,94613,43707,52633,81221,43008,32935,49538,81372,11312,51410,43664,93610,98536,97153,53998,21523,17847,82475,77303,72623,78927,31513,85284,92665,47891,85887,30899,46429,95529,49984,40625,11403,59422,79660,12876,29595,35260,44541,11147,69691,96505,47666,18808,73205,70073,33007,33061,43894,44052,68808,25433,31825,33106,48074,67831,98455,15802,85644,93682,27776,41485,20059,90791,61528,86640,79759,97935,82847,27839,89969,28946,30689,82488,29950,65690,20287,85230,11896,25140,79612,85222,21645,60069,32073,12677,17420,29577,97564,35901,44043,52053,67926,37217,53995,29835,92952,35508,78745,55563,86502,99273,18864,23523,96399,54372,53643,82192,66582,10106,59033,50888,65925,98264,82325,56117,91077,70721,20769,66424,72856,27443,52592,56697,22157,86518,98347,27506,56174,64566,37293,61739,47434,49087,28663,42719,88139,82306,77927,51685,31386,81762,66420,99332,71743,73439,83963,65938,22715,92124,43843,58805,90804,93339,89465,94777,41121,93053,81312,74248,41264,69757,39454,63245,62064,39480,68988,42703,60681,29579,49693,97179,26639,98797,66286,82981,36215,64683,76988,14871,17703,34387,39154,95061,27507,94134,98884,49008,46046,94686,23635,97103,77631,54976,70089,57012,41709,92589,12835,85565,14483,16330,61865,23501,18561,20034,80480,73001,69126,61699,10975,94284,38322,34781,20053,75565,32304,48581,71172,86423,73997,66578,66006,20300,88155,36442,88362,37401,69757,90700,73788,87087,71774,11307,80696,54469,97433,64944,49534,12707,11719,23371,55010,88576,77095,64716,62689,93527,76443,98752,19130,46059,74838,42008,45669,60680,76858,20881,56112,15897,35232,36487,54868,28485,88256,64682,49368,58659,64498,75646,29506,96882,79894,62832,17002,60965,75638,19414,33392,90698,64098,40109,11563,26991,49611,34683,79580,56438,54301,39167,14494,22275,47045,86538,55261,95605,67383,78345,84781,23628,51059,61010,93983,98221,54963,24387,79767,47787,45858,89743,79856,49617,41712,66855,28627,79449,85284,36118,39455,16798,66339,90992,51608,81394,22132,82956,10940,92763,64367,33402,60479,50750,65494,77546,90960,26900,32707,95059,60427,23653,29890,53680,90203,39501,57323,99563,15646,96178,76096,24915,18468,93151,67405,38483,93394,95437,63274,64744,45388,58813,91456,63715,85390,56049,18162,56239,82605,37311,59105,26651,63647,94033,31730,21213,45959,61401,41381,73742,58567,69457,68603,30802,92292,66128,41080,52088,22914,16105,80624,15730,37884,93837,43537,81692,30425,73604,77823,55245,93346,68184,80799,63144,54652,91448,78332,98997,72273,36683,23797,72106,18410,44550,82679,13281,35707,80760,11795,58504,73611,96534,18147,97019,72045,14156,49226,68182,54905,52431,25619,23943,86025,19550,81092,30845,65824,37629,85954,65283,53284,52035,50440,18645,51194,95644,24559,58480,19889,32053,72896,74158,32391,40630,17945,87212,77958,27240,25974,33987,80579,41273,85454,85280,53100,29930,41282,32724,11812,30190,93100,19952,46687,31210,78873,53408,40119,40093,15679,62376,35644,51036,34279,92921,39025,64431,58754,42316,47542,71566,98486,28409,12712,46127,77996,48297,44636,72713,25975,16861,62137,85399,85021,89438,36371,47352,10549,60341,54714,72531,60213,85102,27098,42864,82935,79414,92110,10745,35015,92982,13478,26518,70960,22388,20944,67323,96688,14577,75358,96796,95282,65935,68523,12506,79030,92588,65143,12274,55900,72123,21593,42335,15805,12084,81366,74899,25176,89424,89863,25968,17930,64768,72579,74065,66731,23159,52407,48157,27282,50281,52950,98967,88032,50996,97852,28044,82673,15700,52292,42281,56370,87369,38245,95240,87202,50511,90590,31174,60070,92135,65360,67371,82633,57462,87452,22908,70273,55433,97491,51646,94433,71670,80883,63818,73874,17055,17646,22776,41135,24870,13938,95283,61559,10509,44215,87501,81374,43914,66579,13064,56883,52874,26774,73864,43593,55348,69200,21359,41468,24444,38290,68539,12308,10427,39774,40486,46907,83079,31722,59058,50308,77077,38946,73259,13712,50638,32433,13328,85172,37964,34678,17141,59744,88032,72994,46180,56719,87370,83581,93683,73659,99480,38245,27664,42146,38639,13421,20467,47783,90407,54297,14395,95846,59473,70360,32811,25064,30622,59402,85836,78231,78791,59584,90478,46395,83699,10514,51084,31137,75699,19509,29983,55247,67580,46106,22514,89265,12820,10290,15989,81481,36440,32036,46479,83090,57138,89983,85150,45750,38057,80193,89121,60988,83664,72190,80818,24649,44973,68968,97582,55502,55127,76377,40250,48647,23023,98687,11658,30717,10800,32626,55464,99255,90654,50871,56556,86386,82628,46388,44169,32545,39795,37281,58596,94732,68494,55767,95341,19993,73860,42727,89656,90038,80036,98316,22414,20094,92332,46440,29216,62905,63475,19142,17950,43717,89664,41980,65923,21537,41713,21969,66774,92281,55196,22043,58715,76498,61338,71313,77977,47104,77497,15945,38301,19063,25566,61972,50864,13764,29579,12251,40801,11123,90496,59822,50487,14769,49839,54946,20007,93340,54285,27298,24145,79267,70098,30320,73795,87007,70071,89319,62000,67505,40775,44156,44740,48195,22790,33656,97427,31377,95880,63146,99439,94228,90280,57885,87646,30957,91864,25416,60199,87059,60933,60734,63468,86907,88565,14728,80288,81517,21182,66505,17180,68050,50029,73621,61043,64574,88970,37202,56816,63282,69189,11544,36921,93068,85799,28476,54038,41749,69255,57993,74918,71841,24351,99650,96637,15589,32932,73990,91407,46573,66240,64827,11738,96791,91830,96600,62508,23681,43422,27485,22731,11929,75412,32638,37180,34951,39584,20905,65213,15419,60167,70559,15897,17275,96284,37641,44001,26077,46330,32309,75914,30989,89720,45126,80843,14994,76683,33126,16674,77007,96374,74938,29058,80030,17850,64110,75942,28205,63545,22947,14066,86993,26368,92837,86792,45427,22687,17773,24848,18304,53091,80903,57031,74025,10902,92058,69466,51215,65057,99298,13551,24625,70129,48044,34185,15226,15081,25154,81589,83786,69250,11341,18950,19717,10627,30586,82625,48171,45378,79940,86422,82499,51933,56646,64473,16065,86380,55385,54031,65689,48084,88046,16255,53739,61798,36645,37621,62047,11626,90526,93811,97601,54106,12712,96320,44555,16112,24707,31104,77670,53219,80439,33248,97491,20975,57366,24382,66533,50092,94788,93647,42123,18585,75152,13236,70231,15926,11382,40585,89940,70030,54586,31979,21577,48857,22065,80074,46774,69695,27113,41622,45492,67965,73753,40080,18222,64089,10307,73504,29713,99984,90473,24597,61336,44729,70525,42214,34019,50672,81812,46216,81686,54723,62485,86468,70022,67059,37567,30108,39907,85400,15153,38317,73805,51159,20246,32530,49172,47346,13299,85327,49591,14561,59995,95070,26204,10199,95576,10603,23481,39675,76571,63253,91734,27636,55291,53438,65280,40105,95450,75778,59902,37076,23870,53084,84961,48295,96668,84494,57972,44846,99008,90097,12052,58741,55481,34427,27274,79929,58908,95644,44353,22890,76786,83444,20202,35814,45928,81070,11997,97562,77960,19774,95275,19688,26572,31944,44951,13853,43682,58238,69424,81261,37017,87769,73477,43826,86641,85701,94326,74815,60910,23023,97622,69669,89189,75209,72698,37817,37931,97806,47180,76702,15403,58757,28788,80156,83670,40541,77856,18628,93175,36388,44150,71529,26631,35436,28121,35691,13753,10589,79511,94182,11577,53253,23302,10816,48533,13981,72809,51206,21953,19044,28685,18900,44735,52587,87149,12651,78853,47359,11805,74931,94022,88662,70166,85468,41902,17191,40308,41122,93287,39138,33264,10800,41992,95244,36672,46479,65576,30307,54398,53123,17555,32985,18701,34999,56288,96549,49581,57458,56305,11248,59341,51486,44725,95933,93499,83009,71368,62328,36428,27134,32292,97461,27374,99685,20368,44707,96538,71240,32881,66664,93465,66855,80362,76925,14081,21047,54702,37771,73162,56371,79803,77943,51961,53913,34238,72526,16143,31102,33792,28900,48035,87609,83971,59091,13233,79237,31138,83552,56915,85215,78436,67202,81801,52341,90172,94030,70540,63741,62625,96093,96922,91081,21580,88100,63067,54433,66410,10052,94386,61192,58814,65521,19830,36601,38652,36220,63197,77718,49032,97954,87443,42434,13921,38698,42917,83178,50016,84362,42020,67293,50259,20781,40773,13176,92235,44450,61431,47271,56894,78372,47073,90111,83677,19011,28705,86907,60059,99823,81942,65396,16423,84985,23543,76709,59494,12246,61648,85283,94345,65555,72256,16901,35673,46332,66546,26159,29005,98779,56666,69307,78710,59590,48859,74383,10395,93403,62357,61197,11100,37205,11727,46212,87402,30037,93534,61817,83234,72537,59730,90835,13246,31566,55317,35522,38672,26005,38819,73861,52422,35194,38023,51294,31648,49227,36755,45323,56681,28374,48423,64683,36185,22629,38281,48495,65876,99806,45781,66398,93614,93086,87140,36340,87729,89921,35246,18213,90337,17015,50515,52973,40703,34982,70781,53117,94703,29943,57454,67548,83040,55073,62496,54725,32041,42977,58861,34041,72327,55083,40365,41932,78439,39933,90011,18429,88214,30585,94180,21259,60634,42690,96787,36543,82064,52146,49686,13136,55525,52643,10299,26971,11920,77687,51492,88416,40037,16295,34309,54362,73705,14123,91995,12971,83085,43030,66389,38942,78905,80454,67508,73080,70543,11536,53357,64707,17745,44679,91189,22763,20587,12458,38585,51778,22338,23072,71186,25602,86471,62922,16605,70014,99591,84605,72099,95754,48797,26096,32368,47324,23723,27782,33774,20184,77891,91882,66896,46168,12199,16543,50443,28028,80472,12140,22410,14679,23063,32091,28488,24524,21947,25764,58172,54403,86768,91030,75645,15155,70801,62841,35245,98943,77531,65619,34905,39149,48479,64268,82663,72937,73754,63751,83932,27450,58638,18990,66640,46006,84235,30058,82653,86985,26496,87438,96629,61732,58649,35960,77195,12744,58652,23463,88130,54702,92991,20785,91525,29805,84619,10414,67672,12550,19584,35837,75134,40699,54004,45706,77820,72993,27971,94573,26098,48053,73558,66243,20792,72659,82308,17409,25708,70209,10363,14690,63429,90714,57083,89292,30372,66485,34473,99074,25474,11156,17423,81887,29355,18203,14864,64089,17669,78496,58926,27601,47770,22176,87927,55750,45107,84558,56217,18123,13822,36617,31517,48627,95220,75343,48776,51191,17134,40101,89065,30224,61357,26096,49073,59564,95043,63160,21445,84098,18825,56736,35583,83789,38179,24877,56165,91987,32122,68921,90580,51824,54169,26409,82440,95108,43295,27671,32585,91438,41282,38431,17607,18230,13310,43150,21603,20336,25505,63178,65642,86674,90419,28844,36034,42413,21542,30102,70253,92784,95336,41377,21184,84309,70822,20387,94186,79938,39002,75361,73198,75365,92364,11014,31963,30687,61123,58483,11009,17513,13380,75047,16909,87985,24435,24349,54148,45655,83331,66525,56749,31551,59454,24270,58257,14773,64932,24647,79897,75197,24048,15551,33041,42875,51568,58849,55554,72218,46478,56796,37754,28281,85436,79593,37247,29946,37754,15800,82248,54011,25983,24839,31264,50739,45788,50493,65553,28169,20283,11977,63020,34911,69008,30194,37139,87785,87662,90886,86238,44418,32384,81625,92586,46201,77374,24449,91521,35172,93445,78467,65124,19834,40891,57879,74064,90563,70723,22292,47503,44898,94224,48802,42414,39190,89572,51836,62447,54079,48723,59948,65371,43168,42309,43298,46740,60780,47474,26522,69190,95437,37798,99372,31754,96253,30590,96401,35475,86746,39275,75858,59104,81889,99807,88033,90009,87241,22814,31125,55663,59088,86868,54578,79005,37947,45120,14063,74640,13692,21776,42975,60142,45974,97829,20043,83709,92448,57451,65644,26154,78623,77646,26396,26289,20996,13989,63507,40643,12668,96973,73227,41338,64488,67170,99287,53162,37300,41107,45352,40123,78246,84574,71232,25998,48543,30604,82271,74152,56019,82341,62574,49360,49983,38184,46925,92291,56230,95750,71807,22923,61541,47650,27820,26110,49541,25629,66535,41752,26873,23084,12152,54363,42923,81250,64488,71885,97155,23343,63912,32802,53260,31333,14847,49071,92387,23377,17035,46387,50341,87805,80760,11009,84231,39733,64736,69905,24592,74783,42030,68872,75480,80335,58696,26317,39716,37735,91457,37035,59600,95591,28399,14252,68512,17144,48864,51502,47054,46356,18059,29034,77248,88137,12309,71861,64262,70682,40344,16591,53534,34907,41575,76525,83505,31305,91516,25484,94209,98943,89856,90070,69873,68837,44416,35650,33669,92104,94897,68962,71185,45498,76049,93680,82369,93680,12539,65400,59284,21423,89577,38260,57716,74905,64742,45894,86479,22792,29205,95688,21615,10884,96820,54231,58479,83550,75767,18737,68285,69666,36431,35041,95511,57959,27986,20011,30332,56333,23334,44932,98136,42788,13638,10115,24964,80354,50223,62178,95997,26455,39392,93156,82595,63624,48435,53004,93529,32506,50274,32886,59569,11073,50565,20560,58651,20695,86984,50909,74995,55298,40599,26539,47382,17108,97322,34611,48691,24423,54870,25040,22377,43823,64851,22396,78555,59754,66677,95235,58020,33985,87891,57698,11341,27119,76834,91324,64480,53658,52448,35650,35161,22948,20712,86888,69440,28654,93398,62188,47100,96026,24247,61481,89871,55601,42116,87405,92857,84583,91523,78348,86738,98598,50597,14704,27734,15025,23332,99733,13027,30605,15127,48142,86069,14774,74220,65137,58382,34967,86829,37943,84687,20749,19840,12410,16377,83671,15781,13026,67402,97957,92187,70193,58849,56664,98956,87308,46374,40552,65943,66612,60639,28548,18722,53007,21084,35992,30025,93510,80420,88227,88616,53959,85235,47548,79798,60811,32373,50324,77288,11243,66728,67202,12120,52260,83772,25072,53302,68580,79065,90584,58221,41747,26366,97441,50719,49805,81931,79079,97889,79677,59557,91532,83187,93862,83756,70354,73223,54364,49871,36394,88298,51687,30221,94296,46116,68243,80951,23261,69055,49674,40211,76137,90866,24916,90910,72040,73746,80326,16684,38633,23277,65903,37393,87955,10198,40874,31080,96723,15239,36062,13809,38421,38420,11538,65383,12632,30655,54679,67882,49955,48221,60258,71203,70128,30242,82963,84379,96556,83296,91650,52438,40861,77608,88739,63773,55416,68839,80490,62351,86824,64455,34314,51965,60520,11594,15833,88714,49795,49440,79941,29861,62070,64233,81589,68812,11280,49361,44875,73419,76977,62050,62757,93626,60622,99018,79285,77628,45201,49158,87374,26191,23770,90390,65353,96587,39105,91776,21868,37629,57424,58638,31631,85984,21428,57806,10341,23660,13180,50480,27788,48505,36656,16468,24451,55628,59613,27109,40479,57385,70298,33003,77098,86976,27136,87240,47696,41753,15338,18963,87750,41983,26855,69183,63214,78687,16051,84702,84368,38877,18154,98485,43523,58252,67583,57934,12208,94002,82861,75863,50368,90617,69383,54008,72479,43339,76527,84006,27713,83696,78537,94620,88769,93317,90030,17137,97772,19935,25080,82948,48575,49427,78193,17324,32172,58163,90363,62135,21507,32767,20211,91224,41145,79518,54187,95858,11106,38397,50421,84852,48632,78791,35891,69277,96573,29064,34118,17445,83546,30121,83001,66391,66843,94650,55793,87248,81803,26423,74818,49052,90079,34765,21296,78738,76649,35111,44286,38086,90952,64133,36350,18270,38087,11679,43767,72432,96831,65331,64465,69013,71496,48655,74890,69526,24471,59785,22252,72441,47992,23122,49285,46435,72156,87673,78877,62386,13784,70339,76856,51936,27542,79988,29343,10696,85678,64093,61480,33808,34876,56104,32891,48846,53776,80440,60357,79271,30914,37068,79764,40514,77399,97157,22574,83483,64291,98624,54610,23074,61363,10507,93272,56286,69997,58586,11348,83107,10195,89090,77364,79641,68210,89409,73504,99522,29115,84096,70384,97895,39449,49740,69027,23066,91487,95876,43780,21549,73291,12680,87264,97395,63245,14586,34347,15815,48057,10268,12753,32745,73864,80513,70576,65731,30332,75090,74548,83245,37984,83196,66897,39765,13498,43019,48079,42837,76530,44807,40113,10064,80728,18909,77851,77423,25476,24558,86323,24083,35988,88727,42512,97247,55639,59254,82450,40654,33157,39298,39549,80540,64476,96501,64256,98533,43277,93929,13171,58173,87132,49496,56547,24465,23046,12973,14092,41135,13852,61200,99622,89441,62178,86088,40779,61784,83334,74226,92521,70263,73050,23619,66845,23137,27497,69696,28772,65342,68805,50067,21911,43190,29807,31969,55445,21320,72950,91391,61968,71780,62494,92911,56915,60765,18662,92890,62042,22107,78195,83215,26267,86105,21877,62258,86152,15984,57628,35109,89652,20120,76511,16517,78518,29849,92996,65038,53427,54313,23174,43313,96245,57629,24238,82931,29462,67545,33812,45452,82704,38740,52945,77604,60663,94246,28187,76248,77593,65217,23976,87877,59491,82872,67827,69406,30483,98515,69044,37330,80884,57317,39380,70200,28711,88443,96916,70717,32715,44582,19448,27307,60832,21927,55740,28156,16503,95730,29423,47867,15336,27311,39872,73265,58089,33489,26229,32785,62143,76992,90843,22001,45037,60510,73338,49434,77168,37987,74558,11919,93455,81780,63677,29155,88675,56585,79934,47209,55379,99636,42572,63211,22200,69053,10684,11657,18462,22080,64056,34527,75988,40080,47067,44585,15387,15732,69080,35331,71880,40323,41704,73860,66032,81631,59254,91342,18160,36937,93666,39105,38606,28837,86355,58740,58236,67666,61360,96520,19757,74769,63216,69477,52060,68977,33762,89328,39611,36305,16195,25435,34603,52958,29813,43661,91449,28133,98146,84638,21723,79964,84023,95191,21509,89201,17339,27625,47828,16784,23442,23249,61149,89004,67668,36674,47348,70664,75624,34221,11717,97557,10367,82834,56884,83139,67314,51549,25798,29995,47076,64522,53905,85854,24534,30934,99051,64269,43820,24325,17046,88137,43109,30960,64288,96394,82245,33368,87461,89960,65753,99055,23429,56097,59666,30095,49053,57579,21737,21962,74634,39153,68583,45001,79870,95578,57347,58915,27507,35759,64003,95338,12618,39362,90163,60389,20788,42258,15791,39492,44039,60314,48484,73240,56630,70456,86084,60886,90695,22138,56862,63818,88173,52467,69256,24325,12094,32672,61352,27020,49435,89368,45670,69414,11528,85829,95257,34657,60790,16437,57998,33550,93510,94350,94939,27524,61443,12052,48212,85762,82498,31199,33850,16539,11975,93409,98477,76101,23375,48489,36876,46987,35818,63885,66086,53558,14645,86687,39935,45554,18739,71570,13767,70717,39404,98522,94325,64191,95186,71474,14033,62663,11965,66127,25950,93397,22666,13424,52155,18972,56072,26608,64953,30228,78827,39912,49527,34828,30924,70603,52173,26243,73230,19880,20551,34552,73752,70933,35920,62533,65223,10242,44674,77064,17015,40492,53909,61246,53404,30523,81629,80293,99414,25331,34311,26778,53671,50270,89563,38153,28519,52993,82533,20125,44211,97756,89126,87425,34126,93747,38467,27059,27574,49510,68968,65187,13590,11016,38193,16171,53852,14671,67638,16594,39309,91559,20175,86804,78833,42521,75491,96382,82573,54939,79218,42349,34030,93719,24179,72770,68122,77068,55465,63687,27147,48402,35752,77594,41075,64220,11895,65648,11486,87534,14668,14799,42871,86531,78948,76649,56131,80002,83208,34175,65046,94993,58637,34856,46553,45112,96323,19451,52858,33726,82309,26143,16827,37836,70012,60143,52305,31209,29802,23788,81915,69291,30995,14915,82821,60961,62982,22528,59318,96507,10251,43354,79944,15629,86626,91996,28918,83545,87334,15875,69385,19150,62567,92538,27937,34043,18635,12241,58691,10896,18671,74986,94050,34124,70806,93608,57276,58420,35322,37492,39377,34868,11828,62407,73886,69470,12409,50606,58611,12750,21101,64117,81302,86175,34709,23467,28138,51768,64605,61071,54584,86996,30205,65726,95391,55518,19305,38060,21926,71384,36617,23778,98065,67824,22973,57525,13759,67333,59535,20927,10653,96651,92084,24363,17246,61056,28247,80670,21217,43873,84894,67245,70500,69438,36260,95397,99349,88252,97391,90766,87430,28409,41719,67269,62295,68804,88147,95876,77996,53613,39502,66278,16992,35549,53352,64682,62248,27481,84686,15450,90863,39937,18044,89629,70970,10017,65140,11922,81708,39916,26580,18095,65680,78602,77304,94743,75665,61130,96930,85727,46342,14404,18671,26317,41415,30953,20680,45710,11946,39124,18964,95382,74407,74137,50460,94283,63764,67846,54255,92672,26933,20367,61149,14501,37880,70231,45681,58871,38741,33140,17948,13286,10886,32296,13408,59450,67042,83876,11770,41114,80999,38319,88642,70058,87055,68666,71472,18872,24896,14412,69544,56025,89025,90462,90808,93378,79089,52261,61886,32720,91830,16783,52612,40385,49885,31532,55970,18720,67347,20590,42321,25604,75998,52775,26235,92109,59724,46133,20854,23894,38289,28014,37298,78643,66564,82248,76561,29270,94194,57907,15607,84086,62946,47971,67433,97023,66814,51457,50854,90194,91013,92918,17537,92898,77996,45685,39902,98419,60687,72708,56199,58802,96565,96366,86263,33806,69973,37275,51580,35906,79582,65817,46121,74981,16083,89982,53998,23949,34516,37408,47811,47432,21812,19817,33009,41562,18169,32053,32223,84240,35658,17433,42068,58249,54435,24832,47950,91685,25678,44948,72473,91194,60741,31452,45884,75637,56683,61272,93453,46359,90794,62786,13789,52058,89343,13658,60659,68268,19726,31363,79656,47810,99188,14737,52822,75273,99583,51616,24752,28686,45709,74218,85487,80528,84737,82928,17703,91134,96687,85547,62803,52402,90496,89636,53636,80816,39284,78715,43909,83202,62637,34700,57460,28111,74348,16494,40191,86513,90955,87888,29419,74108,31061,99444,77021,70482,82239,40558,48362,94856,20171,25068,47731,73136,99531,42651,76809,84122,22839,40368,760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,88951,86486,45389,20406,29102,25512,37251,15396,18417,62481,59219,74022,17857,46278,15797,56732,40483,84593,67175,72015,82820,48967,67107,17893,17946,83094,50127,37257,60664,18329,70947,67746,86499,63118,38347,20379,59436,48629,93921,14157,74638,87687,46017,31191,83015,11208,73987,94238,31737,80635,43562,63895,41931,71996,38332,86580,82191,44743,16722,60320,20898,22227,34303,48262,60068,24042,91092,39322,69635,21439,51849,16640,73265,84352,69974,50038,62512,66134,89360,66417,39717,49239,27336,88411,56807,51463,37159,44863,45630,96993,89030,11240,40451,37999,47533,32549,41488,45954,40587,98675,89747,18232,80660,91098,71723,64554,49371,46263,65077,83185,28116,43777,65603,43574,47350,66053,92322,88879,84757,47515,56753,69582,96380,14020,68684,68654,97146,51365,26464,58198,46587,57149,11276,90555,90212,57931,35785,41191,79429,45822,12041,46523,98009,20314,15829,20066,70215,77395,38766,18387,33590,95446,30643,99108,47478,94926,80108,37209,49317,32244,56824,67760,89668,35944,54172,65416,34797,86434,79236,48082,70554,48371,32529,33237,37639,70123,21992,62429,89383,36055,73016,41638,84650,60886,54201,53053,95563,19835,49052,57498,52714,69883,72200,37206,89466,23851,68477,31995,85463,54792,12492,43767,32712,81422,51895,91971,47662,88347,93255,53337,85901,38071,27766,28421,13725,34723,77980,94680,24355,43896,28457,53068,29632,57568,77903,79636,72811,70501,26854,66474,41768,42503,76834,95212,18857,12177,86100,64223,85146,49826,84773,10212,82826,65827,60331,98394,84917,89358,77154,74235,53811,74109,29497,79187,90161,71050,56789,32775,20747,24160,62761,90634,25745,22437,13588,49499,56230,80462,82698,80782,41795,45142,35041,96206,17993,98737,64281,67958,38277,34783,12718,59712,30307,87321,70363,18298,75622,51614,15822,49448,80099,41783,31593,31301,50303,60871,62024,23033,23893,71471,65118,24468,19136,24116,75501,96148,99625,28402,90392,18527,80230,48610,10763,34632,69921,52958,35483,55781,98010,46387,93843,62103,40719,39615,76665,41173,16603,46620,35006,60739,62833,62398,23630,75284,47481,84582,65766,10897,48984,61419,22288,50527,50911,11369,54714,56007,77155,17017,25619,83747,18149,94473,12969,48563,45331,28756,86300,61606,99582,77880,72134,67462,11959,57414,77548,48402,40952,64188,42043,31152,24638,76604,33859,16538,64668,86513,57668,38329,24931,87488,56539,83468,58513,65459,25871,90585,42850,16299,14543,51375,14004,67389,67053,89754,44143,62123,91606,13659,88442,80383,50940,56562,30799,41440,47622,74982,56082,39524,99269,45183,40831,16125,23171,24053,26550,18145,21519,25589,27026,79028,40396,27680,99186,69097,34218,32033,93576,96321,58304,39239,71401,95881,71832,16434,43120,67701,39491,56818,72186,35192,88865,35961,19034,40851,83521,12303,85908,83242,46099,86427,71623,65371,27489,55901,51634,77452,87768,29040,78882,88990,89048,82639,65634,85039,17105,88662,76711,80920,17060,66208,21414,57503,14369,52969,54908,88724,33578,46952,26620,82484,78103,47233,57757,11255,82187,17716,25003,94984,16725,63207,65182,37712,60063,88280,51450,56090,96498,91126,13957,81995,43639,99664,45403,93794,90127,45130,54942,25629,31736,48883,63200,26538,72789,40226,49253,19403,15995,27601,96704,10553,57851,33833,13768,34549,61468,26241,91947,65557,93014,92402,95591,69869,70400,64084,16705,32166,99891,44611,46959,52547,10195,52139,47562,36228,53596,92170,69237,92636,50445,78703,71984,74755,48804,38258,58664,83395,50701,10681,89073,51980,42375,58048,92314,43295,96071,93690,88183,66488,22362,87021,80090,75168,92857,71894,73834,12057,15760,13647,63765,20763,64325,12493,76659,91962,26725,91120,57587,87997,53808,40062,62861,96296,91026,45145,10358,43822,38780,45276,57264,26477,89581,42115,43869,71282,76265,29606,66392,77282,47116,28244,37473,32822,96299,92915,13191,72565,82036,48155,28128,68116,64496,24254,17518,44854,63168,68810,80390,12465,55538,65346,32581,55830,61515,61102,69628,17235,23501,87310,11646,20434,88673,36955,95954,22186,21851,34412,83425,53687,25228,89187,40646,97022,11516,87302,23311,64548,47902,73016,83796,77611,31053,55430,25940,81719,86762,51644,33227,91203,80347,21843,89652,96391,54319,93008,66169,19883,30915,34337,53156,10129,82109,65939,38024,16783,25866,58600,93494,78246,90442,90484,19380,69838,19927,12122,17778,60579,11524,15004,27446,19280,19092,19800,30169,28805,54391,51940,42128,32978,33210,66041,13099,53728,69232,26072,47636,55223,40712,44320,83432,77919,21795,68985,16211,18125,21140,83981,25237,91179,95942,25798,63721,57843,72726,49983,45933,52887,70243,60341,65961,86626,41268,51832,39907,33825,73078,46888,74190,34024,48070,73451,20227,94768,84332,54925,37043,91074,98153,11071,44495,35209,77085,24520,32514,48093,26822,36887,38559,43121,83739,41525,71051,22158,98630,75631,83494,38859,80935,75811,29320,30672,51451,62744,69591,11727,47262,45235,24135,18423,21903,38238,93352,96427,82715,19398,58880,67719,80734,96466,28709,84459,86895,27934,76673,64202,37715,78709,15953,27008,55149,44782,77531,71260,93989,52607,89495,47324,96192,56898,95034,22235,39010,53327,83536,42392,44555,93980,27511,47640,39045,92991,79000,24041,10817,60003,59530,56696,76895,48164,80703,31183,47534,77963,20271,92034,37009,11646,99377,30178,16147,71409,29867,98415,14441,54424,80642,31946,20313,65470,74633,69793,78640,78304,25932,36182,50155,57770,38903,44844,50696,29367,22990,93968,98444,44938,71244,38861,27970,39292,63720,54532,77565,35301,70509,31124,85332,59396,86812,57279,90470,84278,34601,98101,45490,41436,50699,30203,63231,18836,22496,89682,40317,97471,15722,22498,33237,32727,15974,89257,82588,22244,35548,24210,27428,92112,87008,42899,98200,54408,47303,55574,49458,97036,77575,49979,30619,24537,44460,95153,48348,31891,62519,80353,93389,15695,51944,18480,14715,67290,67792,32139,72848,84711,51381,24500,95680,70712,28965,71585,35696,70458,15006,33439,83813,23983,62006,92608,64286,96273,85502,65532,45444,39804,47215,32877,99218,55188,34490,65300,44167,33391,30164,34600,40953,28314,38222,70171,86579,51120,29475,47074,65610,74168,75129,27819,93803,39780,49926,55365,57841,33793,94828,15209,21409,44028,31892,76144,14584,37250,28930,46681,83826,27750,27047,84704,97070,92448,58867,97206,88181,45542,91780,93709,97356,81345,12567,77730,71156,45136,74690,91073,30473,61308,28737,48684,78008,88798,74806,69817,19193,68789,13519,49706,79716,72009,67410,21224,72714,33782,39379,92086,56085,70202,65987,64747,49086,30224,65944,62883,78666,82379,18740,22795,98989,74588,45621,96016,22628,35382,79700,61898,83788,59595,81684,94611,90496,96888,63240,35460,50454,51443,15849,92885,41092,75002,40228,21098,74960,67748,67915,93383,97239,96017,29978,54751,48338,34807,64704,52047,11113,33810,70374,32963,43308,23496,30132,95834,18358,83102,41010,72811,75455,51156,29331,79946,10000,53290,23044,49592,37352,39256,20113,58678,99005,76382,20392,66013,36833,61513,34306,18511,16607,79705,12554,77942,30952,31378,51033,99373,71892,96658,12090,64397,77157,43681,26390,21122,80710,11823,80532,28620,12753,85461,61034,29879,98439,34146,72845,42840,59788,22321,82695,62693,68616,81943,23510,61982,64907,82508,58753,56520,23231,75349,25838,70182,84543,56084,73652,54123,78594,19033,20386,12162,99642,83187,19208,92576,69849,49613,87281,31041,28950,19765,84247,78597,83934,29283,58328,34435,68739,35734,97581,49611,21300,93973,43379,62250,86342,31550,61677,81104,35180,45959,56170,39985,17057,62765,98990,78651,41289,32292,22214,39890,80855,16104,12915,81730,70744,88172,37647,71706,30659,30409,51444,68494,44652,28369,57107,59469,70056,44108,35825,58702,70451,51157,76016,52482,64664,10926,66942,97927,67246,55910,38039,10804,37112,15647,79979,96183,25053,25364,28832,62597,39048,25458,80500,71128,57396,77056,28361,31189,74217,76028,95453,74475,35918,32813,76766,63101,21023,85345,33024,53011,71469,43957,40883,74731,60553,73409,37151,97700,85549,76489,15268,35135,60629,26145,77674,18182,56609,18492,39431,19460,52724,19342,93658,81359,77238,90738,93594,80544,29103,72156,48054,83455,13413,11740,24874,50795,34919,87666,14010,62839,98801,15252,79653,81130,60029,92604,46838,94990,24448,82417,85034,34626,71249,96785,96700,12390,37327,11653,22327,45167,24681,34284,20395,55043,84853,61032,22720,47271,53550,70473,31920,53155,85134,49108,60772,38480,12892,45678,48247,82300,22669,54050,54857,16660,33750,85331,34520,59961,67565,52104,56623,12822,79867,82657,56957,80568,16486,87968,45243,54228,10699,38226,84850,50387,82526,22476,66131,66482,11783,11095,75873,20054,70608,54656,43165,71093,97631,52451,18803,23204,87887,82528,42912,93174,87886,98249,92031,19251,61106,37395,23948,39690,91852,52169,68631,68959,55180,53048,46507,68257,25305,79327,84698,65943,85337,73286,63432,37764,92504,74548,86851,86963,81529,40593,38604,63078,49384,12950,50501,89884,51275,94027,79546,60515,57257,80192,90576,98545,61965,13187,28683,22778,64331,43619,31842,73814,29040,19500,42798,45502,88141,97326,73229,57739,52119,24367,34248,67556,93396,17205,14666,79956,76351,96172,92760,23437,45003,25639,84002,12385,47741,46202,94970,11552,66763,88281,23317,32322,58582,34139,18140,71058,35777,18956,37531,46034,82050,36958,90450,16535,61666,70228,28049,14499,94061,17483,93451,61754,79769,47848,27452,39557,21820,63616,44876,37811,58912,16152,25874,86905,74700,85886,20244,28507,39159,95617,74135,63708,85589,82615,60149,44928,80534,26130,84706,17805,26033,46215,77955,37886,63814,80945,93459,52767,75902,32704,12382,46789,64726,54753,91686,25458,25445,67810,17933,19672,88497,65260,20942,14408,96104,85089,45508,92666,67782,84049,75509,80725,49354,31329,82787,76284,94377,31674,73193,59692,95624,90011,93129,35988,91888,97355,17755,58724,10674,47234,32904,50625,43749,84891,77613,84174,73904,43903,15807,58673,20615,14050,60869,71685,79724,21100,79485,11299,27933,39745,44058,41119,59970,70042,85744,22172,99857,14563,55874,64034,62161,57424,27710,90354,10423,38814,49723,16560,99328,33352,31841,55031,46582,15187,23165,89747,64252,94941,48048,13020,85281,57345,39815,38608,95008,37303,50890,12634,23943,65723,98435,46774,90695,27596,81707,71747,34405,58019,72748,50553,82534,36638,99197,11156,52231,72523,41973,55706,45288,96494,11824,16148,12000,39484,78665,30329,40937,16673,11986,10804,51118,15891,59663,43093,56080,84040,70483,40224,85115,48142,89460,24890,21414,80296,73378,11367,47774,27568,22577,45797,84974,99299,24564,93689,92821,69330,82941,56225,35507,46542,26289,18745,51661,57508,76227,12568,51884,74535,75885,90937,18775,12733,87072,54853,63364,38976,80082,96670,36308,62181,91725,77742,71976,78666,22634,45065,27350,89228,97591,47750,80879,44623,66823,25561,55952,32475,86622,11190,71481,57747,96658,25700,82780,59614,22311,17290,92658,21010,47273,71852,74396,96241,91518,36657,30941,83930,64281,59631,39591,37353,68950,58248,14840,50992,12931,70407,54480,39226,88989,91592,15200,55470,35644,52035,51094,95772,87005,97573,78844,38219,45322,46938,22642,51848,41655,71024,46369,15544,56722,72007,62067,40634,83271,13378,26412,34576,88379,10241,27215,95266,61733,49191,64015,90340,53953,48165,15962,99369,35480,64212,86823,21804,50511,67195,85108,53026,75966,50604,70063,96481,52437,18438,15553,14377,74246,87419,51045,22190,48723,91209,99252,46900,43455,98799,48764,53837,71512,38594,69540,32723,84613,70510,15975,94670,56831,50073,35984,88850,77544,73470,84459,43267,90723,28144,23317,68376,91048,46828,85710,67942,84694,72680,11440,28588,11898,90672,39863,25444,21780,99804,33301,44279,52358,62418,85935,89027,51067,82847,36451,30020,57963,94584,98053,43952,30805,38194,42757,18786,28464,10989,96301,55536,98538,77965,54261,63592,63752,54197,49413,69610,44736,58569,26459,96253,47348,45071,80369,98104,23549,54384,88346,79747,81452,74043,95244,17444,36550,55476,92181,96089,48998,63583,38135,75881,93688,67851,44551,97865,74876,34138,67452,71382,86776,21914,31508,91100,51027,38982,90685,76791,61774,18510,72086,92952,87583,64111,11636,46897,32849,90327,71601,27971,28795,19327,15457,10187,92560,16318,49453,84715,50633,82083,82254,84560,83782,10661,19121,14601,20759,26958,14958,26862,87960,32007,18531,62007,55997,10296,24470,76053,49779,51150,63992,43107,66684,88999,76830,56023,84400,58358,67381,22717,46400,48059,12842,16541,96745,85756,83370,62089,39577,54454,39017,99526,90940,37289,80184,95581,64734,27893,63628,14801,43196,79233,36662,92875,12059,20950,65097,96879,86044,36729,44221,61409,11389,87300,53672,28669,86155,62081,72574,51793,81351,47924,51517,51879,85435,21107,39041,63216,11825,20281,70802,67680,41911,12045,81530,32224,67215,97122,81389,13134,97711,19070,91362,15936,82454,34660,82783,55873,28774,58748,99804,24205,67849,14769,17137,95432,52373,42528,39485,97753,42024,40733,15637,63194,56972,70763,75429,26256,90360,51070,38050,66267,93039,24851,22506,68796,13548,54950,56362,69777,64347,12033,36365,47034,83401,11653,76980,94127,86687,60821,56023,51490,79296,43395,60210,11040,78915,90467,30567,35634,17342,45188,80389,85006,19147,94976,10512,71100,46915,90334,80065,89067,19007,25314,83437,73086,92769,20198,74738,95459,69020,91571,86092,22910,47670,71135,44282,85337,25781,71837,62056,22526,80535,27829,14040,81588,16257,46090,36051,92500,97564,12799,46219,34733,37418,11764,45217,27227,92548,90787,65650,10218,44725,26333,85405,89754,66799,46858,60103,22434,83378,73605,81585,29915,17814,46473,99752,27024,36620,55571,46672,52187,61014,49265,50032,47989,85467,85821,11981,70277,43525,61410,16326,89350,24953,11707,40125,14002,89456,93604,23864,66556,56945,14946,44538,54100,77052,39469,34522,36459,21800,13144,32094,18002,80558,38007,44335,68098,25565,48986,86912,58984,49671,48766,48681,73201,32247,89622,20082,71176,93911,12637,60577,32664,81763,41350,79518,24481,59158,18390,53488,18466,17059,23038,65744,66479,49551,47837,93869,66514,76899,74764,24068,50181,82545,72726,44956,65079,83160,26829,79015,63604,92373,10793,41236,42172,74623,81102,37647,39099,93212,32278,52433,32556,66943,15871,24261,34713,31987,40802,20547,40693,16066,47753,92231,12847,60440,82546,63072,93665,99029,12368,73860,41035,21546,23749,73597,98434,50309,37314,95896,21241,52368,22168,65001,48711,33113,22700,14498,13449,41691,47661,46690,20687,18251,27603,48447,78951,51176,65105,58920,54663,90237,45437,43861,67876,51450,54127,88681,21963,45726,45732,65776,92156,43237,79858,90151,89820,28377,27370,39744,26504,89707,67305,39309,32896,61221,76006,79162,17690,38310,41496,77409,81259,12569,17988,63190,19356,31533,40357,83196,35066,36407,83796,76523,44457,62327,26519,67876,90386,56319,37213,32173,12720,87732,23697,17762,95052,58042,81961,99183,87839,87289,71120,91323,69161,87583,89334,96952,31727,89040,21583,93556,12530,76495,41021,79276,91654,47285,57119,23469,76160,45174,92947,65083,67540,40223,94043,60201,46575,27343,37747,88370,92865,24408,11932,68235,15993,13342,35921,58494,92271,35400,47108,92789,56034,55893,80543,60991,56065,23059,48636,11531,22377,53004,62215,92423,94058,99301,68343,90327,19944,51551,52161,73607,51458,12625,60271,61493,71238,58143,95340,68042,83473,84013,89981,15980,29395,53107,27292,71747,16922,54425,73404,53514,94477,78998,40366,76813,71322,29047,15806,78734,80418,98440,50824,43779,80480,49073,35168,25441,74894,23660,66873,28018,60411,74020,35624,63625,19796,26791,18129,76968,63060,78650,24547,66460,61371,20574,37884,39397,53418,87024,20109,32622,23239,42526,12864,94596,95465,85403,21708,49816,24736,78381,12293,73779,81438,73996,52718,16744,89718,51035,95682,43926,42042,42757,25613,46882,89898,59108,33697,14559,60063,37560,31959,89573,42618,41740,81767,56497,40778,40991,87206,58032,44082,82554,13897,46142,27580,42985,22761,47410,15629,76312,50699,51130,34967,30377,58236,73054,69385,32371,65004,81636,44376,70110,64286,99837,25959,85521,43077,57275,35478,25885,22728,97001,81103,21015,53421,15802,60915,87654,80335,61550,32796,77414,28134,10140,74658,49331,53152,28657,83957,74158,76381,85979,30690,17848,11090,79667,61621,39497,36235,18518,79220,12134,14394,85408,20184,39053,31742,98005,73111,68600,18749,11921,39939,67033,53385,81373,37437,99312,26166,33831,43930,80817,50935,85219,67984,27614,81731,63647,68778,78582,15414,56805,12046,38504,66504,48594,24096,70345,95899,84637,41090,21792,29417,63684,66055,67950,97582,10410,58022,36102,44008,58263,14477,21545,54788,94334,28817,12554,46932,66901,40990,83597,32021,84763,37492,75145,90263,31523,20364,50270,77650,34835,50739,73426,97410,84085,15868,90641,21163,24044,44231,23781,69509,55969,20648,23300,76504,18969,20177,60813,81690,72117,66743,33940,77760,69754,38297,30021,42977,34379,32223,86414,33130,93733,78289,35400,81710,74134,44218,69871,41255,51070,19949,51749,67957,10433,30688,22477,50380,62209,38753,89369,28610,62850,23541,87014,29989,85064,82129,94602,17077,42229,71400,86878,81655,64087,64454,11619,63655,37117,19734,46483,76661,22065,64007,53207,41779,99281,81761,88683,89755,17320,25431,31624,14275,65684,64128,85697,28438,96808,17992,74512,29983,42501,36646,22114,42657,60977,42953,24714,17721,39454,45288,82067,56775,40317,41431,15876,15186,26830,47500,61704,20290,21306,70551,28842,94122,99665,58891,55892,86032,19741,55951,42875,84414,24002,95370,35331,50000,95875,29816,53441,39171,74991,87088,99187,85968,87026,43586,42227,13334,11655,55633,92132,75135,85348,15125,97538,92537,33225,98081,20478,99130,30110,15011,56781,46313,68674,64960,12295,90775,19608,13645,92256,46661,52200,95614,16830,19228,39981,22889,86586,85467,45911,65229,15412,32268,62815,72252,80938,42565,22537,22900,47240,69875,94063,18626,66212,38555,38676,61224,29659,44969,48232,99864,24705,70699,35560,79511,47424,85230,33685,48329,95967,39263,54376,46387,47479,58402,35136,34497,21362,62909,94372,39424,54962,59717,47057,45779,29989,51032,78694,46867,99982,10434,86145,33682,35147,46350,18317,38753,58600,86153,83420,84798,98173,55206,76927,89385,74537,88504,59797,42060,24890,90475,43136,74142,61147,37812,15978,53890,46305,60623,46807,88840,84355,13444,24748,83174,42789,35486,56868,25917,12877,42362,51260,13207,28709,97980,39464,95369,10676,26435,41965,90922,45528,37151,18384,19944,50827,28884,70086,46443,64824,25612,16686,42004,79519,86480,20142,99288,99872,68286,72467,29063,59046,48470,72285,22237,27845,42299,12553,22419,58916,99633,55893,22303,93907,50072,80411,59806,71669,29003,91923,58138,19654,47848,92779,16125,50361,55774,23430,76713,99369,25292,40755,23551,62685,92634,96541,10528,89440,51461,99015,62156,87462,22075,65487,68845,84578,92225,78560,60393,70876,89036,24347,91705,32580,27690,35241,88925,77024,47444,50311,29783,34067,87939,73278,31271,80583,25817,76303,23356,34180,91153,89476,37619,28458,25788,43238,66063,78905,11890,20351,81868,80885,93496,59791,76389,95043,86182,36840,16700,23723,94619,50110,95726,96600,63663,49690,36563,69272,88159,10202,87983,24327,11373,45931,88519,33668,30085,37417,80548,70528,53201,33995,77543,50431,14490,63291,86409,85569,28180,22670,29103,62028,75897,39500,44431,45003,31949,50838,67638,74935,51861,70265,31621,99357,55802,80558,69501,23448,38631,32500,27570,21327,99117,95702,85893,20774,76508,22334,17554,52437,22573,43081,68983,32585,48210,62067,91039,92223,53186,55499,39589,14037,44445,95590,17208,47188,30873,45100,50733,75313,23665,69676,34090,82797,97459,27840,74365,72392,42897,25956,17981,43134,66546,97243,75292,39539,13013,26929,85236,47481,79516,26210,59492,18311,61927,99000,85223,34690,11619,31578,89916,57444,75979,69886,47256,77968,74393,97668,88498,30104,17345,27821,10728,20378,55265,65831,66332,64720,36452,11933,43895,45930,11092,41128,55949,26290,49591,21543,20936,89148,64063,89947,98007,29374,48978,72390,96920,74131,66343,29917,23324,92997,32966,42075,28603,89536,74090,24475,82527,86281,39140,73188,43046,85445,44478,39742,80069,31478,15667,24703,40312,66207,47383,69752,15657,83343,24502,19384,71261,82553,54466,92820,90140,78174,62306,27413,12168,49743,37837,94952,29962,75035,25761,98285,53586,80252,18088,18274,49249,29757,58261,65812,99439,66994,66718,37284,74777,70946,36475,23605,71391,61112,11170,36444,20637,59008,51544,48939,67822,15988,69827,28766,40494,68442,87484,58842,12027,37715,93845,32104,84120,48186,95346,24282,95806,72083,18353,59197,22793,91990,52822,30802,19435,97273,87900,31246,15219,28098,53259,67152,74409,81622,94087,78879,71156,62563,38802,76183,37399,61428,75879,95085,52549,90942,64063,93822,76189,67955,40052,57036,99215,93055,38089,27704,83576,95894,75267,63003,36259,97837,34990,40553,77550,67832,91932,67318,75653,78193,82200,64563,40774,94716,54302,65738,12018,49542,93707,45260,66495,76548,56140,42787,93865,36801,89617,27040,87922,78936,49788,63997,87618,75740,36170,39132,70638,97311,43729,46669,51387,53146,67870,71412,26913,71556,53628,49464,55364,81039,47018,67699,22784,44145,29182,76070,78615,69766,37882,11661,94654,48646,86020,40402,10035,34844,33004,57581,56526,65536,42384,84448,16492,32039,26920,68774,83270,59189,89696,27718,45191,92401,13386,86041,47814,20638,14166,21469,60612,29619,57751,51870,90385,48355,80516,74054,45809,84366,37831,86535,71924,25354,25552,43205,32941,87923,88148,17679,30003,32340,95644,58534,32427,34928,90290,66998,66918,80015,23398,74233,12150,84520,44410,37004,84799,12772,55996,86935,67479,27901,42152,45907,33165,36793,76450,22410,73295,65008,59297,53856,94507,37928,94147,48509,55764,16983,36383,55730,73204,93998,87270,52168,85193,69720,12309,52623,98335,78606,59852,55477,76009,86912,23069,48397,78874,57701,33527,94651,63882,72033,17137,90455,86975,83343,93882,48302,84421,80864,58889,82230,51167,40129,95941,89899,99987,51060,84719,91132,17338,16862,42933,27934,74557,39856,76948,45834,47396,33501,44992,81440,78284,36071,35095,43513,76728,99829,83955,69840,22879,73274,82498,16430,44198,22036,64338,19165,92751,35635,40169,82965,37229,66799,14884,47933,44831,79459,71003,53938,94123,49604,61333,98344,98447,57972,10499,20969,25846,52385,19122,52341,46178,66523,92648,50781,53954,71015,69804,91574,88916,80305,54747,87725,43663,95790,21265,91729,89172,95854,62939,17613,46374,97447,12759,41378,87600,65204,85665,66747,98641,98545,84656,83514,30056,80327,59006,92831,19832,11119,77004,20343,16750,81155,32492,20548,81565,45081,30266,82173,74464,98560,22965,94307,42783,24432,83067,67115,91312,63631,79933,21055,76751,29957,96893,18141,97757,90070,58398,61461,39775,68281,90548,69822,89604,81243,24982,47849,59647,22595,51982,72660,82318,15966,74514,84770,70731,89411,17231,74482,78045,67194,20187,95121,13079,39917,17896,42085,52688,67228,66180,33615,49077,89513,13151,16691,66758,12696,56760,85462,73514,65501,34788,41667,33990,10245,89061,53828,78629,95001,45048,28421,84489,30512,10704,89031,54301,85275,85518,25721,53907,13683,78547,87719,97235,22222,41720,47587,30351,14964,57044,76105,86995,85825,99838,81438,60069,44462,85774,32309,47377,77345,89153,57812,82781,54628,88612,74932,51495,95494,51489,75512,88325,54209,64198,39696,65606,18482,10501,79303,83290,19077,74470,60591,83728,20068,30911,96586,13426,63696,88270,79920,42527,21190,18668,84791,21013,78622,85583,80763,75089,36985,20429,72669,88929,75101,71658,93574,38738,98686,85486,91553,91237,77394,16445,24866,32728,37906,38353,36130,70255,16842,63993,86465,52509,79769,90368,40763,40252,90188,80745,85438,98276,17507,82305,59076,51249,28068,45490,12788,42030,60899,72712,90479,54869,32183,38195,12775,65088,32388,12652,68050,50409,31852,67829,46799,19661,81727,89230,36576,64012,40607,78793,67434,50266,47427,58445,75813,65954,45178,18622,99898,17795,96012,39480,94559,63597,89989,75767,17541,80683,22115,61361,86852,18626,77256,77767,56918,98473,67328,93738,38779,40405,96745,67601,46786,46073,61631,65383,33769,46373,32959,40087,23757,84685,44184,23073,44552,88449,12207,94419,77064,28623,11639,22289,43544,30808,93179,50853,26400,74947,54493,75632,58532,57234,66905,90063,49662,21179,47914,43467,15797,17808,74726,22760,43609,18741,39321,48691,49846,69252,94232,29041,99700,77234,87523,29097,38364,47046,81643,66420,99938,78294,27110,29018,94556,11080,39184,97896,16251,33408,33044,57591,64808,18468,95859,27042,98718,39811,32677,18997,94596,91052,39275,28297,52423,29219,64089,86003,19527,79997,78362,16274,60979,76070,17610,23363,31287,27874,72056,53354,51207,53682,90762,68844,53231,87515,35706,89559,49211,85974,16341,55627,50167,22991,23939,66561,92592,26952,62808,24292,95068,65755,28575,15512,50072,96569,45398,66517,25948,83760,24321,77129,36354,73225,61295,47145,91472,42466,60542,79180,40483,73871,22036,37865,23678,62295,30029,29986,81625,10991,96363,67972,65190,17423,72482,16615,27585,27852,83984,84544,46545,85555,69115,45211,45674,31256,81922,40889,39110,90094,71408,84356,29996,58946,97426,85412,26645,72086,82117,47851,78592,95519,60096,21977,65591,68943,77000,72218,25712,94540,96947,72289,31480,12373,71531,28844,18232,79852,41532,20888,45535,90696,33315,42998,94238,10103,66311,86537,54195,47161,69126,12745,57278,80973,90532,72430,96884,96521,11989,82034,54334,72161,74284,48391,22070,98682,99829,85753,70927,79819,52777,64817,45425,95475,56793,33557,86388,16943,45788,33723,64787,59884,11698,97545,23888,68499,13345,42161,99051,95173,16146,84729,43329,15231,24117,86575,28775,11766,96983,39596,46446,75883,91374,98789,31208,72321,78140,77085,93544,34747,24526,74289,72278,13740,34872,29344,53069,20665,86917,96275,69446,67066,95157,46899,42909,49080,96487,82263,96164,91566,13343,11000,28410,53662,77158,15975,25985,56027,78566,98439,75583,63853,61433,40549,72114,76601,27423,74176,43457,85268,94367,65403,52334,89405,55054,23974,50755,91476,98861,51809,47126,40768,40643,96594,39965,66323,44115,93361,78479,72429,55918,66579,99837,91292,61252,20674,76711,54689,13902,24571,21298,28848,97741,61069,46721,74213,94825,85034,32036,49559,56758,63991,60272,75835,48370,56637,84933,50951,49459,34025,28814,38737,77426,24950,28015,58499,24223,69786,65315,76622,83284,78496,47752,85620,39683,66874,41714,24280,31439,39913,25088,65548,26118,63459,61284,96949,25426,39002,38845,45430,29821,30270,33892,67957,63266,52500,68084,27851,42826,71243,55901,18985,97561,37853,24027,98626,46175,41609,92049,99083,90927,94940,36180,34988,42017,14439,11939,79423,78848,66897,74606,91048,91097,25530,19404,16378,54141,98070,48116,86975,23491,81997,16209,49450,14561,60750,60257,81506,58069,97165,33820,23512,98785,13600,97267,97322,94406,82228,91255,91786,80751,29957,73690,73229,56435,76723,40628,16415,27198,60749,79435,57478,15453,40731,65042,56870,53965,71266,65367,35548,88669,67289,38955,14450,53924,21907,31020,74351,37995,59157,69319,10388,37453,87610,20840,46088,44389,88079,23574,70799,80715,30094,41912,10747,29318,87757,91171,62457,21550,55256,47034,99199,83941,48530,21516,76838,37681,55131,82307,46563,67664,41944,59409,88849,43946,19379,73527,84745,48446,35428,16381,19074,24863,93264,25449,92389,28557,76272,50993,61298,58719,51451,27172,95437,10930,44381,99295,48114,52456,57561,67248,77472,88116,75565,89349,61075,85675,69011,59827,38356,43011,51424,29945,29085,19566,10672,59294,48460,84848,76276,73390,61573,17166,53522,60929,82939,28600,75419,74845,95413,76581,23731,82156,62740,92940,17349,56135,54268,36877,73379,49792,18988,44987,81680,33261,58414,90295,19410,79953,41601,85673,12945,80522,31399,12989,87276,20015,84631,93249,60821,79988,45452,13234,13483,48484,59626,59838,19308,65341,20293,52124,29888,83862,57602,34425,98836,68107,30149,80458,67591,68026,49261,67963,62368,43839,82001,56791,25422,17179,92862,82853,47791,16625,88346,35490,47173,26712,34538,27317,95379,11228,53489,90261,35943,83447,55482,43466,90339,95981,49495,38269,19256,36915,84443,25550,55301,69844,74069,84050,57672,36424,58403,40584,50651,21123,17287,82857,67542,42284,94348,90629,94632,24838,96879,98087,20388,17957,11235,58504,14163,93222,88903,71429,84671,76719,40445,48885,85795,79967,99932,17712,19343,31552,52414,81780,32724,20919,34622,25097,76614,78313,77948,41261,55047,20422,18806,39610,62901,19257,87417,46199,84581,53017,69458,50621,64055,10342,69550,54187,80600,49631,68802,18828,14796,45875,70423,34538,80930,54943,38634,93104,11262,41585,89684,30730,92170,71416,13752,11261,24890,76797,25377,45219,12646,88861,37880,34054,43370,96013,13778,49219,93726,66103,71631,46863,16931,57397,42071,25006,61855,35243,72185,20722,79410,84578,29715,10546,80272,45637,43495,21868,96777,85818,66046,45168,19218,85770,29620,80946,90629,29107,89281,10796,64500,47282,36587,32997,40336,12941,62044,50820,29377,47451,61931,78556,76332,63673,29849,29431,61673,79740,39660,30977,26586,35010,37850,69961,21542,16545,82302,94702,53648,23791,88540,83611,69523,23645,83293,50211,43213,73916,40583,87668,32236,14395,97077,34101,42940,41348,93500,49589,36470,63135,92953,73198,99002,36415,66337,48628,84854,61448,28393,37367,61224,35546,69363,43841,40618,64578,83816,75624,18440,65166,22088,33564,46755,39031,18773,73726,33807,72974,50123,63187,26350,54367,26557,91136,60608,13701,97711,32253,95945,80281,49065,74176,75702,71450,90755,26031,65804,94961,56967,81861,78992,67411,30719,30117,89031,57077,31053,41304,60429,96735,57272,78709,42183,95326,99432,19216,74909,87631,34420,22455,23081,40136,47003,62363,69400,93525,85891,41944,13948,36443,19046,52186,92672,24831,22796,56817,21605,17377,80045,31140,87208,30339,41048,26973,15037,50634,43644,91576,66334,33896,26212,61968,12621,36248,97039,32238,72120,75769,94705,64529,12159,60230,32552,81676,45144,85928,87360,67173,56545,10164,24616,45130,16359,19925,86652,21983,15469,58210,19125,35552,70005,86584,79223,96836,69485,30279,17857,39315,64041,51320,13188,85662,59950,21216,99994,49300,21657,91098,24124,70354,97431,22446,68628,69416,72268,97839,94072,13708,12651,46659,17472,14389,10503,27130,44416,93082,59870,92158,51771,49923,45725,73165,97828,30971,52638,28058,19318,20770,99097,93052,86080,58735,70755,31378,87302,35181,71555,40022,35557,30723,74145,46302,49446,71627,60433,77394,68508,94572,81030,22956,57041,61284,69725,14496,32873,19590,50515,85318,52697,98203,73254,81231,30183,58962,68543,60372,75250,90210,33038,80632,82040,53492,68996,46587,64598,66223,85813,56684,22180,53399,88775,19273,14373,89162,32187,79751,37647,19679,65938,42711,23772,55062,87175,66559,36202,98231,14747,57520,28227,56009,77195,71882,15126,88875,96720,37007,90758,39720,89633,54497,32015,23003,43828,32643,38715,76970,48278,35804,67136,25442,12518,80316,32548,11104,65050,89677,90998,39746,96213,63003,44504,11314,64078,25959,66235,41102,22482,82345,74719,25533,48348,45651,64573,77143,40140,50868,23500,27520,48731,27898,49909,95619,28610,37148,80402,66109,78753,74569,20134,51737,40556,56238,14497,57192,54714,56722,53416,97596,93194,38214,49283,64943,77223,25487,49212,12243,87061,19683,53669,35593,12776,68811,62641,55922,67727,25841,31303,38328,25620,11627,92901,50961,11100,23452,46442,26871,44932,79456,36406,19749,37915,36456,20909,60256,28497,51894,35789,75995,92063,97933,94932,99130,23385,14406,23645,20714,81055,61131,59498,43663,16861,14992,82859,81221,64574,17802,95308,71635,65982,39197,47066,26319,35023,31216,84397,81361,70953,11954,99744,19578,75434,52416,95357,43002,21364,41964,42981,78285,43163,27236,17518,28345,86349,77375,73216,44375,87920,34143,68041,78235,57505,12700,75840,20671,87930,27668,44455,32854,72816,88083,92930,42758,52055,69033,62013,96546,40631,48272,46341,43117,72033,83635,34399,79769,74068,98017,39296,52165,49813,24529,44569,24325,41864,58194,46333,94281,29522,89330,37715,45010,51889,66421,93940,45153,56338,28589,61651,25687,82835,38852,50944,79416,14444,83617,87641,79218,85876,44031,77599,71449,76497,44074,72089,28000,15237,79678,89591,59360,69096,56122,10917,37237,30704,27686,59522,93519,44809,43078,81704,72949,15433,43615,39367,21407,48193,30414,56442,18140,26129,34140,62760,98836,59748,32617,95170,56780,20222,56047,91717,61656,95494,91294,59813,92075,16374,58842,99755,94521,77465,54375,92805,22961,50450,20646,36800,83064,63482,56772,85323,84069,33975,62604,22814,53030,90897,81841,63167,25636,25792,32921,44602,80370,75064,86251,92289,52203,51853,55406,95873,60390,37952,93086,16034,14877,45854,28175,33506,96443,92065,40006,71408,70931,29014,85513,84814,96332,58541,81401,94352,42925,27924,51393,37636,83242,33160,72406,36666,27427,39084,18940,74742,52070,20122,84011,11548,74127,46574,64398,29179,92499,69783,88872,98966,10782,37519,57957,11806,17379,14600,71857,41295,88550,82151,11414,46041,77527,10422,22871,17383,93968,57015,27957,56327,38069,20444,44340,12841,46549,88442,93381,16366,22909,50553,23827,32410,91831,48881,28542,25313,54564,54406,64081,82807,23754,63734,85063,94353,49235,91641,86246,18252,65826,33091,27643,71124,89097,37763,88266,98834,99148,80709,76303,98671,12952,69207,73339,98242,36211,50367,47626,39494,93399,95530,59913,98795,83873,60465,80345,53469,21331,96465,39028,58372,64475,86175,23490,72510,55341,17553,77695,87655,28471,65250,45038,72988,86117,63220,87904,52858,51985,52918,10185,26366,48362,41665,54535,12877,37412,11214,51437,96645,56782,63488,62655,73998,35897,96711,55801,24038,77321,81750,80434,25913,33028,44350,17910,45053,83934,20692,43899,52576,24500,86625,70065,47249,99079,99540,39985,80769,19749,21798,69052,79333,48758,59018,36346,67191,69823,71146,18055,96739,44597,47457,71238,94044,50513,65398,47049,17476,16248,87935,82180,89380,70054,12515,61197,24500,65053,91196,23076,98482,94718,75806,65696,18875,95418,52849,22958,40559,78332,71201,21674,74801,77541,67159,61939,80133,86505,60737,95598,88380,30409,33784,86616,58987,71396,73341,59559,93688,37955,90192,93991,92468,18116,73669,32236,59998,62447,75722,87018,58091,38375,94718,17085,11536,44720,69176,41201,88659,58149,19039,51490,85757,89778,63926,78367,75993,71899,59552,10981,63406,45544,60348,25729,29019,49035,29843,10789,77458,39875,84794,80759,98718,71810,78812,58253,62252,93345,92237,60452,24899,48494,79216,91672,76998,69612,74810,11653,33800,17406,92265,74327,10282,81812,88064,66856,17341,69321,27716,47474,42608,45952,35654,53738,22270,44189,91131,70924,83394,43389,44452,11210,46210,98382,72993,16648,29599,95575,30869,19595,55163,11691,50549,18183,18823,85473,75842,85205,67157,83955,23940,84392,21465,85402,94309,42443,89663,34680,78003,42707,54331,39487,42188,84556,13361,61014,11842,23357,60385,89988,96108,99831,19566,69374,24208,12458,24329,43559,46658,96136,55557,27081,91042,93744,51033,94553,80711,89977,58430,64275,16188,62560,20758,80149,61562,21236,85292,89126,82628,41799,49705,49426,74168,23768,94659,31559,55423,46064,25155,11511,23579,73229,98437,40459,40145,23652,49876,94717,58544,11463,91357,57642,34762,38592,61393,91832,22609,94877,79550,85206,36175,51246,36289,67930,54405,26077,69924,28375,49841,98092,13755,55161,64238,72959,37347,20980,57414,17483,62378,14224,87791,18860,82529,72388,95411,55631,23475,12156,66845,70928,40721,73846,59238,41637,21031,32882,28326,35915,59762,72130,68180,86084,50469,91661,47583,58689,33810,56027,91330,26380,97295,12354,46307,38079,67112,59041,49210,94322,34570,84692,96318,93353,75554,26300,54297,15278,11158,63601,40955,50297,84091,17869,87096,45593,46323,45022,89841,23766,66028,57846,22697,43177,95062,76357,14971,90719,49799,94941,30069,23545,48595,73287,57381,85745,96734,96702,12006,83935,74361,11618,52277,93749,97671,11656,79352,66660,72461,41259,77362,88476,83220,46280,69040,41661,18857,17610,58757,22634,54101,31828,41534,65392,35987,85256,86417,76798,70484,76287,82698,50830,91542,25693,93183,46069,85120,72951,52263,30576,80321,69583,73566,46765,84816,19934,63855,39072,67842,72034,30080,28658,86202,29623,88791,98425,23199,59165,85618,95332,13690,89476,85268,54419,70652,96974,22789,19868,18246,12772,64806,43816,68673,65614,57653,72459,56211,79805,48582,10774,70564,71853,10372,47541,29030,38153,74908,54290,55898,64829,72406,87691,65784,90447,72499,10425,49577,56402,84018,21922,40829,79682,20092,98915,26564,31665,96666,23010,12161,21172,42429,94411,18027,55879,65953,63039,91677,42827,75077,73330,94541,32941,53335,46879,38091,10591,77661,69421,33249,77452,79181,77245,54958,34511,45910,71534,33415,48075,78925,27610,98065,55623,61966,99762,22996,39547,17901,35010,67384,18038,15430,17107,48120,85751,25743,89477,33608,21207,93900,73841,54177,62511,31854,86219,25581,72801,26523,61145,85219,32972,64170,43412,25635,46786,79168,11314,92278,33835,10876,82582,91309,55910,49203,37548,32066,86578,33510,12286,95915,22717,35224,38557,88913,32047,68952,70232,84506,53467,82956,84789,14219,12532,58603,69718,14698,78627,78070,99701,70416,33914,36685,95529,55913,18176,16738,25564,94918,98735,16110,19515,38175,93476,87922,88431,74204,30116,31783,48278,31596,37641,58135,86003,37427,54188,36477,30024,75689,32352,15024,85998,11618,60652,99218,19811,78449,35990,51036,79113,52633,62262,85301,24010,48024,29932,87645,66837,61985,41792,61563,86720,43457,43530,39661,14575,92726,52879,91503,33958,18095,97371,95564,90115,79723,67400,67227,22079,12255,72798,20441,65225,46939,21340,67994,45606,98721,17750,17261,11143,86283,29493,21440,99584,27305,98245,32857,15849,21579,23759,84549,72173,92053,58713,83690,98914,55677,59430,18896,43984,79017,77856,27658,23389,13918,82155,21139,93195,15233,76327,29212,37090,97622,80401,23540,48030,62233,98870,67651,42293,97468,49443,61666,69622,75353,98840,58047,77364,31863,15609,24548,67946,57233,50168,70130,45229,91202,41246,85949,41310,68768,42246,17131,81290,89998,73771,55161,37752,86182,82173,61457,12273,54541,97552,37174,68558,89754,81489,31927,60129,45189,56518,46728,40861,49156,73659,65659,16761,15861,53272,79535,37048,17829,59216,65919,14703,97132,28148,44303,61465,68359,58359,25435,97159,68866,20538,44256,93355,22226,43033,88934,30011,55182,90211,15116,90718,43946,76223,16570,63226,30836,30051,88103,92977,48327,13823,41295,80340,17189,56733,54547,13075,26620,59902,22786,53238,91323,97255,13842,77259,46954,89956,97216,63984,22933,42900,56386,21072,79059,34482,87286,45092,44938,70618,66686,42047,87928,35847,68062,68177,27155,44674,98928,11780,40376,12257,88198,32558,26901,81517,94093,61442,45607,60183,11438,55278,21667,34137,37190,86951,90030,98931,88998,36482,63212,32856,60388,50499,81542,77641,97575,10764,54210,60567,96911,54315,44756,79521,88122,70337,50329,19581,61541,62184,89305,73398,73860,22506,24364,79148,74677,69832,52366,42635,37895,62202,22534,45455,44654,92089,41767,75406,46797,95910,79415,78779,45439,69118,20212,85737,77684,48822,20106,99878,33112,56517,12923,84679,98057,99045,74404,10879,51541,99839,20465,44366,38999,14541,72936,63705,98323,84554,64174,50333,11747,81909,90988,89024,65786,88686,61072,18428,81031,70549,83512,72891,53251,25166,62120,10611,58715,53614,12336,93045,71600,24175,87532,35531,74821,13322,73006,26882,63295,81109,57093,76688,96818,91881,89688,19286,48862,63033,13719,19693,51033,62397,60913,29602,87541,96602,96053,28164,98643,10509,64733,31911,85949,37305,14899,40722,44786,20055,61258,22423,84795,63049,73809,98250,21707,70439,72293,64152,87897,32855,49229,38568,45267,58394,49521,17721,96312,19359,29365,26352,52617,90489,95526,86826,11817,65822,98309,20206,69849,90584,68233,93403,11454,82959,30340,93921,22390,14317,10204,97375,22559,35026,65171,41095,20445,44746,86892,56664,45675,51812,59227,80410,28171,69678,88963,53992,93124,24759,91114,23509,12268,18603,24688,82733,52394,88392,29506,15912,72032,62030,34264,17774,94647,49313,95939,69869,35104,96833,49196,59790,12193,71574,85643,58866,55004,71041,88862,69532,37972,58921,25156,37930,41142,43067,81486,14746,40802,70035,97212,20861,98784,92220,85891,54759,53513,75863,58763,90820,94315,20637,61030,16978,77582,79816,87761,70857,72111,34927,80577,69363,88045,43755,85745,62821,48544,96711,43361,72970,20575,40387,76843,34555,15775,18192,19379,80252,38695,62251,57022,52807,65808,87766,93492,96437,74937,38488,39395,71790,93090,63502,30936,51627,80661,45127,65014,95594,95491,35449,97539,18616,89155,85358,66853,93621,89912,25688,38151,28879,32758,76866,73423,95864,22963,25399,86521,26283,36731,20518,99409,57474,47211,55736,52337,78641,71986,87625,59665,34521,83609,73615,37720,32926,56890,61169,23436,59982,72864,27550,33791,86082,42889,61723,25745,95266,27829,17155,18788,56519,89246,75476,96527,10580,22522,63027,43589,22807,30069,57931,10043,44521,87092,46295,66525,79467,73483,55364,65548,73427,74409,74822,97775,77322,36834,69331,24081,63697,62448,96813,46799,89004,56580,95655,63409,53015,24178,43738,67276,12912,28510,49451,96247,17301,63020,43482,26548,17784,31352,93162,86611,50390,39824,82538,47651,44292,52634,23251,64501,69236,72279,77365,96065,60082,55369,33585,19227,85277,72839,90413,67415,84133,85095,50076,70821,76997,78607,61990,47397,29891,44587,84201,89190,58691,42964,23304,14029,69668,14230,98673,27368,48654,83219,80654,89818,61444,83231,86996,77240,34431,18537,15358,83770,17281,99547,76425,98373,66102,92270,11575,63802,70291,78996,68079,63622,21176,63609,80562,85479,67212,72915,90092,64480,70323,47106,80181,79936,23235,78090,56549,72982,74205,92265,87259,60140,96813,22415,61669,91670,41599,56151,38389,53926,22604,13479,50920,96895,43301,35362,94961,55329,73794,81068,11045,89893,53885,34641,86871,62378,64925,36312,49121,81073,41940,95965,60259,36836,30817,61245,21118,31215,45472,64137,49213,35110,57215,27324,52402,86117,98735,94708,66909,86760,53260,66118,30430,19360,24341,96439,26036,73767,55534,31051,42651,26777,93719,18158,38193,67071,45226,72783,38271,25659,77133,45834,48530,21087,23840,86983,64019,50160,81861,87449,93677,32854,45946,31855,31460,53399,60543,40752,96398,90943,93761,77506,82343,80669,12788,90031,77295,95738,12114,16139,43612,47616,32117,74695,28377,90208,44394,15004,38194,65931,29857,91481,36230,32445,62732,86880,69685,98229,71238,51896,76380,97858,78335,84345,99389,25796,12078,75574,89966,89050,33448,22146,56115,92808,37494,90402,62221,42955,78167,94190,22731,34654,59470,78369,57473,96445,36948,18826,35116,60102,90132,89228,17763,65230,14375,84158,92777,51579,18897,41656,41994,10863,51282,93756,62470,91886,27752,69657,71381,49285,44588,98796,77954,46120,52819,65094,46376,31156,68140,38061,40179,64386,29448,58594,91571,90891,98773,24809,23581,26892,28922,37502,70047,26281,83746,93458,82259,79914,24665,51995,90242,36024,69546,52129,28795,53546,41042,31652,26342,47637,81030,85275,66773,64437,75449,41089,22511,80431,82224,89822,43293,85432,12725,40033,25000,93497,45046,28874,31089,38553,94083,78485,18457,68468,98860,85922,85457,30184,78199,27170,54891,57860,74335,45883,88861,51521,95708,40008,45151,32718,41992,82208,86834,55033,77280,68025,81532,27156,34024,83348,71459,14079,63037,82640,72585,82615,40278,86331,28183,19774,62367,97315,15887,82239,61011,29044,46402,77881,62623,72771,12286,38223,37493,71775,61002,63440,31049,30917,28231,86260,31548,80578,84311,99213,35997,41574,67269,91407,52495,45473,84938,64651,94880,42295,84542,90100,22203,87178,30497,10086,32095,81084,94749,23845,71178,47516,39765,25765,46064,62542,77245,76859,44845,11126,23510,88428,13920,71830,52612,13356,29388,98065,38181,71626,56619,69490,98164,70295,59718,51163,62186,77352,97507,62844,48117,52074,16088,25775,79448,21745,66108,91541,81717,63054,26479,33351,63730,71726,12698,47054,88757,16779,73319,11312,59345,79924,82976,80147,38508,53380,52978,76601,64149,26395,61553,84996,80548,66426,44046,21821,95909,38750,85731,93408,58865,31739,68586,49773,51560,98478,59009,38876,95768,15143,15945,86233,63232,66375,84169,24544,79596,25287,56935,62261,76143,14339,63023,79614,37461,76441,32189,74735,53459,12413,67461,67883,52845,69989,67714,16488,39430,84692,26851,99746,60213,22513,23774,47573,55957,40299,68637,83243,32838,61159,15641,57952,72047,74048,82062,67779,97817,27514,73420,53073,58869,80839,33011,88451,85627,11966,11951,70463,33927,31836,71821,10290,52168,16480,30159,94885,15886,30275,51328,43616,22443,92003,20360,68201,23575,26564,54082,19974,16493,96801,40875,35765,44241,48722,27937,31249,95024,68314,10588,36931,70526,22620,31950,66691,55094,75624,15431,96831,60315,15313,74868,77803,93812,57375,42886,51561,70022,54733,95305,85947,70245,39851,50074,20665,12570,59666,10435,28951,29091,63578,27187,77085,56689,38423,53773,12097,45080,15546,33527,55242,20411,60133,14099,17351,24766,86509,88018,25568,40115,60206,70259,63531,34348,33348,72437,82947,91984,76300,62738,16300,51565,82930,94377,39584,62011,54680,93272,14625,64453,88327,16188,15125,66207,56512,72270,17995,76561,97772,30812,22572,10884,68494,78841,87088,67503,65357,79841,47629,68647,33068,58415,57229,28862,78992,40654,47686,72343,10825,75244,65764,30082,95089,78551,92155,84729,63420,49500,58232,11023,53138,41203,19178,64218,51690,67071,48372,32568,88354,13604,42825,29087,82963,74949,99042,12428,43145,38609,18848,72202,30411,29679,27827,53731,80706,83019,63970,84811,21284,11606,12157,70257,57651,97379,91236,34060,36453,46442,38949,21420,94016,25288,94531,35927,13638,95323,69610,17286,91518,89559,15571,60632,80249,69907,93059,31015,91700,15654,59271,95452,24883,57211,47758,80557,60101,61748,40981,97081,41203,34285,54715,58906,33742,83231,37093,76497,92234,38932,15481,98301,65884,64496,39452,64593,58779,55252,80991,80976,20760,52868,47403,47539,43487,28439,14455,75775,60369,79911,39491,51851,84836,13300,79805,47436,75169,61114,91971,27090,54093,97419,58228,84912,85180,89966,71080,33557,17218,44518,67221,92979,55452,70931,64488,44012,19822,60774,99391,85653,42143,70820,16178,41217,30067,94996,90989,91239,30365,46148,71373,80426,19912,67872,99075,67617,54142,91850,52988,41150,71762,82311,53831,85693,31728,71096,59709,29894,55152,36130,40761,19191,94811,60975,90322,32609,11132,29248,39181,24160,41968,15295,38633,34481,41962,21156,81879,62588,20102,61906,96507,73427,98601,62501,48364,15577,20803,67597,27102,19783,63498,27410,17630,22263,68439,59474,76873,41716,72310,35728,13843,68749,52524,61332,30881,84472,44450,29374,33440,65149,58268,84599,56075,83295,65148,36308,80007,39052,85881,64590,83704,40313,93260,89156,70895,40298,84694,98876,19212,67128,75895,67735,67514,30964,42469,46050,67142,64471,76947,35257,66592,11598,41947,82353,71998,59098,16489,93499,59750,31623,31972,91182,68733,20059,20449,49129,88058,40111,17265,46831,13117,71893,63087,94489,15703,45969,10556,59626,30967,18078,77635,82234,88176,73644,91051,70326,33251,51296,24547,91273,85794,97086,39874,40082,29409,44443,13278,77685,48819,65784,44780,52451,79826,69900,96826,63631,20804,98208,18966,37315,87443,61826,98318,66223,10169,47452,52798,67599,90820,98983,87919,15836,74183,22206,41176,68890,46058,39890,71016,84268,48044,29879,88511,90926,22757,38790,94451,29250,62157,61593,51002,70306,86098,81796,61936,65383,93594,75201,76959,13127,46856,87847,96135,16770,15186,40697,92939,34501,88773,92148,54135,82050,95706,65238,34777,24861,24447,61801,99888,57463,97105,38710,35036,51356,19545,87558,45239,65731,67918,15504,65857,77333,19359,59431,51419,40481,98901,72847,99208,83140,97929,99236,32469,90081,58819,54685,11008,58873,57953,73343,25177,77307,30445,57450,65873,95317,85628,41837,41981,28539,68460,45044,49849,80894,69918,86656,89113,64238,69579,26345,11767,16070,54702,48621,89582,62204,51502,89239,71012,39408,61001,90338,11072,71550,27954,83597,21643,29683,75011,33284,78466,31385,60232,22315,10467,41985,24065,83415,65167,97273,68222,93982,59938,76144,38867,42931,90687,12449,82946,19199,65080,20839,59346,94886,30236,97590,21308,94840,99980,48914,10639,77595,59842,79308,57077,69643,72911,89358,14531,96085,20203,80869,80466,73284,32052,60893,86921,47932,80019,84999,90790,80434,77327,75458,85027,63708,27240,32223,93509,84663,63270,99674,47753,53898,76122,41379,19697,51167,32783,62721,50151,95325,20255,68498,96691,59743,41976,87002,95357,62647,29172,44057,60519,45022,40858,27046,70197,29450,12835,54993,38518,59813,63879,74022,28800,91198,80932,15111,46616,38274,85740,40763,86986,58213,88798,78180,18431,12398,24129,58086,66223,75657,21297,19780,82967,44744,59796,32192,86611,92123,25937,85850,90506,42405,37807,86555,49902,40673,26278,85503,80071,26317,67633,99418,98659,98355,77262,36579,91333,90213,51559,12266,75075,32697,30795,73127,62307,18941,68034,43257,47749,38891,83871,17184,79503,38101,20182,57606,51415,90048,39774,35498,46020,26193,23241,56730,93063,54457,52190,77407,47284,17844,18980,91431,32158,27124,86666,43885,10655,74951,50788,24473,71496,57722,41014,29706,48057,18738,50530,10018,38465,49073,11437,47234,11267,78710,88232,63596,16640,59520,83624,64867,78716,51091,75352,72464,95114,41944,29104,81219,86766,33765,48413,34095,48684,16516,78807,36537,91070,32547,43615,48194,87920,29762,60511,19713,36666,92069,61890,93614,98450,50906,92181,54385,72850,73946,67164,27115,18217,80323,54718,18552,84345,19593,62074,44425,66849,91498,35374,28321,51017,88444,28833,59251,30034,87921,21706,50182,68403,19275,61523,41503,27012,74826,72352,37988,58384,31235,71547,98574,91464,70343,45692,51518,35426,30242,65524,87990,53762,75008,39851,16919,96648,25016,67475,51663,47711,39713,52009,12833,33068,76439,77801,63095,24402,15568,95281,26615,81701,74123,18987,55583,67334,18420,16603,25146,51276,57933,35982,91913,89037,11233,34622,48064,22350,92041,86466,19242,25694,27385,87303,39237,70353,83249,13726,79724,72022,44679,26850,16802,36086,27971,13709,61480,94884,29983,41892,64177,43030,95057,42320,67190,89885,74800,22383,59300,98843,46503,56301,24246,44504,48255,69637,88421,20456,57727,66692,35049,37689,69766,57800,59292,33549,97013,99818,14410,86940,13386,25696,29048,57342,23005,80322,59929,88340,11103,29032,31751,49145,69178,46456,49321,95509,78785,16844,75036,70238,93885,33186,45571,11986,43407,90552,83771,36764,33661,68455,24582,11273,89556,48628,67039,12396,27371,27159,84341,99743,59297,43670,40527,36903,89241,30280,83767,73506,54402,49257,16255,17903,34915,57699,72559,50662,76877,56440,65959,40446,99290,83282,39373,24831,91352,44897,85506,36803,48454,30105,81074,86347,85173,69638,58296,45194,69658,36870,96056,58420,99901,94428,77794,31650,67477,92122,90253,38282,16926,21940,70139,66877,64195,64551,69653,48671,52909,33219,86292,74381,29279,39825,11696,57173,64419,70296,41131,75780,21448,57760,38607,30811,84339,76213,36519,39776,22694,84654,30652,79615,15064,27114,44342,92909,22425,21868,26666,38040,64536,88694,15911,55352,52189,50624,15367,11918,90095,81746,53120,98368,79227,25490,21834,85199,72685,97391,37109,32164,78357,90206,88525,33167,43131,45459,88809,36616,73078,96711,50040,96316,26346,28696,60129,76004,91626,11241,51598,89276,61639,72908,87263,23316,21844,10117,46385,56388,96178,15546,14437,65028,37511,39529,17125,86294,95162,87355,71918,31838,91417,27625,46477,88864,82055,32872,25054,45701,58363,81021,30163,96732,51328,11586,36227,35358,35643,64347,51993,28169,78918,31822,27667,38326,96435,98845,10491,40920,59448,76683,24666,88819,38638,87738,79512,60440,82930,89378,58885,39229,55456,18871,35975,54666,94467,99004,45939,33449,37365,96099,97987,80894,35829,75431,61856,59879,46953,51981,12461,42671,22911,17242,72300,33065,63533,22585,52843,41548,30169,75185,50735,18384,30527,67430,13717,89726,78208,96049,29130,62857,68256,85472,53656,96234,23498,28447,70153,95599,77568,28334,29460,81351,43665,60901,84033,55735,29614,33078,79284,21660,67952,51967,21514,91627,29702,69590,28558,86929,20700,44755,79995,75107,92080,13737,71172,88820,36108,98283,91460,62883,93596,49363,93131,82130,37967,63029,44016,29195,61099,29676,98735,85453,57556,79332,22839,59996,70580,42607,38870,83183,51770,96017,24727,25392,47265,72832,53391,89789,55309,21925,65570,68101,75904,60803,95824,50623,78194,89313,12939,48241,50388,62671,33191,59417,18866,25080,64879,64228,43087,14796,40248,66987,89081,69595,72914,50019,82921,85842,70756,62944,70943,69922,32736,27574,71022,10565,95467,36046,39345,32219,65521,16436,80681,58294,99666,84013,46189,67193,20411,96562,87530,35663,96479,25554,93946,86177,66004,22810,50972,36424,20991,26311,86887,74651,46061,71735,35280,57023,34058,52634,72311,15179,39818,83204,60549,68127,13475,66267,52362,31884,49222,16226,47721,84812,62317,24988,71551,68997,28470,80156,98927,48865,45204,35720,94871,25202,78124,70661,49897,88819,92912,62768,31921,96788,73459,65681,42734,20272,67943,89471,71304,55097,95834,86229,42067,36999,57216,22978,60520,14176,93240,35773,38128,20000,59172,58292,97242,93934,84431,75200,66847,55748,40122,94464,33953,99810,93615,30880,56095,43770,49295,95711,72154,39663,44147,59098,51730,27111,49741,30296,91939,31772,11306,62992,85493,11709,63746,47629,55946,51243,67437,87113,48808,19687,83225,44323,83024,99998,30216,27432,27218,87314,75694,14463,89700,11724,86692,84170,75941,97648,68634,42244,15679,44686,75476,56473,12209,61506,83424,15756,74809,98750,90355,10226,58159,23089,76807,66523,69025,54199,55678,64915,87897,89006,44682,99923,85596,35980,84586,62322,84211,87204,41347,24187,64518,56373,92168,36394,85067,27825,58891,50027,88867,35961,76564,58275,69672,54493,81368,48099,86627,98341,43311,76159,21164,46691,49151,60504,74422,60928,42050,19786,15468,33042,74945,49708,23818,82936,86878,60564,27707,83431,45612,74394,80894,51061,10783,39597,83064,57412,67965,82208,53583,20167,11869,22931,86806,95392,67292,78699,99835,66167,62970,27006,61927,57301,26583,74029,63378,41031,50175,66201,99714,27001,97091,48098,50135,65619,12868,53344,36743,92537,14820,51842,65474,74498,58419,52977,50984,27065,18011,64636,83378,87597,72293,50910,39191,73048,27786,62053,87879,78808,41390,49640,57037,99129,63549,83558,44736,29288,87803,53994,38767,91091,59901,87582,49216,21655,21980,72382,84058,51812,62300,79501,20634,41070,31352,63292,14296,94207,79511,65875,71788,40019,11099,90896,21500,30539,46319,96770,86864,18474,53100,82270,78610,49804,61517,95379,51688,46053,98509,69195,34360,82704,45267,49054,33021,45010,13180,36250,25261,30398,62820,72306,82162,10120,19409,83802,26130,72194,70887,52058,94415,80456,21030,70021,48646,44761,46126,63248,53547,88888,33626,29153,22396,12189,83319,60374,97522,12303,90390,59682,14418,65714,21378,76128,20468,25608,82568,76451,47009,16271,22423,13677,39846,34371,13523,52863,44270,64142,28344,88442,11297,73459,75043,30299,69506,83592,36356,21222,98851,99195,64707,47870,12331,70145,52724,25222,73147,30158,96765,47060,36850,41817,52951,60195,95561,85821,28107,23155,71609,73875,23930,23667,62270,95099,14842,69054,22864,48694,90161,58976,88692,68900,31065,12626,19903,41342,69798,77984,63262,28310,22495,51525,68349,11510,53158,95636,44188,43710,75970,71397,68725,19657,15168,60463,27032,20534,66675,29028,13657,77986,10205,16342,84160,63146,70578,15264,23933,29754,11836,59314,43419,38936,61674,21860,34105,74049,26199,88292,29618,10611,33471,80431,71550,87577,13901,51955,96586,92839,86223,53477,20004,59448,46089,34997,17292,58770,34589,31820,68136,16266,46253,41084,19540,99289,54824,85715,17659,58232,71810,71224,21395,29677,12620,77419,18903,53476,91806,70694,41333,12060,86780,18400,46906,76869,43739,62849,29276,71236,40762,52559,72585,21414,27427,12023,89006,63458,17950,27364,72019,42997,88481,37815,66869,16000,54450,29656,74708,84878,35555,69977,71697,86500,56759,16152,49874,26125,91729,44853,49554,96618,84631,37504,67575,48479,62853,65040,59134,12693,92199,87784,67439,61777,65042,79370,20671,47266,70366,64609,88046,13672,35657,26066,21499,20604,44629,91076,39791,90688,31385,48831,91825,88172,87057,45375,15181,70658,43272,28696,57231,43574,85097,17354,49120,89963,40142,80799,85367,54618,40969,71678,55258,79109,74174,17006,47834,70226,16027,41385,26550,73997,68416,41937,40649,40426,28384,16262,32048,10555,98795,94365,90583,11958,93077,73445,98093,49030,49295,88572,56598,52554,23674,27718,68542,98241,58698,13125,41690,50939,63240,40188,56562,35172,89422,86346,86172,95735,42048,47835,53152,71610,58503,29349,59138,66242,91822,62477,97870,37678,37462,98321,96912,93006,97366,11688,80673,25173,72316,85914,13968,50467,23883,13366,35761,92305,20188,28609,92546,62757,78496,94472,10206,93951,73237,27780,96158,20852,43416,64988,62258,18689,61293,60473,49013,69342,87779,49356,85100,64486,73491,81177,72745,61310,75568,72452,56624,34312,68965,61849,24497,67969,68685,59286,55540,74831,97905,34282,84019,39285,45468,62318,68911,29216,51848,96384,56821,88090,48556,14754,30470,33565,57600,96512,29895,91676,53420,41905,64369,48291,35259,19438,82785,90448,55513,83389,59537,48480,30821,35611,84929,67325,88997,73459,26230,54721,55533,21451,27194,82809,37021,57862,35232,88824,16382,94246,42385,47008,28737,98280,95304,45652,82461,49626,73230,59614,91866,87736,21627,15544,88363,50635,79954,30530,36781,33197,91619,91422,60609,79797,83659,78823,14965,97786,82734,58161,64947,45458,75065,50908,89033,56130,15253,26199,76530,59303,85075,56312,28069,38692,20256,10352,50362,51371,81443,44442,31596,38085,73676,32046,77852,69918,76145,34251,98155,86760,77522,66447,53790,48650,23876,26027,48745,92717,65167,72823,42560,98060,71362,89681,32559,30160,83788,91423,12544,57361,50865,13278,38692,92982,72534,91989,73578,90411,35975,77029,98085,30162,62849,55682,66714,74345,80318,38803,77212,91641,16114,61553,16247,47209,78895,85826,51150,25517,41357,30746,75661,49953,70754,14611,78935,34407,19496,73388,60629,46432,71463,55247,63022,42960,61407,88946,95349,86608,51203,53531,49106,61889,16109,68122,76871,48007,42482,84050,77250,24343,31034,43183,62823,63175,32638,36634,74174,40954,45764,90631,88920,36968,26636,32168,38584,34091,82285,49313,82025,74757,23763,30575,45590,64271,34363,48255,47359,87916,44150,65839,32290,98183,16047,69351,91569,59746,75065,59657,47770,22876,19392,39510,97699,97132,26620,79267,92844,74496,67973,10918,25106,83123,29004,48094,15701,48195,96562,34093,67348,19705,91244,56566,57324,26284,22965,99763,77783,62957,82000,41318,19284,81376,91087,30717,44121,27466,38122,24077,65385,16077,59161,64454,49433,23888,27115,61371,49821,99925,32930,50276,28508,40422,92998,51589,60082,30650,31026,12000,34015,44098,85416,84445,94391,81434,18661,77671,89755,27622,19798,84708,29927,48659,16150,55195,60910,34224,22250,83266,98194,46998,90726,99661,12547,82873,54246,61325,65254,54212,98320,91157,19006,77113,22435,91532,63925,51070,17515,50036,96425,13250,57224,68215,67131,17729,94170,56157,99764,93591,75773,94474,10113,20701,59205,86905,63958,82710,38419,96523,13925,33614,45646,53715,77480,79239,62112,51577,13728,14935,39859,37352,98215,74658,50927,14463,49620,55274,39537,70312,14511,79738,42701,28750,28762,31422,11610,52626,68194,43830,21431,93389,67660,61733,37501,86901,83972,64977,66256,15797,41527,24925,49871,44057,28518,12809,71867,74091,79375,15234,39689,57701,55343,30614,59183,80707,82254,63378,40719,17231,75820,22521,41578,13634,22861,51435,37344,86327,89122,83027,78716,17488,73785,78195,36312,37224,20997,11680,63866,83849,44845,88497,35817,34075,68946,45006,63779,84361,72914,41925,55737,52423,12882,36375,86447,83120,25324,59443,40590,15712,40389,78380,41577,81514,86736,84565,69741,56879,34682,34154,85639,72844,66857,45687,92241,21638,77191,98969,12004,70032,52914,61968,72714,74236,30131,25705,82563,47282,67004,47935,11608,37169,23747,78533,57390,93803,53956,74051,10860,88606,14166,21637,44401,74220,45623,86637,45212,75926,50936,15863,34779,22325,23371,84876,19724,81969,58521,35300,87806,60260,66411,35055,11819,31413,29755,33523,98237,75251,75234,64190,41342,46542,18560,72872,90942,68158,51671,26611,70186,68325,34163,83804,36846,23327,48192,31387,42480,40306,53927,72076,77492,38846,52535,75497,84498,22595,34467,26769,62754,12242,55423,31334,42290,49727,15918,91097,31666,40945,89042,94827,11810,21022,56061,60795,42587,29624,49549,91464,21255,53950,79815,80172,51934,14449,95959,19281,85192,68712,88214,78521,72341,76325,92855,87006,44744,46937,77043,69633,42315,38290,50847,79000,64293,82144,91072,14406,20738,60265,52853,51245,66277,77970,91613,13152,53922,55882,84281,40122,42773,38868,38831,96023,93741,71216,47119,82714,21324,32445,18131,28789,24329,80926,86254,89804,82039,36707,14501,53826,15688,56055,13140,43467,54417,32306,35653,62227,35550,79323,97944,45850,36169,51650,55143,59684,48025,81595,98847,39911,82086,98625,94084,88347,53434,43546,26247,31136,39326,78570,47588,31956,94366,69962,15040,93032,13445,91547,52313,77823,29960,19222,62777,60042,58887,14285,11501,63350,98615,18607,90755,28134,28026,73135,84052,82147,63747,34103,45766,73006,75960,75841,11696,89888,60096,86614,50400,12124,43649,72553,46278,40058,54562,93986,92424,83863,26437,11363,16857,90036,80923,25456,54796,69580,99557,88217,17450,81606,61592,79253,22909,75319,22352,79657,60025,31957,59637,65967,67088,30246,53913,94558,14079,43602,71972,33653,41086,79478,80043,72103,22990,69106,22310,22649,59976,77082,31715,80312,50087,49990,94471,76084,13206,28391,62408,96885,68249,17598,92245,91576,40931,65646,91232,22440,36288,91329,90351,51122,87819,45346,77940,63629,38539,86756,33804,59612,89752,48045,30250,31152,46997,88255,22103,96943,40524,36064,80049,79629,41217,13096,94321,67392,79590,27861,96224,97690,74210,68519,89402,52981,52509,85958,22930,52589,18747,65947,22827,15701,55497,38291,25366,11981,90831,33055,91430,65654,12686,59332,10295,51561,36784,56384,22720,52143,53903,29721,19470,26679,48462,50745,81496,97033,20929,77208,44580,85863,97292,20020,38574,96922,22295,38696,31996,50726,64436,99158,28867,87476,69841,34906,72675,97431,47440,95650,35693,72451,76041,66826,18954,76442,17768,59438,82677,99444,57547,97485,24897,68715,92681,69478,72152,15430,56878,24976,80369,14977,37206,16196,25941,14941,91927,37671,53100,28644,97834,89071,34792,14935,31575,65904,46849,76111,96196,49251,79527,94420,71685,64374,45084,79743,66799,14428,86635,53864,69109,81874,79724,30165,59921,17552,27359,45165,67908,30297,52739,91572,71328,54773,34806,70139,69910,39098,30535,82348,55392,32505,35880,71781,80712,44829,64861,85587,12498,69707,59071,40182,81640,21169,69820,20506,99162,31811,55483,68908,82710,20910,48225,28664,58061,48986,57676,65857,56697,28170,35845,10652,82494,60155,91921,10552,47780,20910,54683,94863,61747,95299,27391,98649,75917,19798,88146,33147,57838,97182,99595,93272,40594,53908,33766,46503,78534,25997,76146,56090,85958,78517,18027,91356,45209,73078,40204,23988,93325,41765,31526,98968,94872,63637,34847,28662,81865,61576,26629,19124,15460,59406,87549,12219,97436,76746,29161,59401,40760,98868,72317,23515,30196,95942,93601,47477,54771,93814,92828,85107,80446,63624,87874,26676,55834,74080,81910,13975,49895,83858,48466,21995,22531,26604,68844,30317,14823,79890,49127,26947,96185,30629,35451,27700,71223,54808,92551,87037,28210,68127,78863,66557,58281,32943,11606,50638,55149,33771,52148,67103,76539,37713,42998,18439,80906,62227,67642,38045,46892,16812,88094,34082,97376,13104,35350,71596,61068,12575,49150,17163,49689,35398,95677,44254,81403,51688,22092,71109,79915,62112,83733,75632,48945,86907,59135,52972,59494,31193,28947,14688,26279,67754,49130,98541,75606,10235,22510,60746,46015,32403,80588,15122,10492,84353,93918,25131,79634,69644,30444,55555,50855,87424,29969,47290,77278,12889,60787,29508,27862,15284,28995,44511,50852,94601,11079,50654,43841,34546,21792,94167,18320,80252,72868,69508,55024,42650,88660,91591,95950,66030,43097,46606,78943,97762,46755,13635,76753,51138,71394,20267,62438,39455,18085,49978,50616,75291,13896,24176,85415,77013,71398,26247,90158,57313,63405,82776,27481,49509,69079,60105,22129,56791,98951,42983,11613,75282,14057,85601,80666,99602,71925,66455,63132,71422,94000,43788,38206,20537,60925,13423,72954,51285,10487,11505,50062,59606,73552,17887,12750,39037,82183,12135,28730,22750,20853,12296,55409,53710,28123,34514,90055,85305,33453,69748,79550,50348,35914,20768,83085,89321,72883,97930,19634,36476,61645,60222,29882,16534,41682,61436,53973,43427,84200,62791,38889,97390,20967,90504,50346,52812,31058,75927,86024,27510,74805,21599,67681,85053,60958,99492,87494,60167,67615,38617,67410,79354,29509,50817,12193,14679,45307,99027,65307,60667,52294,62060,32349,29661,24662,19820,56184,55938,96366,83497,87992,50884,25794,52790,46649,14618,75398,72637,95834,73704,23445,77940,30073,15630,69236,41317,53127,60662,44127,35570,30045,46314,27499,57810,63448,64346,18499,56905,44590,91907,31955,45791,48365,24740,16404,30160,78329,69146,25342,30737,47135,85833,55133,81729,52467,83585,36201,56401,69160,57033,71530,61050,78693,44227,41360,62546,56285,77113,41441,35047,67366,47674,26188,75779,54531,55841,39568,86504,88749,64738,34023,41935,18841,43254,41863,64271,76404,26502,68479,25409,72226,44710,53699,40930,98545,13731,17445,58480,15409,65455,98917,35648,78903,75243,23768,21335,83098,85022,29962,39480,98085,17699,84525,15986,80684,79167,59943,41591,98459,73466,98880,80639,77529,67145,49679,56663,47134,73351,90656,58926,51585,96216,65156,57886,71756,78211,47281,27744,13087,76700,40790,95180,42930,44261,84537,12182,20482,25100,22632,81983,24322,26389,47480,57708,28341,64984,80432,19474,22585,17193,55576,70819,81149,94946,66196,29652,91002,86426,45414,26845,70515,35995,27669,22890,86152,29327,26530,28964,63798,86691,13343,62972,79654,44977,44183,72372,26103,44396,18808,76584,60671,24985,97605,29595,10493,51203,97860,26363,37618,81397,57745,82704,89064,32033,90963,92213,55396,19250,86325,49928,21144,12781,54320,11862,66449,49494,83074,32097,66324,15242,67722,85188,88674,61323,83796,86261,43272,89072,38232,27738,49988,44242,95558,98186,34318,88785,34724,25162,78624,27214,54262,96417,79591,91899,90608,97053,80409,85885,71356,27825,54407,31557,42934,49586,92980,51279,47012,51759,11272,52735,75344,63611,59397,86561,88237,37434,97494,22072,53796,63709,51074,69246,49633,74325,76020,93953,55001,46069,79261,46004,63416,30058,63934,77302,46110,35883,69199,91746,14911,53504,75890,13131,67454,82019,85554,69079,21464,59550,74616,45049,45084,54397,45217,94046,11367,28171,89822,98503,70164,20648,83676,40498,90187,50622,41726,73804,22613,73555,79794,61549,60804,71821,97278,64558,93567,70255,45226,32355,69975,84830,53763,99906,38268,70416,19458,22172,78572,82810,57688,21821,96258,22395,20781,54358,72387,40641,96221,52496,67024,31711,43037,32628,15537,56115,94526,16982,10219,52607,18360,91898,74788,65802,74315,72721,87472,78291,46422,39316,90958,94538,74676,19842,37980,50038,91835,54426,83763,27077,13547,79592,46648,79327,92557,58999,66034,23543,54088,62406,79567,82501,23221,74310,28132,80132,91180,15611,32337,53177,94299,43173,50897,39583,96608,89182,84811,26709,83414,15771,30789,35760,88833,53741,79699,30840,56386,96802,32799,78712,51079,91404,65817,73303,23481,29510,71503,44184,15385,78105,60278,41120,59665,59589,93502,48884,92399,16011,83187,35009,23023,11105,41299,44150,52335,68848,38386,48944,11459,58335,96558,90560,55495,75672,53587,76034,85764,85796,18455,94822,92796,17069,54949,74116,35074,26977,93491,86696,21746,69842,95934,82451,35486,77033,21516,21069,90012,91745,49097,76154,98664,65877,43307,24365,15467,81592,35208,88640,79410,96120,10729,94765,83687,38433,55195,78524,47724,62655,79435,39898,26533,93199,73906,26230,17788,90228,39908,15970,91615,60770,11659,49944,82236,59320,53769,22394,23241,15720,60454,58052,72273,90714,83563,63581,49889,95588,44939,85001,20005,57668,51647,74731,16593,22466,93377,64351,92536,81994,14220,37176,21980,97798,66995,12514,47558,45412,15552,34713,23319,20970,81883,28062,61232,46980,71311,79489,77989,77113,14365,90993,37006,34762,55185,59827,60628,21385,86143,78392,36015,89498,63768,98840,34902,55681,37912,31688,42559,78594,75750,79177,38704,64615,83763,86194,64100,89575,99864,83202,83628,11434,80106,98500,57886,43804,17488,55247,76677,69185,26291,99986,80587,13303,37525,41086,43184,47819,72667,45444,26625,86499,67187,31862,56052,92243,89818,79710,15106,43586,23473,35588,53275,70539,56146,82576,23363,63899,18683,33216,16327,70018,31832,18624,71393,17982,47769,27129,74445,86242,29123,63367,65128,99037,70682,23683,74955,62648,75934,98312,34673,62399,64544,69225,47723,10067,97088,49889,60347,36083,20681,79595,69336,39910,43926,17077,14344,52048,53950,51426,46033,88015,51506,85579,18493,92596,70019,88101,88754,70438,23186,14415,58617,86750,60051,87699,76851,57852,87416,62679,52843,90912,43131,45850,95421,63462,98116,66726,64594,89766,87620,13844,32255,20217,92508,56720,29953,46269,11296,94434,98848,62440,95837,89779,18140,92694,63702,41414,90375,90220,15378,28296,68844,27724,48140,31539,80385,20039,58819,21732,50565,61571,97799,63218,10567,10177,92370,22498,45470,71716,38296,48930,19410,14179,93213,82740,13794,75739,12875,92253,56952,68148,18121,82888,27899,84698,21896,54836,24311,49900,72606,51207,73706,16335,47663,18065,47728,49342,50099,56533,42391,74736,40292,67975,43901,70854,86533,39571,72882,42924,29655,92566,89865,57224,46167,15786,38731,61049,86658,65941,67062,94770,65037,92672,73460,92060,88097,76752,62929,39117,69999,10730,93519,62614,32625,16639,69295,91366,66072,14600,20125,61247,52084,15762,15350,54071,70361,88598,32442,13781,76990,15001,68482,67433,36785,83160,19348,89514,73782,64259,16687,37979,69188,98772,34144,65174,85805,86257,41885,98909,27402,47339,68045,34353,98565,98497,46671,84500,49927,85551,71513,38262,14992,48526,56929,74532,34729,17167,21496,28313,83217,23606,25099,27776,73785,24681,41951,19245,44847,55569,36705,84821,50512,80160,39496,59033,54616,99359,16544,92723,82817,49552,88424,17917,57128,44867,94073,64343,73886,55781,25436,30722,68714,64235,30167,90069,75302,93570,11286,70406,11294,82717,13216,74048,77091,49097,94640,39446,25461,49807,72169,84039,43867,79757,85169,50448,93739,16275,69924,29364,73322,42083,25446,75863,76949,79523,95206,53136,13111,82146,57358,75166,82566,34531,83942,88389,36310,63816,65895,85080,62497,21431,31057,67103,26324,20055,60393,50469,55521,63111,37059,43141,83115,63260,81570,97979,21975,39790,70629,81270,21855,24255,82907,58975,81454,21532,87115,54986,34117,61889,43891,63420,78112,56550,36207,24841,95194,86409,22092,57622,13421,24695,39829,34513,29942,50741,71257,28733,30659,17130,40136,37922,53425,70049,69996,51949,51450,27057,35207,84183,12543,57614,98989,73370,63553,55903,33797,57623,72192,53332,84341,77769,81626,80907,58438,85388,20792,76217,53527,47423,88367,95722,28103,84356,26582,69046,77875,12928,91653,84387,20861,98474,99210,72295,32458,55342,73120,93914,65331,73478,34104,51407,88091,87022,39493,35118,84708,36819,92847,34787,21477,38856,12505,42194,11686,17081,57646,63192,47031,71228,58028,96042,10485,17838,91068,53436,37704,69620,53827,86928,77337,40609,59267,67897,84183,93486,94856,73821,66289,83194,74835,90402,46849,81686,54344,16347,83825,86333,47077,78386,26246,94200,82041,94827,78872,34803,83866,70196,80348,75121,29835,47969,62724,73026,16657,56500,98816,81106,62498,57550,76031,41145,88340,59086,74502,91573,84794,97408,46127,37193,53641,34990,12724,74596,94326,18126,66944,13515,30672,75000,41351,40123,81216,59267,84404,29439,58059,86905,59324,38701,68917,86153,70187,87598,56313,80682,39198,38902,72488,27328,21418,36274,43078,91017,72709,60794,32580,29151,59047,68245,49868,56980,73516,31222,88521,10989,97311,98670,14343,72274,92326,87351,56636,70961,43143,42877,96414,55219,36012,90449,53476,91310,52929,25703,71109,95346,34757,58051,99887,29287,75209,45073,38746,76430,50279,29156,62447,98049,16808,52412,30478,81901,19695,83703,53969,60633,43664,94004,19193,40261,87371,29494,10808,44777,30772,91286,37874,22080,30689,90673,62367,42146,55706,57818,72698,72442,87322,63878,16716,84113,72000,28919,89854,44905,83944,41861,47434,59230,29243,96424,34440,12457,41954,24855,12893,44102,25650,74108,43502,35793,44691,13837,70211,48160,92841,55100,70218,47644,80716,10238,21434,18612,20374,49678,46731,35333,73460,28985,70433,51183,51408,46608,19485,83071,48156,94346,42620,51607,20817,18071,59526,66299,36966,15988,17255,78540,48030,40354,71672,83697,18978,21871,99860,92685,10142,89944,78818,92719,17225,24497,22516,65816,52853,18051,45965,86691,86464,11140,50907,49809,34237,23664,17176,82155,45351,35227,79768,14312,90583,69399,40939,34618,29370,58346,57986,37472,59522,27192,78754,35477,45668,49465,53384,67656,63803,85909,51747,64131,82222,70490,29497,16128,78514,73169,26867,46249,82125,96484,26981,97484,83044,86146,66924,49743,35079,27758,74157,67167,28737,97758,82454,92884,69248,29250,14636,55690,46605,33123,81432,55319,14534,16763,53810,38667,77872,29642,81126,36478,80482,83204,27065,42050,56896,81792,74221,19474,32776,22377,94916,82818,52194,78991,52987,74727,66454,54020,35770,72770,35472,12566,59745,12170,61282,89613,62158,38200,33934,84728,23454,92289,26308,22703,27193,23528,31706,87792,40978,67591,75366,27027,29834,96864,37033,82830,68667,60851,55154,45633,81914,27654,60585,33793,31919,34952,29433,29568,73717,94904,27240,73844,83308,43625,24372,69890,48460,38159,82371,55920,41947,18013,33475,52343,34647,43290,65680,98676,81087,71225,21415,79965,59244,35263,55280,18704,95259,19573,19189,49250,29656,52349,25357,58743,81800,73345,47766,89790,98790,60360,25848,26056,43667,70020,11743,72379,45587,28687,77159,49205,86383,90195,34161,68270,44933,47741,18327,25863,14116,44376,98153,15840,26105,64289,60801,82826,92332,97192,91553,37687,88788,18935,16167,37739,46151,89026,65582,31299,57474,75246,13755,19717,15333,27797,34064,19797,11789,66115,76932,87679,89115,82287,56108,63165,97310,72940,11790,58515,71524,87478,39800,41390,64612,61400,55032,65268,59454,81269,81118,11102,59332,90917,43337,18004,31667,21017,23135,79343,19573,11698,93783,88786,94956,11481,74993,95330,49492,50572,59151,81146,97229,63964,73883,97474,54665,82353,95440,46537,57592,24460,81071,64284,13675,70376,20148,12521,21071,38625,83470,65001,58760,12996,65244,81965,87838,12667,18261,13587,38653,98467,24276,84775,32224,97720,23616,48523,60282,60036,92095,94460,41358,85660,90592,15278,51486,81973,74911,26490,61211,25461,35066,99764,75312,74229,35527,39026,44946,17861,38154,59939,72580,75354,12366,58997,19122,54135,56687,66194,58947,66279,57033,76428,14856,67776,40596,21395,84805,55811,76351,99942,13939,87408,59450,83193,68766,61316,21294,58985,44113,23544,49953,47443,99684,48829,87526,74870,53041,86495,41521,33868,30392,50414,52581,47161,26413,84520,71666,69880,22366,13584,68021,65859,66614,77899,80367,99026,45481,20126,19304,43920,81754,56641,53588,61938,91385,12331,23393,50173,61007,44229,10060,70352,80751,43750,23708,21752,55127,40140,66207,93791,12886,74964,96552,85559,93577,22308,66193,36300,18906,66415,99435,56128,69337,51592,69872,97642,79419,88544,56909,65465,24686,99753,54127,93431,82926,54552,31066,72915,21466,96251,37014,26568,31114,76007,50561,39790,19139,40668,87296,95006,45688,48924,83742,81784,36641,81683,17867,67041,31073,31698,17345,45421,59862,38510,17534,40107,84793,12222,40365,82462,64062,72523,89022,30114,97042,74644,50482,57781,55689,35405,38184,66168,89263,17237,12374,37089,45095,33324,45518,46676,84511,56933,28458,88716,37084,78398,53502,98527,40083,95986,88068,27555,40712,34365,18428,57761,12335,65569,22796,59925,86966,24348,74394,76320,59104,84760,26946,63396,92164,25007,20436,30101,76472,86851,76801,56263,45455,18782,64906,15370,82347,43269,38772,93426,66959,42350,52570,32958,89540,87512,32082,85815,67431,17352,36229,36701,50667,20630,88465,10631,83177,61738,60546,70467,55995,51761,42294,31329,34661,60598,53183,50321,52131,40829,14576,74564,11656,79891,18581,64873,49374,26720,65774,98883,84498,62682,42469,46329,54910,53237,28791,89756,56416,77323,26894,13484,41498,38884,34005,21775,33878,24325,18954,82883,78848,23891,35711,54877,53522,35765,81518,23170,93092,47668,65832,39550,84571,39975,76972,23667,23684,50183,34190,47761,13445,23776,59775,40187,81939,44149,13673,80689,97507,13036,82609,34497,57009,24347,61353,61568,46936,14663,17398,52789,57461,16539,33328,57642,68926,80920,64957,13777,85454,63457,92374,59249,52734,48835,76755,82041,15901,55689,10936,12959,38506,73001,12392,90250,69227,36939,57698,94745,75593,73979,95181,65756,42578,93789,94831,98403,48533,48695,31687,44870,97929,59698,87942,57015,80131,80955,62901,57165,32259,50691,15548,47745,57493,73982,55694,10987,25299,90055,22493,54877,27442,12056,63818,72979,55605,42103,64944,93776,65794,55802,92555,16548,65033,49913,85981,53108,95289,51586,67582,50433,59189,93323,95185,60899,43767,13659,24408,58213,96954,40636,77363,13351,50823,87727,74378,90634,47254,36984,95471,88419,48071,75444,27504,97434,39293,34860,33720,31140,31763,58279,11043,25488,79461,62766,34292,27440,92639,24329,96369,71443,77285,10785,35802,30640,58613,14471,51458,82565,24657,90844,19767,25684,34498,47224,22522,15983,71155,80146,73325,69895,96844,25055,74324,27591,62961,40484,47900,57823,31931,34238,36191,47644,56488,29611,26271,80486,35629,52078,24111,62602,87666,80733,41324,92828,46308,86374,90485,43317,88324,92942,78256,97353,19857,83945,16337,35986,70479,50471,34274,76836,19118,81698,44205,23620,52035,53674,16046,90711,83559,40191,46841,26026,89713,50324,53568,40758,18553,29013,15221,63830,20620,71480,51761,28656,62232,51851,57207,26351,68704,24128,31270,35452,73836,68226,57554,55771,61534,33570,39815,27929,81330,18289,14823,83501,96273,67305,71294,28716,83893,14056,56950,92970,82937,98087,31747,63914,85786,32444,72059,74368,35721,80365,93495,64768,17413,69212,98032,16982,47180,55949,67943,25693,69434,98071,53075,27571,48920,39457,29256,59562,52433,82126,56834,18965,77188,20553,28196,28107,52126,75074,90853,68260,99614,80042,39669,87855,98741,85487,71039,91510,58432,91610,20883,16582,18343,34311,79379,30582,53840,36647,27115,54065,64499,84765,44070,97568,65847,76903,58921,72308,87686,84588,29556,21313,96795,35711,26719,40054,84678,25116,98299,16615,62441,35290,47067,38583,15766,67920,88403,67764,77569,10598,71717,71114,56900,43103,42759,82560,17176,54636,23394,50628,57851,20392,67234,49626,14858,62657,86844,84956,70606,52037,37289,29495,36992,73923,11516,14214,62207,89552,34991,55667,29675,42158,36784,86525,49926,68753,49315,42844,14694,32495,32388,98745,47604,92021,87393,40608,52315,92513,65445,80584,36738,85357,15862,95745,87496,15778,21282,78887,19707,92726,50650,13642,38942,27803,11342,37966,19772,47558,25349,17299,58216,79392,13892,25955,61229,53797,91746,50207,81531,66075,54186,12431,16252,22412,71723,33282,86157,43313,52466,81485,59446,19617,71645,94547,18522,68734,71817,87032,77186,64136,66909,51222,43569,64412,76330,93824,96934,10327,29030,14944,71806,68693,16804,76716,48961,54389,32218,90305,13618,93443,41346,92977,25534,55627,37212,67412,41679,27027,49650,74766,34086,26767,99486,82083,30675,60905,23833,81047,28348,44474,76194,27948,38553,66903,96215,13694,43152,99003,63436,10620,22650,70224,79289,41193,21165,27847,37597,95153,80416,56939,69917,26777,21392,98420,62416,89816,54550,70486,47649,13293,27297,31971,84419,54179,22175,89336,74019,16365,93352,63120,72661,25434,96471,36762,77244,74771,36571,99861,79877,15640,57261,53310,50451,29315,51125,16113,27459,81557,30062,49004,52514,38984,97776,26390,41177,14351,83524,94043,44868,28362,93676,22593,69993,77024,85734,87878,27512,18005,25815,61451,99307,62384,20285,74016,96344,97278,33718,53882,97908,69641,25382,28269,12158,85636,69178,38414,96783,11444,28476,48622,19922,50053,25846,57033,43935,70629,91275,89674,20792,24740,52606,31347,59466,46733,60344,86026,23999,24244,27644,95052,19420,77300,18474,36488,99777,82258,60342,19285,70447,47063,99156,20556,44135,50353,96412,91743,48709,75020,88940,53098,89970,59533,49140,92237,82608,19575,51206,24281,61812,73299,95142,64097,89053,55206,50208,30001,91990,27238,81932,91679,24393,66773,72023,60875,44573,30481,17674,15587,56249,46229,74354,38645,96337,16072,57982,15038,84715,47003,93007,66702,31539,83760,36753,23187,73568,16499,83069,27017,37045,31895,65752,59481,35580,84893,22163,51169,14049,53712,48226,66742,58730,81499,14894,94527,50605,35210,53132,58442,10030,85802,91707,90712,42355,48962,16579,46781,95926,38012,62204,48178,73597,38129,24542,92374,67115,31457,87446,30570,50807,91194,56704,18327,49768,62112,18405,66503,27881,76339,47697,76874,48733,99570,73587,67340,36194,49953,78207,73737,29801,69829,55383,49012,74610,56649,65302,14448,16107,60005,36392,26800,53689,39173,51421,89327,76999,75249,84999,92632,61697,93965,86208,68965,43582,56690,43113,13543,62367,61584,70302,42456,45333,26681,27630,55010,64609,20410,20368,51061,53205,36496,68483,87657,45259,71965,32519,29360,89753,84403,94890,49388,66998,24257,46267,45114,74786,85498,65597,36922,98720,40328,55161,95077,13683,55111,98127,13672,74505,46066,60092,92135,35398,37196,21799,72128,93402,55862,52386,92329,44947,17480,23707,76168,41826,84940,40104,87068,90140,45627,79997,97840,38008,85071,14180,20138,45967,14832,70748,40577,25369,33565,19349,13916,70580,50812,77602,36458,56475,94229,68591,39863,60443,42462,45782,19423,95638,52492,46281,40928,26213,44132,50397,43426,92509,67453,21638,21559,56027,21927,55523,69010,85772,22515,12533,46721,97974,49885,28231,89884,60266,12653,67211,59367,96353,46253,38218,23221,69262,50921,75240,20752,66407,16479,98632,62143,69416,55322,47980,23412,70763,20524,86839,44160,61905,90269,16936,72152,63901,68398,87850,49045,33872,89507,27705,44524,23374,26532,16197,55216,67319,16416,29199,54919,34482,19554,49293,45977,76016,56276,47098,85028,44706,42802,10991,24587,28497,89922,24661,71554,16544,99491,49538,37367,39629,99310,22905,16303,99946,25926,56261,94723,70718,89954,18581,25419,90013,25567,40206,99766,33806,51740,33126,99242,19871,86710,58909,24644,55562,66895,34989,11993,32364,33235,92353,90428,68384,37542,28924,90057,32790,81639,73975,47147,83719,12817,34556,86348,27918,49677,25346,41606,66026,59268,67150,46794,44764,70306,98604,66476,79100,98007,97319,65880,82676,97369,74805,11607,70502,98797,17388,64548,77686,56155,36274,64048,91560,87678,37774,95563,29584,85983,95603,31671,76911,78368,40973,24229,82352,73616,11793,46870,56658,45415,18210,38344,49416,24412,96843,60136,26869,91155,93626,83421,61798,14877,28394,99765,95939,47045,98385,90385,93981,74720,62646,20933,80221,44389,31270,61391,38434,91657,30508,93117,39156,86129,18332,19157,77534,50135,16110,17989,46557,48208,52955,61867,87915,83669,65330,25604,81514,99615,23032,66433,13822,77692,49197,12473,31306,51692,35416,61582,38337,96073,24209,85115,92058,37753,33329,23414,93040,49724,68701,85916,65530,28181,52074,30626,91997,77490,44480,21863,26911,16540,92646,87793,47632,77095,93642,75466,92566,64999,96446,89666,68509,10441,83681,62265,23659,46681,54752,28735,87453,89129,46125,21985,67216,86217,89796,32272,75043,91393,22490,35673,73266,64774,80112,15257,60960,49693,67632,52186,89883,43806,23528,44863,33802,60008,21560,26472,64872,95073,45501,13911,29286,44474,61707,31222,91133,56362,91055,13705,84118,20180,14878,74739,45541,67571,75075,30112,71071,53606,12051,71418,67885,61546,98506,74709,37418,95616,70800,76277,14771,14193,42620,55054,47145,77339,72694,27220,50790,78109,72302,71511,85315,37758,19225,54224,36767,94055,25091,38311,45179,63265,35099,56748,33002,76696,32881,14758,19699,93095,62693,75900,56716,50749,21084,13895,80206,22688,91763,13220,61639,94120,42379,54719,93774,33971,63327,51742,94179,40683,42322,39230,85129,91226,87504,76173,34404,90044,56468,98213,24939,56171,34811,84004,64054,18960,23543,71851,31813,99205,60281,45189,72572,36678,97355,20239,89050,13527,52395,94390,99264,38675,96433,20575,47478,97104,78517,59644,80798,57604,22138,51069,32900,48966,39985,14940,88313,91402,47056,24846,35921,30251,30079,25376,50918,82637,77606,43757,16178,29833,22119,56523,60883,26961,21274,87748,25263,50002,69564,75154,28313,50690,35904,65272,35316,52008,33390,47654,34424,69568,96979,14790,67583,38080,49031,97268,81099,91469,91402,83343,60875,34182,22267,16265,53402,31088,14873,12158,93654,31038,22571,58290,75398,68865,81437,13141,50344,92170,95270,74669,31728,76430,93672,55445,38192,47558,11529,26827,13027,69177,48126,98035,50932,22560,64990,99335,64705,58680,43453,94662,11576,77777,97452,79568,59907,20768,12649,87585,47890,12483,24685,42228,12821,20437,47544,63177,18569,50899,68168,71576,44510,17169,64359,18525,57544,24696,63024,63120,72055,24726,60985,79936,29035,36518,48012,91105,71164,44445,19862,74824,30582,94613,53560,59140,54933,54311,89951,78202,72037,61533,38394,45177,29455,19329,77397,71066,47627,48528,49314,58412,92661,20131,15732,81547,28159,84807,67824,77394,23678,33532,47069,42801,22137,76606,47515,19968,58684,44761,61874,34808,90988,97906,52502,53874,57094,44063,60494,72216,96202,31068,79219,44683,15994,93541,63373,51163,74964,41180,76224,18382,26139,77574,92088,93665,64162,73584,89305,59276,18820,39100,28513,97665,61413,56527,66279,61832,47154,45117,43856,56439,39682,90778,47859,55991,60084,56512,19903,11513,30288,85599,79782,14124,22621,35634,11514,25717,46190,20061,25159,48731,67725,37702,66593,62480,28289,85026,15988,63619,60208,89362,52638,14370,71734,89593,13052,83811,85898,61663,54110,68792,11194,49630,96449,22645,44319,93450,45098,73332,67788,28662,29221,65807,54473,49031,79946,19461,70149,86745,82239,21760,31572,68018,86990,33489,83298,16200,82004,80837,98646,87785,89294,81711,49635,54177,52869,15772,78276,58131,72842,78783,90389,38532,41944,32060,83238,87816,31083,83398,67072,67633,91754,55648,13524,27825,63201,87718,32987,54146,47729,19125,85283,31724,21741,72747,14737,70891,62831,14725,34625,60982,38646,83711,57761,41833,34122,10298,47897,20873,30698,38744,94216,18132,37885,62511,78725,72894,40210,87313,99357,83012,40861,44387,71642,27057,89401,27539,85735,55480,96624,97541,65939,74973,14711,49367,68996,95203,65030,67450,61064,75829,16085,56597,50471,50985,83878,49102,28752,32693,91506,65126,58631,77604,88782,73489,57540,93561,87650,73772,95022,14089,47317,69551,64688,14067,30959,67923,10558,74327,39629,62425,52381,20732,35592,87231,56622,52789,30101,57952,78616,88085,30013,98828,30541,45993,34716,44391,12327,24494,44999,49387,54539,57751,38426,18731,91889,31668,51349,87308,79337,94320,44302,53194,11193,90829,33180,30954,47161,48505,26816,90086,34744,57762,56108,62150,50671,73096,85347,31415,89820,51715,35155,59187,91416,32398,48889,53317,13611,41670,99079,33900,63315,47715,71530,99231,93479,59279,89489,91387,14741,61476,94531,86521,99678,29776,59035,24605,56665,93638,45679,51774,74632,35730,68238,79435,31913,38940,68272,83458,75132,25518,49323,19297,58998,41048,36041,96040,66213,51536,26768,81548,24633,27368,72643,54668,76180,14233,76707,97561,64842,11045,84759,85668,69252,67386,64781,43986,71289,47869,81686,21356,81729,97132,59253,57909,73614,62650,11482,70571,82610,31538,99026,92168,68650,94134,87255,98322,35292,65764,41371,41951,97580,31819,78503,49002,46441,18050,72377,66177,68495,76669,68680,28225,16603,75541,86025,97703,28550,16936,59845,85345,86983,92131,92221,70143,84995,13040,69535,13432,54223,85678,46237,74635,55520,77778,19258,88716,38696,98680,64146,13328,81868,15891,29221,50343,23801,95566,37754,34939,15261,56785,58346,11113,70655,84340,29663,39356,98224,12111,31453,38155,32450,99147,39160,14419,89730,11269,12006,47965,38752,58362,22439,54508,61395,59304,14579,77217,85889,83059,38093,41856,21151,79684,53081,89463,55465,85827,99164,99680,24261,30092,16269,17156,42416,27683,60131,50927,39907,73319,20156,39035,46025,37554,72139,50991,95604,69561,55742,56077,47011,72209,80037,88636,93532,67665,44618,62451,43499,66823,32038,36606,68969,52595,43713,18766,60032,64382,32137,19913,17533,67273,45427,34249,63953,74518,91016,17681,60386,41509,39947,43998,73761,20861,50828,76894,65015,90199,10739,87002,76871,98168,15126,53785,50574,71509,77599,10509,71362,38098,21031,67962,88606,57952,68378,29387,45467,68160,74421,47709,86911,35466,78797,87811,18237,11924,52019,86881,52880,16161,87531,63211,15166,37638,42817,47548,79318,70357,96466,58325,39267,16860,15233,18675,51260,33360,18149,11731,82294,97553,43398,22295,16782,81150,10116,26992,87550,14943,54018,63333,51228,84229,18705,81012,77609,60955,19671,19910,99350,62989,81235,53409,34951,82651,47750,69085,52339,62983,65651,55346,71713,39552,27847,34294,21481,87950,38659,61483,91322,99428,95610,97127,77006,95931,72728,31816,73878,58214,78366,14937,29398,27229,31184,63018,71944,34377,78589,52974,33769,98497,79823,15707,45191,56846,35711,23875,62712,72417,38595,21492,78060,56642,73841,28675,72293,83119,96534,70358,50694,75703,80088,72545,14570,65084,88349,57055,20846,43804,93964,47307,41741,85602,61294,71517,15750,86180,12669,84091,73248,20874,96005,41048,71994,95087,94507,82253,98470,38185,27636,60859,96209,32975,86536,44421,29746,53994,92606,46870,22688,19061,57465,85800,43377,51481,35457,91001,32067,49526,69772,50225,69650,92820,20908,86559,93091,67537,48249,91265,29426,86116,84422,87988,49563,94393,37988,29026,42828,16011,34317,51228,72314,41630,42995,67197,61458,44450,38405,94083,92855,54198,54916,24287,18322,17906,75194,92709,39545,21660,17818,81987,23084,98099,92001,40785,86853,93488,89715,66978,51182,28279,39517,61740,90905,58218,46191,78690,76099,85094,94945,95352,71368,75401,42419,41433,98742,13719,89445,12724,83278,98686,17652,88203,54553,28275,79143,76396,78113,82546,29560,33514,11520,33342,67685,21470,15837,19772,44723,40679,74527,88708,12672,30200,54169,54256,14036,42202,32655,93909,50365,78558,69539,17366,23038,15886,41779,43741,55880,26448,97940,35224,67943,88322,23657,82667,49765,77671,89298,85695,72078,96668,87108,29241,46834,98568,24574,21729,56340,15910,86910,32599,61462,82222,12171,72513,14886,78245,77333,68608,20538,33030,88139,12217,24443,28564,68042,46228,15943,11683,42587,84229,57904,68518,22191,32921,25905,66778,27502,46240,87433,36904,33097,62923,59183,61845,62301,71883,90128,55280,26619,64054,59296,77115,73627,13867,44746,67563,82820,88418,87339,19358,19526,96119,73132,22367,97819,25487,82864,58702,45575,74757,89479,41232,35717,31117,78799,31341,29407,84758,41188,91393,77706,35611,95349,50005,93762,54189,88116,97057,58453,52413,73894,78324,50409,64902,50903,27397,20621,27961,62611,10429,84467,76518,18537,16321,93844,44586,31925,17747,54785,37731,97161,90071,43235,82155,13214,49981,37870,17130,64310,83519,55233,26311,84250,93869,61907,89397,82506,32056,80100,95790,39016,93379,21930,34559,67198,44807,79238,55009,97875,25530,24634,76633,98926,21157,44328,15888,99844,36353,60155,26572,89146,95471,88486,72249,52571,97344,24674,90496,82680,51825,90446,48904,73701,61062,71677,82395,94713,75080,43201,68021,59434,24643,73421,81035,67952,67525,15035,26425,50601,66977,87657,75043,89912,73257,41090,18840,11175,35766,45707,75571,67465,49099,43618,81274,88696,21523,54494,32347,76242,86432,74731,39128,99016,70497,78373,37062,71900,70510,89275,52552,37431,79555,85695,47033,46920,26144,83479,23188,11507,52441,82570,14189,94396,89383,20946,76543,66250,53293,60375,27641,42053,53911,96166,26507,30813,72892,53963,67436,61707,88147,46961,62850,95008,95423,25826,79064,32878,59668,96592,82845,78372,97125,55799,77266,35958,26371,46005,45566,11019,13110,78900,54404,12415,76936,42894,30657,93774,17731,52326,54572,53879,61375,54780,98132,28950,96197,44535,13915,25272,98504,36972,46508,12396,65705,35381,42643,42649,70337,27810,20099,84530,52979,52708,43029,45977,54715,76328,27998,40024,61133,10269,11032,13544,68435,39170,60196,49146,21409,51073,12049,86900,34983,14461,56068,30045,54917,82693,84154,74764,77837,30547,21551,16413,31764,32771,30337,27947,46983,13870,88672,96998,52408,21922,85343,74501,53861,18676,48513,83870,46085,74549,23195,84048,89212,88976,68416,76156,82140,72438,48215,16338,69078,73092,13725,13846,78305,14033,48407,72755,13982,68907,96365,58187,56448,24936,54597,87088,86327,14187,40117,85817,60313,84135,98515,83197,18850,24015,42157,73561,71804,49929,62321,14865,21847,96477,81837,14848,45453,68833,55300,80509,30315,56043,78939,81431,13717,13896,94583,97915,78156,96254,72918,34185,63022,61874,45287,29114,25808,23693,72148,89898,71074,65931,65091,79878,37462,42985,19622,84070,84933,49923,67018,50528,71944,58034,27419,53160,99852,71235,64391,68222,21208,99567,28176,54686,13801,72785,65823,97472,92725,66585,47499,45780,32649,81522,88860,72257,43157,86874,30652,77701,50473,86331,44855,31216,31457,26166,89670,63766,91560,66634,81387,18840,44347,57254,97585,39891,89258,71668,85160,53293,12651,62581,76907,35292,12310,71407,99416,95809,59582,83702,37610,14340,43136,78837,86272,43579,59524,58244,16344,64753,99476,55913,40130,42480,97052,42551,84900,60745,74391,56222,26045,63332,70373,55000,13979,93962,19953,44462,43750,17100,45154,10970,56286,93952,20741,26626,79322,56508,11726,92025,33844,82785,56910,49616,22669,86462,93921,28011,23368,22050,13992,11162,56578,36049,36783,78025,94542,10221,50405,30661,88407,72965,17874,75578,41115,47724,45029,78836,32697,47379,59675,45504,38406,63411,95915,23914,53665,60420,84906,76034,91000,41848,78918,63365,48064,69699,65656,86234,65113,14087,67227,49851,60584,83138,77443,68205,94145,14657,70525,65628,71616,13031,13194,92521,76377,40744,63725,71976,82342,55473,35131,51417,84704,77383,86939,95721,13022,44761,53100,63772,32439,18420,29256,61422,41249,88916,55869,88280,32783,62125,79134,60443,59825,20201,18355,73276,13806,78852,13768,65022,44060,31843,25852,18147,32803,36713,27678,62885,58767,23997,24455,20320,56711,37596,24502,67435,15633,65664,94842,85407,59379,94223,47605,72007,51672,52464,20606,36729,78433,27356,94625,23238,55166,79510,48491,14517,83127,54510,63142,85295,94229,34538,87758,22695,66697,56227,98638,10057,80027,98149,89791,50014,94795,16493,49375,30861,20980,12231,41417,35957,68774,10511,72631,74769,29987,14076,35016,95921,13441,92802,82520,99671,63936,53655,46934,65507,77249,95164,67133,66268,51726,70492,26454,63998,30557,30031,94252,98001,36014,12789,14995,35578,88436,75074,55513,66295,20034,69398,49450,16651,65026,50636,37503,17456,76803,91909,87332,49906,78646,42676,26670,60810,99353,77675,43332,27140,26701,10194,41581,61912,66121,63415,64015,11833,81890,28807,27378,31740,67722,29465,59628,79205,30986,68119,97223,99514,28008,23971,39497,90365,32568,31028,45649,33742,52464,51588,20192,95633,51840,52147,61973,42158,25403,28802,60308,36116,25039,25724,56158,22475,87331,67064,24487,13835,89982,38638,45618,62831,98784,24506,39107,69632,59729,93688,50285,85097,75110,16630,37438,21383,22915,58222,43618,18240,17988,38654,98263,26533,28256,35782,83674,51927,78703,52461,43382,35413,48021,64030,81766,57168,41372,27105,83885,75502,91075,95412,72686,64124,12508,85484,21334,50307,83858,86298,72878,54824,63080,60152,76955,40307,57539,60147,36603,95924,24887,99053,20284,37605,18646,28232,75246,67840,22673,22019,92752,75663,46317,21633,11828,61563,34892,85265,58332,83233,67990,62830,47029,12690,77514,46351,71665,67675,29151,92337,61186,79589,13082,24701,34520,87015,13565,45558,89074,97731,40771,50994,35390,48326,34066,22080,42864,85999,85606,79908,72428,40826,52547,52483,66828,52735,99557,49396,55409,57268,26098,90125,89253,33777,99129,48637,22243,64208,54724,99872,43721,82572,82499,85554,74590,16512,61412,50070,87449,97727,42738,67946,53044,13477,34426,41756,15337,75864,73871,65733,89601,40196,39262,12586,83040,81610,83336,82436,79509,98406,65617,82673,89106,75598,21794,23734,83203,80078,36732,25032,93767,33177,75489,59641,93006,98621,22619,49709,89535,66015,98444,25794,58429,89553,81664,29796,13059,40949,36987,30499,25520,78107,32969,62672,14048,66333,39270,14785,45148,71679,35001,63777,64735,94558,61155,17780,11582,14088,96981,76737,42746,81114,87472,27998,69561,83016,54234,72349,17315,51570,19140,79738,60774,68907,81368,82038,45993,73296,85989,11148,10758,61983,77387,35352,79660,92373,35792,26048,21876,26484,87844,46104,78431,17427,55894,89769,19527,39331,12678,73586,39247,80005,31838,89231,89023,89425,68127,34403,59873,16383,45184,88304,93132,14668,23206,61542,24863,65521,94106,74888,93162,36812,53661,35322,25485,21180,35830,80836,26923,68201,60128,61293,98070,27858,33743,53160,74769,13712,53073,16118,63260,90750,68243,37337,47840,46235,72028,60731,75509,48400,21176,50570,75595,87663,31760,77474,24460,84819,48641,31970,55810,51426,22537,63665,66334,56199,52125,66503,42091,25258,26887,22653,13761,76412,32394,85505,48336,97831,35446,48903,82871,71178,17071,97186,70650,88880,11179,84010,23289,71814,65091,27793,57722,76787,28697,95607,13726,43347,39147,20916,77594,74742,36230,50951,12767,39283,60544,58126,71296,68685,74254,16405,63577,25454,10153,21608,98185,78004,81133,54108,84127,50407,93826,57324,99992,65330,25045,80041,16810,69814,77214,69067,35715,83003,49285,38529,51133,20966,51073,45040,68124,92160,13306,19881,32494,85473,61571,61882,69957,60177,40113,67940,94274,78020,83302,73099,31690,32349,87487,82716,49635,87999,57543,82613,18273,80792,61134,75475,17906,72451,62115,72219,12549,25210,41706,84645,22289,52097,94963,87949,73628,89907,89699,78481,87724,88596,69514,23581,82962,30260,96386,15000,45867,40244,46774,71680,81863,13983,10866,76257,17929,95013,48859,86506,18371,75348,32816,32355,26362,76350,98518,42055,17812,49395,67961,57798,26573,98858,61642,62146,91096,39370,96634,92314,55473,30409,48232,46995,14699,99014,80874,81112,29061,64615,60799,67934,61067,13264,55568,49346,19877,48156,83548,95614,62275,32721,85755,33985,27168,38236,51958,73144,38970,43497,31619,72917,50037,94437,83591,39362,28617,13317,10561,15883,49776,54474,49368,89137,19943,23432,18497,22100,58819,86798,42869,72715,54492,24547,34151,60484,56143,67337,71722,37491,14414,67308,73492,45804,96838,61151,50704,33385,88838,56322,29120,37932,49366,44769,27482,20190,63208,65835,17229,96026,92064,22120,28856,10798,41968,76452,98456,85842,16033,92918,11049,74603,29882,76203,31802,53456,52623,93469,50038,38183,75879,90193,80678,42720,76640,20757,41353,57720,25933,90094,94192,42123,38732,85617,75472,86966,80969,88687,35400,29699,69373,24458,95029,54209,67223,74092,43612,98957,62200,25634,68197,19455,46090,37090,57199,35357,46191,34547,15999,62533,35917,28648,44876,45144,47223,69017,51165,50686,59509,36797,15833,68623,92609,37218,17852,50972,27403,23025,41269,90404,34972,31091,43298,75356,82743,59638,57718,87365,34894,55110,90955,44989,79121,21657,50718,35648,20003,39330,26154,40229,29245,47488,42734,64063,51411,25973,26398,18322,88397,10851,14626,59780,48337,14618,65085,91748,89346,68989,52869,20708,27735,28627,50886,14237,95283,87657,94385,80123,46008,71840,33973,27351,31296,34813,92599,65923,16100,57518,26782,90393,40780,51700,69281,31884,64532,55971,63573,88368,52427,80646,96707,35253,40210,70375,56501,13242,37732,70592,20651,23762,92505,39422,86285,99233,32292,40800,67213,20309,77671,95954,62475,71945,48180,94343,27622,98192,49885,80731,90858,72077,40809,16691,63536,91229,51881,66427,52163,60757,34018,47181,41198,83024,23705,74381,32285,83003,23944,81282,14810,99871,81771,33226,52253,92629,76273,78438,31234,46277,49216,64761,63180,36508,42700,41183,81838,73550,24985,44704,15315,16984,36741,62893,33307,60784,23807,37790,23076,40307,19700,90513,96137,95835,89950,84302,27899,42107,32907,90793,36767,33087,84707,82365,80018,59177,47559,55126,51043,91044,39398,65357,32018,94893,75938,58872,17880,64091,15285,22894,14960,88882,23840,63996,67957,94109,29678,79032,66164,30066,23625,57663,29281,30508,61923,58811,24767,73654,17782,20157,46353,42014,49718,49682,93737,24656,82992,68245,32754,13115,66360,72967,23046,97689,35427,45193,57867,82211,54876,60009,10483,44246,45320,71300,20842,85720,61799,32853,99361,39207,84435,23205,88301,49795,40910,29500,76317,11717,51695,61378,17243,16850,83520,91866,71616,76360,48101,16232,37737,18252,23434,28232,74187,21208,26757,32180,54867,51184,43572,68098,18573,24754,32750,36600,25916,75550,71039,92332,51938,44516,14785,77042,67647,48926,48612,28896,66571,80177,87667,38566,97942,47696,94878,92579,74982,78173,18483,45545,69183,98477,84858,82807,37162,30528,91138,96050,34703,92212,52217,69010,26778,16374,84309,14046,58499,66104,82323,40166,40085,47357,66954,76407,89055,85930,42819,30106,40598,34883,66648,21067,34224,63959,48137,96318,68262,62167,96350,75396,21675,77877,51995,82908,44618,49552,62278,82741,96426,83630,63794,64215,59869,27927,89785,37878,81616,75115,71619,28360,30701,38270,39193,75568,96337,22953,48727,80175,56276,71724,83414,78379,96062,36692,22694,14627,45252,44384,17766,39343,21727,23720,97016,27432,80289,40551,64071,88295,87000,99296,73213,41739,95023,47592,51591,36761,35336,60362,96642,87699,81837,78677,86064,35907,10577,75175,73496,25212,16809,53765,28142,13739,41437,41940,44480,53234,42326,72707,32404,99941,94681,94927,47664,74546,88956,27077,98225,83248,88085,36421,31441,34358,64611,78786,32467,50046,26439,93077,74629,64595,73669,78935,33418,85982,25631,15308,91590,65664,30016,65150,52902,10079,94148,39455,51587,75818,73178,44089,86280,50794,37955,44849,79065,19072,23157,53911,64029,14975,79424,39593,54349,70886,77785,57532,46606,45916,79827,33282,13349,80880,82015,75063,63495,95197,62229,76689,87968,93543,34630,44833,55830,53550,95962,92725,53464,36357,70257,72410,99894,27173,88206,21236,39176,52108,95374,93052,77052,61660,89494,45406,44035,29750,33699,47944,65268,78602,56568,65532,44228,68946,90970,50359,63697,66513,68445,83511,77433,62750,55672,56786,17987,24559,36106,24352,65241,20856,66470,42385,35601,55769,65157,22452,14852,80902,99111,95557,86267,95301,19502,13356,39285,41401,11745,14212,53090,15566,32155,72164,93110,39481,88745,46449,16586,93431,24928,59326,90394,55066,88074,16387,68819,43265,41920,49320,85781,68975,91885,57434,23472,92249,17205,36225,48820,31820,99072,52608,21445,99679,25594,66352,53512,46680,83592,49454,16586,60634,65295,24488,52415,69255,79042,42108,61290,13641,59449,96478,39332,10812,12567,86826,70792,81393,87768,74173,88738,71140,58703,18062,77453,40735,22626,27133,53428,70601,27423,95025,22636,38752,34530,36235,66432,26243,37988,85910,86634,97846,97046,25610,89467,20815,51779,19198,43528,90429,77470,96404,98486,12786,75467,22698,45217,21912,92357,36358,97906,64934,18534,31099,80300,16786,28514,55762,51901,82049,71973,63969,70386,89262,78447,43609,52603,54717,45498,78107,82170,73782,85035,11236,12688,35931,43258,12531,78600,23245,61885,62153,44919,83732,52855,79449,27485,36818,84908,84440,86826,41978,95987,50408,67988,84945,62792,10816,16290,42490,65107,85381,23817,95458,20145,40273,91000,97602,87501,81342,19798,98131,84355,11157,97634,26611,88606,17954,31473,63987,21832,77733,60080,12842,68082,97114,78369,17911,42934,53696,84029,34219,37720,78727,52497,38128,49057,92441,43100,79008,83746,29147,23521,90493,59119,18878,55159,27322,61570,23245,15127,62006,52437,76005,48861,95400,68840,79304,16187,73455,73358,31928,67200,72255,69191,39124,31232,27115,33523,92152,51650,13040,79647,90129,75107,90403,69321,42259,25768,34390,66412,79858,94735,54167,77344,22321,97961,39222,48290,87957,74044,51583,95183,64833,85731,50601,53180,39828,59477,63095,36206,44435,67702,10721,86482,96052,49179,86446,93439,56639,79599,45860,41087,87516,78787,74388,88173,20001,50175,17987,38299,96308,25441,56658,96949,45645,50003,80648,80829,64122,67176,22689,76246,32598,28795,33759,97201,11900,80468,25133,27110,17232,70791,47498,96935,34344,76696,79579,77961,74482,31568,80396,44165,39746,19370,31173,14876,97887,44224,11687,57535,71812,97659,42320,33130,84766,83938,21019,94699,26744,19578,57028,46798,85383,73671,90651,14412,37461,12579,95591,41161,28515,99535,91831,68890,59209,39042,36772,37182,28802,25982,75879,57095,37259,70283,63309,68404,61129,67157,35381,30401,53810,21310,52182,77058,65697,81647,52958,13655,94969,54710,11250,20566,98531,23813,73204,82295,12662,70660,39855,27231,77541,28820,77768,24409,16012,25729,81599,10731,92356,40122,16147,50380,68063,50823,65324,30276,80969,78259,31340,35626,74073,17682,52899,72454,96284,10741,25409,92033,57722,97648,50947,43251,72537,17586,50966,15828,79454,87127,42626,25695,91521,11626,64140,32862,75145,60088,29423,47358,15196,91117,36926,46045,54768,49649,46073,85925,69117,97089,93543,97239,71761,57659,25585,78183,22674,26488,72444,10924,91061,47892,61441,54612,91897,40906,26710,69449,70294,81680,91342,55639,60378,49177,47162,95454,24924,37020,31896,95886,88583,10650,81805,43679,13708,59451,57904,57241,54571,78091,73684,73210,66249,12402,60988,11327,17452,78817,38947,11947,89874,70846,83674,24764,80577,96436,40380,14222,28901,60552,57344,66405,34679,96475,84780,96427,13535,99053,26798,52065,49920,24959,36063,67263,55998,21776,49768,54490,19141,16097,89060,40774,60230,26145,23069,57166,11880,23082,97196,12919,48167,46017,57416,46615,39129,59802,69038,65032,64523,88909,30729,40515,94396,56104,36167,88312,71269,37355,75583,55446,66176,50615,67765,14953,95925,30223,74645,28439,40015,38497,23354,53600,37169,99002,30260,58261,70173,70817,95231,95951,61485,66917,29748,66537,30853,10816,80213,58812,96257,96718,35627,41866,81582,46109,59495,56258,11861,21488,10661,19281,90800,68333,45343,72229,49705,35011,49632,69610,33610,66801,40597,96527,66647,67254,69675,10120,92771,62226,99548,77934,12119,76232,67971,65457,28243,55904,10102,99613,72333,44880,37604,71908,98828,15689,14997,50156,41982,15454,72427,69542,71753,40618,42606,80559,76216,43044,85715,45340,27526,91836,98234,11618,81064,85178,50318,82633,23114,30925,83807,80108,42352,27480,54011,94106,50255,64311,69895,11693,88213,71347,27108,14508,80465,10365,98808,11420,79359,13506,25758,11371,39493,99309,41133,53550,32793,12274,52257,53490,25410,86969,14571,76088,30727,55167,67964,92821,72564,94062,75974,13344,60493,25539,43011,83052,74850,71120,52871,91195,81794,71681,78563,25636,18361,59474,70040,29645,32154,37762,20223,82899,42023,81592,23854,37952,88057,15006,73444,85806,48675,15872,69083,23084,15513,46621,10755,11576,82020,12984,56901,44283,22043,74487,21268,83294,73633,58393,75741,29954,96742,15880,52411,61495,51923,46746,88263,97294,40112,47402,46910,20950,89943,89222,13272,70393,97001,29439,78358,24979,79607,80299,76183,84036,99223,15779,59839,22143,77872,86310,46550,31719,59225,21502,70345,57231,60305,47973,44431,85548,55475,60902,66571,29936,69519,99773,39792,49828,41775,77518,66336,62503,31702,17843,35759,18488,21023,36754,74022,72699,61633,13416,97849,46943,54691,12615,67021,32928,58460,34421,13379,58929,96727,22241,37262,26015,62390,62609,23308,81560,26191,48083,59482,22408,51019,89979,11581,41730,17867,48247,11126,48837,63082,83234,87007,55042,18652,68106,85820,84828,53930,46933,57759,61153,33842,89578,82889,19381,73020,62567,66690,12628,17028,64008,61439,33246,46905,16841,59299,29389,39192,22387,45724,71210,30918,37823,30786,24559,53852,88013,38483,14336,11160,36353,47398,53408,20190,36937,90414,19640,73273,76767,16852,41752,99106,53233,56271,56254,66236,57784,16957,41719,53338,30953,27832,80059,12970,99566,88813,50041,30276,67188,44791,68957,28157,12208,78159,63808,32970,85305,88591,97204,62300,25887,79893,31978,60655,98496,66576,69600,53377,64851,25287,17300,60613,66167,53808,39227,84748,51607,80044,75727,43670,87842,64223,91444,11648,79308,88006,88794,28044,83053,49210,79477,22458,42185,98970,59856,48670,49531,46150,28718,99742,99240,36526,80680,14696,65795,78639,26378,92756,63500,86687,10935,37925,84924,25262,38077,45119,97694,14700,86725,16798,59682,63127,16587,57154,76147,66281,67005,36789,31006,27095,15334,63541,68471,61979,64005,40976,50754,30502,40447,53641,50535,57080,69152,39617,25036,21761,77601,74529,53805,55303,61688,62308,14353,10604,10775,62364,26856,27996,58879,66758,13351,51269,15625,92126,38413,53571,84213,17892,74011,67132,57080,65178,25247,61803,32043,77827,67353,76153,11122,35633,72446,33950,75252,60812,30925,33625,27850,37208,33047,79472,60402,65844,20469,30771,33125,90157,55960,29399,38055,60913,75251,84893,80968,64791,99606,19504,35993,66578,96191,79511,94544,38720,36118,65006,63750,32242,27187,82239,85726,33477,80597,99094,86339,89972,46440,19884,79169,32416,46434,15312,64717,32972,53129,66959,83522,32941,14347,80577,26063,86687,57197,46220,19355,62241,25329,94356,48398,49358,26306,16783,10875,62664,12248,62824,54686,57239,91209,49472,77553,71294,52470,93414,93540,63584,96358,72955,14498,98113,46664,74442,29451,47013,61436,80624,57827,36148,52413,65236,20318,12584,82702,48570,56601,20717,53026,20721,38872,57944,88227,79322,69008,42822,32157,85882,90680,41683,92890,79447,78691,14373,40629,78610,69362,80063,12621,23922,37086,30531,63545,78706,99658,99123,53660,15817,59554,29071,81103,50401,85640,71612,87099,49963,47520,26766,31865,44965,65804,52560,38550,49921,60527,30776,42062,61101,28613,81183,87518,38023,68245,60515,27978,48559,35792,51967,36019,65522,69632,62138,36251,91622,97818,59727,12911,62345,63047,55048,70799,69732,97902,10586,53820,95094,39529,91378,81025,90428,65896,34968,29422,73871,12061,15483,53000,25622,11387,88461,33927,80068,38768,83781,63136,85708,62810,22637,38222,52559,73769,65685,39596,44439,34326,37760,47244,80959,77733,48027,41939,41476,15134,75558,54900,86784,76859,76043,17504,66801,17833,53810,71339,20646,97126,28957,37096,65136,54344,57984,81706,80434,31274,53616,37721,21921,39362,90261,50939,58014,71894,62084,11888,47785,60000,71919,77323,67367,38317,33130,85738,44093,59105,37742,12233,33589,71582,84818,35238,77168,53504,39395,12477,18731,20056,39062,70757,34550,63695,92390,28790,71686,77696,74608,57503,81581,66306,64718,55770,33123,11994,70882,45442,56393,25430,91101,30647,47455,86889,52592,60330,45306,81199,53719,37506,49819,62854,48684,55346,77681,82797,64852,46639,25781,45690,58819,10896,11639,16977,75739,96321,35307,50512,69579,57814,67184,73985,93088,80709,91854,10678,60920,50596,48946,64368,56007,46541,87853,47962,15891,37446,61119,30944,28946,27069,82994,19421,37269,64223,56001,47441,49020,20102,31721,27936,93902,78515,31283,23599,21802,72450,63238,20814,58627,74094,11080,48246,28473,29541,89416,33634,68716,16266,45602,43088,81790,13512,38245,63916,73463,24978,20767,17972,86023,65936,60206,58339,83305,95356,28416,58944,78127,14379,50627,25608,20915,12683,75803,45222,30831,39287,52731,79451,57316,27196,54555,66944,60694,34638,26546,78705,40087,96085,73218,28256,13513,15301,74793,55610,85505,91986,98774,43089,62042,49896,22235,80772,14657,84946,70436,19462,85481,67960,65200,68504,40755,17158,63147,89216,54384,81562,26802,85539,84859,91608,49693,15199,33748,68430,63898,67337,18359,61015,77515,62527,48213,81319,65647,30759,20626,13158,88119,56966,50651,60356,31814,78913,31163,87672,76299,74857,66060,81066,15619,39353,15518,88341,12892,73184,19697,57843,44500,78040,11198,27722,98768,48502,28270,56997,75058,90355,12301,66973,61029,71039,61359,35703,41428,80866,50844,55187,67848,49694,64664,60746,76056,58054,26112,25490,67735,91266,76614,85885,74186,73021,98901,36651,44031,14702,21671,58770,87650,41157,43018,61326,44958,76288,42872,74884,40155,71522,60619,96756,36452,76204,53174,88418,17180,55585,63558,76474,97060,20728,38901,48233,29046,12531,36154,55995,45973,63767,91883,40723,77979,74018,27345,44599,26111,82875,11580,35055,35935,24575,74658,11598,57641,59253,44280,71463,24887,69411,84119,47424,26064,74572,75586,57084,45186,59952,12670,44356,34966,97866,66408,48210,22720,79832,73667,52253,49377,87951,18551,39361,47140,67902,75735,72186,80032,53761,33886,42322,68988,35482,53068,42460,94569,59839,75822,47560,96628,56568,73588,94061,63063,73550,25398,40125,91715,76958,33984,92979,73126,88283,12872,60727,52731,39616,18022,30715,85277,72558,45794,90392,72051,46151,23484,96900,13423,71989,84162,34231,68943,75319,87641,30035,42010,83256,27665,14225,22009,59870,36303,83843,42223,61273,92050,43269,70800,58915,65434,95114,50168,82772,11640,74349,76669,77025,17411,35573,76896,29323,62919,82712,57658,31024,71595,16080,62978,56287,62124,34908,61737,13468,75166,21805,34661,33523,71860,52954,51740,57031,33977,64869,96263,80207,55136,88560,27328,11164,81555,28211,38524,18507,19185,89917,96953,80985,56526,81955,42704,94135,38376,47135,51959,30591,41001,34888,68065,93031,56939,75382,72058,36553,58961,15593,60774,99464,75726,60097,28768,76913,34093,49577,55011,21271,31654,26355,40390,59505,66431,40397,58560,97206,57297,68056,34563,18257,20702,82647,57610,80203,14658,59113,40987,90994,24792,62315,74405,36599,26718,71591,51667,37448,67422,96162,64954,36336,85734,71833,45646,54373,13501,54888,96651,23095,83645,86715,74618,68376,52563,90092,61203,61659,33398,16958,56065,13097,19934,80515,71816,67335,40690,68768,77064,99451,39896,68337,53902,13399,91774,88738,28253,94852,50291,57419,37745,73657,66054,16889,50505,88472,14124,40875,40549,10739,90239,21896,22360,45246,77201,75418,32881,94914,21307,83914,23281,84159,65971,23275,21141,14305,71741,60410,35198,29256,61259,62542,11884,20437,33053,79458,92865,12336,42223,12979,86666,70725,26023,43291,86495,83570,43571,78478,89934,35603,85242,76931,99288,94323,53976,32229,91859,35165,72899,65129,62975,45829,60818,47987,45898,91706,99400,53871,44387,67121,15591,12617,88159,38462,12908,15856,16663,78815,69825,96262,49349,81332,27043,30116,23045,13554,75587,67268,90557,15334,78129,68701,56473,61469,13669,48373,68352,19498,33808,46938,44023,49944,48453,59831,53816,86675,70251,30379,20664,64289,15432,20173,30625,51354,85937,65833,90532,65681,21350,68429,10634,73687,57940,78062,70147,42117,91671,61531,40406,34543,38629,90684,89177,53297,78152,37693,26372,62343,30718,32444,27580,75798,85641,24117,63517,20538,32029,64234,18283,47653,70451,89216,18149,71521,48696,19839,45854,80338,78021,50231,19375,11610,11373,39788,17418,50661,17956,77237,62079,97131,97865,83776,74939,53328,65394,26028,93557,82216,39783,43778,35203,50058,12723,13845,79380,65982,41462,99961,82658,56876,35625,20828,21479,10899,13122,29507,89780,23587,55597,62119,69141,70538,48816,69315,17238,79187,21713,10570,32288,55594,68951,42270,38968,76122,13981,59372,23781,79552,63793,96268,40135,64666,39998,93672,16912,14274,73827,88925,91157,32588,45076,83218,64944,66826,80308,80548,21861,92797,20921,25834,57595,22077,94812,64613,91210,13539,57954,89694,42878,20622,22418,83629,31816,50617,33021,48265,82528,89710,34423,37972,72240,91513,94418,83677,40461,22724,87477,37067,43919,99249,60774,34360,28680,77565,10353,42878,13032,16647,55392,89732,13363,83431,86047,41739,50731,33229,38758,27661,27740,79881,59135,48540,42793,20957,74578,45896,16460,30231,70134,76057,36204,20821,24285,98351,34230,53578,39158,62999,16989,65026,20874,35587,72876,83388,54589,65501,27210,13268,31756,72775,39912,10112,35259,49949,26947,86273,53991,78376,52826,32478,37888,87333,69039,24408,26150,46752,13033,94081,65111,41351,40469,20165,98323,84843,30256,72195,98942,31485,39479,27449,84223,86066,84607,78655,79459,55384,44926,90436,40937,61081,27433,88458,22051,68972,60214,32572,63412,81240,51923,44093,46549,86496,37618,99027,39757,32202,52390,84327,72210,20440,62544,54084,98227,23478,71771,45815,10491,59202,11898,35240,53895,75813,35081,17202,43497,76635,31113,37395,66013,97869,77711,46927,35532,66384,89474,68554,99846,32184,67289,31422,98624,38877,20166,36777,38124,58832,46361,56974,34903,49504,60049,61128,61850,81551,17652,22933,45460,72695,71815,54408,30881,57397,38683,24744,66134,94653,56375,14743,67272,69562,41708,41983,47553,70501,91698,91068,83098,27878,49887,54281,60892,72566,61424,85140,41342,61765,94799,34360,23635,16162,17010,44138,29263,89094,92233,62764,39076,38682,79375,41304,75634,14724,89323,15033,95154,69983,87166,15598,90549,51585,13908,98999,20477,19737,69939,23125,76309,23074,96147,20717,16848,72411,98984,16563,86839,31802,28106,68948,90419,27050,44656,88456,61327,34105,28775,75071,31987,20521,76275,76837,74496,68942,75539,86546,81019,95268,79041,22461,13730,31138,75004,94331,22490,52087,10998,18805,58132,75794,86883,94168,86691,88013,25223,89924,50431,69857,26122,55921,33178,12117,38746,24936,49363,47623,67970,43942,54758,82926,25364,21723,26655,20682,17279,60217,59108,71428,75036,31114,22444,74493,20826,54111,60983,76449,69779,86244,50460,98182,78636,12505,91951,37240,61810,58743,68139,89329,99187,24210,51204,48652,73738,53404,73518,37573,27318,61043,47857,66396,93605,23371,96002,98166,52449,63566,71701,70889,18654,32739,39088,60425,53883,15448,24290,12340,50444,99138,31915,27021,35999,78484,57841,84126,61930,24137,73719,99710,38619,19191,68816,44469,40243,15479,30263,28097,12737,31834,16199,44899,23929,51158,33262,92635,46807,96605,74412,87017,90175,93164,27790,10250,36660,59927,51835,51604,86951,12090,68010,66099,62338,78654,36282,16376,94768,68571,86464,94737,34921,75410,11347,98175,52575,27517,26643,36586,26673,34021,17537,53285,41066,83124,17654,87851,37214,43403,91982,45392,10607,47585,43294,17230,31449,97625,55651,22067,87301,10489,40182,54682,30994,52384,58849,95388,66205,63748,74452,68006,45374,38831,41148,49595,30732,76344,13090,27601,26807,87061,93163,92624,67829,89555,96466,82553,95554,58849,20985,20326,85455,79075,39257,79332,69848,13537,52345,16501,21171,21504,56757,10319,91364,13530,64489,98187,66019,76992,86640,27236,51211,81326,44638,21875,42066,65589,75961,47654,12475,51944,69106,21825,81242,54975,89171,31721,37485,99259,48129,27653,42649,61151,54259,21792,80719,50280,80334,43960,31091,73203,69508,85967,65530,65507,40621,85457,52722,62286,63525,37635,11891,96660,20909,22747,11251,88068,69066,42430,94028,40914,45145,56356,97166,91478,56148,55437,45909,57155,55623,75430,73843,27683,50600,11805,61587,21142,20074,60085,81883,79992,98624,43741,46347,87550,70183,39244,89435,43635,60573,88057,77485,55240,59782,48154,23657,42477,53539,65958,41341,16380,39328,89070,45158,71605,83828,52560,88140,32420,30389,81966,45273,19663,35635,48480,40737,98740,20846,69359,94930,26728,49207,67983,59435,95520,66388,23215,17566,27650,31136,17806,91635,34653,85566,66038,77732,58359,90842,99643,39927,48316,51817,76451,95902,74793,28652,64106,77760,77717,92702,39612,19421,14498,25885,48019,93654,74378,89078,11606,76566,89941,77277,35907,64309,55976,35954,68511,31082,35585,64134,99394,21340,37940,22440,27746,14019,78077,78189,95935,54610,91082,39467,80599,63309,56076,62749,71935,90789,37831,38092,27232,34028,14274,78851,81934,62087,31953,55618,13967,41189,49979,94454,22497,97135,43444,51429,44301,52782,44622,30751,43126,66116,11984,68136,86578,67541,83542,78112,38793,62059,46747,23683,26040,38568,90937,62496,93309,83884,66065,82181,90033,62695,62899,24124,91307,83888,22155,89075,88880,43186,41790,91672,37290,33493,62131,68252,44951,25033,32711,87855,68746,18383,62150,42538,78785,27275,94235,91418,31106,22551,29989,33377,52200,37034,20277,55818,30662,99489,67940,53234,27334,61553,20643,78364,79011,13971,48782,87246,75999,27522,68281,88445,11138,11608,69291,84769,55818,10098,28245,37243,50806,29133,33966,78258,90183,84507,79177,56648,22954,69508,19996,24330,87508,65826,77499,97865,40918,31619,46540,69575,17120,64207,88254,94063,94466,45759,69230,17392,86502,99151,62309,56221,21630,75828,95641,68361,61743,28671,99887,70203,70192,32968,60896,67807,48599,45930,11697,41132,23486,43175,45830,30013,88194,78252,90393,66330,84897,71177,97677,70484,36582,76473,94785,75001,77703,74321,57998,36236,78205,91103,17701,34046,57357,52496,65988,90694,11774,93142,95360,60466,73291,82956,16923,73211,30089,83598,10566,61261,13169,81444,14151,73176,56519,20499,67303,44937,75539,60909,33556,75976,89934,84414,77686,76055,47485,98267,32587,42207,70568,14480,99602,94941,59479,44185,63238,86613,77439,21170,20144,59140,46564,66536,47299,83647,93534,44196,63069,79413,89940,51020,49475,71914,40808,12885,30257,38835,80184,12647,38810,27724,56730,84848,56011,87459,45842,36899,63701,33434,90836,53122,79276,66032,19816,67922,51237,65184,62178,43484,69784,34162,26740,81432,92193,85890,53247,82882,18070,19941,49438,57892,23748,17758,49708,35043,20726,29302,86553,12621,76019,48866,14409,56583,67368,99341,90961,83021,36253,16517,25540,80790,92779,47598,82913,85121,75512,85382,31649,93062,37807,35558,48388,69350,99497,74176,71355,70459,20145,23069,77077,20817,92907,52021,48123,89615,67914,36507,46507,51676,76548,37652,80634,11468,82481,91685,90255,75781,11433,84849,32725,89325,92721,74293,82022,66450,45055,35687,13762,41091,61896,79324,13186,58572,19427,70568,49076,32059,14372,20970,26167,22762,51561,29334,25119,40600,58221,49559,61204,74768,64948,28360,80676,19707,76702,72443,84379,31296,49227,52128,64003,22430,32372,62018,27755,81376,22473,21470,20499,61962,14763,84997,30692,45959,61906,70392,26000,95799,39385,87116,40301,43547,43880,52652,15065,56076,66670,79866,80999,94122,14479,86667,80460,60237,29670,68533,33234,87455,29496,91510,55543,76395,80346,23637,16427,76026,17909,81139,39780,92698,56146,43284,28409,17011,25983,50421,57682,20809,47576,86728,85756,90390,59115,13039,31441,90024,78735,52545,32110,64958,39265,20556,60204,16321,22292,99170,29730,76224,41805,95480,74410,64165,90963,26523,16510,15940,34314,38040,81311,11265,52792,93335,78158,54525,16095,52944,58988,78632,23137,76505,32172,54088,52832,19487,93665,49737,43488,80695,40923,82677,22389,60656,27445,96755,10019,78163,10853,27403,13825,94077,47411,91846,37759,35178,69232,61887,86888,67218,52558,70064,82384,98746,67317,36063,31879,85341,32311,70467,64041,67155,74576,77991,57063,72980,25239,23264,90445,93747,61186,40895,31290,10110,76584,57728,66248,24141,32014,23337,38536,92989,97556,60985,51431,58446,17566,49424,43691,20880,56319,77666,96445,35728,69047,66566,56275,31375,87310,23869,12871,14438,42255,33908,59654,48070,84246,65274,67470,77581,27754,50697,41782,32334,48068,89339,64105,56820,62675,82391,59449,62516,18535,73200,91305,60170,85766,88302,31586,38514,16352,94566,78607,89044,49522,94243,53083,25638,84947,67812,74217,36975,61969,37838,42772,58523,17025,52855,74125,99148,91876,45712,15706,53605,44419,79375,63779,99483,25337,25344,48609,30893,66271,19267,85616,72100,23875,81225,63149,95062,52671,66182,59640,25234,48079,34865,45450,38369,35256,75948,54953,28321,38940,88165,47110,61439,45115,77501,31687,72620,51463,37370,86879,10682,80787,24317,36472,22777,23285,88747,62094,26051,65703,51272,22259,19623,38698,29719,37805,31382,65965,27652,99868,39298,86585,85805,93333,24408,70680,40085,11641,48083,31578,95007,41408,37381,82800,94994,28523,53170,44241,42633,25668,60595,91283,76477,39601,64410,15462,11771,80412,40196,37225,88748,83980,38558,16639,40154,72706,66897,91424,78383,61295,33501,84433,50487,68134,99502,53748,70915,13393,35179,34873,15074,20087,11050,29495,79667,57871,50334,65685,29152,36414,99857,30708,37526,18351,39321,68468,97645,84252,68605,21278,55634,26019,80176,91962,21479,16383,79054,90332,86250,31369,21435,22717,35870,69463,33667,88069,34903,15257,75076,87877,69688,23677,13590,27953,44989,82439,81086,27790,20676,76338,63317,15198,49636,34547,88407,38728,82109,61504,94047,35251,79444,70740,48392,22390,65971,12581,63414,58055,72075,91904,94078,34855,31788,15938,37490,41606,39065,87368,34550,45189,14543,88974,83253,74482,40743,11758,31633,78726,43307,46697,70550,43445,88045,89485,44548,95355,96752,42323,96956,61217,27269,79843,41098,61456,61468,65825,63211,58214,14447,26935,30871,66623,31305,15511,31474,95158,82968,81527,81958,46347,13907,57317,35570,21279,77892,59900,81975,95381,86343,38309,17699,59610,53591,82159,55617,38186,27690,96795,50117,86990,73225,30263,83407,44482,15506,53139,24722,80064,97710,21451,91635,30899,66871,68858,12280,15176,75010,92671,77661,16594,48944,62674,28533,70206,25061,58604,85822,75259,37796,11902,35183,44114,42085,26826,37125,77285,42236,46841,36076,40241,96470,22106,46383,34193,90573,20230,58642,29857,36274,11724,34495,34437,25987,89384,87815,60678,44136,98046,87456,76088,62316,99754,33466,93405,36277,23041,27187,38220,15290,62600,41221,93727,58088,45279,52745,15160,91066,92430,29649,77256,43541,90487,70734,81068,56600,90123,23516,94376,25432,25425,83390,35251,79840,81558,35675,97679,76455,36679,93869,64266,75153,34655,93640,75299,15034,95086,80088,93252,89837,54971,15697,92604,64352,61638,25456,83165,42578,31022,48511,16363,81548,80177,16541,19737,83286,22427,24400,67607,76862,13838,30925,76712,51726,68033,65780,32361,90622,69169,32327,19298,61503,65882,49347,55818,59262,26872,36278,77731,31789,56788,80942,39595,97051,72464,60237,95127,45783,94236,21193,39169,82809,25070,11340,81257,85753,26518,35684,14622,50602,53199,75633,76660,34189,15247,77893,75989,32104,40083,34207,47350,73031,44130,35730,89000,52888,53231,99341,76659,98721,20223,16131,69784,81731,44091,35739,52857,33021,85449,70435,87016,83540,28113,54010,18513,48341,61364,45008,59224,65157,63755,88294,89872,74433,42146,82214,21857,84163,28761,73135,73701,69651,57704,72305,52077,79865,34749,75429,25402,45146,32721,56926,48953,76549,89326,97266,29105,96690,57801,81127,85690,47135,87638,76025,40718,53269,59805,63125,19913,61058,58003,86951,18265,99731,21301,49822,64331,14774,12165,75694,78562,49826,11645,64477,52167,39748,81637,60954,62327,47291,74609,28683,10543,80775,59146,45329,88754,30882,17701,12015,90549,88298,49637,89834,86376,24886,46875,95321,98089,64387,91241,57199,74978,54945,75162,69772,40743,54884,63605,20353,64829,73175,82307,95432,49042,45719,73680,23312,91806,70784,78139,30665,30412,55427,86332,17159,56952,22345,46714,24821,28983,65869,26998,85217,67168,72436,80533,15178,50345,50714,76717,95364,61134,65017,61639,55047,59064,76635,70692,32497,25905,79276,67935,18673,56064,29523,34719,62360,27565,79494,27741,51881,50430,47238,44186,45906,37957,18220,47392,95804,56910,78334,31187,59598,47089,80333,83096,36846,87269,22909,16072,31884,20835,68678,91201,90550,71124,79076,92615,89705,83179,64378,45918,92492,92825,86411,22330,10809,57896,30333,81171,17503,99516,90786,16479,74653,13039,37896,68764,99249,82083,30509,35438,91362,37240,49004,19238,89915,24401,57118,83210,38930,44732,26326,20289,77809,83464,47967,28957,29164,18934,77787,15366,91201,30993,90569,76409,19824,27788,80821,49269,12418,12946,15619,21594,54131,76584,27097,12664,27589,16339,19086,61909,66701,19183,79562,29733,16810,38614,75863,35603,99889,31335,84776,21382,13192,19881,32222,63387,10595,73671,28854,54597,11184,52804,95867,80467,37851,18378,48806,84236,62073,53756,30710,12046,76311,66027,94697,69710,73622,43057,38800,77912,68473,39052,45657,75294,31159,90865,28720,52634,65463,41227,62583,92742,87453,34131,88157,55398,12548,20561,48200,58277,66801,51993,88780,91542,26595,86427,27786,37042,61204,18195,99337,28387,27441,63181,41851,79936,48391,23106,23247,82147,16579,43484,45137,30854,44654,64227,41732,52885,17252,86791,79650,31379,73118,49282,47007,26315,92860,21933,60837,32451,37807,10774,52579,94047,85327,43234,28347,20994,38043,35104,34962,19319,95745,80514,67901,26660,68211,35911,21828,67570,17229,18881,56819,69877,34604,55589,25503,10704,20540,76310,77346,40764,87538,13732,98580,74589,63939,91528,47980,67680,60451,76007,30563,95427,39453,54544,24695,26166,53832,53789,73255,44044,17180,77169,17832,28965,81595,18059,12268,93854,16967,36687,49178,78228,19500,48066,58498,28845,83589,93434,20337,25113,20270,79027,58319,78623,22082,10912,66675,72645,43022,82916,50248,27017,88132,58021,18416,43064,80008,45755,96413,89729,52461,58571,58671,95534,86104,89580,26685,13855,36466,21641,61645,59145,99545,61771,50465,37381,50777,94951,90533,36437,82277,15311,73058,59378,77309,18907,54768,26086,29876,92356,85242,60027,33078,66078,88288,68775,51304,55168,89488,57490,81970,33152,73004,76379,30011,48752,66416,54990,77431,67012,84530,11885,43258,25013,66380,24442,94662,44261,28165,51662,74120,94586,74694,38787,91855,99327,76164,72746,54911,53984,94925,39238,83683,88304,82957,30898,33803,43503,70620,49977,72333,52065,91331,57044,89748,50970,70113,81243,47552,85101,93092,20178,64574,64996,10824,38901,29762,70290,75601,92477,53048,46550,87532,47661,30206,55803,91380,81840,60446,46637,24921,12035,68099,67232,25075,14958,68884,92867,43568,93220,65019,82271,91544,59205,56813,77316,24672,73585,93222,94841,97383,46368,59323,37351,28712,34835,99039,98340,68236,10546,76983,71979,79930,15318,69865,56740,76123,67499,34225,53553,66923,28627,45903,97484,80631,57098,90146,57621,38100,79398,20073,44470,84493,31567,19462,93424,90031,72258,84878,44387,67085,10997,10641,47133,45656,48781,78516,59313,47715,39112,99053,62065,31320,68355,94878,14128,72092,62065,32811,63963,18007,88306,75432,64483,61457,94781,16499,16685,99255,79950,94729,11705,65870,98256,50241,80411,19939,48060,28165,27400,92321,74815,25801,66209,43322,68889,16642,78266,64086,21394,88682,93577,81787,94288,40632,86167,19171,52415,90095,24012,98543,49450,92441,57712,91864,97938,57917,42035,14496,59129,74515,11897,70728,13988,91396,48557,61244,52716,43893,76439,14694,88166,53071,17039,17905,80985,66423,74246,14292,85006,51649,46481,96804,89860,52346,45353,87011,16946,44385,31857,99492,29126,97357,38935,45891,41541,98900,21647,17216,21796,47632,10413,15381,87860,80294,14927,82505,68493,80755,79265,35692,28966,12362,88627,97742,50785,28965,48166,63646,44811,91464,91746,92559,46959,89403,46388,20174,18938,70437,99871,16470,37524,54487,56352,38099,84973,60723,20555,30842,47093,15834,87401,83155,26770,91390,73806,40923,58174,19341,75231,49688,80824,38837,62225,44737,90045,18123,45244,62509,62368,46517,80969,26051,66777,11010,82497,15056,36485,71868,39033,88536,85975,39466,21295,82866,42778,12622,97224,21096,21487,68778,14814,62632,97344,51848,47563,89316,92243,12466,41095,47859,52107,19528,81012,46831,96618,52324,91465,55904,25946,78492,20705,61707,57127,82879,75226,99653,47735,18825,45712,10183,38476,73613,45756,32542,26029,38306,37901,95109,49042,15153,10698,36234,32054,58473,82813,81783,70580,28191,85568,59226,70607,41308,52315,20101,76032,45455,99770,28620,30738,98227,81378,79515,19447,99180,82016,39686,34156,68611,71944,34071,85235,61230,89791,66786,63277,14009,66973,68107,16976,52656,87276,73089,70288,75632,91619,42241,73928,46826,26319,45302,36082,39627,33889,77385,45360,70399,30010,75396,50071,42299,45144,56385,56732,29395,20578,45279,30136,44459,48705,81102,27607,53556,19639,69348,37479,82993,41259,42801,81510,34396,76191,93972,94943,53511,25026,48194,52417,39723,46579,89289,98246,99608,37551,78635,51121,93806,81487,19253,56464,48617,19915,17598,98196,72318,55360,43294,34128,87362,63090,84100,67607,31583,41172,16094,33257,46008,31573,90074,75311,43150,54154,24421,73780,75716,59483,73759,71345,16122,72674,26977,81337,31125,65684,58273,65900,98258,30402,18931,38600,69600,65250,94695,61942,29015,92162,72449,42818,89754,79839,49202,48096,58570,42264,59857,73814,55260,79592,80606,62308,69473,88315,98018,85695,29933,98011,54598,16527,94254,35818,29641,45424,49349,57638,23433,82594,67411,83696,67952,50964,52863,10440,95067,35539,64318,13172,27083,60156,10856,57321,84831,20622,35661,46011,51723,95349,44052,45425,42389,84838,75321,64316,78187,18720,13581,34896,95930,87236,12645,44503,90619,10910,17200,84110,71620,37229,40746,53328,87424,95367,36710,22404,69873,26536,19432,89714,10628,55868,87938,48070,35436,31507,57809,50947,17648,30994,73702,18861,70353,87285,37398,77529,67763,58931,70007,99112,53373,24509,16840,66666,86163,79405,26139,74317,80727,69599,46753,13533,91968,21402,37838,47884,56862,62935,60315,54837,79750,61762,68140,36830,23127,62979,25282,26877,48296,95821,70765,50065,63160,50120,61460,52697,61606,84012,28872,85074,34246,60975,34365,15525,90273,27916,68789,81275,76366,38716,91722,61292,72237,30016,54126,22739,25496,29268,99109,57461,64683,67645,46408,83042,39742,10373,62076,59297,13753,48222,49490,48671,83382,41767,92670,39534,29664,53059,18076,24224,35083,45945,92167,11321,35006,21442,14839,36289,14078,67412,52237,97817,40568,64746,89368,74750,96653,25585,21201,98250,55569,14102,15538,25411,66678,80776,71548,91987,87654,72900,46681,40185,65597,44798,80926,95024,28184,73423,93580,92012,60921,14423,50023,53818,88893,20299,78905,20610,77844,99373,35844,21417,55150,62340,50500,71739,83571,54534,52956,87425,38295,26498,55585,32796,19698,59342,83734,17645,68973,66411,37388,40373,57325,64025,61027,20102,70534,37042,73433,16559,58612,74841,84451,44504,90797,77716,50243,60822,91841,35072,77120,56141,91547,72290,43042,53959,87251,54423,47990,85274,76418,25848,72835,19769,90732,70540,44411,29334,26404,84694,70244,12824,91312,36382,18597,91292,59192,34424,41293,32314,90159,47860,78565,60594,29711,14180,39195,75049,75078,54395,79018,43915,55929,74675,26839,28243,20133,98791,82281,84716,55102,99059,15611,21307,54284,25570,51614,59689,87302,27676,97741,83324,93699,68731,70851,14763,48459,29254,78949,82808,30799,66011,50317,77264,91107,74781,38106,59222,78300,71713,67938,10899,18154,76898,43005,72706,94603,17556,53911,95685,67645,99287,23102,51836,45757,66515,17005,44136,38887,73991,42912,67582,68283,91175,13523,99164,85841,68300,63165,14052,40062,35788,58406,79803,35107,21800,59263,94294,52893,72612,19862,12045,21968,34313,80918,66258,80371,62243,23277,51374,99175,85959,32581,61424,89455,75308,24158,14209,51477,61028,20582,95670,79212,80763,61480,90025,30991,88653,30183,44672,77568,87589,21501,68250,77693,42259,40626,74368,18243,67387,46473,53913,25058,28384,75348,84476,15544,88817,56622,15826,65057,93600,30943,41805,44397,75119,86645,73424,97366,45270,43711,24243,42823,37846,13714,20862,50772,23693,89222,33350,81966,10121,21318,20781,15352,24626,94069,77016,72968,32568,99017,26606,96878,73047,11173,27286,68545,92752,34046,40833,27454,41541,71162,88945,70511,42843,49790,35589,80076,32902,24423,27261,49835,62621,37414,88201,37495,59817,80129,64588,68027,87831,68616,66910,95913,87128,85027,27048,56318,61398,60721,65423,98222,57119,62652,31085,94461,11093,49116,72137,83658,93719,14994,69730,38965,56729,95687,55204,56954,38112,25477,50549,95703,13969,55195,91751,87548,24774,97797,59600,82871,75548,28911,33147,21468,40929,61749,76527,98158,15499,60802,70747,10518,17978,25939,27338,38389,43266,33047,69068,21551,75008,96269,50968,79633,94595,52501,90481,26189,97416,73560,48982,52977,65597,63499,12851,40838,10902,60934,85448,71871,73298,69821,61773,74361,29226,56785,60745,63108,99927,49271,64720,33563,79545,88377,86527,58615,15049,60058,89970,43315,68102,75837,15812,97964,79675,15126,19462,16909,10963,38921,19490,47411,12778,44729,62418,24048,11208,32967,80886,36656,63803,14720,12522,64552,32889,81023,81828,41739,84864,53238,57467,49225,68165,94958,19059,48609,77072,59316,36012,48600,33944,18620,35718,51588,59212,16418,55620,67993,39444,96198,21380,43548,79102,88621,41319,14646,20437,35720,97410,38435,36987,34857,99859,93296,73699,92235,13846,71360,98980,71747,99114,40623,84320,38512,39958,90362,50571,34465,20841,84068,86487,27749,11235,75317,18582,26393,65865,54711,54571,65072,83853,17784,26622,34307,36559,31163,42518,63151,80699,23548,95147,84781,86146,50690,54895,84067,51808,55126,88688,74863,52164,36272,20770,29152,78382,26164,39733,57005,21369,40413,57107,58659,62193,13263,30171,49226,92479,99036,44944,76327,41637,14379,35801,23961,45458,66970,73164,96527,94267,61642,88245,81999,57832,63337,31656,50193,51024,62457,49160,22972,13253,16060,92083,80790,33969,90983,27556,29897,58680,83250,99712,16137,67582,52168,68991,59595,91043,53117,19638,81384,77408,18446,70818,54073,20499,81656,97137,91036,81222,26241,85941,85889,31693,55067,97169,83855,60149,68831,57153,22358,23308,22239,88084,17764,89045,89094,95155,51156,40939,74220,26988,75049,35494,15049,34507,90100,48347,32670,69387,40158,30188,60906,71467,60297,88014,78856,23271,54811,44928,10940,16992,72446,14590,77056,18486,94730,61162,91181,70063,96438,19350,42277,17240,33542,60857,14874,99905,29542,69786,93070,78180,88000,61755,38407,88645,24794,18198,36036,37253,68061,71367,44282,13781,85177,72083,35943,20085,13309,58422,59865,27783,27478,77588,24279,93195,70596,95378,19633,58668,83808,23126,99736,60684,16121,32460,40692,22075,21127,18825,63611,86277,31027,82752,66006,66510,76259,48163,30004,39946,97694,12304,78722,36048,38798,40602,30357,63624,31026,83291,75055,25201,21808,44200,71445,99382,51443,92232,70213,54862,28179,52959,25128,85637,12369,79788,29964,47233,30810,85736,80502,68063,39240,71662,70440,56653,53798,89759,26707,37471,50560,68591,15426,21060,97249,71088,45719,13419,29199,39578,50737,16973,14599,51327,85805,72735,89066,54792,29487,22977,36369,77528,59332,49898,36574,78379,64327,99993,35193,83559,50475,12266,74665,69377,52669,21333,39949,12912,30540,14240,30657,70223,12708,13715,60779,89964,34713,39763,21828,84794,36574,19857,82045,16372,90919,63339,63622,61300,98147,58791,70783,20681,55646,98049,53700,96757,20546,29497,46469,13975,83207,80466,93650,51266,53030,94044,37281,21997,58939,74914,52497,85206,73637,19933,95591,63310,60933,87409,82147,36016,39503,27990,65895,95537,16353,38251,59449,63440,22414,14072,35358,82607,39949,10696,89475,33376,57912,50082,72949,49768,12982,21133,76473,79022,37423,13083,19439,48799,20700,40454,90165,14433,13070,16937,67826,62732,65465,65710,41154,58997,27687,21993,52119,75783,64985,46953,31293,14551,29433,31788,86499,94165,44709,98411,29436,32787,60145,32260,93817,73799,30472,66237,48472,94885,25821,78736,28082,31307,25498,52256,59717,22915,99096,13489,31477,85632,31780,56171,19344,60219,44314,26596,29014,75706,44449,38623,33195,67561,85810,99441,62828,47631,70608,17061,48088,69807,56244,68186,68248,66940,60477,86445,96141,14512,76719,92121,88332,35828,34051,13314,93858,67773,64664,72711,61006,34742,82535,33545,64686,56937,38564,56688,31990,37617,71239,32362,42920,49617,97116,52851,74507,92546,94242,68619,64226,35745,21417,52248,64142,58431,91419,40282,87750,32756,68691,56471,72931,80328,26084,51139,22729,74185,77330,13409,66382,43565,28284,15763,31349,51308,97466,75296,46844,38702,97497,32327,59636,13889,52026,47819,54994,84919,65450,80439,97267,85455,36869,66370,28096,59679,37284,71187,27042,55031,61097,27692,23246,35973,82532,69505,66015,69149,29468,25375,51619,47512,68529,77970,95241,36235,22845,53914,53043,53620,18775,53937,81634,71868,71208,67983,53544,71576,45168,51273,71385,83011,64282,58626,35273,91014,13913,85053,61773,85280,40781,51499,49489,53791,91492,21260,42237,53522,62468,68946,15147,35087,68135,26420,65125,60207,94133,97945,64683,53417,80194,53660,67503,59262,14933,38873,89223,99814,92225,72119,33848,75333,87163,23419,77228,80048,61720,61494,73067,74447,29435,81932,41422,80848,81619,33641,37712,76696,81462,75666,16135,63048,60251,75895,21680,60311,27356,91168,56208,55025,97709,37552,90407,91932,96046,41143,50011,62044,76363,88126,91645,90655,59710,27832,69333,65756,96697,10851,47551,73279,38972,61244,25974,30253,88243,10131,65973,43050,66646,17921,36876,62093,78677,93954,50512,55586,99487,80689,70601,71603,77048,31524,91116,60089,59309,58040,40705,67270,86835,65592,72060,72591,24511,79275,43528,28098,76770,28371,98952,22220,92944,83430,82059,88340,62543,51282,70364,54599,73567,89559,77466,55140,52870,18585,27313,62655,16962,34161,85249,78239,68683,16712,57374,86095,66465,82352,95127,80701,56075,96621,90345,51902,44479,40968,77886,96552,12189,48545,56113,69866,65931,57330,62764,66173,62585,26191,66342,35426,53691,40654,37660,44801,86770,96801,37815,93322,66583,89437,70148,34044,35233,19799,59762,13673,58086,13112,50271,87168,13369,79137,77351,32675,56422,69709,34569,50078,83940,63577,76766,31727,72300,63946,65479,17451,38327,59910,40197,41818,69300,56946,38579,14378,83405,21754,64807,53179,95426,10550,15893,44994,46942,47859,55962,41773,51474,51833,32591,72502,21150,61082,42398,25705,25419,34320,68245,63426,25200,27354,29628,94112,61107,25628,43168,45576,42546,95703,95506,32739,85298,18073,71860,67045,59213,11260,16316,76762,56283,80935,11866,64735,33789,49080,31747,94300,29136,41958,13426,98875,60976,31263,88183,10529,21985,47115,91229,67149,16371,76732,92815,26619,87709,12637,23787,57157,38690,99364,97393,28743,26703,22444,84813,16415,30375,86552,44998,49322,56315,21725,92040,98864,92919,49851,35717,38981,85328,54167,86767,15932,78433,45279,59446,69290,19550,95071,86983,81729,63817,71015,11626,94785,71535,30663,60508,67917,47631,65623,24918,77524,71588,54889,51013,62716,34669,44520,58118,10692,72763,77440,80788,43976,81397,26355,91446,63478,49795,41427,76485,48871,21086,34593,32467,73039,56997,24569,88870,32979,63770,34540,18136,85778,31061,60381,88984,43782,86121,33662,55612,68572,74327,21845,67831,62111,40416,98774,99304,10281,42144,80075,15194,62996,22883,33248,67141,50705,71813,80970,13160,12725,67654,36970,30350,69962,85880,96785,38614,41162,65255,85181,99429,92740,38251,68804,40867,30189,23743,20853,26110,23001,90696,95714,84267,97677,45996,24516,36066,77038,56473,97039,22992,62255,62968,30792,27064,32109,31984,22113,80007,30497,99282,92470,61613,60699,94612,87650,53736,47099,61773,50835,54898,55161,48121,64930,77420,77167,50489,57176,72270,51072,47619,98024,93650,74444,46818,35590,82935,89380,88315,30997,58811,62409,42019,57794,31475,16227,12138,57517,78652,92821,97456,44323,81408,19850,91804,13597,63560,26986,82599,30431,54156,50955,31559,27379,87544,74446,79374,34015,27302,55237,97215,80285,14125,42124,32070,91296,94771,96407,22159,87102,79247,34167,92475,99930,73246,92173,83091,12348,74414,56045,38564,51149,32070,30706,47813,78175,55124,48146,27675,12430,85316,59421,81853,73144,52782,87942,49560,81441,54418,50332,42462,40633,28060,46977,89642,44765,91969,35640,11545,31583,20172,52442,41686,30193,73976,19237,12547,50470,59436,16560,52532,80748,69135,72499,48229,35706,53873,60943,58217,15836,42987,24634,50614,69510,10960,88816,17407,39707,88985,99534,41937,31017,73414,35940,30008,90930,75559,63940,31423,25447,97276,47430,60367,96617,85609,35906,42266,86390,44418,74466,69890,98010,10142,71599,22068,88221,92263,31522,35759,24115,28887,96242,62519,95968,44217,47534,85116,78445,99420,23646,63155,31363,27513,69591,48597,82468,90073,53599,29729,94332,50548,21039,98913,71645,71482,65339,59609,97650,86484,17354,59180,51091,57350,60690,45225,22535,44873,69956,15910,35432,94712,92942,38143,32162,94212,88374,98895,45835,39403,64695,67961,22773,61567,63230,65402,96052,29393,67014,49034,25535,49799,84541,99395,93663,22411,86517,65181,20279,56797,19904,88809,74664,18050,88479,15209,89767,74921,12140,71151,72266,92570,82569,71207,85115,91360,95883,89980,58087,74174,88269,40261,19896,53039,81716,99628,30408,86642,84165,26575,92045,34637,77459,69895,35630,48739,58400,89999,62946,55719,71817,60222,96720,99532,78425,99732,30928,87856,41794,84474,15242,44398,47659,98517,60147,26012,22832,74781,79622,92572,21250,48715,76298,11699,50410,24979,75070,41145,87092,37884,53129,63524,72588,83773,92029,96361,10563,74397,96505,36673,66856,93914,35177,10209,10964,60009,37662,74489,62557,91316,77133,23665,62746,58074,73006,41999,64628,31506,78938,64797,43307,26896,28773,69765,78893,76690,82830,86294,17771,34521,58593,97413,46315,68735,84735,93640,13797,17898,96581,33757,82410,96145,81490,38826,91308,49787,32261,68019,44559,51838,21061,95136,67048,65747,86642,27827,12247,21734,21499,30119,32797,31703,33347,86755,56004,59579,84914,64185,98043,97727,67271,72436,76106,94789,80799,57183,85035,11886,14590,81719,27153,24095,16106,80404,16150,58429,96753,28272,10569,16648,57325,54814,21518,43449,60639,96935,33800,45068,43020,80895,44502,42443,53726,38170,77494,91630,85359,77541,42545,65368,34193,22155,89154,75307,90779,84497,34039,98339,59136,69171,36532,29948,41544,50118,41888,65673,49167,38372,25303,42875,38623,48034,15350,96666,40641,40020,19713,30276,36567,69633,77725,87820,23321,50225,22439,19729,37001,49207,40668,78915,56221,33155,22133,36300,54720,81528,46766,35931,77078,30962,48476,81683,61583,27700,83771,20981,93870,90272,24534,86605,39676,21411,72102,59643,28824,83388,57525,13016,31401,73670,25678,57261,97447,56137,77262,65312,54328,12192,82720,35623,90546,15856,12726,50697,20409,80318,48571,62535,47542,62719,93006,25967,15342,53622,15810,76321,70890,84274,94217,44187,29016,82387,59745,36636,94645,60091,92247,13238,29052,88249,27447,80100,58605,22794,11906,39440,11488,68101,89774,34084,34661,28017,55641,34119,95206,40915,99837,72845,18856,52539,51491,71986,24912,43377,45686,21566,11352,96855,72902,54523,55045,37222,10981,83324,24562,47371,59628,15271,86358,36149,22048,98783,17230,47935,59436,88521,93213,95250,41191,78420,83910,83966,39449,63637,61672,11004,35338,98030,73282,79325,61929,36518,35423,87928,43723,90648,69367,81355,29693,27076,32103,61514,85577,82314,29514,45474,73051,73138,94380,92112,88278,68193,97984,41521,51935,69393,19277,50479,39036,34158,46312,48258,12580,71788,51717,61502,85877,87452,63935,21335,57701,78340,46207,90514,47633,59165,56290,97640,14124,38005,44549,84126,95752,63778,37567,33439,54587,77571,65934,97163,15694,50921,26150,99955,45862,35568,51712,49834,49942,16290,47057,43023,45473,89290,60252,63459,16772,62108,74272,59327,22938,35224,54128,86484,97879,31075,35549,48355,30487,28804,38203,56176,98722,79781,71100,74745,55078,30153,13645,77978,73397,61514,48413,55133,41567,99155,64252,67596,66072,99753,47106,89935,10598,73726,47718,43115,52450,18879,84270,14346,21631,86673,57227,19454,29468,75667,51716,28700,75538,25876,62300,15008,58733,53772,19012,62639,55296,66707,73529,62623,61419,93904,32298,97577,75003,62815,85979,87877,55664,16252,80855,51179,96331,35832,46036,51191,91175,79437,40956,23944,35535,65367,69596,63380,58951,57291,99488,94393,22812,84628,28140,39100,74712,80155,31885,50543,38173,60372,59446,58006,85440,77759,77503,79187,55421,90934,59059,12448,19866,36736,32296,14967,43899,32819,96552,20260,12223,85576,60689,95427,62191,23520,95182,59463,45960,20376,40673,82386,14518,35301,92118,43500,33011,70432,62182,81619,11206,65536,80593,68155,60302,59466,47583,15185,23575,42490,96514,71743,73607,60237,88206,17959,91003,32914,18833,81628,29835,73892,51860,74277,32742,40917,52914,87141,14728,13216,11982,38008,76826,30591,30724,68880,39695,95701,16753,39909,25511,27000,69653,68881,39561,61830,78099,26844,94470,23993,25304,64435,35516,38621,54228,58137,90458,93028,36273,41406,50097,60857,43031,12404,64142,95240,51079,12069,93062,86543,10957,62771,27953,87177,79026,60035,46915,31948,67798,63691,26448,19714,64783,68196,11083,99112,89630,89788,93070,98621,70894,54020,65828,41636,74021,18461,84108,75087,98604,72188,18911,81162,96624,69293,44073,50898,55881,72360,73133,24731,10208,45836,51084,73693,16111,93112,53452,48954,56120,46298,26948,52740,60666,29691,13840,12691,59040,71243,14691,80612,27543,82600,98543,12146,53942,62622,16769,56042,91979,96945,31938,29102,12349,14168,99680,28229,53341,43416,36060,26566,60414,30120,18548,17815,90817,25174,38421,73109,38173,27397,43502,63494,94412,71831,41757,93821,55495,23507,83950,55039,85851,56687,48678,66662,52107,73763,45189,82557,55112,66268,97874,52985,68124,18516,48544,88077,28301,36980,60682,58875,47066,70343,72177,32601,44467,93215,78353,55979,80953,28534,38879,70033,58175,69451,76703,17554,74552,75111,32773,97256,81107,65024,50935,21632,32667,51767,76190,92333,12982,50152,51331,73553,33035,52717,70242,22130,99031,11313,42288,93444,62218,11971,90497,67382,86102,41426,96381,35037,10104,27796,38361,51242,75296,54803,97808,25697,60555,49936,76511,91283,41288,42145,73179,53158,11781,26398,49129,48610,43687,89863,87257,58158,90944,58092,94451,80367,43297,13015,89127,17439,94220,71294,41023,25794,75632,85849,51792,53818,69847,28718,17354,94360,94538,62002,97994,79637,73180,75490,92296,63278,53328,76905,88633,65101,70391,75565,28516,32806,59866,47391,22422,95930,50610,47849,29361,85887,92355,17226,31723,14528,32815,39900,77634,89136,77978,31983,88309,62154,55536,20342,40883,32977,89944,79237,18623,51454,47078,62202,44072,13147,87898,44546,60603,50719,43217,94280,32864,76349,16874,36075,87719,50366,57325,37478,24734,94879,82608,98018,96414,59619,32449,60148,70993,66793,74414,44002,70982,40121,92037,75675,53164,62626,10322,47590,54722,18727,62700,86366,30116,40784,48973,68219,41399,78140,15803,59480,94304,61310,85077,47220,19811,43020,91302,69860,96403,48884,16765,36086,19218,85317,50135,23634,15283,51694,62112,51770,22241,63902,22449,67810,35618,16031,25342,47050,92994,46130,99678,56162,57573,77747,23633,85399,97734,73972,31386,31817,42191,64346,49332,48633,44322,74418,69161,65241,39873,26833,53750,64911,87205,84502,93537,29670,22754,78942,41025,10409,84717,68106,48403,15293,96094,10356,14161,92975,81004,40680,87122,96476,43474,11008,36189,12307,99101,24135,66157,49060,22709,22869,54079,60893,52511,80384,87347,43651,35001,30156,67443,78707,31388,51819,65635,34495,51868,78735,31864,95015,70575,22732,16805,46439,79962,29705,29183,88015,66296,75446,51192,57215,89425,52844,61183,30106,16468,32408,59087,86576,11923,36492,93386,58888,30976,10429,14582,64744,53489,40024,55607,96154,68815,52157,55579,33551,55980,61808,98177,80347,74673,88816,90331,13603,40041,91533,15008,20787,98693,45478,44333,10716,13145,19737,17250,80153,84372,69764,23824,27501,18320,35955,51970,65217,22278,63348,95602,51398,44078,21139,25920,10648,71474,47725,35155,54856,89154,38879,39862,61909,21783,60813,48326,99131,17025,78449,24551,27037,41886,17339,35053,14112,11838,86226,52130,75360,15404,61260,86026,64368,24344,76757,78670,33011,63279,27677,66346,53017,13778,73514,79879,26902,58878,99027,44364,56331,87392,67454,91210,84892,56871,99489,61580,40842,10083,84785,49048,98429,45320,33442,55434,87698,90200,19537,49399,13747,93665,16570,92659,89848,95633,85265,34972,37265,35877,35974,85798,10525,44465,89340,21560,22362,37625,31781,21327,46970,48486,38722,48825,23203,64771,97925,23709,35829,53513,86191,27734,74017,61320,96005,24794,78643,47971,24189,18451,20547,38819,75343,70622,72519,36297,50682,47088,63646,17447,80943,81846,24152,45942,94544,32680,81745,48741,83761,38533,65732,14721,38002,86873,45861,89533,18716,25955,68266,76445,61242,10840,84307,73937,90668,85906,35757,93759,63858,81173,89452,92650,44774,44203,46068,41296,23778,42385,26728,70304,29595,57904,90996,68121,64893,16707,86760,93753,36966,56102,44046,27228,21673,91846,12650,33078,93520,73779,39665,79252,12732,64052,21975,98709,96210,71605,19664,28862,29641,35848,64556,71456,20734,47948,14669,72791,43892,84287,42575,71975,85112,18431,12776,48298,19652,82638,27357,14778,93608,64339,26615,26936,98520,90432,86376,38322,92438,58591,29990,42856,47511,10028,60970,16395,88650,95959,54620,11069,24263,68809,27191,27686,92575,78873,13504,91695,36631,88287,76565,64283,69379,92010,48179,62522,87683,95218,85351,96272,71133,27277,95006,70844,49614,43385,63275,48209,54955,90170,92230,69086,83604,17740,82148,55328,39579,78148,44710,47085,38726,95390,81004,64083,15365,66339,41362,49229,95084,63758,12497,57209,89420,32927,61658,87460,56876,34657,45953,62499,72660,82239,74954,71267,41128,65678,72165,69573,32201,98707,79732,81390,33429,16008,42233,10843,27406,55402,25303,69138,88386,61451,26636,13619,51543,63097,43580,27296,96655,87087,53252,70134,75318,26311,99211,59143,68811,59886,24100,16002,14438,61468,17132,78678,17385,94682,93178,47811,14970,68856,18130,13126,65042,95093,61281,55075,27828,90825,16530,75272,80704,90097,16292,98084,59366,77471,83170,81075,75278,74831,56104,29216,13288,90709,70874,28959,16652,75917,21868,10399,55682,64958,25025,90058,49664,11856,27401,13989,20729,72699,11785,48492,67270,99329,80096,11632,73746,50206,19472,68614,90392,40475,87034,97418,64510,33471,59692,46607,45952,26608,50493,88313,49413,67233,87279,20572,72912,57695,58442,97036,82716,12097,58053,21765,90375,96199,78530,63723,85885,26814,40213,52069,25197,83158,40351,83430,44591,34908,86778,27663,69287,22640,49626,71157,88542,59270,20421,96773,29454,24365,76759,64457,86378,20224,17026,22929,39977,10996,67419,49738,31246,43331,29654,36534,34333,53371,11057,63173,25457,54161,22911,27298,72582,41743,17466,57188,39111,78888,87948,12568,56693,25244,29216,48802,48674,58861,53543,58673,93694,47989,90944,36051,56659,62688,25615,14769,59235,26548,89520,77003,94663,28948,35237,68761,47554,73923,31408,52224,83148,64330,59341,79678,33140,39789,84960,74010,44073,77668,29656,20169,48001,81156,26867,29407,76633,23965,63477,36772,38136,51377,54442,37237,69883,68434,78506,80211,60690,27497,59561,68408,99167,55214,25640,69175,40647,14580,19329,20381,92634,18569,28599,99397,29544,24464,74527,20031,22687,92550,11578,97609,64869,91704,61829,61981,88230,51315,24482,15666,35668,89700,52314,79062,32816,18375,10651,34271,17512,60946,49683,93895,50365,65344,82844,98680,82771,53225,24691,85531,36774,63044,34016,27519,69836,80056,10795,36686,15833,67923,74422,89728,59673,25151,58560,41334,53258,15346,26566,74285,38090,72811,84185,52155,52175,35673,18816,30691,64728,69860,34735,74334,23557,76305,58896,10472,10114,99689,34939,96681,46882,84178,93411,37080,91497,74437,93797,79315,50956,89655,93574,81867,21082,31919,93943,17755,73471,95274,49997,68376,94548,45064,47914,36445,17343,51729,71854,18967,22473,97274,58462,53619,55868,62068,95497,69706,28780,47815,91421,65291,73059,23342,45149,65797,39032,10432,93677,60435,67248,96309,62072,60303,16155,57077,40369,18667,83444,33889,21358,25405,50314,45600,82287,86452,13161,59468,67805,81258,37441,27113,93298,30423,77845,32844,30122,89105,90176,60562,71014,12184,34022,46459,19158,79598,78485,83019,99142,21739,63124,52039,95719,50090,33611,90740,19037,92560,90572,93929,56841,17547,62545,59709,55013,63452,51284,59097,59402,51066,94736,68776,21333,54068,23192,88137,10672,91321,78755,93122,19021,67554,69710,24378,40038,44637,72331,12643,98768,29299,86295,44585,53818,63299,68910,62853,99734,65837,83699,66480,87238,36121,84222,57991,66896,37722,33076,80229,70409,11136,66899,39403,34138,61339,51903,21827,77766,22829,96157,55896,39528,44353,15687,95148,23706,11946,56028,61534,70420,92199,68880,20303,15528,94857,18933,98461,81631,80462,12125,50235,46982,37107,91731,40680,25159,52766,87004,51031,69345,46251,61691,25938,73647,47979,91915,90696,97517,43074,73029,98594,61498,48803,74837,16132,38975,22540,45523,61599,72106,14932,73868,68804,99432,69153,68046,60867,36797,39489,71192,41709,48700,75077,75400,73468,72092,19573,97571,57285,33859,46353,21545,37604,97978,29580,91881,37566,67351,87324,75988,34431,36922,40465,93889,70216,43226,61112,68468,22469,42384,49828,36743,52676,25110,34788,58940,65139,14341,20366,80580,26127,75214,87561,25212,83865,30050,46074,73304,51635,11670,38012,17149,44875,43253,45944,19321,68052,64758,31843,33626,35597,14916,74081,71904,30420,43204,86611,32742,78164,99722,86836,31307,23418,99778,68803,80517,38591,86019,61907,18061,32369,75049,91418,51435,43549,14229,73358,62853,49769,97275,56442,77060,18581,18589,83684,72230,65327,23311,81726,60964,58625,73066,97503,71830,23013,32289,86629,89692,84099,39682,32956,56099,40874,56177,67344,38210,67541,60503,34569,22419,72309,99452,76996,27149,83955,78469,84252,59444,55463,92888,17352,36179,71041,54602,53956,64326,91202,47281,29550,56442,52193,49553,26701,23539,12296,28423,91876,34324,66965,82505,20689,74643,59387,51119,41812,76577,14492,94845,72303,15906,50765,42742,84137,67356,36726,14885,98656,60418,84863,25318,40217,96712,64248,10274,63534,33254,24410,13783,87199,52758,88977,61045,73882,44803,61043,39754,79377,69625,92460,30375,29276,56253,73589,50515,53319,74407,32388,89279,73062,13902,13376,36006,92245,17935,61477,98447,80335,23549,37163,58681,29348,40752,86492,29950,25606,28522,82094,23930,76461,67374,14429,74265,44142,30185,47114,35857,73456,89316,60147,45509,85671,41443,87613,47761,36524,83145,52266,71911,31601,27922,41794,25293,92838,50660,55671,19472,32195,64298,35456,31553,75058,42402,40706,20173,80378,40141,25845,17827,54365,60218,97631,16836,99747,30680,77328,88130,76223,20187,48572,48302,89354,93366,24528,67595,95330,11125,94801,44518,19399,24267,89817,17008,59724,65859,89460,40675,20464,88792,55283,76080,46412,20180,32092,57595,14517,94153,99790,82292,29109,87736,59979,45062,64193,37093,11366,43045,31740,99022,23996,88441,58937,52063,32934,90880,78150,18360,20434,77513,93884,93325,22891,95744,66294,95850,50539,24809,27898,35350,41439,34980,36997,44224,63131,33117,12445,72298,15812,88823,91591,96617,63451,81950,39440,49120,33967,15124,57220,26594,76287,35380,40902,99346,91868,70778,22066,54006,84054,27348,26896,40922,83315,18649,10821,54592,38107,22503,31363,42968,73857,54294,29238,59297,12127,56296,28528,56389,36809,85120,23943,49572,30015,82683,14906,75669,69100,30998,11821,44194,27574,65591,59266,32879,71542,80238,56477,20237,93533,74125,48497,54373,95046,71221,45878,78493,31412,40629,69533,34485,20370,72866,91212,20974,18108,45274,53778,68227,29642,60693,48070,64054,93536,67676,95141,43843,26901,79243,76728,53471,45441,77257,95557,33540,63888,17523,46296,63823,35647,68392,59438,20541,27121,39157,36424,34017,95641,74234,34542,53117,96688,34606,69378,51019,92912,19912,59987,14418,60174,99345,62652,10476,10385,16070,13495,84015,63264,90620,91218,56267,50820,78620,62487,26644,49580,78329,50219,45597,90513,49376,57911,82912,76455,87829,35113,87727,95145,64865,50182,68411,36558,47402,41550,49579,58441,20240,42502,32168,40432,28164,92398,22023,28934,29268,73426,50183,54991,17744,22003,66700,85469,96636,56934,84850,16084,12380,93668,90539,91836,17691,48590,69325,65801,59980,81798,95442,50377,12518,27954,56984,68259,22631,50457,78953,64379,42408,69842,70205,58163,20577,95204,61982,20933,13967,89897,27511,32361,65975,52166,72886,74919,78656,81253,48725,60612,89417,10913,53161,94390,90505,30501,61454,14086,75284,44504,11026,35981,17591,45298,49599,67806,95769,21625,76820,39249,33343,90446,53198,46811,97127,79993,12371,73314,99749,51348,51513,35926,24646,87676,82102,47802,92553,86063,16528,16950,33268,97046,81765,23746,90878,40005,97948,51803,38900,77171,67455,40810,77459,73520,38722,24534,37120,63961,36093,39437,33874,27426,87321,71971,57688,35198,15414,13148,60286,11826,64613,94884,20397,51909,50851,29895,55408,21608,35586,27520,23121,46157,47034,92652,92578,26707,11121,37498,22297,46232,34640,57152,58531,21384,33273,94148,58327,69698,24100,55172,46591,89753,57066,28321,11387,46293,55022,54454,29960,62927,28748,71813,71306,13712,13221,29276,76915,53007,70051,23093,37446,98694,82235,11667,58936,61865,51824,19574,21077,23244,64520,54349,20159,42409,77500,40810,20662,19742,52664,26776,61328,76575,88382,77823,75886,81450,37398,76535,40060,13319,48893,40522,23229,23072,82953,40571,56536,24613,10404,98820,21742,92178,27748,16139,47913,21012,43707,88170,88166,40043,44313,15974,12559,97693,35200,65063,15041,43494,78919,40768,31521,12694,44473,56449,97035,12256,25697,25933,16550,45475,47952,20857,82279,81561,77550,89134,71868,33337,22863,90726,96725,44687,55372,62185,86153,18991,43178,32856,70357,39086,34900,87087,39543,97146,67361,76788,88020,22930,49766,99726,91545,64153,27125,91242,72570,28512,47257,38208,88614,54958,16709,12917,75294,93710,12605,70010,75879,95359,66905,62471,77859,59136,18951,47547,46842,44417,61476,74649,26451,60985,36413,78543,93179,11761,38860,33366,84567,82267,63155,97313,81283,45611,84371,41919,76066,90522,47935,94411,82883,82132,73848,43087,83696,76859,53536,10237,97074,18850,44337,68659,41694,15923,34405,15676,44926,40304,25972,35934,19754,26834,17842,72819,12018,99109,15965,76100,53884,76898,70620,77016,50509,23220,24576,46581,60075,21033,42732,21471,11811,90357,35243,18949,61777,48315,10143,99446,56547,94901,35304,72510,80116,86176,10681,60986,20556,78039,51580,42105,85542,34310,89424,20387,27541,26679,43188,51218,61004,60512,26483,28590,18055,18635,91761,49708,81605,59437,27815,90496,32110,47242,90174,64484,41931,97819,95677,56650,51410,90988,97503,50666,82071,28852,20910,96367,94825,98217,33016,32565,19321,28603,80832,90086,96755,67070,73843,28690,67595,22322,68624,52353,56823,61420,28008,26644,94739,68638,57062,95700,77015,54515,90247,21624,71672,83698,56040,89789,97385,78854,37246,21966,81482,55687,53516,14117,60107,85939,31617,10698,45672,14854,82809,23654,94096,44677,24359,20569,84973,77125,18948,73591,68164,51647,68804,52465,89264,17092,57355,39847,13174,24807,60702,78250,46479,73802,63052,57550,97272,44129,19307,68521,31506,36453,18781,59363,27485,23218,24657,74109,36181,37060,95037,10561,51543,33448,84463,87974,91547,48361,82639,14069,67488,58501,16977,82348,50572,64242,10203,73836,83073,79989,51759,10588,43863,45741,59503,65900,11121,13784,71487,57944,37479,39071,50241,82270,61795,53839,26219,21640,12963,16286,78573,55660,40698,62125,51977,62092,33209,24545,22245,14134,72154,63726,67525,73872,50528,65006,24162,28654,87706,89936,98568,91014,44444,17937,39147,48452,87124,77843,76124,96245,61879,47913,39934,61679,87479,14579,70968,25064,69828,61685,92838,57211,55962,63402,25933,98111,12304,80529,79337,89205,95801,35893,86011,23770,33874,16068,55393,49832,23295,11898,45795,59496,86581,64647,70266,28943,13869,92408,66975,80532,67393,33480,46576,22259,51921,11012,88073,37865,87786,91325,13850,34926,29416,24385,61242,80575,88702,40629,59569,78725,78505,80769,72133,98455,25850,92507,91337,83988,36958,56849,35909,93215,42227,65700,19327,59881,50251,82191,39468,66336,53981,94981,66739,99579,36638,67382,48255,81178,86697,33508,96842,48743,56087,19740,42440,16424,67599,32153,60354,92893,99942,96982,30535,24766,29368,98193,34816,23264,62913,37691,19651,36740,10322,56542,22869,66323,49381,82605,99551,37739,33582,23967,20936,42587,85586,32748,68179,77719,72822,53364,16121,70540,78496,90520,13161,54936,89542,91203,88052,77746,40790,17434,18410,18092,31825,13200,91004,16731,30694,25698,17298,87746,70951,68031,19494,83503,98690,10663,19092,21238,71362,55667,75182,99703,19019,36355,23091,42247,74767,80680,93279,23010,12913,13253,20721,71768,30158,47838,88182,21993,61400,49114,95744,24493,95619,71771,82722,14374,83315,28452,37233,35281,30439,81123,29837,31191,64949,27110,92370,76500,66461,60885,93170,57502,16808,89397,68937,45614,38764,45640,25695,85705,64077,94865,68256,11290,80952,47851,84980,37507,95270,99344,55587,56252,32084,29715,85997,80809,16736,70338,46448,98607,63608,64906,66810,95199,78923,89177,43481,66279,86665,28353,70673,55581,30537,49165,82672,31585,64715,18565,27659,98221,56024,37504,17926,41359,70344,36069,74274,26377,69152,96254,58183,33475,80390,64692,33138,48501,24491,32424,89790,61924,37372,56535,48114,63926,66997,83179,59685,30625,84962,95212,55391,92988,95032,45318,89712,25886,18442,31177,97803,33394,21858,26383,71995,10214,87584,93085,39260,66622,11814,71328,12391,50751,16043,32658,94502,56729,67814,10539,17767,69358,75528,47306,57337,92018,87855,87040,60405,31507,35078,84225,51291,14379,36642,36162,71425,90101,89847,39813,29230,17456,44710,76276,98042,24373,87897,56910,40179,45460,46467,35340,99707,84618,16666,18774,65191,13814,73126,67304,92926,11692,37302,65390,72416,61210,14949,93961,76829,43506,78176,72626,84906,47076,98351,20287,74916,96579,17544,31727,16723,76072,17703,44037,86138,19482,54851,51469,19804,96609,25086,43798,10281,78446,94612,69443,57972,86373,65007,82456,64249,88222,80508,20108,67995,37051,99099,79025,39256,67043,57081,11967,68657,27181,20762,51452,79539,46696,28579,64474,15055,74947,85000,22449,60757,68579,23985,26828,56174,98727,64613,40398,97655,41387,12609,11536,10068,32389,78899,60602,16535,21164,52077,44708,16902,29180,14796,74318,45696,10410,36582,30423,67865,67409,76582,74065,90358,77563,33506,89484,65573,65372,23608,36045,38241,97797,69314,36166,32114,59584,81361,41411,62355,75065,40976,31253,39056,21537,75431,26599,64043,31014,56904,11010,82772,86486,48070,15005,19029,44406,86787,66207,78858,31025,29373,45733,53426,89371,73112,71956,76860,74965,50953,91948,69037,75088,48809,20901,23022,61232,38050,92019,45302,32088,16514,79725,73881,66178,98629,46351,48323,46183,19852,82993,46327,98089,74692,46259,64697,99875,88053,96479,13460,62011,96419,96765,16151,26438,97838,45339,97842,19336,37547,98507,31996,74118,23794,28145,11642,42517,91705,16601,17000,65256,12750,14277,20699,50186,11094,39723,34510,53552,36329,45048,56273,48918,48962,96115,42535,67938,45552,35898,77712,98652,83879,10659,33972,14686,95916,66898,60876,81432,18272,98072,77861,99529,98476,20564,47456,85133,99694,69116,66241,52669,91269,65861,12634,27897,85302,54905,33806,15044,26279,23953,48930,67995,76989,45253,13822,32307,37850,20023,24320,78229,49889,53240,23773,66398,38881,39341,85645,88520,62053,38813,84992,18372,92288,36119,23322,89494,96598,16375,43869,16819,94832,35942,87516,75646,37905,16943,22270,88148,65538,52177,29419,42319,88174,49950,24015,89087,76736,29939,20816,10082,36214,28439,47918,98355,69239,45815,34572,62191,89254,34618,13227,11049,99359,26290,30475,40790,39761,49453,47296,83701,26761,54568,52451,31592,76561,25777,66339,97764,80145,86994,56464,44545,49791,12558,83010,49490,45031,72996,78953,93224,43328,55404,81797,37834,77580,89575,75163,57730,18005,39970,51147,66343,62865,15307,40183,73350,42146,50798,25734,82840,12309,48396,21883,16763,62617,46955,10595,99139,49688,20282,33886,99116,83469,62291,98110,11778,38854,71726,73456,86576,43751,83193,16773,94189,80968,70494,93728,62741,89142,84609,10041,39446,61294,19220,44432,66780,14088,96935,60183,33144,83868,36708,38544,29362,14283,90404,78417,39500,11837,89255,23504,61393,70820,45963,22929,85356,50169,26777,98139,34474,93629,97569,55143,86971,76731,77288,79202,31221,94523,45850,45120,83841,75189,64684,16234,28952,35378,14452,46773,81167,24863,63825,60380,79565,30273,64656,21085,49289,43011,86894,69640,84374,65522,45975,39023,59263,64699,70363,11249,49335,23853,36271,16119,88036,91168,57568,90965,69893,40767,99130,18404,28781,94569,34038,55475,83161,42016,92177,83537,79443,53365,33884,85238,99143,65841,79948,52030,69732,97725,19277,92031,39240,82464,43547,60314,62864,50703,78710,90222,43100,67763,67172,95809,37370,48114,44759,16612,35276,81873,37963,86613,36201,85018,59572,17045,23230,62219,31094,11724,36756,12487,43976,88579,80221,73614,30310,60850,58864,76462,60113,56392,16094,36964,30546,24058,92558,94512,51270,10191,88250,15055,17706,58657,22322,27310,81090,10164,21114,65274,87194,19194,89121,41306,75235,25353,73225,78157,48298,86118,94558,41080,42975,56851,16183,59829,35003,52040,16572,16503,67065,27305,15572,73283,17499,56773,70980,92891,45040,37431,61568,14632,76633,29572,42674,62131,47072,35056,18551,82941,64123,23423,45851,70209,69681,67190,48046,59081,30884,71489,97979,18881,70010,14736,86301,31565,87919,16407,14316,67605,49763,14610,83471,57492,44033,37510,24810,67107,69325,13266,66583,54500,81923,37051,70656,48957,66026,75142,58338,54311,51045,32167,82472,40179,97963,15983,59536,78556,77700,55496,79167,74181,32395,10499,32108,62872,68969,91254,50764,42918,75429,12456,73158,44469,59187,83347,91580,62356,50299,15010,42856,56107,47928,66470,17448,37623,92343,80448,15712,20851,40927,85549,24343,68677,55766,13389,96370,47616,46965,68432,47989,23702,51734,10447,64043,74364,58816,42111,55113,97524,63410,15063,51409,74501,34261,64327,94043,11252,94695,47985,63906,15032,59782,32071,79493,20547,39945,50861,24625,37773,94770,54408,36384,74945,12434,69027,46072,15427,18633,78179,87422,22370,82652,44553,48061,37092,19394,68294,27462,87531,40396,16479,45072,94528,42777,67869,90537,47191,36172,54004,81888,28278,89987,93320,13459,76305,32594,10774,60051,90059,49888,12072,77328,73762,93316,38876,63918,40186,30576,40683,24791,22580,88668,21983,61833,31888,43820,32701,60821,61940,66830,36630,18774,90362,81699,33024,58127,71733,28999,44383,35976,49139,69938,99735,64939,32274,42064,10812,89385,26595,33319,19560,64181,48457,20437,55881,20839,65397,49938,54306,99510,57243,76914,76260,51887,69913,36074,74106,58807,11996,65434,89026,81796,71835,95541,23789,70118,34332,77177,95559,30780,84160,66151,79748,80235,26764,14395,47157,60324,78910,37017,46635,24973,94823,44311,10940,10267,85870,34223,85472,62650,74468,72731,98662,13396,72879,46340,99580,34765,98204,82102,69460,73780,92586,15503,90196,22436,32823,28515,77797,23597,60650,77439,25195,53215,60072,75331,95698,34254,37046,91171,97004,73055,69175,45397,94595,55402,25381,20866,79726,80610,77971,40996,67198,52092,85941,51400,72560,72326,43005,54418,69445,70359,26251,75876,83868,25705,42526,33025,51234,70168,96717,68681,31789,56303,78022,91830,88612,81907,81559,64230,58288,51823,22038,61758,38555,23010,56698,92291,81429,81933,51513,72607,53692,43745,67150,66910,76101,20944,40131,72797,15845,24021,66435,15381,20524,36217,51301,57151,53024,14522,80044,95673,91497,10214,22758,38856,96384,87256,27935,93240,31247,60311,17386,94457,20508,52757,96427,42430,57748,86618,22769,92224,21825,76096,37066,94793,28778,28748,89924,83794,20941,40468,49652,66646,37659,24515,28967,57212,59375,10428,20113,71622,20497,75186,73693,96040,75998,79581,47609,53388,65975,66305,98378,22907,24430,68441,27637,90610,93049,68477,92048,49011,90763,74420,93476,63400,60983,72593,45226,18258,56836,36603,95535,10106,82796,84017,95243,54748,19288,64542,49288,28024,84228,73298,64201,50296,27031,34658,99259,89593,79491,36158,19138,38439,39316,30570,20529,36821,92255,86367,49650,21832,58255,98264,64801,51158,12385,26635,13176,99367,89043,96672,11816,75228,26491,23521,17649,67494,12486,68727,74314,38686,28469,92320,62395,30158,78129,98080,81334,87106,75024,26661,74778,28646,14367,63798,80460,34729,75213,72487,33264,13517,91744,22027,53195,14627,13064,96671,16653,59053,84767,68969,67868,78389,15718,24575,40765,57367,19411,43114,77995,97109,56596,93042,32105,76946,97422,24415,42438,97913,77308,88339,98980,54468,16773,79021,57431,74904,39056,33977,60374,39021,20160,21383,23976,29314,62415,89443,91033,41551,47756,25389,70569,23625,86774,38824,15063,77411,28722,75630,95780,82831,26254,80768,24872,64320,44108,31345,43159,60057,59553,81308,25638,44177,94332,15691,98893,59928,49203,49212,72106,31389,20044,26220,53656,15502,27438,50879,47198,89966,48993,60357,42185,42520,36366,19080,34615,20917,20473,20763,94357,80499,33577,37527,54548,71990,19912,82391,61587,56345,52001,28724,97834,65216,29911,24630,98880,46902,93805,31503,66671,35582,92281,30657,14757,57132,92092,79106,35279,11106,19505,21482,29196,90137,24107,70351,60217,11868,78854,76988,51461,54977,78476,88249,18064,43121,24241,62476,48837,67682,36897,27249,72431,98099,24666,39264,61958,36020,87417,23469,53603,52657,38004,72595,25645,21548,99061,10234,95209,26363,58542,58898,80379,15268,31469,50865,28412,30696,52774,68543,87946,61864,32848,88002,32676,49774,29420,36321,94984,68064,55778,20107,85642,53891,50105,42591,55316,87916,21986,14820,86540,36592,38515,16114,20952,72054,92392,13041,84891,36786,73571,59827,35827,86190,46041,17624,71461,28062,35570,74936,56963,60312,25320,93089,41401,73468,72515,26628,17288,56314,71360,24259,36605,97700,16178,90718,82837,38347,80705,28014,66273,54351,56633,39454,63846,22275,67613,68769,14824,96815,91793,76674,15219,66647,19372,51577,45923,14322,62853,46677,90162,49396,43953,71315,99905,23751,67149,50422,64866,42684,45500,58542,51556,88284,94610,14774,28853,11586,16464,42949,29947,57348,35165,51006,27960,36073,47682,13974,21223,24614,37836,78210,49997,75023,30192,62498,26964,39974,29125,28960,80922,74247,91041,19378,60418,88256,86250,14721,94396,16164,90538,48112,32391,94969,19792,72593,92888,93638,22446,75823,15715,91071,34347,55609,60992,37623,75636,65739,41347,60927,86974,13170,11131,57525,56358,74563,86206,82877,50316,98101,81233,31923,67303,18828,47322,87913,65712,89373,57577,25852,53684,32157,15187,87585,48234,15468,46290,38170,94540,99317,45519,85341,38229,36568,87519,18986,11841,85754,39329,16139,32998,41428,46218,75519,86294,52510,10719,49670,14223,19102,25995,95668,78801,53433,96533,73754,67155,90288,23513,73732,46139,60354,41475,92195,12585,94288,25665,20817,95073,17662,34295,75565,43801,52047,37822,85560,35248,45691,81988,48299,41740,54858,92979,17525,99402,87020,37869,78038,13129,79997,96412,83424,54375,36126,25658,92782,54879,95889,66564,82712,94812,95770,95678,34643,68902,97417,89211,53393,49539,59164,71722,82837,40992,68049,71992,56343,99758,36500,10729,83123,40146,16462,30478,87094,14949,66698,38377,27481,81260,64448,50998,90969,38510,50968,52850,24151,12327,43265,10277,92580,67966,27005,89085,11893,67522,25953,50811,74201,31886,93415,17272,27635,88340,45129,73772,36935,61433,39161,51544,33042,97906,85477,67309,40354,99611,73113,76585,78324,75621,48917,55701,68007,12244,21414,68087,52630,32075,82049,67551,34710,58473,41726,45630,15967,89698,15516,44265,97585,72350,29013,99685,77873,71226,19226,82918,88035,38042,23078,45643,36851,12677,31915,99342,80507,87150,83713,45940,58098,32819,29413,34574,97374,26323,31619,23498,27519,68705,59526,66463,75597,94831,55384,78000,24443,96988,91447,30581,40240,16365,63105,40431,77474,83311,68493,13498,81526,40984,95925,56958,14549,14815,21830,66896,76825,81970,24207,55312,53834,14392,59495,97791,41147,66453,46768,79648,84336,66963,15895,76934,49103,67432,50548,57985,65702,12080,63278,41719,80664,57040,13379,57817,96382,55634,46341,34910,95082,17264,25367,34550,22917,59778,73605,51439,56859,46742,95693,43817,68186,17972,65387,10958,32399,74644,27352,94623,32052,32459,88740,43705,82226,60170,28923,54366,93332,51826,49423,85072,85617,44881,57948,22098,21222,88901,97814,18113,94261,24360,47676,23941,65823,82869,26095,33375,44693,65103,12863,72353,65110,94543,85564,31922,94901,14748,70920,14227,11262,45594,52202,71373,22240,35600,14900,20471,93451,87594,99321,70620,17658,77545,89988,71460,65241,38550,61473,47761,71091,62684,78864,40992,66022,62465,15406,15836,23169,26200,85274,45430,25571,66949,39359,62534,41806,57434,53191,70949,34860,94012,66818,67626,73357,34588,66290,29955,90013,16679,28771,31087,64200,25303,76600,31762,21720,99014,27007,97409,30929,89724,22136,54219,72358,67959,79247,32109,64260,50463,45027,51838,79974,54653,38699,62348,71810,92940,68026,67961,48887,76299,85502,19626,42553,90044,70694,32047,18500,92696,96078,40597,19610,86735,28044,28879,88606,63435,50449,88410,72759,19630,91852,60838,39188,71873,36247,63319,16614,36794,31389,20696,43135,94301,82188,96010,88575,21775,36529,51693,25118,86306,29980,52520,43820,33391,75322,30973,81029,12558,85941,27846,74357,18484,72505,66292,14811,50658,16337,67820,99199,94851,41622,42144,66246,64164,52961,49731,13676,46673,92618,54493,47866,42036,20533,24455,81073,98881,90156,95278,49021,66311,53479,12853,87402,14446,14096,61725,81547,81659,81550,46695,48455,16462,33745,25830,65909,49660,40880,60298,47091,36015,53430,69993,47230,27450,83823,10191,17788,43284,80660,82525,10805,12463,19007,36078,44714,45935,17146,95033,13165,29666,21649,96936,78049,30124,98870,98718,24591,97404,30813,59037,13471,81536,64387,11592,71284,67393,25718,98399,45968,18823,54313,96778,64868,30476,14438,79512,36976,20636,13399,80584,23041,88288,40864,98523,59914,45081,37984,65569,75296,38503,91758,39000,44632,52436,15276,19785,77472,21618,39884,34164,33044,84965,47518,68249,54525,14687,92128,23667,28120,15603,94953,50843,53145,98502,25402,17467,65165,14724,52367,13158,56127,25902,88799,83123,94056,84161,51625,67139,90882,37669,58134,87259,24050,91894,93064,54386,87242,65354,15235,24450,19457,72237,23659,65397,47244,92945,37326,12012,82104,25591,60318,80092,79690,63024,27296,82129,92056,50366,44131,19343,38286,51039,39080,59108,35843,63644,80802,15535,13302,84432,79461,95346,71101,76031,37219,42501,52001,10754,17921,22210,30774,41280,54996,65005,82011,64829,49101,53578,25265,54873,97420,74348,41283,60590,66868,79170,99548,50310,73776,14109,69892,75205,98616,27401,86614,91825,75062,28195,63313,83997,15871,12187,92337,92441,25434,96380,34341,20699,44761,36056,67782,88206,82275,98719,62311,66036,36976,94310,74135,92375,13965,66201,99263,39297,87545,81260,37607,94690,28308,14235,75328,44719,41877,90914,29577,90057,64210,32629,74600,27875,56714,11825,42248,98387,85154,90286,57772,30531,59961,73039,32984,31650,52147,17549,83858,38033,46765,74322,72192,83645,77133,28566,22609,84832,55795,92069,47876,52955,96960,68262,90099,19400,12001,12387,24126,23530,65317,38319,52059,79502,29967,15769,97574,86710,94631,27065,53860,64905,54362,77998,32463,74266,79620,76926,39407,76219,88669,52957,80193,77163,61436,44320,55161,49390,88574,20489,80088,25734,55107,42950,35887,54710,59590,65221,51914,64413,32858,17794,50305,23061,20037,31419,53899,72129,37340,98931,25411,10511,99751,43700,73148,27825,55191,42607,60908,31161,78527,41710,76631,36253,43236,84950,43258,35866,11216,98140,69123,13612,52365,86314,52369,79568,70497,91994,79658,96476,94998,11946,44943,60627,98984,72234,29831,75271,64316,65532,28386,98933,93601,66833,17864,48255,28396,80025,63887,86748,95802,80627,92695,38618,19937,43147,90243,12963,83638,33951,77319,26828,46487,48198,77056,29450,98278,53786,12296,24271,91251,43506,94390,97418,91263,41607,63230,48192,92828,13813,82354,70070,53735,49786,93309,91237,30935,33710,91008,97349,49282,25878,49343,50903,57883,30036,28471,45252,36626,44472,55909,48254,70240,72615,65931,90991,72657,73700,59741,84312,57997,39468,80900,22914,59607,82289,52351,35179,16846,55627,94953,20883,21308,25888,63841,11427,40439,75312,39169,31318,16334,16586,77825,59612,32632,46966,75823,74449,85068,86120,10211,27317,93379,51650,60458,81236,73828,68635,67908,31367,64823,77776,19921,72102,94903,50222,47778,92112,42826,58153,41167,45118,22275,95799,20181,91735,83684,96285,20938,30095,76235,75138,68465,24231,20303,33093,29647,29836,30873,86785,76010,21385,20901,57570,58980,65802,66683,71942,44032,56393,23825,70814,41394,98785,54394,88009,84568,95006,33061,67372,51234,88478,36441,49932,90273,30428,80852,83547,26424,19228,36408,65397,26566,56013,96601,57613,30785,36841,82507,70026,18120,48272,35830,58897,43200,15173,79539,34086,62774,35822,59970,70994,86035,55963,51040,72475,54629,19801,85675,85039,53225,13252,96645,13811,68898,59524,49921,73148,53014,60974,55348,73848,79422,31611,48867,47624,83255,82340,89357,36287,36261,74095,12626,94972,47230,31237,41394,52249,26697,97449,99132,57618,85357,48195,28176,36617,51439,99048,36381,87693,37365,84103,46097,72309,80530,55626,89656,57450,64706,56459,77360,49092,40124,84955,50055,60599,93777,30105,32458,79612,29071,26082,60873,10662,43909,33750,61267,12248,16341,54743,62548,54905,38479,47486,43549,36983,66822,50026,26866,42078,65131,75640,73458,39503,61200,56513,19220,99386,10621,37225,88091,54139,27825,36679,68598,17969,95104,40633,29644,50557,95697,33944,34263,33137,19267,62780,32439,41370,68766,38074,23552,89374,69388,76310,94696,99206,87492,75044,80663,79981,27048,57379,21668,67749,48329,11190,87273,44764,85684,76231,24408,75785,82580,25105,11898,12610,83817,14413,19306,14484,25702,74658,95930,87788,38595,36507,37400,47934,89729,27002,46467,22994,79278,30326,40774,66048,44098,95347,89209,28525,78186,49821,83287,87814,73217,55750,43668,38468,26989,54064,83051,13254,35243,43890,37977,92542,19105,35852,72451,10143,54727,49648,93567,79018,68144,34780,43939,51276,44259,96207,64766,20093,68118,65202,66278,84722,26757,15392,48873,61915,97562,82488,29523,37296,25081,43539,24664,71900,56083,56996,66430,66384,94693,34490,17042,15882,22527,97293,62509,97351,72763,97174,32252,76013,18985,35792,36436,34023,57190,20887,75562,43217,62559,50013,22614,70083,77390,85151,70060,95244,94831,62080,18935,49867,25107,63915,26954,22959,25272,14257,85333,96336,68541,89016,25904,38477,85456,57224,39430,73593,78423,68723,68268,31871,30398,92609,74944,90227,33470,85285,59862,78557,89513,36502,92392,93683,31269,11860,96576,71803,64248,35026,22996,94624,55390,29028,19697,94692,44002,10966,59443,80687,97677,21777,38889,31026,15567,78240,96047,54147,41804,30347,84267,62711,83580,86970,80668,66958,13572,11269,26344,20180,55276,84969,20139,47836,44077,66868,78165,93665,78755,64645,44037,58672,39423,79118,66665,33816,83643,81977,24419,55260,36074,42823,61643,51825,71239,35417,93709,34485,27334,51263,31726,78926,16582,45984,37928,84807,53469,84477,33202,92398,71268,10341,71657,39975,48492,59158,57462,96926,39651,70981,44065,79323,52116,57892,25482,50938,48100,14687,62645,37067,20915,64339,54448,43417,62036,37648,22356,20689,12052,72978,45643,91137,63043,68338,80362,34316,54186,15284,97142,22108,57224,37821,86859,36579,77227,92503,85952,47687,51541,67580,25807,26554,31756,61239,41760,98461,89292,14351,38979,14567,85294,91918,85016,31122,29008,37502,32022,74848,38302,31458,31115,24579,93329,37381,24382,38119,69413,78237,95515,48415,48586,13178,43967,56469,12111,27537,39053,48691,91491,73428,75187,80316,11459,87725,52776,73139,17878,63221,41975,38295,84701,29369,76493,28912,14843,21590,76426,20932,18002,90225,62289,80270,22635,48416,87239,99445,61437,36839,65229,62774,27091,33907,93525,25339,77886,30459,39048,63709,60927,87247,97052,29660,54893,72973,57544,57436,21366,37933,80503,33057,33209,13193,72707,14126,72223,24921,68316,15059,77795,64566,50326,98489,76662,80401,25416,61106,74035,53259,71874,26524,27779,68143,19735,21326,10339,51088,87706,18102,84231,25946,37302,65889,27766,15912,99483,50522,45538,73449,59366,97690,65566,67602,97150,55827,81849,77615,57148,56263,67713,66009,92453,24400,61676,83727,16087,16139,37556,34376,30060,49442,33517,69775,56466,90303,62466,93818,12863,38700,15282,42795,82130,41736,22661,78037,48568,37315,85712,34081,55692,57556,31286,35417,22600,61045,45205,27055,68253,77879,76560,82958,63425,50279,53930,33614,12628,13324,87839,22049,84645,12460,57383,69161,64417,71379,83976,31033,27858,45157,87469,61711,83186,43424,57732,49908,53816,85759,99366,37243,45125,94377,13701,87182,13094,67867,99258,15098,34437,26893,74331,15503,63000,20157,22738,39105,87198,15512,27629,40220,63284,71514,57457,70289,87956,28372,27413,16928,79415,99847,91791,81869,52665,22902,84694,65240,31670,25523,39447,82805,81023,47425,60761,81391,87643,95189,26693,65018,95631,45032,95523,63343,75428,32689,56470,20772,29121,19225,55809,17580,74577,69627,83188,92256,73564,27361,33222,58974,75184,82487,48362,26865,86229,41536,91812,99068,96404,92721,79590,33321,38392,86690,73467,26554,43936,32291,17991,17356,16357,66956,29335,95197,67552,94935,83516,44696,78841,94130,86459,15188,22165,31250,40550,98649,99918,26413,30426,32003,50501,94339,68009,34135,95676,61862,70112,55280,75838,38865,48695,66911,81875,43358,77369,93648,29479,67817,72497,25006,83446,19718,47062,19871,65595,48715,68046,91348,55202,54043,50711,14978,68619,34131,32602,55050,49199,57268,93787,52679,82478,26914,39819,18637,89618,99315,42459,66871,45445,90654,22348,53739,91379,77044,80648,68153,32170,18888,24743,58955,47489,94499,13106,30931,39216,97994,71597,41603,16697,29127,53111,49130,26709,28005,77711,59944,37097,49550,60800,30171,91429,67109,95236,86276,96868,45502,78805,96196,48560,27823,24248,88733,76838,94932,34290,16016,51979,52604,82799,32171,22910,93320,17723,66738,31354,76798,39531,11312,17923,56358,85890,57063,47852,37491,20228,53226,74980,20284,84060,68850,49102,40542,79711,61935,46081,93008,77696,89177,72268,80075,28799,43563,28486,28537,15866,70480,93242,64872,78162,71074,15497,46347,24666,90146,17678,20685,60700,81901,16044,69480,92984,38823,95003,59027,65606,17101,84764,65290,41476,63000,92032,51265,23026,19259,14163,30424,18747,78955,33289,75580,93273,42057,49072,11378,62590,88333,23363,30660,51987,50519,54579,45536,55149,57989,51779,68672,99913,45566,59439,81971,27220,81582,99798,77253,68644,82054,79381,86930,88070,66798,49509,50833,64707,95864,25945,47242,84656,20639,66959,47004,36958,41214,70846,44438,31814,44463,18921,32453,72606,69822,11825,20637,68149,44613,61189,26508,63522,88930,71407,99072,82330,92206,99031,27377,27320,35345,12946,23726,59912,77218,76822,77593,28347,78281,22948,84247,93123,85012,87257,13562,54310,94934,46808,71289,89246,23390,14597,37614,40482,16902,28817,49540,31918,74579,19924,17255,17796,88571,27005,26339,48572,91867,60271,97680,50712,53477,26290,84058,66755,12171,91092,43702,61989,90536,63662,25553,33927,26388,91862,39108,99511,25295,97933,23305,26579,99698,41837,94573,86614,10778,61321,44953,71753,56251,18516,84714,94472,75995,24530,87630,30150,72383,80061,25016,44729,25294,42578,76941,13048,79933,63229,88132,62548,79122,70744,31081,30002,80832,91519,30193,98308,41660,17539,75226,92234,87976,17649,92393,16584,27409,30984,24533,21469,20705,11066,54261,59148,73799,28463,49001,64190,21404,41383,75023,35456,16220,46738,36416,51780,13417,81760,14437,68104,79615,25008,57593,57089,66678,23316,52044,81760,19028,98489,90579,78100,14232,76531,79311,77123,33942,50070,27431,44766,90920,43100,21126,76692,87401,96962,60199,19627,13996,66833,78833,81742,66549,50730,68022,28876,10486,66516,92791,77968,94897,15655,28114,12924,73329,78749,10909,28792,16742,33996,61156,74313,51536,50864,30250,29581,69005,43435,64924,66285,26279,98590,40381,27523,15942,16253,48515,31639,13618,88571,94353,44597,72416,26644,30002,28209,59361,73394,21271,83307,63023,19841,78168,72926,38704,78026,34873,83685,84880,92084,21956,31256,19651,44493,89942,75888,59375,33494,24979,52377,92360,55724,78736,34131,53141,79875,11682,85936,70365,88505,80470,41651,70306,17683,62867,99830,60319,14112,37742,69496,10466,59233,14726,18767,52839,51015,43194,29678,78378,91390,87864,91452,33193,48212,96240,77661,67402,81872,90836,33044,23872,50339,59712,35145,39407,92298,61378,33831,13464,68804,67865,10845,84341,39613,83828,41395,69475,30458,64560,22775,86602,52846,78513,11782,66495,41671,13762,65586,43882,83486,15275,88435,92351,26961,48214,86899,72774,64458,71498,66944,96206,69085,21346,97399,68867,17498,84428,74827,49729,98213,22956,81396,32015,39250,31428,95320,86735,54542,17918,33278,71222,20736,84715,22488,92637,67137,26582,86149,78495,34997,25955,81943,64019,64687,13138,12023,32264,31639,77630,85885,83120,29016,44151,81719,99063,94058,63491,40057,76770,44039,98604,43793,87034,22427,75698,62565,95676,86886,79212,87653,14345,92805,73113,50442,88987,47687,53536,90574,54405,53939,22262,61808,18551,19350,14881,57702,56699,70294,88781,28458,72857,99757,47595,95307,65069,90551,92119,85125,38399,50260,73002,97418,16422,11227,93840,29538,25796,35374,24964,74065,68530,63359,85338,30184,97487,35116,61114,51235,18555,70257,53665,29385,55817,90714,53698,82604,75707,84532,31987,78225,46348,16259,70636,22288,55237,68639,52149,44941,98043,15465,17092,18925,50997,95503,76406,31352,99132,99409,93118,60392,96450,84866,91966,59148,95766,41220,30213,98907,39986,79034,27267,73529,70295,76287,37252,56499,57231,55418,59835,93825,91676,14845,43941,61439,67472,53883,49320,45995,83971,29823,36512,33214,51831,11011,57182,41712,42171,11405,41516,83213,30541,93325,15780,58267,58561,88190,15947,12175,84950,52691,29758,51011,26480,54680,11065,56489,60293,41438,22132,18371,47792,39989,69377,21216,72352,52539,73177,44386,11919,99588,57568,70644,55466,91545,51679,27879,41039,30619,79748,83869,85258,58053,23223,50719,31230,12361,27741,96863,87641,56837,65077,65903,59287,98858,53330,14909,73133,53242,54198,61814,97783,10467,74519,45457,85678,28613,82646,33141,21130,19278,48735,53608,74549,51394,72771,32621,26107,33431,80097,12479,76824,77308,14024,63999,77226,74523,26884,52810,27260,25404,48035,32999,80674,58336,74212,12406,82384,59719,79816,19950,72672,80658,83892,96839,33360,72097,86828,82370,84889,42743,59510,76871,49799,88269,71926,13724,26329,30003,97271,85569,63830,54213,30697,59217,21762,74762,21340,98871,86848,64688,22763,75331,62636,76465,32486,68981,20629,49609,80325,77968,29561,57770,61473,88964,67579,20395,78951,69432,84771,58947,84926,63672,62487,96878,98700,52426,66814,22933,78749,91577,55498,57852,31748,66245,97404,66284,32806,94601,90462,26395,78606,56082,53590,57756,98725,62472,86196,72152,52917,94625,71890,57921,14173,26325,87323,39940,40464,99046,84844,58618,95521,42254,39580,88099,70072,42760,56883,93658,69915,84291,52627,74978,20521,61099,58843,11083,68170,17734,84016,44678,79698,33046,29313,78244,98738,12673,82478,72983,23198,92327,30904,87966,21623,83156,35605,92733,46286,77568,22926,79698,99778,21418,65867,83639,39765,68124,64588,90794,17525,94426,13174,91556,27667,81639,33501,59540,99809,15031,26752,28816,56131,36876,78025,54104,64923,81593,13607,60531,71515,85232,12459,86455,80180,56005,44235,53178,94460,50050,25457,42465,68435,23309,59112,88161,32801,93357,74845,81380,58282,82856,24838,66836,50823,24662,10167,57788,76492,64126,67455,76834,64230,14081,12930,44611,12859,67313,50264,65984,10088,89826,90868,51507,83254,81686,98002,37476,38321,72348,67895,82854,48899,81715,89911,26114,98545,73024,35301,54305,98043,23493,76662,92913,95614,92553,36318,49549,22658,12933,66358,72340,45233,45311,58806,45616,39035,40531,13631,65076,60057,72516,50744,55086,66753,98404,52091,24807,33077,66391,85228,35433,88307,59357,71762,51696,39670,99367,92035,93460,17948,73192,45240,40301,78631,40223,89057,52988,23785,81242,19533,35658,72555,76285,82901,96538,26579,73046,10182,89850,23993,39885,65110,46422,48608,43181,17304,38302,88179,97981,90368,23983,89752,12600,43703,37213,46872,84571,55839,71529,96563,23531,74152,11866,47819,81898,47624,21735,51427,98182,44639,63505,87861,43170,46113,89961,88447,54766,48647,43554,20965,37263,46128,80739,44149,44843,20875,41997,86565,43289,52147,98870,69338,45739,59007,73365,52864,52008,52243,41993,99686,81941,97417,79224,78820,78705,59722,79323,44033,31717,32663,46778,99559,49330,24203,99760,56092,51879,22615,14013,32090,41693,15525,89114,75616,35068,36071,35530,27572,23150,61126,68701,36028,78197,41421,11436,57354,40784,64782,93681,71377,57834,51248,16128,31889,78991,41388,95197,15011,76789,99209,23848,81063,69376,55172,54810,65069,91133,51032,78125,15742,49587,86576,18129,73812,53152,97071,99306,98830,49484,93807,99588,78710,93266,56309,73901,27858,90834,21017,21330,86675,75730,85650,31925,16056,11345,76815,88788,59824,34936,50654,82187,69512,92342,91393,40317,13849,95445,88393,26202,94663,88791,16210,15544,93680,78124,73749,26410,46295,76067,48567,58187,50420,46002,29390,48726,16804,90381,84581,78129,22153,26186,32500,19306,22870,76893,34198,70112,27631,36975,32447,78407,47882,91123,94153,98752,94189,11631,48559,71087,51843,94368,42365,82125,75122,76463,19505,15479,36729,82707,64465,62223,83959,36743,34510,17517,75682,26837,21040,72481,70961,16336,57213,96462,91903,48822,39764,88818,29248,52963,75461,59922,53191,12037,29158,92587,55873,43839,32651,25620,95132,85590,99750,81431,30014,12191,66342,89222,70913,67689,96490,98790,53377,84391,10205,57740,90191,70433,65252,92913,13625,42799,35168,91318,60174,94735,61596,92637,74402,56124,20209,95147,75605,85359,84547,13712,44569,75072,93360,35956,28392,97409,92085,77456,99661,73851,15876,37482,46055,39242,12253,91119,49590,84571,10659,88755,33059,29361,74577,16264,17932,75598,93419,46260,27746,56965,50766,31947,79582,33527,63586,41466,92385,36294,66876,59075,51777,16841,14914,21695,15410,83583,77917,49892,87182,71188,49858,78393,81352,45565,41437,69368,56113,86751,36880,82674,40973,10601,80183,56773,44621,27821,59873,15450,11030,66695,88248,58442,78870,11319,44992,50264,14084,57249,70263,49305,72283,34215,12780,95650,95136,45043,18671,40611,75765,30332,30075,94034,55282,12794,76413,71597,22793,80305,84211,59186,40082,50135,18761,66915,66809,69182,21787,46342,64736,26141,29766,16360,67844,76368,91119,33846,64556,74453,25518,56252,89094,57694,33406,66340,10125,53862,25458,21162,81985,24393,49421,67144,32579,86953,42887,53866,20359,27462,62140,28697,82328,78667,27909,71865,36541,83062,30007,35326,63939,72450,96733,19443,94294,59474,81737,19470,41239,38676,36934,58857,57966,10427,68684,10392,88470,55696,92978,26236,46552,38568,87328,15016,80486,33651,58604,16225,26059,24882,57731,65582,29160,89178,27177,65162,65188,40843,49962,50876,48452,18926,14364,41783,68095,67244,42460,20667,13532,85452,57632,18781,98889,52342,68845,30580,21733,23651,61704,97809,79263,91464,63385,90840,34461,35883,11633,29063,94221,71523,73511,46104,82422,13606,14819,17522,73491,21141,76492,15805,26973,56903,55796,65693,75218,78235,14077,46989,61332,89805,39292,31327,85740,17093,20649,11797,53842,99681,77220,44871,93807,42199,94552,93430,77296,72562,60907,38077,46242,76427,54331,15178,25467,14101,87860,87807,36272,93240,26168,10773,11452,98346,36549,41906,33202,92082,11669,74578,72592,71449,77448,71132,47469,92206,22913,97977,93555,90476,47541,66090,32853,68784,48102,47113,55749,53235,14207,86515,18096,50676,17213,12582,91158,57890,81197,69100,74161,94616,59897,61787,40001,87528,22222,26701,35047,44296,49094,44718,17894,25813,13225,67480,94879,78649,58138,49961,13099,81233,95610,27865,46454,88843,39633,77801,93362,54130,99925,76673,94705,53489,90843,58389,22789,19802,67885,38752,59294,48717,93268,55043,85203,77797,78635,21098,58267,84062,53040,12186,49759,66992,35044,74655,57313,84828,90183,70221,15431,78011,38822,60012,20279,56509,94329,74821,97115,70843,16207,18687,16795,40692,19787,84731,48667,49565,46548,58804,80063,69434,22448,70625,66945,94974,39661,15415,43770,21756,62327,79374,18313,31358,65619,69688,82784,95647,52064,88464,52238,31098,82495,18618,74667,29296,30787,18235,44495,67228,68368,66108,83452,55524,89814,73311,60438,33806,18892,85173,63553,72465,15301,81283,72846,10969,87101,30269,65874,25913,77715,61835,11105,81287,10180,88506,91925,27419,34997,22261,54739,76699,40498,40115,50864,78580,77994,51146,38654,74094,68344,64690,27525,92839,80278,20638,72067,90473,20117,16955,49067,89549,32286,39960,65606,56752,22551,64947,42834,81903,10135,51455,12416,98478,28348,40144,46398,64164,90505,62130,33817,52161,69116,16833,89819,63305,64326,42236,22598,75741,72330,98852,42625,17427,55251,10031,90446,39669,80816,29664,42808,67757,47117,54789,56299,89228,79255,29340,23628,25152,49690,25211,66528,37010,51704,34904,79280,90286,21066,83585,18308,62096,30703,15481,91382,17105,42907,26480,84726,12240,99696,30558,30446,99659,36593,96576,51656,49082,64328,24313,90071,51668,28226,22673,18260,66212,26203,49496,55563,87017,98305,72211,98634,94905,98877,69036,62141,63039,80626,91530,39881,83081,47829,64685,49304,49432,95819,56842,46596,22325,23478,42349,76646,89596,18862,54593,60484,43427,77632,37085,73026,83632,14458,16560,85711,72580,68797,53251,55248,72188,10573,65865,47099,22248,88257,91192,93843,26598,22409,70107,31637,82885,66524,29382,30428,40010,50987,68993,43296,88687,22259,17783,86743,16930,56761,19990,68213,58265,61924,43399,99544,28977,27313,83077,54628,44935,11692,27109,70405,71024,80857,37231,49369,96251,73273,47032,99855,57461,80678,29555,93655,19317,95012,28506,39772,96196,60083,51877,67579,80088,18013,17491,54590,68321,59308,40469,18482,62741,96561,23649,86817,98016,64619,38255,27813,43093,79603,42695,74869,73793,80706,20510,83216,46140,99753,80097,68573,92407,50538,80262,43418,42770,19722,92326,83853,74737,98220,68908,83593,90984,98522,58095,98600,69611,79350,10691,73141,16767,46068,38805,25178,55251,33477,91826,82433,67991,54163,71632,40741,87944,81157,96315,34663,68627,15159,51573,51961,48223,93964,12140,72445,21548,43464,27377,88789,49818,46609,76161,64668,30048,71837,74520,97959,49696,14780,35514,27348,80369,43372,90841,82978,52571,79973,97275,96328,61265,77679,58117,46339,17692,18110,12267,62634,95793,53460,48433,63767,21217,79728,53649,50955,95085,82868,57400,75929,30554,38301,94095,66947,89647,21700,30075,54534,78706,27217,58740,99366,71567,15195,60689,65441,73379,30027,48939,91517,24280,89657,62257,95633,95344,20206,86873,51855,38682,35728,87919,81241,98300,34465,50602,40274,14627,68331,30588,67746,97892,86764,80461,55560,96736,21255,82237,85610,53961,85659,33420,90694,45507,57221,49359,47219,56048,87989,99699,32932,39021,33286,17336,11390,93047,53655,24583,40713,42484,64057,26272,82074,65836,82214,15593,84204,38838,89140,76213,97244,45648,68823,48715,88828,52586,91181,19289,25656,45051,61525,86049,83293,18302,72472,59828,47503,11216,45817,54709,93027,86149,22208,29736,40751,49745,33597,40523,48689,43389,25516,98877,39320,32469,34536,68167,86376,73746,69130,85923,77929,79918,24636,38821,16004,66663,82958,32817,72410,86780,31473,55968,31959,90328,14778,38595,12020,77738,13391,85551,78868,59628,50153,59623,16792,51232,44500,24118,98968,78394,30837,83775,84449,76988,60876,21647,54558,25316,22413,22266,76879,90410,45129,16543,87086,49665,81316,35403,98980,29320,69343,72214,85263,62282,50375,35297,59994,34592,16579,71045,59911,99001,16946,37619,21354,73777,13418,45510,64451,47421,92578,26344,41053,32395,40384,96479,53676,56038,77362,71173,17930,17749,76683,41231,53589,87954,51380,64651,77617,23608,72022,72636,41246,81476,37721,55644,77726,56957,16098,83061,34547,15753,42182,43535,31474,72851,57036,50271,63806,15091,35277,22723,67089,28785,21788,43478,81738,30202,67434,85252,74847,27642,86202,58624,25398,61389,14573,10799,68180,30354,88845,58039,96613,47110,11771,42251,95273,40410,37837,53273,85069,85402,37785,30066,80107,50076,48346,28982,38391,93455,65424,84348,17888,22477,38288,49983,32077,56132,40990,59522,17245,47283,48227,67549,63289,42473,17000,51035,24726,11139,32327,77937,34927,69109,76115,12475,73253,68385,21008,63771,64678,82692,69677,20756,84107,90541,53654,61399,67160,68936,41266,78779,21883,31215,13927,75865,87643,20196,83627,44773,84229,66788,97116,16533,88155,22475,26947,75350,69223,46019,38570,36945,41877,37020,70212,85805,50476,20495,67475,87332,51498,65254,80592,42054,20433,78686,37611,99197,28055,46265,96095,50857,59680,51833,21344,49856,13960,67488,32793,68507,41487,68703,54457,96558,76814,88787,84824,38826,14028,18366,63917,71607,42551,16454,64993,67174,60799,53901,88153,75944,93727,30287,32003,13168,36487,45910,22999,88703,72434,61527,41316,50888,39283,20278,19254,25389,59108,91843,71928,86003,40379,79447,82021,23899,55878,81482,57252,63513,52903,18922,56135,45541,26530,37470,11007,81385,63817,53156,39781,99362,87601,80806,32248,93551,70764,14152,98218,29499,12867,99280,58419,70216,54781,98126,70180,53699,76494,53279,89157,48211,13970,82106,55916,51316,48837,72904,55461,21207,93931,31232,19816,38288,46020,85813,23602,60976,67866,28305,16334,58924,12470,28086,63110,13230,40782,19030,21209,82446,80194,15938,25306,89756,77954,68665,75552,32364,31281,35655,72428,75370,19082,54756,57032,47187,99572,40213,59757,36454,95316,17637,24756,29447,35969,60055,99457,55215,86778,77285,50650,37974,96465,38073,29480,66137,17927,64108,82301,52019,28718,45245,99619,63696,17641,46005,49795,10827,94301,69751,11852,76743,77768,87863,75020,66677,11913,73033,45880,47955,91039,17103,72492,23115,68108,11455,21286,39550,34108,14345,64707,71563,34348,49757,66643,63504,67010,60333,56135,67500,91278,32380,15191,54110,38930,87697,89575,84874,11310,58305,53554,43813,59609,52602,96525,40678,21804,27203,95588,26786,38295,80177,43770,88574,44000,78367,64897,91906,73700,50551,73216,64934,60690,50168,68194,28374,79338,40024,56217,27687,54333,48724,19524,82502,66796,70601,17145,13314,98178,86331,83603,24023,93131,68841,53965,37759,30406,45370,57288,62960,26207,34309,46878,92296,32065,75464,13121,13571,24955,11150,47134,98212,52688,48583,29953,18331,16697,74121,20333,83247,67165,57717,78419,68403,50313,34204,35702,16349,87812,70561,21126,45754,43394,19035,95297,59269,18777,77733,54811,83512,20711,91966,99448,29594,12762,69250,70605,92710,65550,43659,91997,42929,55997,38537,99548,54024,21772,82052,74558,57136,59056,49640,61039,63319,83156,40177,64816,92105,58853,88623,90468,90704,78564,31104,44272,49459,47150,97067,65949,61154,80022,71690,38510,26722,80241,11528,75135,45434,59909,30618,69818,13583,56913,21324,87038,98150,90973,55575,41089,25778,60621,84337,34512,30020,33615,99399,44669,76131,56397,14928,60115,42054,78316,18287,49821,50494,11173,12747,22960,15497,52540,23103,92856,96380,56048,60950,41611,97126,19293,86039,68307,66122,35759,56801,81651,14924,31648,85882,91636,80566,85915,49523,81333,40635,94697,83730,36659,95118,33484,14416,24485,56058,11468,39568,49066,71173,42078,65734,50890,90911,58514,33121,86968,56049,52735,46821,17707,33537,77347,11268,75666,56797,16129,96000,17433,55368,78214,22716,37100,57292,28727,24941,70847,46805,36816,67657,90447,34164,92233,82517,81461,54037,58650,94409,74910,13316,46982,88999,54532,85443,71446,56417,99519,88372,51594,82978,33378,66566,39796,27326,53786,14103,57459,94646,87371,87765,31911,54159,42066,64755,96693,86284,88089,26751,78780,38693,79297,83123,75412,22346,59419,86653,67850,83783,31537,90313,94909,90181,70046,63817,95011,63443,74439,99603,91912,97684,23586,13101,18282,57169,52489,19223,85031,23477,78091,92714,98308,70072,46281,39382,79365,30208,61663,14846,91067,40353,67245,94347,58857,69252,41344,95268,55870,25039,30822,37086,89721,95305,99553,83094,32152,17455,12945,62198,89962,22839,99518,33629,89922,49379,48540,57594,58183,31508,13828,38177,18900,10257,76976,34715,99650,99173,74356,86058,44162,39932,94239,97823,78412,71330,83115,49586,21310,23256,81609,50518,92941,34667,20966,91661,32690,54107,74381,38122,52135,60913,99359,58709,25189,67812,28528,42937,18842,59490,67342,94217,45646,21837,47051,39076,59418,13312,54258,97789,98672,74366,98642,35116,89149,47212,28101,97928,51754,86327,25093,32820,33275,82655,95427,57010,58238,21586,89724,37919,32642,31859,48720,85099,97237,70547,32287,56157,37989,69264,87606,91441,49025,55214,35808,67243,19959,63280,28802,88973,93685,49790,54347,67495,76433,96650,87505,64326,98960,91226,61345,13128,38146,20452,14143,44893,33946,50281,28608,22813,89335,15212,17424,10397,87486,56451,56298,45051,88142,30947,49158,39924,12715,96439,40429,18660,91505,65875,10390,53734,63030,90416,53104,86283,10932,47854,44484,30755,43017,43449,29689,27685,83173,83929,58815,46268,75783,90496,26443,51988,89831,30828,99597,63992,63390,75972,49991,62323,48134,68113,46570,35788,39904,92550,61343,38639,62747,52467,33095,47667,78867,22785,35574,61561,12063,86517,93385,91514,53586,26080,83786,93098,60954,47522,71327,44562,12104,31866,25263,94228,32920,95403,31131,93185,74749,54110,38892,40239,86966,76474,11585,25851,11282,99914,88017,88350,18527,21529,57961,23472,14724,58920,97405,65162,39611,55182,89489,36459,83149,34936,85524,89016,98539,98764,13990,33493,77970,65208,61663,99035,83654,58424,15480,89451,57651,80883,64916,21631,16850,10276,42391,24062,16596,64545,48041,16814,25903,22110,33534,35745,56281,49714,21881,43492,30118,29593,31517,77370,38718,83951,15222,21015,77726,69306,88211,58322,30323,47536,35746,79999,94024,10951,51660,79046,53072,53460,73258,29905,67468,70636,51988,75283,18622,81045,20975,86564,68877,83834,24476,94985,66333,40334,84738,21276,31334,90160,88659,42004,54723,18787,11741,87363,92978,29038,37393,61299,40684,95443,49040,50402,89685,28524,25167,48454,28217,25526,21829,83888,14686,68174,19989,92413,65090,93205,14043,20137,34419,15900,89834,72917,21382,22927,73225,93217,60689,21570,43412,90325,70622,71335,98866,45214,22643,35527,12180,88050,64232,28529,47682,91449,50550,15805,17577,88166,15117,40001,98465,27488,29213,19780,53727,90351,31023,33825,61410,21550,51125,79708,31430,18995,60317,21173,59369,76957,14870,62432,47765,73751,83024,48163,70064,35680,99035,92535,53275,66034,11279,58815,41805,65599,48868,96444,25078,50386,47093,21090,55970,29815,50902,40184,80536,82905,47923,70138,18992,97723,66538,65061,24363,96198,62671,39181,67766,60070,20935,73692,63662,76977,60587,21713,92158,80160,72561,34886,79648,74307,86018,24092,68305,49425,88049,63025,97592,24721,39732,51799,22803,83072,42408,43899,79111,60964,29571,72193,14909,75498,16777,19609,30767,36200,86646,83458,68379,59623,34635,19815,23284,46476,82596,78978,37210,37360,83146,77946,67506,35776,35566,21784,41483,56995,37011,76564,46817,82090,53945,44011,77291,55803,64851,15109,45619,23331,72996,82045,93438,72310,76502,99312,11620,27417,53844,49563,10583,47432,57548,20094,97721,84584,66044,86952,69614,63971,13140,76423,47068,99798,43820,40549,21972,12155,16678,33669,25641,71364,95823,33530,69902,36879,61826,35840,24084,61628,20989,99787,55474,18121,17777,31734,88947,23015,77896,12932,58847,36456,33213,73440,35247,42718,20097,36190,32707,80679,34577,69130,69667,17676,17654,26762,30049,11179,33466,97192,99578,20065,25948,29064,90591,36501,27169,25709,60633,71808,58984,76083,77501,80675,40008,76180,86795,59646,26160,44119,69086,60645,81354,70719,31998,69251,23585,94544,53320,13097,95517,45373,94482,97816,46061,92659,99541,36472,43320,69112,56999,95082,22059,76320,18292,80720,72150,63390,67288,10581,21082,98014,99704,12440,16899,64403,15273,26281,19012,17579,93585,15160,62765,66322,26942,19663,10421,66690,25904,84087,67130,90701,52839,50381,57281,20317,95235,75408,39576,20694,12184,92420,24402,48372,22702,17770,95292,40522,97220,27926,84385,55376,41764,40893,56384,14681,25805,55465,41034,37240,49178,11578,18194,75784,94867,98363,14290,79745,43182,84922,35007,49803,36985,68807,36080,21475,18854,71642,79919,13705,93316,28743,80168,84599,49798,44198,33180,33289,18000,14384,86788,93679,49640,55103,37792,13904,20971,63155,91754,70324,88163,59949,31815,95263,56105,24420,23441,41832,19420,10198,33159,87833,49261,18644,43453,44398,21638,14663,76938,23342,17083,66973,91047,58940,21595,46408,15054,59595,49876,98909,74155,80938,60404,63676,74405,14026,91588,61313,13930,27214,13512,14209,58416,10896,81627,53872,49130,86101,41011,98155,71805,20797,87908,71206,86534,87023,86870,19297,88278,26795,41018,55082,78488,24577,13325,27379,60582,95682,48040,70624,70924,47071,11401,91183,63780,67081,21922,39820,38851,53286,20795,53696,26684,36364,99180,45229,16383,65927,20947,90631,99911,36706,65812,85568,12069,42334,92541,43466,96959,57888,71774,58800,66448,68287,69631,56418,14115,91416,98820,60957,58446,99584,27011,90684,90526,26148,38740,87554,34308,39687,69186,51159,14579,52004,72940,39850,11764,93067,42161,13284,94283,26673,25240,47250,21696,87084,27021,10245,46378,12948,36526,17522,72382,90120,45217,47590,21065,90788,57623,13385,88459,64767,60709,69318,89143,25719,23921,91270,81143,20358,14348,38734,35705,89625,60516,74808,32710,63792,65151,99236,69430,54320,19446,11181,21375,37653,35216,52064,16912,91992,21614,79680,28000,85043,21817,63359,78186,19242,96415,28241,13542,70020,87943,54864,77534,27732,71362,96860,59212,36298,52156,51720,29717,39488,79477,53113,92160,16887,99288,39142,74935,27856,14980,56585,51087,16989,65703,51756,14750,68121,25267,81270,66233,18992,72278,56242,78193,94909,22929,60568,10187,86413,73923,22714,23799,78015,85401,56944,44286,80149,75669,11514,92524,68770,62793,37109,79133,92055,32994,44560,73455,27576,23190,95983,67387,42585,77792,68208,12232,13620,58421,64258,18167,83547,93605,54046,66965,42776,25916,19019,26491,40833,15258,40641,13251,48388,51506,63167,56877,36940,31856,61704,39803,80374,67661,75082,46834,78419,42601,90647,24844,79036,21324,86370,28758,65622,59712,77088,69974,66229,25758,35736,39216,31265,32680,81558,24513,98784,90300,73508,83990,10942,47197,88400,54971,40631,17590,95660,40289,37252,78717,41916,55250,64253,14412,97960,33732,50176,72540,30199,26608,73824,20942,23398,86151,56037,70627,72065,50046,23124,63485,65495,50718,46710,39948,41504,46601,15947,76221,79256,81039,36859,22798,96374,21183,41753,48816,12241,68363,27169,95235,77005,27000,21717,44513,55293,90347,20520,68449,86694,14573,36785,20066,90537,78272,20743,87253,72914,60650,84770,91771,65151,51095,90743,75720,33788,68187,40922,22356,88803,22564,34277,84679,64326,92882,27064,39368,45267,88947,40372,85270,62278,13230,32228,67364,22685,70965,53962,52896,90153,96522,56332,74452,34743,97980,56478,86212,15583,24989,37233,39992,37813,90288,41076,50564,38495,32622,13388,21826,98107,70899,13534,85309,50743,47961,69909,29449,76238,14691,61910,67963,88459,12171,44447,60333,73819,97281,53143,92741,60534,30855,63615,41635,17067,51039,42077,38794,95711,87438,78607,20643,72449,67468,45849,30946,12155,67254,10778,91221,70193,87371,89326,76957,52606,98320,70339,28739,58668,49903,35979,72164,28347,47892,83305,95057,28381,25065,80034,36174,64339,88656,21703,65133,78036,29595,73889,72390,99660,38584,66199,51417,97287,73698,78837,80308,74738,58908,38362,18741,16709,51707,52275,63527,16552,22440,16001,94304,76848,35389,92040,69926,23046,70658,79995,44617,73147,91869,42148,32310,69400,91359,92882,71356,73655,39946,66416,87955,27436,16379,33287,77302,68912,37499,71604,57027,90563,59169,68511,99475,82561,93111,52972,42776,47221,59679,25214,83283,16153,49859,83519,64006,73985,67461,31733,24785,44654,78554,83399,80095,72059,26488,95893,11437,26254,83263,79709,84117,31607,69257,38381,58177,59798,98799,23849,24018,72841,21578,68862,15741,98696,22678,70281,90752,96589,30735,67059,61026,45796,48896,32981,75897,17148,44307,72868,69849,15016,65836,47233,99820,82005,33556,56021,12341,76616,84938,23093,80908,45316,92423,92949,61148,85072,23474,50210,29548,44119,94973,77150,93577,87173,87412,74087,50911,55699,96647,84444,65521,71832,75789,56862,14781,36130,16789,24961,43253,32270,62389,21295,86217,93612,77079,88057,27526,79484,72733,80151,68140,58922,92846,83669,96096,74264,25983,13531,73144,22542,97518,84639,95575,45494,59539,26532,17055,58946,46041,60443,57623,27994,62186,95565,22858,58133,31715,98666,36717,42565,84252,20300,25309,83149,17793,28347,58390,97144,89770,72768,50509,14288,26840,21214,51319,77437,72152,23716,77233,11744,79246,21876,35147,97985,92965,13355,52501,93428,55422,31295,85026,95167,89243,35258,72760,33123,17996,32909,22858,90445,71227,88189,10043,67519,39252,85283,83733,88390,36067,85797,78168,98429,81525,58782,86721,17755,79542,80604,22128,91259,15796,31190,23998,95505,98880,68869,15149,60945,32762,47810,60915,17322,19285,28381,17733,32883,44038,51803,94898,24858,52741,86295,24319,53226,25095,54544,80514,63460,76382,54009,79831,48441,42479,67520,38875,50280,52001,45415,21875,95698,17215,47697,83199,95513,48100,72429,52492,13710,10511,34190,99547,67275,74023,67696,81689,84505,78986,99542,27289,79762,71087,35378,30710,58411,27625,91153,89834,68110,37338,88921,97521,28060,40623,97691,97934,21564,78480,82340,69280,68497,75846,40382,34482,49184,63375,31628,57705,53207,12781,44368,80286,32193,68977,40778,41921,44597,93886,76726,62494,71885,29576,29645,13383,43140,59720,90570,70933,18884,49810,54008,57154,33142,74569,63929,20461,94197,52480,26726,74019,56730,47106,20538,69311,83791,92043,89119,84434,40885,92018,95579,96638,16701,27003,20284,90323,36111,84007,58898,75526,30752,65309,13744,78021,54537,55124,58290,51900,91203,86576,70291,83685,59133,33475,16286,59302,84398,72148,15356,32227,65434,50492,41101,47955,26638,38214,67712,14379,35049,55213,68328,51875,15371,33098,70527,15842,52190,26021,25421,73432,25474,49650,33557,59773,48675,67387,74577,65227,47925,59254,81815,63496,49286,12136,51685,43437,32330,54716,56010,43989,29074,74449,96019,44495,52646,38163,35142,81497,95362,39987,87653,73477,78754,49995,91123,46656,35523,19082,63681,82086,46666,78116,18265,91726,86051,18060,84560,52651,36116,73315,62958,84754,17079,68826,99908,76310,66968,81537,69349,13143,18860,96905,77905,36735,11294,85159,81886,24339,66444,58386,59436,19676,67603,77313,46098,19554,27157,13664,64853,90512,58027,15635,99742,43228,95009,20292,55256,33375,88459,87596,63766,55736,27878,37402,79526,50670,86841,41943,14513,16286,24825,92344,78735,99492,77137,86072,84922,46195,52116,39357,68859,51179,86640,13699,55160,55540,25992,90285,21700,83690,55006,71459,71876,76567,30123,10606,69374,93198,72492,40066,10704,70876,58626,51667,11720,33389,36838,21925,16887,66035,95141,14792,12139,77981,63027,46445,46851,40894,63852,19047,31086,55915,66885,35474,96893,12350,27928,30977,62354,54282,92190,37496,19868,72684,13082,56277,21384,73141,64411,62234,77875,45411,97950,87565,58635,17951,54543,93396,71741,49166,32366,22119,10049,32899,31245,18635,44132,94572,77903,30029,41614,15875,28249,78025,27697,21703,54909,17251,78915,24571,36367,18221,70275,87531,81045,86314,71860,87566,29913,35071,91679,34057,31773,42330,41518,38867,47265,41043,85806,57206,88078,96873,14331,11198,17337,16075,18759,34303,19645,75761,10296,55460,68570,37684,66302,76738,68452,94980,76209,52567,36549,40409,91359,92042,55019,24470,61053,27814,37449,26348,62072,67437,88574,73932,37153,73155,51916,16283,35778,76297,96198,82134,86931,37658,51842,63104,55021,41639,71303,43551,28956,55461,63559,83149,37758,22189,84770,10439,79301,22059,14085,48540,77575,77662,55512,67870,14521,30306,81095,20595,16109,27296,20065,59314,88003,84396,44501,28302,89277,93512,55255,14749,27754,13942,62761,70937,44442,65753,55368,54446,38911,34948,18286,15135,48721,27062,22254,49609,42527,72301,40127,11700,78930,95029,43710,23344,38914,79516,32767,72082,42428,69439,76521,84339,99867,37961,56353,92820,29429,97085,92836,37896,13204,19321,10922,37657,90504,40847,49336,30691,98782,19927,29799,95280,15213,55844,77787,27636,74887,51559,41384,18862,57139,21729,44350,23885,62611,58916,25036,38026,65240,49247,61494,29039,12979,51062,82062,88065,21613,72372,11140,54401,92738,56130,96990,66703,55198,27124,49651,23697,14250,84145,59545,60919,28723,36727,87936,63198,97838,26287,98503,67766,45903,91893,67450,41393,57808,67294,32047,81876,88314,71605,69939,91344,62645,64496,51168,88819,54850,24265,99429,33762,33153,86430,19854,66557,27766,98486,49778,49605,99164,72319,76352,21189,38674,12730,86514,72490,52015,16837,53458,95116,58425,50086,72259,85703,93898,69809,95563,55736,51850,10432,15446,12524,67706,48720,44437,11597,22671,89796,57670,24773,79019,96771,86926,79403,23573,66566,28087,39778,19386,23684,88687,45132,57466,65866,71354,75906,58027,59380,87155,23867,16406,80139,11883,99343,42063,79322,78427,97186,13992,97884,14208,99476,21498,24098,53105,66120,90409,33307,57180,51292,79016,27461,22767,58055,38598,28739,71425,19480,50575,46993,58840,17062,24185,56737,87520,31896,57693,87374,83190,39421,30864,24912,17029,36267,57497,73896,92802,13086,93046,69964,85676,89595,19516,16658,83917,63419,82308,29601,66768,88761,82715,62043,42361,53050,63383,62589,71406,58547,72379,38431,65879,73389,91295,98546,41504,89868,80067,90766,98404,27107,96267,37335,20856,59566,97311,27250,28893,15546,65020,11703,59952,78298,22673,83807,50250,60287,33420,97013,20164,22229,37600,18994,11198,83792,11176,91849,11849,82081,11369,83846,45370,87098,72261,80904,49429,81548,62242,60503,21770,91356,71055,65883,27862,20799,53825,29481,69695,34509,25000,74322,41413,90639,37621,99195,30229,11881,80823,67351,25544,65120,80286,33231,76616,93876,25856,82997,34612,63390,14472,32416,69054,12318,77374,89095,26246,59202,29385,60276,63291,13040,86665,55399,68720,24371,97586,10443,31227,44389,82512,12247,11936,64781,86376,68196,82212,82315,71787,33033,26820,21948,32434,34568,19354,87204,45991,59953,65918,58733,99429,20346,99465,44093,20992,63045,12036,25700,84021,75886,69269,35334,56009,30976,21090,79437,56614,50209,19153,11176,53539,58044,72151,51251,10929,84185,40298,71613,77049,22810,26212,63957,23418,80124,21738,70089,15315,22342,82872,96729,38314,49082,72706,43251,64438,65468,28318,15670,93427,84486,33187,33576,92162,24472,36262,25606,74335,86372,78325,30832,40937,45521,88750,97208,40783,43484,20357,47432,74267,95563,33076,66073,62542,54879,48828,48384,12858,39859,45576,24470,81056,91318,58937,63764,51657,54002,56719,39066,64928,88255,14934,92596,22865,43448,74823,87841,41508,11128,94169,47976,35839,88953,87547,36968,52372,79303,56765,57866,61183,48161,15067,68998,49980,28834,66707,42119,90388,16692,61960,55946,34350,48145,13895,71155,30818,40470,15292,38996,89568,19331,66535,20688,39374,27676,48307,14401,15141,13633,90512,32990,59280,10748,24506,42660,53413,37794,37653,40080,38463,47691,75277,80589,76790,49311,12752,50387,67823,56133,82538,98185,58848,38156,41623,99889,57655,66698,24469,74014,56359,45272,82369,65805,74980,84876,95921,22705,87246,32552,66118,49562,28976,10542,36590,50261,31582,60877,69161,32417,35147,67717,24348,96309,91724,11600,14870,73493,79657,10159,40640,54113,75840,81446,88426,70752,90750,81554,43806,48473,10026,63749,39330,77674,92022,97144,60261,82159,44687,60869,25346,25585,88981,41170,28565,13869,62579,76246,24399,86560,36401,76428,92270,94461,61361,92351,65539,26039,97640,95271,78826,63809,19612,41157,21106,24062,26153,59570,61437,70065,99921,17638,73068,59271,31669,34671,17551,80930,46791,63766,50414,51254,18039,78083,14380,83710,82260,77415,17555,53070,69569,75859,88057,35643,26685,75485,14656,53287,65645,12873,62840,83582,61540,23805,12933,19330,28102,20047,17248,96193,63854,43385,28662,71968,96609,50325,14863,83358,79178,82798,37790,73469,52080,81063,53485,98401,14289,48170,31343,45376,94281,83397,65923,17130,50301,73255,18232,27095,67810,19267,82132,77629,59589,68623,68296,38847,83828,31860,95081,31571,31999,98054,80643,31960,55033,53723,85642,94380,64239,88114,26420,72648,45964,36366,49536,47869,67927,41103,24389,39832,96681,25283,91944,70908,79770,75107,60757,55354,77826,12338,95559,89807,88188,82476,96918,24569,84749,31765,15697,28760,99118,33863,87807,81383,43656,49829,64770,52556,10932,13607,66009,64894,33664,36618,55251,77043,71105,64553,42381,10975,60697,49177,71088,72136,31789,92204,44983,89563,29292,88530,88807,56076,74722,64581,73475,20199,36363,23385,64350,42409,19773,79363,21876,20922,29387,57364,58586,67541,47153,28034,86932,94854,58448,42050,78888,32399,40510,41627,85004,10552,70142,45750,80013,80364,39078,80571,87500,46453,36646,57837,31047,13050,40643,27460,92649,62428,36974,72957,11962,78324,10943,60922,13394,92750,44527,35225,45923,51634,83725,89468,79642,91700,42359,59929,34221,30157,37116,25901,13833,21207,50763,32807,11506,87944,41967,73483,87779,25775,17617,29520,16675,86867,17100,29529,54737,36982,50586,49026,85867,41124,59390,13147,90041,89568,36274,96007,55799,88338,56370,72215,38940,75684,34118,44131,63755,61547,79198,73957,79332,29775,78885,72013,10681,84920,23736,43687,49157,26364,49357,13571,59388,87240,67880,81646,74934,47482,64922,72644,67408,59699,58302,21500,94474,81960,51612,27229,50506,16952,59949,60936,72668,52655,50951,10275,29248,43411,92211,45923,86730,69793,37020,23331,37982,41361,87970,44839,31197,15469,88125,30141,90163,77645,45094,79690,23671,77445,54475,20015,91635,95531,75955,64973,16466,16478,16130,13939,82166,23353,57038,45631,13814,81002,68065,38126,76292,42850,44347,35441,96616,20008,35829,91254,30635,81875,23515,39132,44520,88039,49552,54841,45924,17898,70273,87766,87772,30856,69770,14654,81205,29823,17065,24951,67173,54961,39695,17933,62186,31705,92875,95641,99656,38152,91041,19783,93641,57008,16488,19594,90208,55846,47530,49431,66478,18104,36258,31671,42852,72347,49306,29396,32942,96664,40159,60768,94320,27588,27543,51997,91346,69502,82995,85613,16887,26842,33507,49424,57913,88093,49349,52180,58757,37961,12326,29716,69755,39252,71216,68745,65153,90869,65481,34372,35055,97995,94548,29226,21214,88047,87371,17113,61068,15604,90264,65979,85713,19989,92540,56851,77908,69288,86904,44338,81367,72457,12316,87882,97597,34195,49449,16309,18544,43720,91193,36249,82080,68755,55694,69727,21592,14641,95508,21729,18131,44583,69904,33751,12889,44916,35607,60706,94636,92026,16298,70736,91240,87458,81659,93733,48755,42821,97644,64189,28206,25308,98475,13404,38505,68493,37512,50337,97123,20879,63041,60749,72577,38024,59648,69965,19627,41649,70398,20936,86110,44627,35266,80162,41020,20129,57520,39523,31003,41426,79269,66826,53484,97022,13190,33228,96098,31782,97649,66745,52862,50622,97906,33345,71209,96874,42915,24217,94198,61857,69691,98109,71282,47747,65108,57386,54669,32717,64430,36564,33012,81587,79602,81357,79973,71304,10324,36504,58171,57807,28960,45852,79612,23391,31094,92741,51037,81642,15094,66859,78719,50550,86205,90941,55259,97323,27501,64253,35215,46783,57006,88579,57663,66046,67302,77135,38920,99488,45729,28396,70345,30409,12292,19291,52507,96539,10879,98811,18392,21525,26179,58778,93864,37430,91836,36002,75436,44723,66805,69760,79024,12587,28240,71655,84656,15114,41782,80644,67912,31549,97963,77818,37873,34283,37005,44284,59234,89962,74356,70363,96026,73232,99346,72520,94755,97534,46464,25965,79602,29854,22495,18276,53231,85983,81588,26785,84597,76371,77614,21914,68681,22632,74210,57000,60944,63633,93786,89518,55625,15155,59456,67520,47978,58412,53017,85028,48037,30480,21471,72511,90703,72002,66928,45313,93263,83607,74446,91739,82591,81425,73749,70514,80747,13514,11666,63320,89189,70083,28378,78737,83279,85200,26709,91570,72330,46187,17389,20717,41463,32085,71967,67085,35547,17831,15481,27506,86275,70671,26470,38259,25835,11005,73162,48126,98290,27911,99635,76918,35741,48956,38342,96835,90588,80511,20508,59832,46457,90585,50804,32817,99510,23820,22508,95311,26687,29013,15238,34495,12532,64148,93601,55962,54559,60678,86825,52338,77510,11156,16800,38717,32670,81509,97383,77493,33959,40387,14883,87668,38005,43056,29382,73110,39950,18387,95345,98119,33984,23935,14190,37976,29256,46607,23565,38305,17436,58787,47170,11945,36057,44419,29481,76057,29370,30451,39777,46777,19980,74478,83263,21604,80447,33453,87248,90731,32324,17415,21337,44914,54231,62570,23061,66048,70710,71852,84859,77110,25315,98040,75835,25734,22082,89372,86654,72319,88282,96141,36200,11964,66523,54764,23739,34142,60129,60163,90794,14288,81311,62728,53245,23785,96333,23478,30566,35679,71786,29424,25467,32144,48871,84927,14128,78325,53488,90491,83580,84572,42070,35274,62720,94632,48892,87226,29473,50769,92457,25991,17204,32921,18473,31054,36937,71753,44542,11696,59257,68886,65005,15914,25996,22305,97421,26701,65621,65403,82808,14970,47766,46520,55925,21565,91258,88651,36355,37188,16266,51106,35489,32205,75431,69824,23338,63907,26796,29484,68568,22903,37872,86112,96006,15294,74102,46937,33039,99194,73892,10432,86595,77586,53095,89539,64879,91381,25354,99749,65152,52802,10387,20568,29440,57315,51424,33796,64326,49169,61170,58868,15033,40609,21540,61633,28931,94134,12818,49653,76215,16378,72833,66349,38507,36585,95771,27993,18708,80414,27975,60597,68095,16823,63012,40466,64159,30827,80695,37256,47529,54079,36259,41283,40247,97326,93327,76690,21760,78698,92169,23098,36766,17259,24390,39610,69219,47369,36347,74681,50574,92425,79009,89818,68083,81390,59625,13833,47643,68199,59668,26527,86629,94302,11058,84995,53185,43391,86487,43752,75041,35358,69035,61020,19623,86757,32664,58041,71800,86866,21433,54304,20312,12646,75317,28378,54047,52526,85056,33994,56366,47217,67073,17626,64875,74950,17858,10917,65970,93629,53903,55333,28323,33370,77485,39303,94486,82725,51392,54332,27541,31681,35917,61833,72887,17922,57994,58208,73516,13840,78878,18572,78877,86535,72739,10619,31537,70340,74350,65530,26551,22227,27537,59322,86044,58814,50064,56124,77304,97470,80794,96272,57924,18627,82395,29120,14468,68980,87158,38408,40053,32928,59493,44770,94071,76807,75976,89656,81527,60569,93189,75948,62074,56678,33383,31404,89923,33724,21183,92084,97477,85864,41368,76503,17964,71972,37756,91501,95801,28353,69286,10043,53527,64929,47398,60191,16074,19734,64738,38881,12304,95802,30396,58398,16001,67941,70301,29863,76533,37176,36816,35546,31197,33902,42350,96849,33044,41487,66495,41891,45348,52963,58079,21881,62714,98210,50904,13146,92196,12190,66941,56667,85381,66980,39123,81874,10626,55207,11421,55083,24629,70194,14327,14560,65463,47631,14986,73090,89911,39939,32168,73895,74695,71709,97578,31996,48584,71340,51377,76390,37589,77555,80783,75100,29794,99951,49251,28795,36252,22900,48284,55091,53534,73638,90144,93218,50438,93566,74143,67388,16410,24509,19606,82461,96941,63937,51921,95089,79151,15730,94695,45766,31389,26299,79802,42632,86864,33909,13061,27126,30074,42766,27357,92283,20949,37707,63701,99829,75326,63373,80095,16318,98538,10574,65857,96925,52441,26045,75468,40149,44380,16081,82649,26368,82541,22604,73594,69557,70044,91257,98556,19574,94442,94847,18832,91529,70063,56774,38171,40775,39186,89004,84770,37109,44170,75518,93584,20708,88528,83941,29821,21855,67539,60498,43027,35911,71429,75985,93517,90062,53509,81580,58507,24001,54974,46166,88621,58730,90081,60637,22141,24852,49559,86226,42747,26987,31881,32614,88048,45493,79389,12966,74970,68646,40871,36200,90049,50459,33420,45696,15098,41346,85044,37644,65065,14103,40652,98800,75509,81973,85816,51689,95438,39106,90831,54395,22934,26502,47624,31672,34829,35557,61606,97830,78917,63085,57124,78602,73629,24434,48187,47428,59607,67339,45064,66132,28217,69585,24307,51068,56766,53723,32328,99976,15080,73736,83977,35966,81028,48653,68494,23540,13491,27394,96908,60583,62746,13819,89869,16217,82326,56734,45631,90929,12584,20998,99125,37395,96746,90744,55559,48837,45671,42763,51643,28777,53125,21479,91985,66652,66405,42170,62185,68591,30038,77259,65201,44614,36215,46823,50929,36827,60939,26544,21966,37639,96236,63280,81686,67724,75998,49821,50672,63239,13583,11970,32188,63634,55997,31559,27051,79385,59879,77464,18475,59076,37946,63479,62624,81739,65587,98513,22009,16620,93908,11683,13033,70336,83453,61370,36986,41812,94756,66164,22288,40775,73485,33887,45841,37549,59678,20253,35926,56160,48497,70193,50189,46612,74905,85530,23882,70582,96456,99209,67533,43726,12535,12413,62436,26542,88353,77325,16165,55496,21183,56872,27055,97327,36776,20305,54747,38332,42880,76767,42563,43441,39938,11193,37270,75862,96522,24567,15139,65606,35672,36967,58208,85826,16867,38343,39635,38925,84287,86588,13028,13488,99905,56165,20205,52451,26831,40312,43950,14545,76981,67580,19628,57579,86078,70573,54243,43080,76042,98736,12698,34778,10081,45399,84759,66959,70418,81349,92686,45381,33318,22466,94561,51717,27772,61891,33076,60942,18915,35581,48860,95576,22614,72347,15065,23516,70807,33250,96239,69033,37846,64156,80209,41213,80820,18675,41298,78905,39601,91624,18907,31219,59993,79318,10760,81373,59566,51789,69196,51093,39195,20465,77886,98136,71249,87534,31072,59655,44597,75540,34470,79637,24701,94610,80889,64607,17315,50044,53734,48106,28658,58379,17431,71143,85019,82179,69533,60924,20401,85604,25234,56493,13052,72492,16864,85987,58995,96584,33418,28322,37335,11951,69738,94349,80031,44868,52744,55408,97134,46143,38248,66417,46901,87601,31018,27494,14326,14985,15263,53434,50813,25656,94846,82203,81475,74393,17837,45123,93112,70534,84012,76705,77437,56987,91135,52425,19774,92383,79027,74908,40290,29036,76012,65165,17638,36500,68030,65762,35129,15356,51979,34980,21755,95441,91649,65172,51920,26651,96284,90241,87567,22862,84049,77730,75407,22594,97499,49371,14110,72017,12161,89711,51949,71309,73547,20200,33938,88412,48791,72661,72290,49192,90814,30529,95713,31164,13659,54836,51202,70321,12872,85183,69522,26241,77479,65193,36967,49088,26325,61971,98263,84594,42912,45714,35597,70081,89791,11569,91545,25542,69408,27993,57467,14562,57946,42245,76714,32975,61416,10432,13837,98532,49544,55940,51786,31321,98959,30920,99055,64160,94361,21998,97051,73941,71543,15701,89807,70575,48202,76815,94972,43399,22763,88643,76323,39243,92646,58682,50767,80628,53648,28764,99910,69308,82562,87526,50416,85894,34139,14838,60162,46278,92384,75244,63261,61558,10970,94514,70647,20098,28336,16552,90412,95370,42923,57231,80829,27615,68944,52984,47578,14351,69659,89566,13808,43158,26916,62100,98762,13838,51278,10097,93561,63802,20686,70954,43176,26656,76742,90014,80426,88518,32372,89739,63935,68196,75105,37765,35553,85021,95036,79923,39402,30663,28055,95472,18980,29818,74107,23011,75402,57352,13274,21306,39229,38725,66714,92501,59766,97706,48894,29854,37573,53446,78687,47496,63166,79454,52085,65799,11996,88743,49656,20195,35480,18618,60725,37362,70971,24718,64591,34520,30234,50316,86346,12473,98819,17115,10769,18576,80924,79637,69763,56536,12632,71598,67733,99638,90348,27485,51364,25210,27734,89550,89792,26563,78394,40896,77259,69225,70521,26831,64467,91836,15571,20558,64601,73681,32548,23353,34664,59265,15562,75199,93943,90820,16561,36988,36637,41143,35022,24721,95734,77208,70542,87650,21505,20809,90315,66287,89887,79500,71709,63799,18716,93183,31108,35935,25052,29465,99638,47996,67883,45044,89480,28373,14025,50781,41894,87122,52342,84723,20418,42148,11197,89152,84397,32384,93117,79175,74482,49340,81413,52903,32663,66188,59459,97254,60142,76564,38297,46023,83359,49780,34373,17233,22087,73012,60331,35757,90325,37496,70156,33173,33268,95645,97166,48891,90080,61809,21950,13694,10381,24600,58055,66812,40758,24656,85367,93517,27497,77675,71972,91421,19271,13441,22065,74815,74576,66104,85006,88190,67983,39129,80937,70101,54655,95240,37729,69088,91888,82559,32478,70867,71695,56811,27936,37175,77554,91568,66171,61382,86880,68198,91413,93675,61544,19476,56742,75126,25542,47731,74196,74259,95376,81768,96209,35383,92401,72112,42874,68167,73044,94783,36483,97373,50710,28513,59028,23844,83318,75722,43581,89107,74220,72167,72161,82692,85610,99891,51403,92051,43068,84194,46338,95877,36437,44321,91776,17555,33217,40541,73478,63147,45452,12561,78506,12314,30021,35206,93008,94618,20447,40584,93494,26348,52709,54360,34038,48939,94622,20547,46139,45059,90504,69145,80385,35825,29154,98901,43877,44746,54256,81604,71345,10723,86572,70360,27242,96107,13616,55421,74647,58498,12551,79800,30566,13876,86258,74364,92882,15907,17247,15177,89589,75235,85657,11330,94236,22201,50745,49819,57173,61711,56425,39028,43801,39236,89059,56996,82387,78358,33969,32880,76471,46376,68891,75089,98047,31437,38552,90701,95507,30654,70362,91697,12556,62624,33171,55052,93969,42974,50970,39039,81461,97904,47446,24135,56389,96360,36537,26991,33541,59089,96597,82704,73471,98399,65596,30147,49892,97600,91336,69465,81111,16000,47043,29490,12053,16653,84252,86327,77396,76254,13932,88051,98890,67048,76209,26360,10884,34375,13383,27089,97647,78357,21018,54392,36298,67213,16549,21771,42945,73607,31429,57073,96691,22585,85812,58173,37916,49434,89485,43518,29400,82940,51040,95941,10201,37754,99366,18979,83778,24284,14100,74252,95413,16179,85291,89351,58998,28749,12542,78379,39414,27563,87650,87297,27293,22778,64797,13301,46494,89999,89663,38706,78065,20544,59012,98470,60597,37284,18960,24565,36155,85762,52661,50925,80555,81952,88573,72158,84842,13862,35091,39968,34714,29483,55619,42119,10622,95391,67698,82503,24743,21613,54880,53769,68391,18227,84171,57302,22206,98017,20298,59607,66508,44831,76583,41806,11781,75626,74245,15426,10804,69431,51150,45491,29287,27982,75829,58227,36054,90404,42202,54002,40719,19965,94268,20877,48571,94607,65960,11107,71064,24834,65529,11163,68750,85844,74048,30938,82797,64694,77258,10714,98951,93106,49866,23213,99983,44051,57621,81546,66521,13443,49939,31583,47340,72316,64780,12847,43369,95201,30215,47849,98217,55739,86386,59098,98790,91408,96154,14149,98730,36861,15704,83490,68433,20335,24312,72248,67790,34738,26366,48866,88422,91055,48010,36221,65387,34471,15546,82256,74003,96638,92456,72156,21374,81647,69119,35797,89097,45589,16576,88298,37748,68540,28933,10876,64604,33838,59412,90265,11113,81004,21695,99474,38870,32962,57515,38305,78819,98480,14370,27113,80325,58651,32268,96068,40718,44074,83234,75570,20633,73439,29740,45735,90686,23504,21055,77050,43083,84009,22557,46171,89937,43702,32900,82563,96499,43902,36479,49506,78089,55527,49363,53369,91696,52196,78464,74060,94079,21558,43914,30308,40827,53590,76764,91909,12298,60364,79018,37371,75076,44428,94638,39002,52610,70124,79058,44834,78620,98833,85516,37232,55913,78776,20121,53138,63642,83568,40758,94453,45875,18874,46941,38161,25364,74271,74017,66293,74072,56496,88344,38368,77425,22297,72692,57820,36687,42298,52216,12822,58659,47285,23131,53558,21724,14967,96757,24669,93377,91478,50038,19557,68269,62902,12743,52584,70179,64812,69698,53290,22678,10380,73307,51799,30903,30228,80034,78740,25559,76475,86062,45042,90796,60517,89606,68560,64506,88821,14730,55859,69171,32712,17130,92686,75700,50137,40032,45662,55560,62229,30886,19338,62783,32476,58909,72890,10391,94771,31206,92919,62230,21869,48380,88129,45877,53683,38795,21820,63171,68454,93083,88975,55989,44596,65938,99576,62398,59131,84768,58485,31959,74635,87675,87896,21074,10937,39620,94625,75975,50176,73728,93002,11001,52356,84184,92662,36046,43130,11694,79456,74000,49569,63126,70966,95429,75792,24186,11100,72812,62923,15180,92331,92174,85318,22858,94744,72640,17916,49834,78270,67587,64788,59367,29987,76457,90555,86190,58630,27489,40351,98068,96574,94874,82837,38134,77657,49677,20159,38555,74966,76637,15078,78392,98481,66131,98156,18027,22702,60570,85962,37824,86818,32882,99611,94373,27971,19789,53093,44186,30869,51023,10906,26600,16744,30016,48636,11083,44809,28709,67350,37793,18294,88396,88937,46220,45424,72596,67729,15888,15814,33493,72748,92817,27179,54718,68825,91562,39297,34269,44913,60203,41865,33765,92842,77625,21582,98945,30234,10137,50359,26365,30089,69716,46627,13876,86199,38118,25409,50276,72340,34155,11357,51000,30037,44337,79227,12612,34952,94551,52699,79971,60812,49616,18232,28603,90040,88033,46435,54326,69475,92585,53447,82968,43769,20534,58761,45727,36718,21777,72145,23532,93746,55554,70244,81277,97515,77324,83404,53704,67540,62098,27362,57459,36417,88597,47440,14078,33577,82988,28615,83527,99832,32672,86184,48359,86035,39633,63663,55263,15617,16350,21837,16791,74006,28687,31935,66221,86517,94329,78245,94447,56748,19125,21083,28831,31275,66853,76682,74327,56214,44927,50442,51596,51076,59493,34000,16584,13366,40393,67969,27643,19992,59732,90866,24171,88186,52388,39223,62102,33338,80878,45381,12485,32046,12797,95919,50164,86431,28673,40052,10097,74941,35910,35678,92650,80166,31516,22964,29915,42837,63550,36318,71170,17114,59780,86436,37295,60358,23977,41104,30107,31997,89720,45541,70585,51306,64300,34353,92437,28515,49866,79903,82967,13759,30758,25317,17858,44563,83055,41325,97071,19528,63580,93689,59564,85925,93735,41810,88715,11513,36733,47306,63272,68146,61467,93000,89645,78932,79408,86423,95020,70643,89209,67676,69752,68100,50600,88365,34325,11769,40949,38914,54434,31846,54147,60866,72308,20167,21641,10754,88456,71349,59328,37609,41853,82210,26266,74425,16403,24714,97241,32456,61302,50589,76544,48723,98165,70151,13398,16746,41806,29556,89621,70302,19083,76765,36511,25722,16820,18757,29006,39439,61486,53935,76457,19947,88919,89422,84823,96126,13520,63061,54684,32118,52437,33791,70139,94490,67089,25230,20509,65927,36141,87387,48354,78860,66694,74599,18536,31997,75718,69087,23990,87125,88349,70357,35133,33121,61747,96737,25071,25423,66746,99763,88498,10819,37240,45146,54714,58380,90964,74319,14288,96910,25079,80434,88274,69156,70708,62534,95987,28444,28541,46412,67923,30500,14758,79536,19169,65602,35417,31120,65168,15862,38530,42917,85821,87166,80679,76949,89214,81534,10268,87184,53824,93426,79488,19302,57157,82089,40938,83042,38372,22644,82761,73201,70620,45005,58998,56499,55048,18208,25492,15224,45976,12633,13321,48426,12617,33542,20371,46428,63214,25829,91231,49011,77397,93989,81241,10448,51231,94378,21991,38817,20606,66013,58923,99110,23846,69068,49193,35827,29574,92135,11900,82423,46797,22214,44694,15166,66260,56577,11933,34016,32933,78435,44055,59191,31473,37689,33617,63976,60354,44411,92734,84843,55503,45226,49165,94793,88513,42761,69360,57283,44813,42364,41507,42700,70995,21297,79391,12391,85695,47500,83083,56389,29402,97154,61981,86475,33445,39122,85648,27971,87434,96407,16232,79406,17551,80449,31246,25223,38251,41607,34477,25807,65685,73341,29578,21051,53537,71141,63594,51221,54382,90124,57033,32530,81353,35120,89523,51804,41639,81652,16383,16349,94920,57620,16091,42878,82266,10301,12566,55172,53745,11038,81376,70585,11632,72572,20507,83089,34475,62125,48398,69040,30072,38530,74368,86722,24661,99118,48361,25964,88575,54807,91368,62509,70130,18050,52924,14572,83131,46215,92061,19883,78881,51137,78709,88752,64663,23861,98308,70453,66643,85711,81714,55228,79369,72723,43087,74682,49402,42584,84103,65798,31743,67089,85801,40154,31340,88976,25833,80661,10363,10819,60657,48554,32230,50239,41705,75506,12934,52744,70834,59332,32553,45960,72601,45745,43300,76816,76066,74302,42489,46674,21004,46630,19941,39305,82693,62471,43953,79650,31091,81229,28678,17476,25284,85438,47153,70302,10447,23414,75782,63512,12701,76642,99532,59580,10584,76313,66256,80122,89519,96244,68725,43355,92126,11274,32354,42914,70808,20491,89443,32417,43186,53511,26803,32071,44940,78178,52947,71466,99774,15196,48160,99350,84906,47201,43765,84255,35113,97504,42706,97128,68882,11843,40156,13092,24411,21949,89592,19503,83272,74829,97874,40351,66386,47321,83747,48047,73668,79487,79036,78900,28328,44501,11077,50280,92519,91225,11552,61194,32638,27687,65987,63047,98363,83728,74987,29428,84591,30711,68843,38929,19215,53711,98958,89763,88442,24538,13873,35376,32275,22319,25866,25247,71076,14810,89425,10907,14753,57731,64587,91963,28516,21071,48646,65288,64085,57995,82742,47667,30900,48385,58593,87800,69207,54783,85106,73805,80505,68624,54996,72610,91978,18578,71971,46009,37379,84787,49568,89930,88314,69885,10773,17561,17198,17589,14163,52056,68646,71429,10295,98471,11931,86025,16930,31602,14484,32680,54638,12896,60876,78945,30063,71015,41356,60415,73964,38354,42634,78186,43836,50654,13444,18644,84091,40695,58717,76332,79225,31139,79616,82259,57706,89143,47930,66313,98565,47252,68017,16172,74999,99783,81286,12970,72120,41458,95300,19105,74186,38651,90206,20843,85010,15629,20706,73139,75800,36132,94266,77142,80994,50884,95705,44778,99229,54395,92859,65983,19928,69142,51121,96361,25842,44471,95776,31885,85932,55601,34068,54871,26019,59552,97511,83538,57480,91083,61932,71459,89146,13651,16285,82837,79830,89233,12309,39429,37209,12416,38687,19212,13542,39807,32185,72992,18066,89399,35787,56125,33843,87938,25770,27379,34850,27170,22559,31513,19177,42211,13523,98511,43372,77177,34776,33596,69900,65699,27174,66972,53866,41555,54370,32862,48600,45646,25223,28408,16210,65576,55183,44082,40595,62615,31036,61583,38412,28166,19590,17628,72303,71547,49711,99244,81222,72374,72429,20274,79491,10322,80904,48710,87767,71813,36617,38813,73294,63940,32959,35199,69282,55452,90380,78178,34867,10854,81087,43641,50009,37750,25912,64142,60979,32354,41121,63941,23296,39237,16239,45328,44946,84334,65872,73632,51554,66236,27239,18749,46547,20060,84776,66951,80703,24263,44552,98766,35174,69564,98203,69896,20515,51328,20062,89949,17765,16820,57863,16876,81585,39533,39542,28169,73305,73684,29181,24294,22038,83049,17443,22867,11879,90759,55528,87801,81872,72489,91823,48225,92696,61142,78781,70074,66581,98144,88198,61860,18847,42023,86337,29680,88425,21634,37723,32725,69810,76035,44735,28135,55530,85596,16662,13393,41599,18900,71593,72977,64007,73685,73050,62944,85875,10293,71531,74595,24075,94928,76686,99111,25983,23815,88759,98711,87361,97867,76806,32062,46358,47954,46784,55125,16405,82958,29601,21343,26649,32480,67844,32747,69606,75520,79043,40135,44385,39654,28100,43359,98254,80272,22770,84296,84004,32292,64130,67218,61590,40065,64788,27623,75682,48551,68055,78749,55457,56422,56165,34182,21729,83864,47954,50759,75147,19875,39842,60971,69451,74525,41078,71635,65079,12036,76032,65057,77337,62821,50199,72008,52086,19994,44167,41339,92086,30431,45999,51198,31931,58438,84832,52375,50702,40701,73772,58599,97043,94583,65058,67211,28104,90790,16533,53052,30282,43445,21798,65991,97355,66080,19452,78429,19132,68748,99765,96449,79873,46740,12214,40994,22086,58942,82038,80524,80043,42767,88914,90870,96965,45902,53522,97529,78211,98945,13156,35226,95590,28788,40449,28904,63996,71884,56664,49176,32773,77349,72661,63078,16614,65271,72512,48756,73784,89438,83955,47050,92184,45897,16333,18366,62263,83370,23220,92507,34507,35703,19950,68982,85479,45362,58175,21694,62287,13820,32547,69763,88102,65189,60685,23376,60008,75638,79332,41324,36472,56583,48138,57148,10987,13564,31755,32750,32677,43102,42723,32314,31651,28968,16140,57745,94788,60611,74618,31595,99934,37251,71427,80921,18055,11030,47096,88154,59937,82698,81358,93226,68208,47834,94788,44051,83215,33113,13319,75608,52259,28903,56121,72777,13206,23243,26503,56803,90058,71434,34241,27940,96651,99707,94434,81594,20032,75736,81242,22093,53855,57024,21808,47181,89441,40813,64720,45651,36879,87060,59853,58621,81053,89585,13324,58398,76152,14151,33494,18743,76197,21259,92645,57374,77598,47417,91987,13612,81957,30534,52208,57760,32416,82557,75940,85502,88111,67372,93453,71982,73041,49658,50936,94111,82436,21569,30022,64153,32224,72129,75095,93903,54567,89923,34851,34804,43170,51106,23534,84112,42152,31802,81651,86601,35722,17182,69132,99755,52643,54922,24598,62529,95116,93982,34111,34920,65190,64202,93087,52226,68172,55678,62114,26094,88099,34401,60415,23888,30700,60072,24396,60645,71250,79107,71309,79194,53935,26360,85073,47458,65444,65217,85537,29021,12281,71793,58446,99784,55459,60456,13107,82652,81230,82312,30043,51356,53680,76483,40197,75366,68368,93717,74032,50813,44109,15104,33847,86289,71623,84745,11754,68678,49833,96697,93651,55345,78739,59933,85953,85216,38692,29164,17149,44729,11679,61701,32942,54573,16939,98933,75303,72239,74905,10358,31697,35228,63482,40593,72578,27359,64299,31139,89994,61923,54602,29988,71563,20204,27104,60669,90464,37601,71314,82811,41233,50011,62695,95284,11312,32457,41710,86635,11890,40204,87443,25440,31954,30259,90208,27699,94549,93973,53983,27556,10489,66617,10470,15192,37593,95289,24821,93485,54191,36241,14539,61067,30768,85145,38986,67598,53565,79318,70987,24262,22712,51438,35750,33176,63248,19116,49358,72189,13738,34428,82932,27510,74314,88971,62584,92951,12170,29327,32391,76857,23430,38075,45849,75804,23737,30709,61647,12494,64162,67762,34943,14964,72860,23549,12858,33273,44487,17915,69413,32544,76519,42179,49260,11058,54307,77073,70551,31353,39329,89558,43606,86273,31631,92181,67128,55452,52046,29006,38444,26417,15531,27973,24880,23301,54652,91176,25079,34081,48627,39035,16867,48657,38711,51900,92006,53334,75973,61783,41770,48998,77669,53901,38393,14631,27728,13942,90539,82128,14088,67899,60840,67501,41043,50757,57197,91645,67080,95519,17787,96084,71947,88180,33511,31230,10818,87675,38120,67499,67800,34496,27289,63786,60635,59261,29473,21631,24949,61621,87784,70692,95619,50547,45693,59810,23579,21328,23097,46876,73877,86805,53654,17343,20199,80917,37809,17898,85195,71910,84250,69151,44278,59908,39756,32466,55098,13947,76007,54909,33959,98144,29401,78409,72603,40863,23135,13149,57319,52520,76853,67613,15244,37248,21968,36968,52234,63394,66274,34816,58777,21492,64523,56870,24781,99785,95180,78411,44386,13268,85450,26192,26560,98765,95024,60550,49770,40295,65253,75933,11690,66738,16367,21442,53548,78150,86333,51561,43734,57509,31426,41062,74587,40256,17898,67441,93360,77581,58617,69342,17964,54530,59072,18351,90782,36069,49369,55456,68065,27100,25309,69328,22357,32837,21847,41032,72949,78728,21960,33149,31511,65962,65790,69160,60746,86176,30407,19903,99678,71079,81350,35195,31867,95974,66840,36870,19091,98069,61932,39629,91906,62519,74123,77988,92250,49679,53290,11683,57581,38666,54062,88360,33001,57480,15994,77329,62246,22139,60291,14612,65226,68367,28818,48008,71490,68078,12023,67270,84315,54281,29198,36319,88946,50164,36508,86827,24874,64582,43164,85339,50142,31256,92189,65141,21362,31397,74476,10437,68994,27666,34467,23024,50577,46451,41575,57829,18196,65620,76218,20550,93824,34709,38441,65775,65487,92616,24635,21446,98576,94183,97372,22557,29111,18761,79499,61459,44679,22262,78533,19428,24978,59287,73047,12232,26914,98231,44531,22579,95721,51544,93051,86936,41394,65401,32927,89355,81574,37078,24704,61385,20203,29841,10040,91925,48031,58757,83562,24633,12652,15160,51279,89305,57268,44144,21338,61245,57497,98059,83947,54305,83593,25255,53905,47970,79890,92356,97800,88360,39225,96674,33935,53861,57804,11630,88962,36619,55771,90240,91404,61090,28213,50715,27118,25927,51082,50514,11764,76408,12144,24786,63146,97670,79935,85708,60253,46627,43364,92617,42819,21784,94589,90779,44211,53869,54264,85867,86559,41135,50372,77873,77546,87121,51784,92853,19394,21838,43838,28972,94231,88275,44833,64957,60413,62597,30755,66288,20261,16531,26797,64121,78799,47226,15109,33856,94364,17234,59084,34020,57516,41476,57886,54952,54546,29667,21578,99599,89239,77748,82793,59237,35147,93669,95353,76174,51137,47000,26554,14173,46378,23916,73327,22106,45396,92470,14196,79599,18907,89800,47578,36547,97494,97204,10330,69321,14005,94414,72415,82197,70267,27384,91572,22465,22302,68952,92755,53072,44073,25463,17580,29377,94019,93357,58704,50678,39706,83913,79581,83882,66814,44584,30066,52174,39923,67999,60621,97703,73588,96545,29314,27302,97163,71631,21929,34348,19933,61395,28308,41974,63204,82794,50423,25512,21791,35226,45667,27824,48814,31348,40587,90725,77107,51894,33957,50571,47312,74466,95049,12398,52538,75015,89959,25121,16336,87944,83684,46960,53487,92551,63110,29875,73162,93448,51601,91811,88306,48832,44297,73431,88974,60298,39344,29964,29398,22740,81238,83295,92840,37100,54411,84152,43183,12781,98981,92612,96151,71430,53619,66197,88527,70837,35734,65220,51352,10521,94921,47980,53401,90336,18698,35053,28239,72791,14989,22768,54328,28600,91830,43061,82295,28011,68879,39665,96039,12735,81729,89072,29019,41247,52939,62337,31643,66531,47134,33139,26245,14505,85909,68597,23797,28985,16574,71536,75695,27343,63213,16510,27955,17485,49545,18965,61429,66086,86425,60182,33155,70501,63833,44037,41084,88650,10806,40204,27285,29355,68410,14166,34906,96707,52545,13308,74922,68408,91121,63345,29193,42061,86278,36230,85628,34262,46520,40453,60622,72941,42457,46442,55826,42751,47107,79158,67026,15116,32698,61210,72278,20552,46528,22654,15030,57917,38898,33977,20393,15154,38313,65647,37857,82493,22950,83897,81124,37330,10474,25552,10935,62641,34617,98685,30569,46313,96545,30031,75923,92287,55638,32761,45423,80845,29171,85748,33389,76342,42328,14702,30762,61771,12008,85823,73411,80944,61402,87069,41991,70211,23584,28984,42335,51329,67426,58293,10009,94349,28556,34066,64316,54457,75546,97461,55602,90226,34116,94221,27420,75561,67264,25095,46351,89186,20519,57770,37753,99444,40686,24200,55380,40848,15010,16849,83851,15345,89693,27770,19340,28633,45478,28944,59882,88642,85829,27170,91042,54429,84154,27793,72955,56693,70298,39429,30288,84100,64271,67248,39328,19386,19946,99321,10407,97784,36309,21455,44219,20848,78770,45855,35932,38687,43876,31480,97145,96042,90305,22529,69389,71827,59535,55409,30018,69170,94961,64350,90344,26427,13748,17551,33293,66379,92167,68943,60810,65994,66510,95209,62029,30673,46813,60405,23881,10844,34756,10150,13119,10458,18487,13464,38525,39156,94762,75491,36743,97012,80316,53479,33952,48992,29445,45712,86821,69109,57194,10074,46195,10227,56219,38511,68798,96586,31078,99316,24522,93152,30130,36808,40966,56426,42532,32261,46954,28497,86602,84993,99638,82581,76695,18308,35469,94542,93118,99651,88637,68075,68768,92895,89324,44732,95466,86943,66979,54837,63511,68493,79722,34392,80296,81707,82263,42121,51193,93772,22256,44463,65717,87813,31942,64374,21924,31431,53289,75986,26341,76856,47807,99660,10369,21341,16130,12684,35521,92888,97318,21131,96187,53789,83159,14589,31854,88276,15769,75036,24696,94823,19991,28157,33555,12829,38141,93595,62981,68936,26294,83095,23481,26836,44775,58330,85562,75236,67999,89598,76375,70074,41980,94754,50736,95506,88937,61402,38702,43477,79926,23024,31200,53310,75501,44296,21430,22690,24887,40861,95341,75898,55350,30635,67982,24865,60809,62380,24634,33979,56397,48434,75165,44488,25947,89043,94788,14423,36860,33343,52648,47752,65223,89512,99667,82379,88823,11746,31665,90398,91960,50870,18467,39803,35494,57883,16300,19413,92461,34162,30556,52387,69649,93148,41775,78266,36513,96586,60235,72604,79432,99702,70588,98921,28724,93877,94125,21939,73589,20346,97010,10554,97392,65402,62444,70770,48148,95296,29825,90825,73703,19607,98283,23212,15333,85708,31077,78035,55198,81527,78147,95766,97850,18285,41252,24468,99270,12646,28122,30219,57932,37784,46053,60681,70671,21856,38390,95771,97044,53061,35693,80254,31448,75257,65563,25917,60001,56582,47218,43598,69344,73382,30178,29707,94409,80847,39112,26652,42901,11965,31577,84102,82072,95129,38434,86483,54821,86382,77037,97972,73758,83248,73916,35496,11508,43388,13501,11462,12928,50472,84577,92668,87430,61096,59715,65264,26855,60342,68345,51128,45596,56744,28039,54539,22083,70086,21953,82353,82877,50310,39377,64606,26823,81552,63239,71734,44306,63532,58076,18975,40947,31194,32482,99043,35697,54933,76968,84248,69057,41569,38358,56066,49565,30179,26459,71366,39201,11253,43965,23286,59316,82522,72476,35509,88930,91722,86433,22526,81949,35250,43160,16897,18975,51886,20078,39146,85671,27764,16682,71816,33311,54634,35922,30058,49807,48258,85300,37659,54353,38957,59818,26086,85106,57007,85220,91400,40868,64546,49213,54688,27915,38509,76056,38130,82841,27663,13703,50053,10709,62368,61076,48894,48299,70687,28646,84672,11831,25649,56730,59132,64586,13111,84513,39002,81083,11284,50146,70686,11374,61827,57459,87560,53367,32664,99388,76161,44114,71048,39680,64652,69428,78814,24115,99810,71753,42212,43040,42155,26895,76738,95685,96128,36963,35606,63749,87248,35896,35733,97587,39859,57263,29819,12185,48506,78596,89127,86975,98855,19288,93716,29050,41702,47826,43091,10575,87807,86785,39400,72048,52569,46846,62675,97631,67607,53672,35027,24946,59432,26391,66916,17939,41058,37877,69390,24070,75736,45923,46211,20158,61869,16024,79894,52654,18874,87542,92160,34176,67546,79353,21119,22068,93821,61712,66327,47527,53982,26834,34387,18885,51614,34011,68115,82102,34864,15398,74063,32345,82182,51725,92512,65257,85212,54948,50769,52649,42109,45218,91804,28054,59158,40260,60711,22573,59491,96460,92579,81630,56539,11027,30938,15293,75892,59695,93858,68871,23304,71186,83364,49464,93537,27146,41288,72882,66453,64617,46583,49312,28198,87033,16010,79934,90762,60227,54231,21280,30188,42280,18261,62814,10329,66626,94950,11516,23087,31363,70808,91456,44564,22633,36276,22984,82494,88770,64506,55067,28330,75740,98091,15814,58233,10669,62092,38066,25072,13382,86312,62596,19253,23622,71375,64738,97251,80258,55742,51099,54733,33986,46085,62079,31479,30315,43089,51789,37605,47866,10152,19668,22535,29481,50252,41755,50644,69176,77946,12924,36028,37399,67659,67024,21233,64586,13256,96469,74493,79469,35162,39244,49676,92708,71430,58516,81498,10762,87573,41445,33473,85333,24061,23857,79172,42924,30863,31581,53057,45119,73163,33366,26444,53047,29902,21082,33930,61522,86638,90156,81943,60360,15999,21543,16583,26368,25627,58034,38612,27837,28108,31269,76497,52298,51513,23450,74853,41546,35824,24544,10938,60108,94520,16230,47339,59919,44660,47794,20505,77300,44598,28398,79187,28208,80780,70170,31899,59391,15338,43006,81094,20404,62281,26338,57800,84908,68330,92317,25870,45800,86429,99689,95867,43946,92945,16934,70304,84437,38681,98765,49169,22276,93542,84227,36861,72742,35660,69113,78528,61715,66619,63057,91040,42680,88715,84606,43219,34707,45816,19322,58148,10175,15800,46465,66150,65571,15902,78095,62987,43570,89778,85625,29311,43239,88043,82764,94624,21605,90600,34330,73193,33556,61384,87452,62626,61351,23967,31724,47013,17286,82483,96391,58480,10560,59553,86103,59534,52720,88411,36200,98973,40191,21048,68815,71078,91181,17960,71947,34970,78725,11100,78493,40959,27251,55543,96874,97981,38665,72598,88648,61296,74688,47103,47560,55992,30931,17299,60231,15696,19238,13068,20088,82663,43353,14067,91432,42579,23095,42674,90447,31504,38595,95219,68560,10294,83831,86843,94300,67767,24073,41383,30095,22405,91119,38222,26938,59926,82267,83114,52793,63077,60595,23277,50445,80032,15276,20699,60642,16809,11821,43348,21801,70742,27137,32514,67872,69473,54300,69706,54641,79145,10282,15551,67184,64419,88826,34939,84436,88170,49968,38039,30372,49729,12400,27881,33458,30540,94974,12618,32159,68606,80627,58923,62441,63009,83703,59137,19381,29053,19296,39331,70363,58637,29562,21800,76186,19645,68587,75894,95499,11508,62042,31829,22883,54701,99675,41469,74183,17047,18819,43596,34182,31642,55868,92003,85256,16982,98830,58163,86482,80281,55531,18717,19058,16934,55241,72143,79646,50376,30040,18932,47656,96270,42141,64137,99183,36371,65752,56819,36287,52546,70478,95164,89645,88971,91413,42199,36912,91901,38794,94708,82410,46062,94287,80151,24937,49004,34623,28019,31822,71834,76398,46525,52330,84812,35183,59081,37133,11079,66588,80645,19167,59931,17602,47842,96398,37667,62528,35313,55548,23089,89176,77010,79854,43651,44750,51418,66051,68904,29537,94515,86710,84224,21052,16667,92848,48963,96961,88623,17005,39353,16259,83974,71432,79372,26305,12165,79019,21282,70340,98172,40160,92824,56254,60844,59131,12002,57688,15366,72342,57075,84083,35468,80505,35908,80172,55662,85554,89618,55650,30553,83728,94924,62438,46681,18282,68967,24273,94685,31082,53552,67456,63039,61242,95458,59459,43712,81994,12838,78773,45478,74661,46503,61479,11928,58662,45948,99250,94746,79330,35722,21154,42026,51821,50034,71434,91567,64071,43060,39116,73112,23420,66717,27537,31571,85519,74724,54578,93396,78537,32268,93046,68661,12815,50736,17960,39304,81674,13405,25840,51736,14988,60757,32617,36218,41053,31532,18309,15085,30021,62943,20099,39899,24919,56861,53720,88005,80158,16620,71307,66853,90736,49107,32401,36596,28609,99804,55131,84354,43635,62652,85282,48440,78083,34957,27441,23517,30970,89251,50628,71379,39567,21071,67410,13373,65141,55295,24469,68152,48967,89121,86419,50052,28655,28828,52026,58161,90043,36785,51911,97617,76535,69582,33767,17601,85182,83817,28331,34303,24126,13429,59967,12566,73954,88369,33779,19740,30427,76263,23207,39793,67290,30128,45638,57464,47890,95965,63485,38070,87936,11518,20958,37032,19112,35392,62043,46628,55469,12105,74960,32786,45846,31150,64815,56161,67145,97308,86587,19229,47587,50091,50384,81487,78763,88316,87942,72623,26175,36942,59069,78101,61139,11563,46667,55155,34837,76304,32384,84761,76932,50431,96917,82279,58517,73981,84888,17135,79182,14271,93529,10690,59195,75244,83033,96605,35924,17576,33431,40372,61618,15050,83283,80327,58841,44510,42238,31214,47349,89398,92685,24707,15015,73316,14997,35566,30773,47746,37608,50548,10782,43249,50581,97445,49666,92775,37968,87611,14712,87772,13600,50461,58636,45791,56025,62243,30437,36287,47283,93712,54176,11891,19585,83841,94376,48390,23015,23227,39749,94674,72470,88416,12039,14615,92745,22897,13364,43561,38053,59438,79787,59072,35005,95337,39013,96474,52954,52850,51741,27545,40690,73282,92284,92546,80736,59393,25297,91261,96378,64897,37386,25088,63369,80050,83024,15535,65012,75186,95030,76091,66903,42431,79554,43487,25523,19005,93132,53488,82458,63101,17903,46689,54252,47853,80803,83635,14681,57910,68024,27531,86926,25259,23044,66757,99909,71535,37389,88949,97625,24642,86506,98148,75349,46809,39125,82001,65088,61447,42428,84318,58815,40917,56639,45039,89130,66998,53248,95984,71980,66492,21772,31882,65016,85037,31619,18237,76223,26352,97198,63717,38902,50205,43119,69192,41462,91246,76488,74840,85007,10735,11448,98840,75690,92945,31015,49943,59988,90885,52361,43730,35842,18685,97737,44983,39144,30832,45450,94911,71450,61082,60358,55021,75667,64426,55978,96729,96220,28817,96938,44731,12166,28923,97467,42063,37663,58707,49170,25755,98965,53143,58226,75500,47983,42625,51295,73221,97588,34580,92376,85917,59744,11055,80831,52990,30167,37475,25802,58093,43716,88396,34480,75603,14544,76767,82322,71693,35325,44769,43806,56437,25645,13698,91174,93795,25504,32927,14125,20687,65355,72013,28118,79914,58302,75452,68636,48146,33713,86184,41278,29071,59918,83332,73416,31297,28042,92731,81429,97786,71697,10978,17108,37425,31992,49701,99411,99270,98408,37089,72678,18719,86756,61689,85312,13318,70495,88425,57487,57883,97067,65032,42873,31106,83335,58433,95485,11431,37051,36105,93276,69255,67197,51780,51700,47988,52980,50233,78458,12128,44220,95631,32388,92198,94095,61709,62526,73883,22768,58089,48632,13374,29746,17096,17325,22785,64978,48697,11974,32701,70513,21925,65290,89891,64925,33392,79633,87318,43793,96926,63068,31299,55067,80849,92829,90552,76558,83061,50624,28496,67601,99461,32913,48568,99983,27010,58333,68306,67537,12268,10012,31508,35818,69609,24430,10198,81946,43809,13947,43210,13231,74236,70769,91543,62386,25398,71882,48151,53539,89795,13463,49162,51448,67355,36816,39075,37453,79502,58824,35550,28980,75346,32616,96646,73762,13381,83915,55700,90542,67322,70193,47134,91155,81948,26512,62274,55268,78653,49985,45579,50928,19312,93751,96575,62551,75543,76204,68953,84639,95003,85218,92283,22148,31569,63605,93702,16853,90440,88723,31653,93274,72739,32116,28587,17398,50840,27000,37284,94995,55302,33988,61324,42540,21543,78545,29577,75753,69431,83754,70901,77989,62651,69762,25092,51233,59820,20554,73571,34882,65151,78140,69217,41932,65354,15727,64941,66899,15069,60075,85813,14741,82274,55918,15508,27685,47393,75735,83514,85137,14118,89947,72391,88090,18326,44364,28546,86507,19532,78285,94180,69990,50005,61487,30937,71119,75500,66249,13118,95253,77592,17933,88468,79786,72939,95554,67211,10751,83245,36708,86214,45563,13732,91669,25938,55853,17063,90335,20440,27408,11618,88773,69618,85103,21903,92570,16100,46806,31507,41121,80643,44879,64857,58052,99813,67311,27363,13432,87669,70230,76294,78120,72303,19685,84993,14414,89061,63141,76611,69152,56260,24452,16705,39603,76618,55672,40294,92756,98730,47779,57252,37615,32390,43264,32358,46229,58236,77177,70406,80326,94428,88004,41782,10384,24038,84592,88130,25569,77063,17799,87816,55451,22489,27867,65707,63427,62462,43066,93109,37245,43728,17331,44901,28960,46061,78224,10026,46116,90759,31334,20367,20741,62974,84763,15500,13298,19075,91667,58889,21863,70833,57681,91428,20393,48368,59058,13729,44323,20530,97383,19770,15000,87451,11896,43923,79913,41459,69221,94095,33701,22511,46142,94062,66859,82054,47165,37436,28401,22272,54715,82711,35728,68129,16545,83158,69038,21217,62457,80220,64302,54858,55586,41510,20327,96831,61009,76587,49691,12904,23720,32866,88840,95142,43928,37169,86844,47876,63987,58034,82375,29106,56884,67046,18163,60855,26519,91657,30250,53985,85468,90269,59949,31727,59544,22730,32482,58485,80770,14284,34142,59137,40716,97711,42047,96729,43363,99469,31046,28778,42704,46927,97387,92060,41609,58397,35065,28544,26174,42260,57929,78008,66304,24584,54093,38023,94196,85441,21289,60114,57523,87711,55379,95351,61063,21907,79781,91657,87327,20250,61254,36467,23676,83347,86940,30635,17988,16872,76782,76330,19052,73484,67042,60977,40188,11834,27695,21569,97399,64665,15963,27877,18738,60124,22791,34506,61300,20241,75306,25808,63401,26226,42897,67657,57124,93281,77291,76515,32396,35270,53792,64754,67896,53044,96819,50935,69113,72456,85735,51148,10425,85598,50650,55821,54086,37284,55115,28821,53387,82649,15197,49381,11581,30974,48719,57466,83177,21937,27093,93872,58774,88607,58799,94140,62279,63769,12915,44639,59124,27996,80323,59668,33062,79003,82179,10724,23481,16437,29603,23105,61551,69534,87460,26260,30559,86890,25685,41245,29493,66841,91642,70858,91056,26381,43067,66691,94759,52601,85778,54136,12107,71675,13866,12065,78484,67326,52964,75662,30883,86402,22262,80408,85226,59604,29039,69536,27146,99230,71033,69655,91064,14711,46200,69230,50430,43986,19349,40227,66883,89422,70277,53802,36148,70624,69814,63377,64705,87055,78246,43939,93524,74616,39497,57496,36864,26297,79087,53149,67628,38369,83641,82836,57979,76657,66537,81807,52633,65275,24041,84575,18255,57042,68746,53473,38333,90404,41901,10712,87918,55135,44438,38185,67475,48363,49974,71038,94348,24580,31386,43188,70758,82541,70600,43189,85603,99172,67504,23239,65851,65640,64426,71609,88977,50254,25042,96460,84024,48848,37230,82615,32815,47630,72600,99096,63331,46537,22653,55170,38428,42053,98728,56738,41981,77240,97682,75492,77954,76873,17623,56230,32777,45484,22267,80509,54054,14374,49427,63330,89834,71007,60866,51322,14886,35231,75493,20239,39476,47062,97483,41992,76492,93387,33612,56604,52499,91959,66375,57771,68629,87080,17086,99954,34404,72438,85202,79364,56966,67201,32120,79147,35535,68403,28522,93136,34244,64560,30540,77132,71279,19563,43867,62410,76559,15498,89423,64340,65789,87098,84082,62491,73322,19018,76294,56256,53139,60303,92808,24471,17781,63003,56161,26619,40069,82096,52166,89056,96860,76088,53008,51562,10690,78408,64364,83011,72796,46123,14677,22946,39391,36792,68630,11982,57799,85688,37237,24367,14278,19944,88966,97759,55041,94223,70277,24316,37221,10313,76366,26987,15356,89426,56753,61441,10307,38585,43420,41481,29721,95275,55528,15612,49185,45384,10386,53222,67703,76868,61702,15187,69059,46279,29204,37749,58504,98099,96086,64175,46007,90513,56856,14169,94220,67359,38736,93710,11920,40618,89224,27583,72238,42659,19298,67564,78041,66738,51739,84957,26209,90363,26691,43144,88062,43979,82699,31121,87153,16239,94233,94748,92327,21705,84713,69007,37304,57465,86275,10018,68140,59035,75129,40789,81308,96459,21560,12642,82633,23923,86887,98145,97820,79874,97897,20559,58549,25922,24407,96340,54607,81532,35975,42754,34912,84115,78470,17628,72633,85026,90864,72103,20035,29668,77594,81034,10346,90703,59615,43245,94932,49486,55196,32183,84604,32565,60814,19544,12608,32916,89344,32221,58311,71570,98580,95575,71839,82230,34893,73050,61494,99399,34991,78990,99593,55715,48216,82827,18339,19351,92553,58764,56583,71683,82833,49080,76826,59573,87384,92114,68546,18625,31713,11160,32657,61887,26717,67277,68220,73838,10309,98607,54202,52872,68420,54415,76034,82550,89216,72127,20697,62145,39367,85778,42920,36328,45789,86965,96072,17854,31967,59584,24409,11680,81945,18215,13008,34381,85470,33666,96815,76273,94113,40788,17312,27451,47781,55967,69146,10763,56465,89389,94624,62047,30699,39731,51094,23604,53310,30786,17316,32320,24106,46701,31152,89264,59998,39331,37690,94273,48474,13994,86017,19094,95286,59790,14734,36913,45348,14596,93423,47279,30351,13132,80581,51526,69280,40462,83301,54022,19758,14903,76713,62739,13902,95176,57612,21552,97674,24987,83783,18324,38871,48002,33227,61464,18715,65709,63930,80318,12717,88054,28988,11399,23223,21059,90110,99391,13510,25569,48221,91329,56340,81733,30510,40763,30221,70848,58122,48783,12967,43791,14705,27393,15735,31349,98561,57603,89303,75899,30330,11593,33169,60115,15429,97375,45755,90477,33138,43854,36995,39453,90697,18967,91032,92630,43832,65882,79015,56974,32852,48346,33493,99371,48862,20239,68991,39830,32791,19364,89013,43500,84990,24639,67260,56390,18773,47841,57082,64092,48387,31448,99290,30106,39349,96656,43354,34511,53550,23881,18773,48971,98108,34313,32906,79377,21191,56833,91111,65123,20805,52946,69573,12313,91541,56175,21389,73698,84704,73793,17838,24984,10138,22184,89684,94532,61448,42850,97977,83880,35473,10658,97173,37741,59941,96331,61580,92698,36571,12870,96345,15814,42358,20879,91403,69984,48652,94843,52609,88316,31194,32224,43448,62331,64096,67019,73773,20612,53546,62708,65675,33710,41592,43682,73031,32392,29288,47152,33404,85066,56553,47648,56978,67228,82489,51864,98361,80603,62712,14034,54116,50409,88017,70056,28994,93510,91341,34771,76653,28668,48056,41274,43180,22490,54132,56948,12217,53300,83281,73833,12060,19722,23452,47045,94621,90606,68898,55489,75553,40292,37616,82108,33595,55953,35406,99887,52358,34637,23030,30636,41752,10463,90475,42121,69362,95977,68814,10881,47514,55677,96683,56086,80589,19724,21427,61205,99438,13136,70055,72791,29890,20252,60147,40593,20917,16493,53421,91417,57648,60789,16216,21356,32930,65859,69540,61818,46838,95784,93711,90160,63594,61038,54695,28296,48796,36196,42162,64819,56173,28760,68495,63857,94131,48154,40839,61262,69498,43089,69464,66128,35031,35310,20600,29855,68158,48004,72136,71010,65517,33951,44097,75118,58091,65167,60735,66966,54228,64990,97861,88495,94825,60348,62572,46793,98775,16770,69301,47905,76084,99904,46899,40122,90849,79400,80879,15825,22589,69103,43440,70478,19673,26044,17100,76524,91175,63856,93734,69167,69308,44145,33260,23079,65020,10088,69826,40795,40442,39596,73303,60554,72605,70668,54184,14458,12507,65777,89666,19831,59938,12249,90509,16361,43751,59382,23927,85346,52773,23934,27268,12176,56870,28153,13541,58217,72865,74178,24116,26329,61286,56395,19832,29442,75480,52747,53817,13310,84499,46325,57270,28740,67896,54217,31142,46457,69630,43847,36908,40201,38951,92740,25437,57206,98843,41531,29091,57352,35911,70387,25041,87850,17053,10870,28338,41319,51180,39848,23795,49764,23664,13183,31598,77713,77756,38223,44120,93350,64731,96192,61972,67211,70441,98812,80155,46789,93034,26371,70963,18254,52344,51797,72564,53051,82487,24464,91583,39871,31956,55306,92856,86556,97669,64729,88197,43226,16425,56195,74097,34050,97432,85458,30248,58459,21753,95158,56988,17280,28382,93681,10887,58293,35253,56906,83166,76887,77102,40999,58878,48287,76273,70087,92802,74037,68588,93131,75317,81705,91783,65268,18592,57263,61928,87124,80644,72414,10299,85415,56580,85718,41445,57227,12794,63414,16146,93031,45912,64376,43934,85553,44378,63338,96508,64773,18387,69858,60704,60323,98407,81801,28563,88603,96094,74987,97498,26010,13332,54403,31132,10546,63865,21522,41699,48376,69578,88264,28492,28925,34189,97156,78677,20768,86027,82118,87343,37146,84147,99606,90350,75283,16990,65311,95427,18487,93230,40560,75266,14882,12251,20262,73634,34401,51801,98339,69291,17810,85697,44943,84261,83878,15513,31354,14300,41313,48158,51268,39465,44377,34458,60660,69613,88952,16086,51372,18340,10923,25915,51320,34138,24219,14516,52507,20414,92779,36412,71225,80672,44203,83778,83843,76259,34811,50794,90569,78495,74499,71620,19289,42998,41654,75979,54562,62568,99473,14242,79063,83731,48198,90517,24519,96949,86426,55682,53514,25722,16950,99755,11108,61947,19555,71798,40527,18176,69104,89685,72315,56342,46810,15676,10685,17046,87822,41482,66277,11094,89439,62101,19893,99010,78975,46469,73787,53232,42816,15950,21580,12384,66472,74058,29657,52195,15597,95128,31608,68138,51543,73693,91992,35068,54809,94434,85439,30255,12820,19218,54685,89943,79682,70933,29396,10094,33787,29063,38092,21211,36962,31425,30126,43899,55750,16439,14764,32402,54285,43845,91944,11568,75798,48919,56375,64228,63046,90362,33124,25791,81817,53196,72484,78603,12613,17927,46753,79750,49160,95780,95569,69441,68553,74133,23775,55068,94136,56532,52036,65412,30901,16229,41354,68765,64100,49036,71536,42838,75305,71157,96364,82163,98305,67513,47105,73572,25792,90281,38111,43328,68891,50199,97450,96751,27262,35112,76174,65217,60216,26554,75913,66940,18226,95898,45564,78252,22061,71825,39592,23305,84358,65194,74204,15596,13121,13641,61306,21460,25016,50366,90370,35956,63870,92201,62963,59960,30219,76056,79834,67423,25776,94349,73417,29393,89729,73253,41407,97193,25059,41180,35417,19000,19284,87541,70348,77921,50622,85490,76279,47292,99299,30824,30424,92303,30938,52460,18267,79435,74316,52396,99254,92452,98972,58450,17500,78416,75070,48112,60628,15283,61992,15809,29648,97103,52597,55541,39734,12467,28404,44027,40542,17156,64221,26736,59183,81405,25482,57145,10924,28585,44562,98028,23910,80449,96219,80061,90051,99558,66578,35551,97872,66630,50299,10551,45105,12132,95730,41639,35151,36096,47706,58695,72449,42732,56189,10918,58950,10654,18227,37067,57361,91416,18633,40357,98626,94835,47545,67181,68624,38218,61016,61632,19073,62761,81505,98972,16647,93469,91191,45107,22964,25932,74578,50752,48188,29410,78256,66158,14997,81708,92836,30212,37000,21035,56870,69045,72594,71423,29793,48178,71069,74812,69048,64472,85538,12239,16940,68709,93331,58868,66492,43486,79382,70710,40794,97452,73329,78051,71276,58181,89353,87868,78513,59426,23178,32792,47758,56316,24208,35628,65638,31614,89203,25190,91426,61531,70137,18546,96073,63774,23722,49814,97764,76441,58014,36817,86264,65386,47044,94384,59879,26888,74142,48720,64954,45262,89614,65007,88689,77887,42169,86933,22197,36226,93051,63779,70828,98274,48332,15639,24748,39535,72654,67878,72826,89863,39194,51825,68133,22586,74060,67675,55012,25520,90777,53874,28986,98898,91393,33431,62822,51119,33589,80278,34098,83306,75009,45999,11473,33586,37075,45234,56177,57706,26063,67039,44985,99169,84970,16737,58964,78453,89340,61723,21098,21168,12173,21969,60248,47127,95573,86528,35201,44673,27926,67432,76062,60080,20537,40673,34198,23356,18575,92644,20802,73363,22957,57002,45170,12190,93637,21568,17210,43086,92364,67710,12573,55574,63650,55470,94932,48827,55402,94790,18948,91935,26935,35695,38531,33633,43036,45804,74350,48324,87999,25844,44717,82197,99857,19959,19215,83817,30248,83135,16611,49057,22077,16601,53816,62690,81752,91773,36770,61570,66964,49516,23073,56283,54627,26204,23009,93110,93022,50170,24332,13985,55860,53945,36343,67777,72297,42039,87906,34339,41604,17803,52850,38918,71513,77236,82676,11918,23794,62582,24814,71377,86960,41038,33772,70922,89425,16139,26655,14405,77275,20830,66161,69969,58139,10644,23606,64604,81058,62602,82831,43926,90652,12833,75310,90691,82849,62266,59121,84939,38613,23142,28437,28036,82986,46350,86902,40981,42350,73177,28359,11020,28507,74859,71329,39402,70785,92197,40730,17803,63137,79150,51631,94190,71569,38504,25342,27569,40207,35072,63493,83988,99239,73761,55636,12604,12588,87340,67110,63307,37063,10521,69859,54916,98394,66884,37369,22071,39447,53331,61980,32547,59562,47272,55711,37971,29093,84852,91599,86875,16657,13865,55885,28437,44437,72060,15851,33903,12911,70472,69431,47816,57438,15438,65060,95710,64611,46567,93932,24292,49271,92609,79302,93752,97400,30317,27967,29318,87515,13074,70932,55791,75464,72876,16386,68412,30504,99220,13690,76945,82543,12697,18770,57779,49986,86091,92473,48049,28847,36042,90517,36001,43493,17725,79748,80602,95236,38581,32659,70590,47937,82289,30996,43217,83679,39495,53346,76120,21800,45157,39689,75792,70390,22001,57813,83920,36112,68945,80146,98560,13840,86766,26064,15148,63337,41372,30944,77738,81843,35827,66674,39509,32929,43942,92107,42943,53115,66181,59758,24087,91671,70673,93455,50130,48038,87830,47864,17784,45543,85587,40318,75082,21869,75859,18529,41458,69402,33704,64010,85692,92201,91178,41755,13240,50632,60028,66889,14075,82597,28238,71683,70987,74038,26637,10059,13803,94717,85499,59193,40339,19539,20447,94018,36328,37106,85120,62041,99075,32282,36271,37571,91273,83893,97744,24086,96689,75124,48736,97776,81149,83714,13479,78232,55815,42462,77884,41948,41243,27779,48819,75729,81299,20051,90341,46844,89871,71503,47245,15834,38500,16965,78165,38007,64233,44226,33509,52579,53985,97744,20027,12176,39718,59509,93524,84231,47030,41324,66243,51390,35483,42132,70844,51748,81535,77145,74310,43255,24466,22756,19082,12684,53804,66629,96028,48095,79220,83510,46941,26956,53160,94106,48723,79311,34010,25270,14767,39677,45886,95487,16109,28535,50837,24474,27486,77301,77329,60426,54895,99299,41891,36223,13163,57582,67631,14713,86821,90708,45336,30053,75613,23490,73406,21324,70980,35886,34516,29198,24292,15132,14449,39417,31107,70291,76625,48414,82662,76183,47158,26597,95765,47917,47743,59688,45866,39491,98028,76646,63222,90070,85449,38665,12935,83126,99109,98562,82676,21406,93298,91737,82550,40497,57668,35705,77526,64934,60502,89617,74003,67449,10754,12539,31385,40353,93524,42876,82850,11783,64762,85195,99092,43686,83898,69570,99148,66505,98505,71954,90067,52436,82842,32968,20851,83219,78488,21775,11955,88550,11527,18639,95845,29810,58425,78566,80526,22826,38696,17387,36215,79158,88577,68191,15109,79699,62899,69105,50051,68862,39079,92199,30028,43095,57465,23886,31354,50561,36046,21519,94084,81960,10906,96569,51426,35366,86084,31476,29232,32641,79175,68963,64163,84199,83731,10341,55181,22153,53751,10050,87010,58102,87545,28293,34809,92493,47448,26903,17828,43938,92450,93690,69919,37995,43907,20920,50216,54130,13709,66062,21206,17959,18763,12628,73055,77556,23705,97589,25758,17266,52769,84137,14922,56191,64104,46827,85738,29526,12635,16956,10464,53888,87815,54221,86941,50054,53038,96601,95960,46235,80972,67317,79434,44452,34509,77950,49055,53786,15091,98509,83303,53087,42678,52771,20481,81498,40694,74368,40807,50102,81273,85842,61875,68796,11251,44240,84232,34717,87659,31620,56601,44988,38610,33528,40320,44231,24540,34070,60791,88246,39399,55634,33392,78189,32533,56631,70658,73456,50353,83000,53954,46569,84131,33541,70850,12349,39217,72938,72474,16796,79468,67814,98977,13359,83447,48686,39730,76987,13703,93151,83854,91357,16728,97899,84238,81501,60462,45404,94543,95286,94898,64374,25515,11230,97346,44564,14516,12853,34505,15411,23509,17528,45137,47844,69737,32584,92012,98855,70254,43793,73729,12230,25999,94224,97792,49879,14644,80392,72152,89800,99293,41498,20998,79397,95398,98209,84594,23493,46399,15329,37337,43167,82642,16942,99967,67681,95851,96707,57921,76734,14796,75142,96671,61687,38852,30370,30508,91627,84728,61687,38960,54856,40563,78886,90174,21162,57093,87394,44095,81429,82018,68940,22646,36821,78003,26215,48670,37177,98390,16685,83496,19723,58294,64298,89628,19144,15428,95186,27141,21687,65437,53419,72611,86055,72112,99362,45878,68253,43826,29191,18129,49476,67081,19616,20283,83805,28776,68709,23652,63251,53686,48422,57630,20983,58896,92154,75382,49448,94064,37286,98092,66386,88608,83280,17015,56528,27389,35512,18469,40662,32696,58847,48543,31804,76184,52490,27517,75604,43244,96901,79537,10425,76406,42378,76199,42015,90732,66723,96474,34019,71654,97791,43631,44576,40698,49337,67502,89033,63419,17927,60050,69305,68463,10691,53504,72888,96239,52738,29922,54069,72706,27591,11139,18653,68903,52306,94335,68802,87177,60471,96400,34689,45001,70129,48705,59699,20399,67768,74269,51418,96565,64010,32218,98935,21359,83939,55199,83777,39716,73934,17849,78969,13183,79411,31487,17380,36231,96332,41383,76812,74657,92157,55922,28675,31891,93011,65458,19357,27749,33988,40105,54890,99634,56361,49523,63759,33588,81089,34234,61957,45765,28961,16744,40811,23157,11572,60683,41794,63779,26173,66358,10506,72201,62409,99859,33256,34032,53307,38534,18656,76732,86018,62865,32869,13544,78121,44960,45997,50588,75271,67000,28386,63421,94291,58791,17485,23997,24586,95361,66796,79569,94241,44809,77501,30927,44316,96896,79869,28174,20809,61964,12819,54681,54204,96460,87837,12990,98930,88388,17282,66779,38369,15637,80055,58655,91503,21209,25907,66356,94534,72068,10534,96646,98389,79960,96026,10977,11409,75623,47140,18046,85316,27045,92739,10505,76957,52202,90221,76218,21853,67943,32105,60428,52319,25330,72952,94288,72025,32623,53144,53692,43860,99757,88357,62269,81584,82415,15673,87572,75842,78507,96408,64768,28920,22713,32784,86649,97864,42613,45933,89894,88211,35357,99329,49882,33342,81333,63824,38024,19667,71183,50421,85845,95346,99440,40831,55367,10202,13336,12737,17741,46504,22125,22607,65643,94405,27074,71541,79516,88439,64535,29543,41581,57114,11443,85683,93111,34196,37678,87670,63035,33718,70610,84270,41350,41562,23805,47935,31883,66651,18378,45112,13927,63007,28926,98340,78434,34353,37607,87857,52047,13730,70179,20992,29083,56517,60454,24897,18435,35211,44724,99125,63802,20344,50509,30579,17466,90545,24207,25947,54779,96873,34172,91623,14350,49712,67033,49733,49726,82546,27097,37917,74802,93844,28998,37014,63466,57562,32002,53619,31478,68147,40133,12310,19917,38273,64583,21511,48306,54892,91932,33066,10934,45558,57927,28236,37251,45431,76169,15551,99851,52882,13172,80188,92764,80555,65723,18578,32304,20117,69254,45092,16859,79147,99698,33889,42928,78204,56327,59447,85118,83741,87719,48159,60312,69882,39087,34483,72779,12831,81166,92143,87848,47050,94468,89160,64444,85529,42571,45411,15367,66968,16178,95766,35483,54773,60910,42787,97941,53163,29735,27985,57750,40106,76398,52392,92050,31911,52167,45459,20575,97844,50860,99383,44354,72822,93212,81440,62698,21117,27029,21068,11652,31187,34452,12782,67186,95105,11916,44053,61328,99143,89593,15920,24016,69954,50816,50896,12050,13563,17649,39098,32163,36088,12471,26615,20588,39116,31335,29113,70397,70727,65117,74789,42498,12149,38991,29800,19733,87811,57605,99793,71553,81035,86098,89331,64393,61191,46152,65582,24432,90217,95239,49757,59782,33028,73300,84079,20420,32079,28122,34621,85347,32969,12302,12465,24840,50882,44115,70287,36373,34121,59718,81951,16259,17221,53090,26842,70612,66049,13300,92741,31386,97370,60956,29023,82585,97605,66171,55657,93846,42478,31362,26586,78603,35784,18032,90028,97577,74984,94832,30797,63504,10842,17923,76249,77392,14409,15866,37905,13798,39062,23156,96139,61011,79675,55535,98506,50044,55441,17402,10733,40230,95731,64836,30690,28599,95954,81662,27092,97469,91686,18107,94106,31403,47499,50084,15983,35846,83451,17741,85075,19824,77622,79346,28375,12210,31267,62411,31426,50700,46465,63418,66461,46503,21123,67338,24615,28970,93086,50482,68359,32740,36336,28412,31040,61101,19739,45793,29389,28471,86275,76394,53246,85215,79212,32894,34652,81463,89571,66199,16538,13560,98155,31063,15984,91970,61004,73664,67786,81389,44176,11281,17894,63726,55068,93772,33848,38722,60731,13022,46617,20843,54065,67797,50160,28279,56222,91811,20179,53005,59387,13628,80896,13029,20801,87061,48334,46121,24133,94296,88828,35574,31258,72623,49159,78086,87907,11187,39113,20892,43819,95797,42349,76906,56957,22086,52933,85301,38325,89511,97328,25172,96295,15218,85647,85220,77801,56310,93526,46664,52091,15167,14708,45997,57323,76464,67192,61805,94787,49109,35182,61981,67368,99070,72111,53249,17065,24127,55179,15909,95236,76993,19628,77412,39813,14703,63349,54978,84520,96565,32451,33415,85688,44302,98655,34202,35595,19268,47399,14202,65700,86818,37115,80317,99068,41907,97932,84405,42968,76378,95384,14332,16948,51851,34620,17986,31697,27948,75422,69041,60291,67941,19375,68738,89794,84959,14986,68830,64337,95461,49064,60692,53102,18185,56973,24541,62404,29226,71518,85349,61816,24889,36512,33370,84461,80934,20770,37496,23220,94881,59700,17219,39508,76732,94463,81325,35707,14139,63724,84591,37837,13747,18271,69486,47894,44706,11638,71061,95521,51504,82407,75404,94951,93445,33700,74011,71532,82274,53181,64095,36922,56715,75313,83879,24516,42504,92772,86283,96819,55662,43159,20177,62606,63232,17479,31975,65174,45893,49998,86691,56245,82995,22952,89106,36494,31888,39282,71129,46840,18103,56802,90472,99013,91632,62674,21699,78752,73953,72497,24759,84384,30747,13276,36652,99200,30088,18186,85533,73301,63115,87938,44497,35170,83183,48462,53420,80305,79466,47287,53168,35531,79580,13806,97993,63728,72560,27121,93787,30169,14974,73115,95710,72386,41324,15230,65476,71201,40011,38227,77497,10266,26269,58015,73756,99133,25972,47128,97112,99606,49521,87718,40277,99073,88993,21337,38940,31437,60145,77131,81865,81830,53278,54316,24907,27454,62824,51471,49397,76812,78920,87437,39464,38426,84246,20955,97755,96519,46207,53567,95000,54032,61724,29890,41265,30554,72375,41420,17846,42357,42380,96743,26119,46094,44315,45727,34255,73504,94985,57273,47766,44994,26345,81918,43659,80196,31346,10890,33451,50605,38359,62711,78080,34176,35281,87716,38232,49387,28833,44072,48961,67698,37734,22877,49167,49602,42167,44046,15550,92321,20012,15987,11018,56146,35584,37249,84973,14574,45137,18245,53377,54078,71451,98083,46717,32571,34747,91177,35962,88986,78376,71734,97932,50888,81052,60618,95760,11671,94233,86365,25119,73062,14418,43824,73081,65597,65735,16215,78643,94942,23019,10084,38644,26316,90760,55647,32069,77666,18442,64844,50355,83354,81512,91921,69140,86012,99034,44819,14183,37594,65239,31320,59216,88828,50850,75990,50070,14581,47093,83095,62157,68921,27426,74778,38206,93565,99528,10888,28410,29724,37291,57467,43161,82156,12340,16096,66786,52106,52350,42387,63761,32057,43298,86970,23367,83640,86938,26586,15344,36083,48383,27288,64088,41086,17227,51592,25272,67685,32630,52440,32418,35367,24488,29399,30738,39706,30612,22335,83106,22137,76810,47671,84505,50234,31776,61004,64124,74198,92231,62737,71092,56045,35675,37224,91165,41755,29924,88220,58461,45085,60007,97241,57637,67524,94391,40295,43588,74258,87736,40195,42875,64915,95929,72036,83705,86028,75680,30317,90027,47927,28999,92243,95344,71158,68718,78078,12258,59775,96237,77856,65853,47417,42754,63922,60884,64790,17086,25754,26546,13330,47838,36002,81371,11874,10193,46153,85313,23450,46318,42608,54197,26626,67541,61484,91048,29760,91936,30929,72189,15845,11306,52125,62832,57342,81698,39120,37698,85554,49809,25355,82133,39583,85602,34987,22522,94349,79723,62720,19004,29313,81480,35127,83978,66434,66629,32570,88371,25147,36542,12597,61017,73138,12558,97230,31531,20297,61724,73822,73235,37414,74893,18677,55984,13743,89704,65588,51666,17301,95231,71076,35556,76535,95067,91302,60609,70782,13389,27433,91689,42601,58826,82194,90773,78595,36365,54290,44686,82306,95779,62871,78418,34100,47435,18152,13060,18122,18799,97056,97739,63826,19715,61200,21201,10744,43778,89388,10330,78649,74351,35325,67470,42502,33087,28255,83684,80170,95715,98786,13304,27216,62299,28852,50423,32137,61010,31801,84690,76520,33857,17049,96103,43213,57535,17166,79897,15584,96066,95260,27281,86218,40346,62088,86205,96023,44676,40928,66042,65302,70584,17397,62098,75904,19324,79031,13198,21272,74441,86894,62070,84353,70443,97535,58642,22229,58970,39370,21044,17622,84324,77239,22722,32664,16486,88123,50919,44243,36222,41282,69474,17860,45257,56115,80817,52889,17317,93666,57394,68577,56594,39110,76788,83746,53158,35364,54197,49316,18899,61716,60371,63175,14111,75866,70998,45142,24032,80744,64114,77568,73459,58763,72707,86130,84513,52451,19574,33752,59479,11977,97267,93011,69873,99112,46045,74109,61586,14789,63974,85698,73503,34620,76280,68260,17746,15013,21751,92044,40129,23983,33071,90697,33993,99461,20737,53824,99227,38653,72109,14290,34629,90081,85853,54860,12901,43711,84981,94707,17863,21704,55778,45976,24687,71243,99450,38404,74009,49072,40740,48340,79168,20513,95503,65823,48273,58360,33072,56522,59670,91199,96631,38891,80561,53930,89499,74131,22282,44798,22797,67362,53728,20381,31374,94601,17713,45131,27990,14362,44221,24062,92798,91899,12476,58741,24365,24727,96962,64950,96830,98533,37141,48540,68785,54395,55478,47188,33105,45967,57850,75527,26537,29151,53859,56678,57241,51867,32263,84793,26420,75045,33840,71319,42048,43825,23767,78485,34667,15769,48593,86839,32190,31843,78414,17307,13948,52818,72726,85381,50312,47860,91854,31194,89229,63160,50641,15732,56295,16506,34015,94578,24597,32593,49168,55572,99460,93967,53228,77648,85734,39022,40943,81726,39049,98021,10809,12810,35159,69597,54211,14813,17105,59811,33346,31547,39576,60126,66356,65991,15781,50628,13812,89652,69598,28829,82568,40283,85940,62711,47823,40793,61524,99947,32305,25368,48001,81872,78413,80142,31875,97682,48637,64912,53169,35698,47998,42658,11499,57574,52831,87812,35956,15315,30744,51585,92987,66532,42885,50072,60255,63731,23364,32715,90163,99916,42701,52652,28380,37324,61791,28781,58494,19601,77490,76292,19918,87379,17104,49558,71787,65782,29899,20306,45681,51106,39229,94379,96092,35045,60009,11116,24083,66099,96618,37136,31738,90020,15248,64704,54212,15407,92027,64308,14899,87598,41804,10614,16668,71199,64378,81284,90684,60336,49291,77301,75901,66155,96371,92983,39633,27452,17121,14979,87687,91336,17291,84236,61984,56972,88933,89863,79596,69433,58157,75958,74969,85080,39629,29223,45225,43532,96732,54047,49696,35038,63804,97581,91240,20265,45878,31242,23559,10132,70713,89172,18460,58045,41950,24903,54471,70366,15743,98556,36092,10540,11431,49205,72571,60562,99517,74311,39831,80451,70335,67459,86760,99403,45350,90631,89663,56647,85987,58089,61074,71336,89204,11131,39304,21616,50493,11250,80717,15647,80582,98148,77581,65359,46714,85585,88435,43210,34215,23766,82230,79061,98060,52239,95080,25202,62548,44158,45629,19445,52434,45438,73798,42463,75512,98203,79467,61030,33076,51635,26401,67042,84096,53444,16155,96810,38841,49510,29086,82510,19562,27203,69793,73813,39485,42782,15645,81278,44660,57036,96370,72203,48289,81281,92786,98399,40981,59577,65496,43917,16722,36707,33523,43068,83511,83119,21018,94611,55962,44763,29022,94963,81790,18484,15051,65537,14646,17255,19144,59500,98019,70006,91120,27623,28448,53488,44995,97088,53149,57909,19659,56815,84228,41103,43170,91604,99872,46122,82588,93816,96898,95219,43285,21639,13723,70535,93385,42085,14423,77736,34994,88048,50833,40581,92462,77693,65507,19128,58375,72942,69854,84568,67252,93611,17360,98953,75910,93983,46176,27955,93322,81791,82773,74955,66822,44958,16008,10025,65604,18638,50963,99367,50183,79907,53424,75455,33942,74550,65605,28360,25932,50850,94290,81934,16987,46625,51747,59776,36512,13659,88489,22809,51042,97580,50739,30788,35028,89268,85755,87707,34959,53205,92908,65044,95456,97140,49555,56424,74677,16070,23383,17864,33324,64043,13337,11237,85135,33528,72588,23159,79703,52370,16487,77026,84461,82606,12717,42938,93011,70754,45349,69233,47425,94155,87239,81241,24538,60150,89960,67982,22905,44356,28799,53876,69267,66375,96521,34754,50597,16410,58826,20074,77359,80753,90637,62070,49265,15328,49614,62678,71720,41466,13089,93863,37930,77740,18095,36946,50181,83437,70133,68222,71887,72025,42197,12828,93596,91437,88107,67112,98338,77677,36028,91006,62346,43505,37670,19832,97338,14241,56075,78965,79535,50524,30847,77881,51144,30310,17659,62525,31956,22886,29515,79992,78544,37251,73397,77520,83422,24562,20032,31409,34770,37948,84977,83288,82846,97777,30195,17748,40981,70139,70377,88705,85842,87928,65444,58801,40741,38136,49650,10584,90805,64089,71952,90662,45465,74830,95949,90696,48122,80543,37249,19577,11195,53584,85992,26025,38602,17885,20415,34093,55082,80877,76264,83046,54301,60189,53524,41866,59337,13275,76822,47764,55695,43398,12880,27268,19096,91937,68770,65546,79355,25076,30448,83805,89530,37317,68555,69755,53167,19807,36430,32895,47615,90519,47603,81925,86241,76838,69877,16663,89947,15787,51217,72639,43014,19026,55098,80264,88210,84248,30590,63405,39318,73190,41632,62612,40110,80714,16367,90760,72236,66923,54098,46746,56504,71921,93230,42764,98520,61372,81355,69724,66202,21432,84566,14762,45012,93988,10801,45380,66702,51229,67788,64634,44572,11515,26265,57899,41388,18893,66379,95919,78127,99518,94094,52669,30927,32657,53264,22730,16723,49420,55019,95804,39214,48759,18952,39806,78670,83345,31281,48787,46405,54430,25282,63120,86766,69236,51770,29602,65945,73138,79062,40273,95208,62797,23779,28913,92571,79651,60854,14003,41535,83667,39793,12770,89887,80836,37912,78176,67691,54355,27623,92011,62654,63494,37306,33008,70162,96300,65422,70193,17267,38129,73839,78313,51186,25988,79486,84722,69379,60505,26220,23806,88228,26883,58789,63558,57852,87686,46697,71310,67456,67324,34151,20782,37899,72544,72841,94805,30785,63555,81808,30701,41523,46323,31083,75326,74115,99873,36903,99843,32217,46298,18203,32011,41019,64437,98818,55897,39833,53082,55968,93084,61896,34185,75211,25190,72016,86938,34770,40367,59929,37573,47474,94918,69442,18386,56996,73272,19080,74124,71534,23066,13766,18144,88018,30539,11963,32591,64716,27776,79175,96171,64580,40061,50738,70527,58114,35250,36313,83704,61346,18173,36007,86369,66302,76105,24726,97754,64604,23982,68229,83319,96872,87782,21491,56601,79319,65872,40604,20602,86070,12335,69804,57731,29643,74288,25936,21893,97168,69957,30532,37543,44596,64763,75310,44178,62328,87632,16616,91616,63116,99383,68806,42639,72102,89534,39286,29256,65635,75476,57707,33459,12837,82335,59543,86702,13347,90081,82858,73970,91777,35682,14966,70969,86839,49002,42992,46219,23684,95762,67498,51622,45463,45254,43980,10469,35259,25562,42579,12712,60247,61392,47178,21673,13846,27082,17574,42546,22043,19740,31659,57434,14985,56955,54301,16013,15189,56517,13654,70585,97028,62510,70171,73174,30862,71801,33893,93175,50676,53747,53470,62915,47307,84964,82580,25774,69246,40123,33232,44973,90748,40948,39280,37077,54379,97182,99469,81487,77180,97897,80380,58693,93207,98915,13480,35628,60051,46183,40633,17709,75421,19857,78849,93147,82087,89340,59070,36391,35862,82997,58672,69721,46693,41592,75961,80378,60174,94912,49839,36178,19735,35180,24076,40413,48039,38963,51312,76621,96254,48103,77028,65021,68931,65815,78899,22996,46791,65394,66599,61955,10015,57628,73048,16722,48206,62300,11817,46072,28182,36718,38433,66821,92144,71632,29539,31326,60385,25483,38686,20462,92133,37300,60970,95903,79126,79038,88791,42933,36109,34243,25254,84889,51951,94940,55029,85648,53174,53275,88090,74069,95821,82216,97058,79240,68193,62516,43864,94521,99819,92774,96905,66635,75666,60713,63204,82337,53847,84041,17341,40560,20617,27446,32608,98093,47444,63688,89782,67086,96952,39280,31181,19401,25113,61025,37388,64377,37340,27405,58613,89389,66198,27988,83114,93771,25330,84935,39964,53444,99445,16799,56624,35664,14698,99874,45711,66996,91631,50606,98473,71557,41602,53724,27337,66699,55848,76633,10475,29578,91934,18814,57100,29086,83203,20754,52707,60608,62719,79814,28461,32179,64104,71095,87850,90456,82701,75852,84806,59316,28836,67886,78719,90990,98459,49514,65970,97068,76527,49397,11853,35122,56873,65824,53628,36532,11742,45997,89226,18506,70571,80954,10724,73926,87879,67768,64795,74656,42733,59932,10298,67361,67012,53798,70641,75311,40866,68181,40606,21804,49299,52273,74523,86221,15708,62917,51529,16471,66725,49052,72303,70536,95030,29614,59632,31582,19239,89342,17101,76533,45699,23057,32433,48821,94514,22851,30480,69672,31082,81875,76622,97516,72757,54361,45821,48730,13338,90117,76120,87300,43388,16312,54934,78051,85442,77359,80503,44578,22665,24602,31307,40349,87699,58046,38357,90871,85502,64298,97313,33059,59860,35385,67159,92198,86235,53788,45029,18063,26434,36618,25968,27714,63153,65889,86704,78930,54680,33357,72002,81288,74597,35497,88192,43629,51228,68307,39192,15880,55346,48815,56588,56266,13541,85544,12669,60176,63074,76596,54558,83231,53645,13605,48904,27935,30631,76333,86441,42722,54626,65439,73034,58129,79738,94824,92088,84440,72967,49205,83186,38993,77037,79181,44158,50522,19362,68972,79413,36887,32251,68505,74077,45981,34165,82925,74442,85039,16404,75410,99908,85778,26680,77767,48687,22866,53952,35228,87612,99849,32715,37689,36974,22866,75249,61445,51374,59429,55231,59468,58423,37715,12998,88751,68993,20627,67963,77657,64760,59542,45393,36924,67447,43239,84855,28885,79475,32511,84620,86893,13326,46235,47630,78930,98885,48548,12576,30726,87055,36361,38656,85071,41037,31426,14079,64465,49994,48111,82726,77364,88660,33067,65206,37723,29899,58681,81426,36789,62072,21668,89368,26418,73368,76780,72550,70212,50625,57786,57510,70224,93951,46382,62852,43591,50406,19307,85974,13693,59823,37747,61181,67452,74112,88656,10753,76177,57007,89836,84247,21980,74352,94233,13875,67139,89783,92674,74277,32921,61845,22907,73362,24095,31624,59289,20860,83154,53246,35594,20736,67611,34493,23150,29942,91392,98300,68242,53569,62211,58587,44192,70820,89918,35226,22853,37980,90925,45146,21651,17449,35794,69948,77085,14963,28670,83995,24094,31501,54789,23127,91781,49104,23863,98336,76170,75526,63271,95385,23728,44467,87987,45827,53226,60929,21972,51673,86464,86580,58060,59932,14727,24198,59645,22764,22671,86001,63855,77645,49198,61116,11696,35629,44973,85395,98074,95998,51032,17471,44775,54805,33712,75444,82739,82063,95202,47507,44124,29451,82828,75163,56153,11582,64804,76888,29045,61912,99591,55366,34502,23543,98790,65548,63880,67006,92809,69790,68131,79788,72166,84363,85477,20104,45283,43437,63395,58955,44692,49759,46203,89113,32947,67225,14384,33934,77210,80282,21167,47944,64922,32526,53123,72452,65471,39185,52246,97718,45662,25263,27469,67481,94471,78829,28562,82474,12470,71655,30347,29518,72794,45426,97479,76980,24960,46527,24934,23541,11047,62412,84894,98742,45609,83170,38169,57587,48333,90974,63032,51484,15145,76557,62424,96252,46775,26031,58499,94351,98896,13325,67091,18769,20097,21063,29315,11933,68006,60411,63412,41089,70844,98459,59849,75592,88587,70606,52554,98593,60281,61548,67392,78365,21474,39565,16293,26846,72616,17944,10386,15494,75830,17872,48748,91689,39162,77140,25873,37244,24099,59806,17622,50541,21113,90719,77095,47729,84558,77180,60425,82205,26687,79441,41378,54965,75277,99303,83962,86746,40231,85444,98738,95564,61921,31095,24422,75078,20973,21984,90952,87830,76663,38000,21367,10746,54711,16003,15996,99708,39282,17073,97921,66166,17464,25118,72965,87234,14251,30367,82566,57365,10104,23960,74333,94218,57512,48655,29925,49544,50295,10094,24594,59243,60089,81708,50659,33593,47963,79208,19199,47583,89363,88090,56508,60407,70368,74074,41585,15996,35717,19326,68663,96344,44973,11852,52828,82322,95063,92282,38810,80698,41904,83105,92885,79977,12614,97839,43374,91261,88367,72158,48034,69133,90002,62352,61613,72319,13811,70349,13701,48724,58447,15687,76310,14914,93873,51109,22983,46650,12405,11680,88837,33879,32717,88457,78989,48154,86049,23462,79539,70189,65538,65923,37245,54009,64091,40323,24804,24540,88841,45926,20539,70495,31614,11241,98518,85464,99446,21291,57834,35797,72209,56212,71114,65215,36560,79395,71557,23452,27966,79868,18177,70882,71819,61727,61317,17061,98407,81637,39842,77385,62292,69954,55207,42328,11706,27234,30859,43615,51862,77451,46262,22386,66768,44959,54690,72603,32805,92827,90225,71797,98298,79527,52990,27412,17197,34687,64482,95168,41447,55463,35981,21589,30874,32396,39072,70371,79323,58654,32647,17959,40356,66739,18966,18915,68399,41526,74773,64947,87514,76336,14791,96414,78172,97143,15197,99366,88427,90070,33601,87495,60206,30240,19124,63123,35247,63211,78218,99246,26616,31848,86113,11789,59118,97190,82294,95547,85051,25423,12026,18852,11611,40188,36961,43946,81384,34511,15398,56055,21431,57009,43644,94089,95837,14015,22249,23894,74642,89804,33694,46144,50460,97068,65378,95133,79613,86881,84657,68051,66073,54170,52150,34300,32366,72369,30932,77937,77846,17523,39308,14221,66259,91634,25534,35054,28748,54016,23070,28714,56187,43221,83529,99868,99615,47161,14745,43524,68613,27219,36209,32828,54574,15164,42226,15232,81015,25601,88990,25267,86369,51058,25745,55495,55167,97555,44063,43372,46962,54111,67068,45852,27860,29729,36661,13514,52276,46623,88051,35525,71450,79270,16665,30615,56382,65591,78848,71174,76029,77000,79401,16286,72529,31888,59422,36292,80095,85174,78439,43570,57029,47597,70237,79230,96098,19491,20712,94339,11847,72306,26098,80125,65431,72278,40275,84302,15382,98392,30865,79969,43136,41936,89461,90585,19525,69033,32593,64896,24059,16179,80827,39813,16470,58099,94792,48589,92619,56619,75597,82104,19553,59347,46369,42288,87627,78511,78531,49055,99914,62096,94783,72650,60197,40689,10669,26359,67092,25016,44659,36234,74699,93212,52240,77401,93260,73697,29250,20155,52784,72712,96731,76823,50650,36796,46790,44542,61014,13944,70077,86804,27014,49265,98313,35875,68368,91872,49916,40450,50015,10672,85085,94885,62366,15290,46022,70600,49800,86187,12117,93474,14215,11567,66710,95069,51250,72944,60349,45887,42249,83011,56761,44787,89130,70913,28193,26864,20718,66530,48731,40210,80488,79475,90757,52023,29189,81415,30841,24972,98445,46386,84418,67121,42506,56583,50030,43978,16056,45133,87744,94573,74415,39757,92552,37336,52931,66447,67424,41607,40581,62572,13200,56479,49125,42985,93993,84112,18404,35677,64934,24678,51013,38666,50782,18568,99493,44047,61459,38452,13439,86667,63631,54758,54906,24883,83684,40623,73968,59336,35665,77341,90247,50049,82148,55587,77266,35634,91489,77462,17481,39771,74474,29543,33746,94848,83624,28463,28795,10576,34450,31413,59925,53351,25749,48675,23646,91189,66130,96444,86409,91886,76979,73399,54467,78544,94065,76034,40485,94181,52548,17974,26868,67840,39936,35849,19333,12149,71653,77560,68757,44214,43031,15410,89638,98845,53603,10813,59866,42432,14124,95072,77204,82857,59372,91251,97985,17278,29350,34969,97159,66601,98766,97812,19612,69980,39436,11206,12536,77742,12095,94780,40784,72376,36544,99847,65199,37814,89009,23563,43445,42076,78235,69958,90193,25760,37270,25366,22470,75069,82286,55895,29537,97017,72388,70935,93481,25943,89786,18795,30455,33129,24333,14744,85926,88004,72573,91104,57432,17168,16154,93119,10537,40036,35628,41645,58202,24027,62531,97623,32663,90586,22226,83176,59216,64645,65830,96242,24988,30518,84725,82836,55460,74083,45483,83980,78954,76284,48655,63611,58618,17015,67372,99102,11989,50483,73242,22283,36674,50973,94985,67622,80838,94403,84008,34276,89327,68844,54785,95655,34898,27713,46943,66746,73250,36649,54321,79748,12201,71449,37422,60489,69474,26087,25266,21363,80723,99320,23156,22095,27374,65393,11377,19164,35477,95583,30256,71794,51626,33840,54755,18320,57710,24322,35669,41973,39915,59303,96297,27629,51139,17648,22776,63214,59681,79004,14931,34912,43083,23530,58711,71641,72595,81226,92247,63015,75674,34556,29892,38854,41984,76418,64608,85477,47075,59390,12807,57864,51060,94890,79286,56382,74457,64553,14541,90258,52119,28991,46399,96400,22115,11361,19323,62874,27479,63078,57804,77173,13808,40435,50946,67624,91346,69383,46305,66192,88835,91736,19717,20346,95508,88052,93356,63983,80441,19863,47845,92937,87747,30102,40675,23331,74478,45543,12374,80646,48103,21666,44999,15479,72701,92112,93789,39207,91385,35836,55932,72905,72572,43729,23826,23345,47697,12350,42956,79736,11371,34858,86293,61935,86076,89958,28104,87703,73410,26045,98263,79279,85654,50381,15694,40093,71294,30078,91107,54339,58308,71081,66116,86830,42084,42356,56083,25681,67508,82260,28973,71842,12025,84924,78760,74413,98949,93643,13254,86775,18684,81318,93931,86737,84465,37414,11233,67609,63032,13195,72819,55674,72324,12601,43718,82234,10854,36736,46261,85086,84962,22953,21759,68557,33359,27436,74440,44474,36818,37588,63869,33261,96622,19701,25457,78493,40608,70357,64081,40624,15088,78679,80980,12903,10133,47171,19797,48023,84035,53831,85109,24237,64881,90347,61601,62313,35347,12450,38635,18467,15713,70804,21109,51341,82095,50432,55163,81525,77246,85350,14451,77539,29071,14023,54589,60506,81133,49745,60581,48597,58388,98073,74102,88021,52882,85699,42575,49185,69159,83548,10014,12765,58441,92282,24001,65280,26967,88092,28830,52223,70987,59169,58758,95234,18962,83920,80030,99575,41326,54654,69546,90684,53636,66918,36776,37185,28181,27024,42181,83389,67507,39313,53784,29831,79567,25572,87202,91845,15624,71548,80826,73568,40626,19095,71262,19515,98208,44944,59124,68239,44181,42851,35530,36220,91712,89341,47707,29076,82632,49484,39771,33853,92195,31160,81392,45271,20268,53284,78453,93081,64605,36601,51175,59276,29251,59062,31394,47294,78327,25557,95075,11945,34004,56973,94685,39818,38409,23435,10898,91127,96701,32361,43582,59628,75039,30392,79900,88405,62206,31112,33691,92617,70833,85545,74132,61683,78053,71319,21311,97854,96966,78868,98149,54563,66375,60054,61973,24337,48923,27239,69833,15045,32487,91486,62502,13345,93476,83453,92712,65978,79635,31207,71298,93186,36690,13587,34443,10119,60250,14171,67846,73045,67054,21715,63316,55813,84744,83158,75841,39436,90331,99502,59899,31148,62909,14222,15188,72693,40801,25133,96207,20359,33451,66983,68583,22078,25492,68237,76070,24424,78827,42127,32295,95786,17448,62525,26789,28692,74489,26134,88247,51641,66671,45435,21050,77347,70521,23511,10172,44537,11264,25634,65880,95238,28060,88797,43287,92647,79095,18072,50568,60844,88274,56000,91365,51137,78097,78759,27642,63118,57145,85442,68100,71229,27966,90322,27537,90707,57166,43476,58514,99826,29877,51061,60966,26526,78474,26010,12915,47126,49353,61484,47555,91187,88317,44155,60855,28048,16976,63012,41863,29490,34984,58544,39518,44469,86341,10903,67110,71524,94110,23562,47368,17133,10184,83074,43090,99411,29022,54810,65144,97212,89772,35956,14888,65878,41902,24105,96274,35668,88679,11141,77029,21321,31880,18443,54003,68387,50535,83348,66082,23418,85363,60013,23213,64802,58931,29384,44008,15349,85700,15246,42816,79237,30931,93359,72715,26588,23078,62784,74281,37754,57759,38045,79733,64370,96690,33328,53303,21961,48681,18915,14966,36366,57508,58853,40184,19640,68737,20192,67635,70131,14584,61546,44295,29932,35022,24532,32568,79593,99742,75837,11250,22595,69482,60317,58623,33198,21830,71403,23281,15547,72711,81672,38138,71547,67024,33989,74873,85244,30972,90454,67156,25250,20033,50034,76373,69554,13655,95820,52004,27672,26341,31405,49176,84511,79807,86097,23220,60405,39272,25093,49142,55261,54601,32679,39902,77333,86137,25283,52767,30068,54457,48387,23188,14347,67688,20453,60897,86904,76473,81967,88503,37948,83169,87597,10266,23795,57856,81835,52563,67665,39593,21367,50650,71405,10932,83757,85903,32263,19930,96283,26340,36966,44642,29116,65122,72999,81687,98573,99273,97104,54988,44087,77641,93555,89108,86460,68947,94859,92108,79463,64540,86094,50256,32845,55837,81260,60924,15774,11520,48490,52097,77993,98929,11071,88168,59135,58060,39270,74361,64128,14984,13225,26607,57136,84313,37386,21467,48553,41937,88134,88943,28834,77219,34953,34593,96523,29653,75725,81028,86292,55841,28154,61610,15995,26445,76417,44774,34037,66749,79504,54063,23674,55125,63479,93314,33327,53525,53115,63479,18527,30907,92519,81750,71105,52554,54009,82985,45435,30141,92974,53000,28389,37731,10621,39566,59149,66256,90704,57074,15633,68727,62496,79691,23120,77011,81999,25037,61780,90388,10628,18606,58694,50927,39114,26029,56402,46413,16242,98592,61105,66173,33770,55998,58550,39156,74066,66013,78546,53563,20149,73692,57211,36823,37410,16517,92063,24640,74100,57014,45495,84187,95572,28313,92433,38759,25343,80921,88313,57377,61377,43100,62765,58036,97954,27777,45407,34864,78161,16138,63480,66918,77338,68571,43682,89152,89482,67314,82773,29172,38587,95021,77888,51152,41307,30995,92893,82153,67095,91502,12096,24504,29202,74510,26443,61078,53929,49920,43969,62026,84430,19706,79571,35090,30133,17623,94519,69839,43856,40948,86855,33411,95639,96510,75187,13349,28831,70804,89704,29417,55785,85894,31970,41684,19986,71571,91608,98364,12266,58050,28806,83187,33808,53674,28255,36816,11278,17298,14347,42967,51052,96784,80871,54230,10674,67078,15961,25325,16980,70467,10045,20963,52338,56816,42873,73012,58209,49472,97675,95032,31618,46011,19530,62110,59855,59513,89903,28635,62879,79989,54274,86996,92579,58267,90172,42513,67274,83090,80424,37808,20630,53889,27099,71410,71894,73695,58690,83792,41024,83267,58246,77366,85624,28836,14852,57198,51580,46544,82651,45856,38784,55921,58988,48691,45643,26561,11738,73882,43937,97421,87315,81941,99926,21960,68397,21933,17678,14918,85907,30732,60817,14228,82701,22622,75614,71813,80342,20687,46478,23522,66829,75706,74430,96871,73096,64642,90626,54461,33257,34393,58726,51590,22426,64025,75955,33006,68493,96981,60012,14138,47933,46197,99646,82060,12248,41162,53496,62639,75622,50205,51550,24890,46158,18318,90801,32635,58484,62618,39286,79526,80914,91304,16225,28946,80757,37543,16311,29706,65712,56917,27909,92937,34160,69810,24660,85410,25120,45271,29577,30908,93783,20278,46332,57365,93694,78804,13702,29977,37830,14821,45157,74561,31528,59874,79989,94956,36014,70284,13679,10709,54545,88068,72847,53185,18267,77664,30911,62392,69774,27623,59657,10030,61719,26771,52156,63780,41446,59112,80654,69715,49557,68296,74042,34496,82567,34997,60905,60021,78966,16613,69300,38956,82650,89602,12579,48836,50282,65492,21345,63499,53514,69837,15684,37217,43961,50924,98041,29395,99455,79405,91678,55186,15798,66380,18826,62747,86829,43789,45061,31217,68030,38379,61728,63602,19190,17858,73211,20973,20295,76043,21951,64124,23351,40631,82694,21855,70964,59253,85246,60238,44430,89484,76352,12218,33760,15067,97834,59259,20974,92791,10987,81791,75916,95061,30093,56817,41656,93390,98846,10075,84902,36268,79091,49780,67054,56986,30889,83285,72132,38440,27061,73097,93424,98015,35597,18758,70968,43391,23639,38146,28238,45842,80982,52323,91110,81301,13752,22371,47233,21128,25841,78597,11319,59111,44852,17619,27216,75143,15544,44473,59385,62991,67292,73235,93326,87667,64035,59682,48244,28688,62653,55196,93741,83808,56868,63551,59522,65555,67346,63630,82847,47336,61434,10286,87188,19269,47629,62838,57341,68042,60815,93859,69489,51566,18995,61601,62005,22479,69715,57019,95732,30005,58860,11805,53520,30506,59940,20615,23850,69847,77217,10944,59050,97397,85728,61578,96981,55480,98663,52087,22692,73991,66367,22162,32463,33428,70848,73464,10663,58450,71611,68418,62743,64005,97747,17559,37605,19899,31215,14775,80110,63267,44642,55829,84305,86592,27562,93763,21914,73492,81319,73893,22614,74063,70520,24675,36932,52702,30292,33182,62030,98904,24213,34321,45746,86448,12543,42244,44972,59214,54902,26446,23695,76673,36496,41575,67952,10867,93456,72117,68065,29781,52139,87433,10535,87728,40426,17811,97667,68668,34144,18367,99284,39516,20739,17072,98332,47467,59637,20405,25456,27621,39137,47283,81148,93041,85279,19980,76346,10113,47497,37130,82096,37008,40581,41061,57551,53905,32609,79426,51690,41795,77527,39116,24818,28146,62201,77203,32554,16275,15353,60035,61902,44758,97048,27340,37620,38118,15946,60089,25770,51616,73377,18433,21168,39182,48892,92588,42349,94461,34860,55354,66006,24592,38194,94122,37963,18279,94737,94934,61439,93720,37443,82421,50801,22350,85683,77401,67428,35235,50333,26403,64682,49174,23756,82830,63657,81460,52123,61632,58578,75392,97119,89021,31183,48046,74422,35641,15788,16066,37434,75006,22910,51278,90432,20304,83575,92455,49938,56317,29071,33094,62383,84053,84315,71071,69403,78349,84128,86176,59866,40628,54226,88142,56970,14523,14196,80861,90339,28215,13661,15497,47366,19037,40641,14411,64781,41360,25513,42530,86871,62470,41189,39440,25102,82544,24611,72699,23667,43353,57908,41172,75482,67225,24554,80812,27680,29224,39315,46692,59067,98678,33282,72151,88421,72572,11058,31857,52335,65874,52207,45081,29852,25682,94173,14824,22649,37127,27675,28693,80593,56307,15050,29488,65755,93260,99281,85381,79040,61811,66611,93678,53473,16034,72185,87745,32464,32072,24624,68430,20742,78673,19725,74990,20381,59142,30917,41724,18674,15172,54688,62735,61692,86584,63172,58807,44617,16987,93637,85061,62643,74300,13458,85190,16916,11703,17381,60463,18392,24805,19420,40797,66457,65292,46566,10275,92714,25449,98241,52372,54467,21711,72424,51052,31093,95875,51879,13146,56060,64390,74465,72410,16231,86487,38379,43703,12260,15272,88674,79107,33670,91564,30293,70793,83774,59373,16160,20565,91148,15482,24006,60393,97706,88267,61317,94286,16132,70294,83665,21182,58625,16671,77006,43007,89950,48886,31529,70149,13856,25943,77635,73224,38100,33603,33675,88998,76282,66222,12227,95943,71745,48778,89432,58664,64943,99722,45333,11998,11260,50120,30659,70642,12754,63126,17968,15873,74807,83767,71317,44420,17116,80329,57209,49509,80398,81869,48761,79010,59747,57467,20347,78669,93128,40233,79644,21928,21493,90821,82300,93713,47369,90568,44458,19198,84608,21526,18569,72449,68244,84598,91766,50898,74173,51255,78958,98645,57341,94627,68916,64294,24030,11703,68230,42293,27671,43097,38362,32398,37939,36526,26007,99559,33459,37924,58102,65898,49783,27781,43860,35125,60640,17328,24478,34333,87896,68888,94351,54909,16454,42236,62269,37605,85792,72310,27113,48631,54345,91586,41211,72351,59590,61780,49595,43163,57146,47032,51117,45889,43505,95874,92800,60072,41173,10022,84549,46079,64558,22481,73971,66748,82684,63268,15489,85726,13838,80305,43636,55823,97156,22676,92566,86689,61925,67297,30319,77013,31557,99416,13500,62420,13549,32286,71229,15922,80329,28019,31816,59957,72051,13515,43276,19467,41919,53300,96203,32151,54182,67054,67742,19665,52513,50343,51003,59859,41291,30953,21919,76927,90534,12894,62522,55891,64395,63665,84079,81360,91786,63408,16699,37354,82697,18087,43858,18845,21909,26092,95465,71150,31760,56083,98543,16527,97366,44154,57794,90684,70394,34570,83069,61213,97192,72138,90835,79064,29465,17461,92054,72153,44785,83787,53593,94936,36145,67454,33066,98151,17744,65883,75454,62925,96146,38156,47258,60594,54231,75648,51528,55199,48161,47938,70768,79538,31211,14454,71007,46654,84433,47202,62849,66814,78023,46576,82022,41952,37347,96432,60916,79827,57574,19185,57880,95465,30211,86884,35074,79091,69784,95780,61364,60381,37884,73398,83407,10576,75969,52772,67439,86536,88307,10589,56033,58906,42689,77878,78173,55732,35897,98009,29778,76711,18991,65951,25409,95087,71115,53150,45006,40451,64821,25715,68472,94030,59086,45994,94256,19405,81345,92479,27756,90766,22643,83633,16672,34776,52964,20657,79536,12935,14886,76915,27651,21090,71279,98095,84178,64734,77727,81879,57459,27396,19461,71947,49698,70170,38496,93958,99919,31771,98493,97814,22157,64731,43795,74758,53934,49719,71215,94245,37051,68601,85786,86118,35512,15739,65367,56886,49022,61829,84450,67971,17721,74274,81148,61562,65681,12781,34569,11648,76916,74541,79660,41297,99892,82413,25938,63413,10573,92722,18612,53790,97277,40704,16727,28203,84037,95104,32644,51120,57547,54673,54458,81642,94317,37645,52654,39949,73928,10465,77425,39236,45213,47684,46201,86330,39469,43663,61696,55259,99346,55091,24543,37007,49240,99187,73492,15183,57079,64578,15561,79264,74185,46251,66167,14842,51166,36874,33567,60740,88112,75241,38062,83164,48049,15238,15162,85265,89304,98844,44943,58734,46299,76302,67514,60261,83661,63791,76700,11357,65048,73400,29253,96523,36006,76028,11018,18991,62002,67148,18429,97216,35501,71187,19413,22401,65690,53229,56537,16202,37668,42554,57312,17397,29158,21888,63270,63576,60412,94644,31499,91925,31079,40197,61316,29832,77976,64213,67488,71575,21906,92724,23733,24679,80465,14764,27475,60464,16904,95185,67761,77261,54830,33953,60701,23657,60233,56096,73538,95055,83974,90845,50151,25785,74847,61310,23904,57017,62514,11251,12743,56476,54867,25852,19390,55309,39108,64496,46533,13582,52195,54640,81948,25642,56111,80649,70186,98063,46602,60292,68006,84413,39259,51197,21664,48723,51404,97082,18010,84349,45310,10093,38025,56641,76652,61867,14360,86026,88678,22432,39701,91170,43921,73636,33052,20609,76813,73923,81868,10841,47364,35714,42271,57625,54539,52482,55797,86692,75866,80230,41930,81827,24117,44726,77124,53167,61047,48799,72456,37046,96477,19988,91692,95729,69580,77562,86012,11091,65061,12306,57625,65534,90028,62235,76613,34774,74181,20524,29098,17672,60045,75423,46155,56932,28039,86280,96686,62748,92903,55685,23451,67119,57112,15095,21885,23001,46860,51556,92346,13288,51865,53147,97433,75981,31304,77150,31572,25017,54763,98615,54177,98257,51896,73060,84910,99124,32257,80826,66267,46871,12050,78044,78193,53238,80802,83306,87216,71601,18213,94231,26104,75743,36551,93336,84957,12822,76172,78327,41971,38740,70123,11415,72572,58288,83668,50064,42593,12918,57020,93129,41005,96968,18380,19762,64133,42124,96817,77722,33243,27209,98626,53554,70425,30637,53705,74933,33790,21170,74946,43129,64738,19588,40722,49946,90712,40416,36380,44931,13620,10177,42343,66341,26863,52696,82154,26597,49175,19955,25117,54444,10153,49993,90377,81506,56307,99768,68857,87068,52642,76522,72610,76514,16113,47325,21885,21985,23449,57625,36467,36333,37445,37909,43524,90219,23635,83507,99026,16780,17802,91911,88111,87418,86208,13740,81048,78785,50044,77609,73124,66624,15895,66348,52711,73056,90886,58878,29789,20429,17901,91342,27350,14104,21534,99600,16888,26894,89899,86941,19038,85727,39079,74456,65013,86796,89658,35257,35670,22729,88095,64400,85997,80350,98490,74645,26910,53934,47981,63902,55861,36061,76266,57146,99296,93592,68601,44902,48526,84504,71093,50201,46216,74131,69049,79148,63049,72015,69954,57506,71991,42394,26332,34344,27175,77212,17892,51728,81924,21392,75617,63648,25509,13888,57058,63933,23305,37753,20612,87873,59346,27596,58658,57784,91144,66060,25097,84742,56027,49225,57160,73369,96172,79717,87228,53483,97848,26945,28725,62610,55839,88905,23721,31273,55516,65433,13886,52172,49506,76437,31977,90461,39551,65603,30282,52042,49344,65584,34361,56745,63736,70838,29103,66641,65882,58927,22938,40093,74027,22540,93671,64628,28933,74811,10636,22762,90762,97059,89097,88314,68798,26344,66120,66591,95101,26463,48452,87082,24753,47684,37499,84248,62417,36659,55592,66968,34326,92761,31892,43140,63822,23025,90446,44045,95343,11383,29306,60409,60027,61734,23317,45445,10973,98466,54442,31425,16476,64822,91630,38574,76381,79594,38016,99012,57328,76182,51770,45688,73306,80636,19853,40550,35114,68655,35657,19561,97905,63039,37609,37097,35040,95875,64661,20243,84233,64683,16785,29306,40994,12310,17216,16271,37876,59533,66231,44649,16525,73885,62528,33536,99893,60233,69816,58833,87815,32180,48562,53322,26590,19667,29041,91630,39511,63756,65989,30106,67719,12186,71595,81716,52596,74153,11018,81596,81722,82054,61672,87048,28421,65736,63146,97933,94166,46962,26776,69904,70190,19836,74522,91091,13509,86876,86010,26864,59333,12841,22673,82637,25025,73577,27481,53115,16365,23031,38066,49214,66879,12248,26898,79111,92406,71371,64158,58461,81749,18153,17260,40156,49694,87337,25619,34758,59587,17857,30751,52753,32580,51425,63564,17281,22728,18415,80498,55840,52995,64641,66639,95373,18540,69831,88347,76445,34754,41964,76314,93525,99789,65906,43154,28937,28619,83515,47446,25001,22226,10940,18789,84275,19560,77130,43041,95323,18507,59970,37790,67789,28433,74377,95556,68514,66008,27581,49173,16634,47048,19553,68063,18243,32875,70435,78177,47562,57901,92021,13459,86581,84478,30428,65667,40144,55323,58795,67047,18834,47309,28253,73120,46377,75822,88991,74845,90980,97265,84979,22357,21704,19292,76228,52520,22396,74399,57187,29129,62245,60452,70301,87668,56703,65374,39470,81287,22716,85605,28796,67376,78872,45506,84453,17522,23372,95022,70407,94592,25663,79655,94976,67015,54496,58633,48818,71174,86035,89114,13431,68283,48836,79903,33226,92246,86232,94711,15263,70843,45902,56822,38723,64404,21338,28671,87544,94844,81152,29890,92263,92612,83176,73219,23334,36738,83882,33130,58944,35966,60352,88223,43887,60013,76273,86224,25248,46770,57479,35538,96030,23858,94844,57465,16008,86831,39138,97047,18500,96636,71369,53069,90519,40808,18781,61756,47717,37645,67664,91904,65145,69370,20794,50482,66360,96319,58852,45149,83332,71904,95377,80524,79510,59590,59741,39992,52459,60592,92881,74244,95276,73783,55166,51410,38712,56539,81570,99421,43149,39543,34252,32715,78070,91131,30736,34903,79854,90235,45092,95642,70654,63199,49277,60045,22198,88061,96605,53337,15408,25181,74695,12609,85751,70331,34859,73914,40926,10582,65238,14893,33147,69381,42335,99587,36824,90942,32002,64443,32875,93877,27429,43987,98202,80745,95583,42441,48773,45898,76590,97354,96129,42527,42260,65726,77835,63901,60751,35432,15886,87866,38292,96254,27696,11924,37979,73965,43464,89100,84920,40806,72334,16540,10905,27064,43716,16219,42080,45552,69781,26561,80606,90880,75555,73819,58566,78374,83351,78030,62791,93487,29598,40236,29501,69833,88340,94373,23125,83728,58082,86979,92498,39655,27590,56677,80967,70112,66641,75390,85681,38590,22255,34301,48331,32065,62454,17052,11768,38866,62694,71419,20015,97171,92729,31989,97428,59053,77774,33285,15454,22166,21924,44010,17726,90636,91474,93739,34043,79125,74109,39542,84087,22904,44118,53040,45937,19919,57767,62905,72462,99408,33187,57125,15321,57259,50227,25685,16985,23213,61454,72376,94451,49747,45156,78485,18491,82878,59923,85185,36346,56587,20048,88559,50408,70476,99571,88604,33448,92174,62201,74627,63658,95327,13118,55971,18782,99157,77128,95462,10789,49164,99182,42604,21876,31197,18420,43511,29006,37683,53863,76247,97698,75415,31395,56940,20922,69124,37934,29632,58500,40207,50818,25927,92613,59103,34953,88945,28593,73025,76464,25796,43989,25307,34993,87302,39582,53949,26511,52449,65487,92584,27226,84563,56918,31597,79170,21956,70714,12716,11696,46049,88036,82464,51880,37330,74099,39658,84717,43502,74319,66430,12411,64542,16492,74759,87953,40841,61334,45968,88351,70761,90192,56119,52275,43461,29621,20797,79944,49885,93026,14682,20893,73354,11316,21122,20551,50574,79394,91853,77808,10920,87001,72190,48234,32681,75930,98814,66273,37921,25999,68688,61698,53481,73496,46783,71651,96675,29977,77479,13459,18246,41342,65864,52040,43159,97161,18233,15960,28612,62569,20411,89059,51901,41774,16795,79709,83831,54755,61885,18369,21094,94684,85740,82722,31670,62542,74186,11866,41942,58176,86493,59381,92421,59168,92756,29751,49082,23603,17257,51318,54076,70100,71049,42872,17271,54304,55694,16233,70973,34014,42209,12208,81343,24428,88756,42875,18364,48662,78699,34757,67900,12374,34995,29037,19523,36321,80258,62709,45980,85328,18367,71896,52973,77527,41665,25016,33666,72486,10346,12537,31741,79741,88980,33525,50094,43503,15108,41250,74736,64191,85437,76504,25271,56521,44547,68644,42081,30400,36448,24523,47589,93918,96936,12927,96742,68374,58874,65331,63250,19878,22617,42966,74488,63274,80512,80437,30301,48984,60534,33205,16154,59561,20650,73636,10129,27865,99841,30491,76586,18325,97368,63467,62864,22205,30330,62089,33984,86307,39031,35465,11831,48846,28481,95984,98818,41077,12990,65910,20844,66277,92528,81900,77880,44751,96020,77438,42659,80480,39900,91081,61556,43491,47893,72792,62225,60095,35682,90357,52617,59511,84660,52577,91894,86481,49344,59088,46466,29939,41063,22479,33593,89586,79540,32177,76392,85754,31422,34513,33337,12860,33047,52694,81964,96076,72867,81359,97142,30331,36554,19690,84453,34749,82662,99838,91167,63741,82204,97203,83604,80789,83158,56112,81345,34807,18062,59374,71308,74933,36402,54842,34010,75697,65244,51608,39743,17734,17818,73338,56545,54698,94823,84612,80267,95550,45637,91955,47717,94462,42201,88603,27039,35651,21244,75665,48089,16806,22578,84431,61835,43801,90741,57168,86572,43903,57499,63336,28877,22608,71084,82451,16420,61444,67910,13272,64421,81844,52846,87181,70565,70620,39940,47192,74684,13273,30635,49325,78633,92782,33341,91076,33986,83084,54390,18758,44743,91606,67950,37524,58105,41255,86830,95561,88225,62263,94050,32872,57037,85442,16903,66420,56712,96078,40339,80107,74257,57323,37921,60359,34741,39545,35169,63688,86055,64044,19740,55678,84295,63309,73969,10886,93676,96916,83424,80992,40521,14160,50281,60771,65875,49481,24037,27860,71187,92874,54279,41951,99559,92123,82053,16153,39653,16134,23228,82820,53313,31957,83484,92063,55352,85587,63727,50727,76026,56889,29284,24224,92297,86638,66558,23277,41227,82581,50528,87023,16950,18824,16243,11042,52285,57632,65629,81611,55486,54735,84148,63634,51421,68230,22913,12794,80893,95301,16254,29192,73591,68257,33359,26211,40996,89990,73009,27920,96406,46973,88068,44381,29717,92772,48312,76249,89751,22016,36037,11247,90816,90103,49747,96373,86900,57684,38788,11201,57451,61119,81484,29768,59727,80637,71207,99914,66186,86438,10366,30476,88489,68437,46550,86356,71599,50132,65578,20026,54241,10122,27463,65382,94212,80965,63139,62785,46021,66054,18767,89207,43655,87657,33349,17588,38997,77540,74795,51288,33298,27684,69949,10505,18877,67560,92594,74447,77699,47940,53301,82158,77562,48294,11302,86589,96387,49051,25885,74618,26300,74271,14574,75980,66573,99727,25527,68028,20182,88747,17898,74072,68503,54850,38586,41192,16051,14456,34328,66977,76829,21804,93726,34994,12083,56741,67315,47762,79681,83149,19787,70010,52297,89347,23736,77035,65297,15776,51313,91589,72128,63001,70799,59739,81792,99469,69979,51599,19683,66204,68834,62466,78747,33982,17431,81721,81644,59895,57377,80680,94837,90721,55110,79817,32252,68474,30544,66730,32583,72869,83849,27863,29374,62522,68761,46297,70927,38623,21349,67539,32856,92691,48823,47550,79450,92621,92380,42683,24643,60394,21899,91055,86149,21610,25517,89274,86498,90952,31422,77515,95822,60026,77242,73868,69018,15412,86685,24213,53962,90729,17305,20166,47891,38169,53560,90733,74192,13336,15431,84298,38426,45742,23124,66346,41380,16609,37277,35460,88437,95105,80654,78358,34575,75037,19051,30392,80164,74278,16732,39224,48879,58584,69274,38176,61797,27817,28429,22376,17560,36854,41843,73336,56319,93443,24082,23522,87891,36493,87119,90107,98482,54557,72928,10198,75764,16564,63361,30846,46459,97309,97749,79357,20761,44325,90714,93014,73579,15653,77045,74188,81117,16667,98982,94080,46099,72571,59290,73047,26068,52693,41843,24806,49841,69563,85034,76856,88105,94326,65399,32204,85438,78792,50455,84529,25498,63865,49531,93531,45758,91364,88576,51580,64729,90120,63727,28268,45666,84879,11348,11299,17542,92049,62821,10543,12847,59046,73931,38888,99937,27698,21508,14013,14742,86579,70231,81250,26430,19284,20589,14879,83117,29641,60197,17569,35371,50517,28118,90746,38034,88709,47346,39352,71125,60450,44975,74352,61382,68184,16695,49946,83867,93143,35546,23376,71696,96793,23539,32824,21673,57854,52477,99161,90071,85959,66527,63579,61544,20711,96489,56390,62901,23261,45713,62465,99854,39091,54560,65303,42484,64335,29412,25968,93489,86466,26598,47508,60328,52462,29168,58879,57228,34815,88502,23080,47797,47976,89890,90337,89939,36076,35739,41491,94131,21682,26395,61715,23376,19377,35625,41174,85558,50339,68593,61985,54114,28343,94059,67850,27226,98784,30091,86155,97493,98697,81969,76476,99155,65385,35118,66818,70243,66540,50075,75807,16352,39434,27255,50616,23089,95119,56187,95025,91821,25287,10540,61042,93551,55221,93694,56734,79666,72548,43106,45634,15319,16993,34538,80402,33191,73817,53023,19504,39382,71199,29353,49876,57670,73503,72908,46941,63343,67192,33007,51867,29910,49174,30334,54252,73712,30582,28572,46546,48570,75946,81322,12080,65312,39267,30509,82937,59939,15127,52989,80898,39981,45122,87784,12391,25276,66378,61926,38659,16189,34588,60461,81585,11934,77921,37106,76379,82180,56029,23548,10322,93402,28538,30741,48761,94620,45858,79058,91363,25723,17649,67700,95304,98450,18696,80431,21724,52317,40810,53707,93320,16320,79438,10864,61280,48370,65636,21765,70097,81002,78576,38658,59357,34459,46163,88143,47428,11515,97112,36594,70328,36994,89857,31717,33082,24432,49228,81040,73151,92793,32679,76604,86267,40612,91652,44613,53631,92082,28642,71269,51388,39169,46164,96106,11115,19725,94679,43478,27375,77015,38938,89416,93797,42361,66561,93070,67884,72639,38873,93890,68329,76704,55208,74942,50011,31461,28955,61257,15077,88725,19178,26804,95233,50544,13263,60414,78676,11581,65937,67978,99444,42941,68058,44576,40592,70156,84838,42664,77200,85077,76450,52248,99973,43936,35100,99609,19763,15178,21234,44630,27483,47908,47722,35871,77542,75871,13840,37109,63024,97805,16513,64472,59000,79276,32180,59001,78560,95909,58591,12842,11410,90628,78581,68376,64842,42748,55888,91142,54132,52285,17678,12915,52470,70140,48148,49080,43502,73047,26936,67607,47523,77172,41343,41020,31148,93754,33665,96385,22137,89851,21571,59252,53730,56942,83098,47797,94888,85806,52690,27837,69854,95457,73037,95656,30137,93542,31564,53809,86391,33646,42784,64306,12572,61990,87401,26489,86207,44433,90936,81498,43632,59738,56413,64631,63947,59352,26464,14260,90746,90258,67037,92133,99485,92378,25701,39323,65953,93408,44749,95859,91929,93564,73805,77823,55498,57291,59194,35038,76910,73225,67662,64224,37192,84505,58876,34413,25551,10224,77252,16369,17368,20182,66678,89827,80113,63672,28454,79096,88056,16910,39228,25699,20419,60187,38941,17514,92514,66938,79583,28270,42030,85511,21947,31004,76764,73095,84320,34908,18670,25914,55382,23039,60684,28642,51244,46207,97300,42070,46505,31668,33841,83879,58940,37047,66930,59749,77257,65950,37890,77574,72557,58387,73266,19253,17546,10287,25809,36098,19996,70719,22234,78119,82025,45766,31589,75419,94308,21502,18334,78220,34918,60343,72798,65715,66082,56928,84443,69717,19981,21639,84001,25666,80818,47823,14269,39233,48617,20736,49917,30055,63499,59558,64090,24653,74289,32867,39400,99333,94880,79376,83518,53446,95007,18710,14205,80249,99915,85737,11292,51861,77453,60347,54461,68421,19028,28456,65858,50612,81745,74302,52541,51066,96326,76862,50362,24758,12258,62510,85075,94430,45060,42385,96637,76017,17558,68378,68364,72913,24887,51444,88600,11836,63046,44513,13205,83342,20788,22022,98778,35142,52296,63313,33466,13504,36693,53257,12522,57361,80281,51620,32321,82027,87810,92752,19197,42924,59912,32905,22103,14135,50971,25594,63765,14883,72771,51886,21804,61896,52975,33155,63363,15266,74143,30713,96866,70604,72932,45153,24606,80714,58188,87774,67335,53935,83339,52965,55812,42929,55566,24779,31776,57681,28371,75917,36549,56900,85371,54425,47874,56665,59850,93882,97277,63157,36038,97238,87527,30357,98453,30713,37984,99425,52775,14834,18942,83565,76882,17681,68648,92749,14121,31583,75951,82529,68438,61223,89687,15865,19447,87739,77581,77690,65331,52927,34831,54292,98308,51009,75551,62363,88015,98969,86312,85502,83180,84725,36644,28767,18047,55927,80383,79207,90493,65546,65467,33606,57643,36741,25868,62691,24949,89726,18643,70300,48623,15638,37888,62856,51558,93993,59652,89427,12600,17958,31796,15680,43491,60202,19855,70522,71082,65423,26501,82698,53378,47130,63589,54552,47077,34036,93236,27412,99412,11831,17394,26231,57153,28521,70398,33096,56371,53756,18493,39651,61401,28214,81316,20020,78720,86676,39613,65852,89502,39134,88748,40303,77158,69203,52263,14747,56232,16392,58399,22003,23877,71232,91206,40833,46146,92354,30073,74574,72807,38610,56475,90721,88278,66649,80608,92194,82699,79253,48680,32618,85882,29399,68812,71719,11786,41564,85885,19887,92633,52055,53603,79650,60945,42805,20668,31019,96483,49567,25825,16980,70092,60056,91266,99069,65759,77498,76657,62756,80730,14481,86102,63419,46752,35302,35565,63573,22514,52872,99720,70905,24049,69241,92551,72803,47507,61567,53499,76437,34060,38564,89748,61950,95588,98177,16179,50234,92296,32825,77254,72493,52413,36997,73278,46545,47832,65538,78265,75633,41534,17649,24060,71300,23771,70631,51743,43784,41772,16918,93510,12895,89650,43840,62757,35614,63851,83019,65098,92853,53139,53133,18255,14447,98712,92596,88692,75301,18118,81827,62448,80151,85629,85735,85890,99709,56982,81202,17618,50371,16083,64285,33102,52164,20832,26826,62275,33787,10319,79697,77126,58016,10118,41693,46945,85567,71506,64082,78648,55983,17108,48474,18693,42531,76488,14817,34889,79033,91785,65981,94382,34207,12527,87937,39123,91711,15911,50792,61273,70931,76285,73217,77009,82594,11737,51637,92273,87952,58507,21766,74542,71744,66320,23138,25560,26479,89302,87787,28825,16715,54424,98907,90757,24882,44688,69863,78223,83575,56684,44449,61855,27413,17923,58631,48534,93759,72165,88495,22721,62612,21217,59009,45485,70838,30645,53440,26041,38118,86496,90450,12520,83926,51158,52907,72384,67977,89660,72276,79579,93132,53809,42420,53194,25200,28904,36422,18976,45882,34595,42612,69376,14836,32040,32954,32884,91331,76866,27882,78958,59560,25979,63990,19330,30409,72871,67958,37472,58689,55798,27368,54691,16661,61092,79465,94285,20919,12777,87450,90918,52306,52525,84161,20428,20427,33484,92477,24151,93257,14086,75001,46262,79791,60837,72006,36679,94454,14119,62763,67982,67539,61017,57967,20269,95331,99830,78435,80181,91953,60492,55524,11020,10946,69075,75617,25613,27011,90510,77561,48848,38779,86022,21946,37657,83094,48675,62681,65643,39807,50361,94258,72214,54238,79562,39431,41135,67892,58217,94191,83305,44804,28366,89228,67149,36727,87062,71798,98736,30234,52607,57913,28702,59763,85193,49129,72290,58311,66661,98537,71918,16949,70225,82496,61967,34831,58982,39863,51065,86516,30119,68476,86767,46443,65573,96001,10460,43944,74073,65718,51123,34897,20935,90555,23272,73632,34989,20534,67712,82666,74657,85299,26206,78368,99286,46905,51807,40691,86487,41899,43207,98676,87593,63575,92394,78971,83300,35085,87412,81478,64585,27452,92183,70589,19911,67276,17323,97212,32085,58479,95581,76631,99551,15893,86584,36393,58066,67551,35062,90439,91165,47270,47680,87482,20343,37870,62316,75868,31133,91501,44891,94759,40582,94774,26949,53520,84894,27273,39575,34284,20791,29596,87434,80129,63963,22591,55456,37108,53808,42294,66237,35416,61305,49276,52525,50906,38914,48095,85898,72102,80024,90712,14128,62421,86751,54837,92096,36390,58118,20003,45354,66552,69098,45372,28886,48467,99373,29113,42886,67589,37733,86504,15844,69727,76201,19574,87361,54727,60965,81256,98951,95289,29617,21581,73049,59364,55541,39680,48609,46770,56426,40103,96518,54471,99359,21878,16505,88427,16246,10011,33635,76652,84517,31446,79046,18247,13974,63596,35511,20187,22967,59412,95912,51606,90110,15548,94133,78988,18452,26322,48414,86874,61936,62152,77507,75601,60654,27744,45785,18789,97710,37407,36991,96988,28868,86909,47084,83584,84438,59458,71754,87142,52589,65401,44983,28464,67481,67054,75035,13828,50648,90705,77469,80178,79007,37042,85893,33326,96787,73711,48950,69998,90084,41855,80348,91273,64300,45399,45509,37738,68862,53772,52600,71366,44790,44267,17949,29376,78955,94604,24639,50232,29425,21762,98875,61404,65185,85835,40329,33134,66590,40528,97971,26101,99396,72110,81449,51891,35738,47507,40226,12427,95174,59391,17926,50278,70200,78071,13734,57493,45075,70608,68501,28915,38299,94507,98421,32897,50200,24808,12429,69730,63243,75605,67819,63448,84732,15734,49919,48790,71805,74087,57189,36759,85233,34644,49325,36909,66649,26633,29293,78723,62594,98646,66348,78455,55239,97651,48021,73670,37006,14791,41093,83951,34290,98258,13912,50514,60799,15216,84534,12130,97580,33816,72464,77559,58537,78468,72523,64026,58628,83177,75396,75634,16802,89089,30938,71997,47611,75488,62867,64585,44007,48447,68047,58114,86806,11115,29882,94812,73289,28786,78514,23881,91870,94514,46123,88653,47086,58367,20439,58097,73911,50857,90367,37334,12515,35523,59654,94338,71326,66609,45332,40253,28517,52087,47246,33407,16018,85882,22939,61620,92077,97871,97983,14442,28216,32386,41843,76966,82574,74488,44596,90968,41284,56074,84885,98837,62145,22360,17737,89875,96170,52067,17837,50425,28493,36149,40164,60755,97840,86929,24983,80358,29157,92105,60650,37280,69442,35387,37739,84568,68697,19039,44901,89919,91095,66369,74698,56726,78042,42981,80861,94340,27938,69738,87570,24522,20775,69170,66833,60083,22750,79972,72112,36051,17048,53093,92453,16988,60510,25837,67007,85557,41839,96949,56251,95235,13031,60577,92790,76203,12278,11993,14064,38368,48336,51453,39889,99737,22658,33236,18075,21393,79878,24091,29193,49243,61675,61666,17305,66522,42034,78226,59514,15854,27685,55501,36022,69512,24479,40795,64895,57111,74027,14563,72030,80715,98586,17546,78665,41150,40653,68651,90416,40191,37539,99173,25008,32957,88376,90631,33658,98420,96101,70621,44820,57172,47784,58531,31932,19435,98811,85062,46742,98217,40164,72721,39811,77511,86050,37717,68205,82269,73655,80821,10117,26921,36859,64408,31237,83159,27172,31392,16065,34581,20316,91034,60474,91309,97432,61405,78940,89453,87085,48054,93501,36921,55124,86600,64058,27213,94412,66961,84768,89414,67078,45640,92434,41886,45570,56522,53382,95956,34183,58647,16282,56355,13897,86776,68600,70070,40295,24043,16070,94642,36251,29122,21966,24727,76534,34506,35206,56306,15276,76357,57937,85279,43559,47383,60826,71982,47865,32010,47699,42030,30380,74838,17716,37013,15109,74210,53805,94327,72605,87052,37018,81792,98127,95772,61586,99491,71848,38901,69439,17090,80441,60048,65462,11743,88657,62325,64816,17524,83139,79798,54543,10548,89086,16169,46631,90560,78152,57340,61173,85601,10569,48658,95350,81515,67440,91516,57003,36869,78415,74340,90908,97994,16533,43406,90988,86275,38422,89211,21565,86864,40439,81156,84100,35907,72759,28815,88648,18648,82643,48166,78182,36427,64778,95225,54215,46832,94939,97006,31180,25425,68323,67412,45816,15405,64330,60551,14253,90653,93239,23521,70085,26652,57826,66501,98304,77201,29696,86313,19916,34896,21709,46322,28270,80009,54064,50975,30165,35007,43779,63035,21681,22601,15572,60734,47685,79004,33687,19908,85993,52347,47300,57305,95071,19068,62252,57670,69721,98900,18414,17448,15045,83231,37709,57319,19977,93522,84334,93850,92578,61107,88159,98227,75055,92881,41869,80043,34571,17480,76469,79962,60502,45144,23020,67121,30097,94714,81659,16903,44666,93828,52272,36670,29446,82735,88608,30263,98814,28288,56633,59673,29459,32073,95493,19328,76043,84572,97398,34860,47800,74109,38015,57573,99449,24242,15981,82409,43381,37326,61376,42881,47237,32213,44052,68157,13456,35010,51094,70156,45899,84665,89396,48481,87263,41706,14567,93241,75337,22970,46135,68714,25536,35271,97141,13115,76992,89180,58125,49681,83885,95199,51225,76046,25473,62673,67959,11933,60689,89871,66882,71289,48653,80930,86279,52473,68143,25711,88986,86249,73742,79834,64634,30006,99811,87928,28327,99315,30738,98813,26369,15035,94091,72646,20589,54401,31901,64438,97675,86082,13182,41410,91653,61106,14255,84783,10615,20621,54329,43306,72183,80934,73680,69082,37536,74423,61041,17801,27427,20101,12050,21694,79155,92979,13399,96451,93414,19311,78014,97150,24574,43100,61940,72008,19592,32108,48211,31657,18211,57051,59956,36920,31593,60177,53375,50587,11527,83511,57777,33814,56837,62829,22391,69864,86069,10557,99889,79449,57788,36575,78213,63455,48006,61963,14090,89671,63125,30525,13151,98679,36815,60691,20131,10495,96512,40474,54167,66543,93292,21538,43413,28703,82201,71049,66957,81520,74228,36047,12690,92603,73412,31444,54628,18645,15314,51235,47004,48234,53289,33354,38619,73787,30298,64392,22721,52186,68080,23768,48527,20331,41692,66278,80065,53986,80182,64203,59557,36774,99116,90854,64978,89311,55061,42160,56649,34749,40647,33929,17282,24774,82739,98240,90401,46239,44588,90915,10413,15727,22286,78214,71408,28617,31649,23792,35548,74915,34623,72794,90603,74973,25151,52744,36275,17470,79924,99327,73397,52297,45120,27385,43376,84707,16000,63413,62851,52169,48615,20023,58643,94598,71503,64883,27451,37522,89064,74662,51366,61312,74473,91493,67499,44288,34446,70549,10971,37362,65662,10250,67473,41803,85199,80250,42854,21311,84577,10317,58331,61989,65109,83413,10216,85270,48388,58164,11735,11863,32909,95709,64353,59924,56635,85405,41774,38494,73476,39621,63139,44309,25008,22679,84274,90128,52451,59588,98108,70412,73336,40137,47674,19086,39515,86636,84243,35787,36675,80213,63895,75247,84574,95533,56159,58593,31334,72801,19888,65007,57023,50634,48643,46953,23648,95369,79013,89897,52757,25675,16813,10333,46840,34236,77220,23745,48791,25121,61034,16847,62703,79863,54282,75356,77834,35757,68896,59994,75783,85387,42485,26073,95165,35642,60955,37497,38327,92813,82032,59467,22775,50713,35665,73951,90995,90256,63417,16692,71000,22147,27556,34341,55034,63882,12285,51752,99837,36952,75269,96685,29512,84210,11331,60759,97176,44061,14236,82172,90705,58479,74654,50533,69623,46402,33676,46501,19860,74535,59342,32178,97033,89396,52374,95987,12978,85101,86145,13886,45825,87998,57353,17071,55989,27521,21451,30080,54115,51229,51841,93667,76265,88654,43977,49333,66020,92359,48221,94692,25158,35127,77338,33419,32464,55205,30063,90975,38367,47711,93443,82014,17668,67373,59766,30153,56055,78923,65790,87313,92758,94565,77087,70922,65780,58584,23305,77166,78836,70024,23506,96678,32522,77604,63365,46831,70714,58524,16355,85454,52941,28187,22398,18247,84360,10687,39358,64603,89460,91587,50673,14598,38854,67600,34703,35902,89447,91403,69843,36308,29133,11321,33754,44897,41336,32255,44063,99275,27089,15197,16468,39925,91208,80464,42007,77019,58069,79098,15393,37840,76623,93220,95504,95493,96233,60618,21292,50907,69729,97731,69142,53473,93711,90455,71648,23781,19189,21441,35980,24289,54319,47158,59533,80681,34280,43375,97200,55229,24212,80075,70195,82707,28489,85437,69659,17561,23610,99292,23450,71443,68482,34217,67070,88101,81468,84338,69746,15848,33560,27226,51583,50269,57538,30806,69733,43742,36070,57865,11496,74644,29404,47168,60843,46062,84511,81481,20606,16903,46005,60777,74029,83885,19101,65612,46333,20467,60117,80928,87765,75996,53181,72970,93602,83420,70557,85680,77380,25840,76787,24657,97999,36319,16833,82219,79487,89803,32504,20277,87377,48356,72173,59709,95499,12733,69446,38363,12677,71079,23702,94296,51436,65052,83306,50917,81001,55815,93369,16294,70282,50688,90882,86355,59998,81282,69588,41751,95201,93547,88328,89199,16106,23726,68936,43098,58058,68419,67020,86701,10990,16218,63932,98037,13559,63746,17677,50769,24520,57174,95054,48540,11941,17121,47905,46288,85695,32135,93415,53314,58429,28997,50663,86185,42413,39718,47935,93322,15766,92167,33731,16587,76063,12492,28925,41883,85318,74057,30567,85659,18207,61159,45000,94575,18220,68722,18401,29533,85555,85033,95632,21159,74584,32331,90937,37330,84628,80231,23501,54815,82851,68544,66774,97857,76532,75392,25614,52700,71082,81723,58813,68396,53343,58360,69362,11673,50100,82850,35212,26112,30820,57340,24153,46028,34791,75764,33271,57627,83086,50209,86413,31936,46485,20522,34039,69921,42776,78329,57320,56375,22639,65883,44125,23075,29605,49573,32095,33968,14095,86497,78883,56254,70086,52741,69602,98773,27312,30182,18723,48170,43681,14408,39379,96530,56065,76468,35187,59662,89863,91806,18111,12150,81389,45970,70195,59840,56861,83809,27021,59123,13757,24219,13500,40824,75852,71436,45255,41439,84261,23375,26073,69257,54073,26079,68414,17521,87215,98506,16888,49982,48307,86610,97812,60420,15434,27660,93900,56416,84454,70338,90992,22546,14696,26797,50002,58779,21776,56984,32546,95093,99665,47186,38182,35588,71290,89363,49204,25020,91815,57657,74874,50437,89009,32792,21686,41784,54044,76848,59515,82279,84954,30188,26747,40158,53694,57675,20158,12815,63315,40147,28454,31524,96121,98979,61904,37692,96980,92907,91099,54181,83675,88054,74138,94803,31995,33481,30943,91649,77255,47644,62440,88648,86223,50106,42980,17332,88000,85849,61270,76981,23289,79537,26525,61809,49257,42628,60444,18979,96045,58293,74859,63819,99291,69613,51569,49051,14068,97791,34919,68878,13605,97142,94464,91020,75186,74765,63294,70526,82522,43151,34349,81231,26759,13301,41155,59059,52728,25106,94056,69485,30181,29545,19827,14644,30426,54985,40166,44385,10914,42875,80995,74297,52892,39233,35254,14375,55242,56070,50751,33473,19610,71802,98346,13034,16097,47382,17601,74987,72992,52620,63661,78679,57583,87189,25360,51815,91077,96580,15059,19057,79622,98925,22324,77293,78242,32828,57115,94170,21276,84138,14526,81321,30658,68326,99796,65825,58324,31500,69441,39116,28539,50797,55922,40169,48546,49296,80990,69667,48590,72307,27407,63567,89523,25745,25091,21090,66278,18743,57814,42693,81509,51701,19138,40895,38335,74739,47730,27054,45237,71042,36910,35108,17392,83143,31252,19363,21812,22077,26932,94130,26579,57115,20973,31859,89667,74984,38148,57197,30938,52547,30375,37439,52431,37940,10259,57877,51623,12191,57236,86117,20282,21012,14475,30992,28850,47665,74934,20180,41828,54913,75264,73363,59779,51831,69689,10516,74399,84257,95946,80795,43158,86859,13484,28309,52000,25094,45584,28420,92466,50904,48479,47653,91645,80406,40429,70310,80452,30226,23467,94536,36379,95896,24955,84892,85735,65286,63235,51713,15197,52859,28670,72713,45157,27926,29910,36189,45996,15140,93025,67091,70221,25216,82576,20240,24449,39846,36686,87121,60866,70003,61902,58601,85856,32342,55989,56851,70051,70619,75433,75692,15195,36511,72401,45217,80773,92405,33920,49184,83929,91151,80938,99286,33856,82234,38624,18369,52784,75978,37385,71194,47915,11861,16736,51568,34462,19321,69213,23031,19946,13407,78655,44671,70227,92135,38753,79934,35668,25347,37459,22838,92384,33336,99787,82050,52692,56487,61738,80253,82041,38289,69373,48978,32596,10959,82608,35801,17057,63435,30462,85418,77360,67305,32626,40186,14052,18950,90653,96224,10469,17339,93780,10567,68066,35577,56180,91586,98981,41253,10709,60675,11189,22378,51774,58539,50220,79511,45683,26771,48313,66425,89451,58550,39093,53970,55082,26331,56006,50966,65407,33402,68976,39087,67907,91574,88633,64047,85377,44820,91515,64149,22702,30016,24088,61984,35448,72637,53959,47005,40091,20321,66869,19627,40320,66560,82973,50772,97941,92852,62388,22433,61276,46007,15702,66131,70703,88861,75168,50546,23428,61346,84162,44543,72207,79272,23527,40759,88081,51452,49741,33650,65028,53840,46609,81467,33762,40883,95467,37502,79272,79972,56948,78605,46001,37672,19953,83270,98914,88115,86992,82240,68900,91369,66339,13736,88977,65207,53164,21275,91676,47174,80286,36065,71806,40613,99040,18716,15575,58300,59681,94940,18619,27805,36204,67253,24982,40118,52318,92993,54463,20668,67859,82577,27532,15998,19013,10850,39040,97023,42238,53512,76392,29466,70237,87706,23166,29177,13711,74288,90088,81468,74455,52948,43373,91831,30312,25397,31506,95202,14994,55528,77145,38761,18863,38626,45937,49722,83462,99747,60116,90929,69801,58952,49732,41035,98702,26738,13171,51303,27601,13930,14318,57997,71265,81015,90011,24927,79864,49074,87854,79645,29475,39097,22248,19148,67908,44549,18435,22576,38695,28135,94226,72729,35065,11111,74450,61893,37060,25862,95230,11206,22771,48305,47766,87930,42463,31926,71126,54052,56882,79480,44626,84569,15275,93147,64776,33609,69327,77646,97130,44239,56455,70345,19757,80886,25298,28489,18312,78777,51282,26769,49310,25333,61034,97134,28266,89339,15734,55357,57025,67859,37756,23216,41034,51458,53816,29814,23162,69110,22836,85115,19961,42241,84843,67511,77756,44557,44654,81992,62996,65517,26589,36778,29849,97123,38528,43070,14510,27078,73145,86217,35746,56585,79331,83834,26554,84690,32632,14267,45255,74137,65236,68450,56031,82146,94409,35438,60452,11855,29797,36040,46669,69933,77001,12392,40543,55635,78626,42564,61026,40657,22023,11657,93093,43649,98269,69346,38029,58882,13687,79182,38436,27087,44906,60726,98404,28999,20204,80796,70720,98749,32276,16871,16387,82475,58631,32790,38166,52513,94908,28541,89947,94212,71349,39283,85397,14537,79939,52005,26418,46176,36876,91419,12006,58388,97196,11812,34673,86154,14144,69125,20517,68962,24834,69868,77961,65950,70346,13948,10958,48450,99738,70584,48657,62597,44075,49587,96348,52328,69838,17449,77052,63270,71374,53998,39347,38655,13501,40496,93018,12355,31802,72487,69552,65918,21264,51852,60991,14218,84851,11993,80906,75379,41320,11707,90938,59957,42950,32223,32668,73090,14261,20101,53618,93210,95428,17572,39738,58474,43018,95647,46594,88570,78726,49515,58730,79095,45470,96514,99767,75849,16594,28493,68299,80345,40485,16343,12738,29546,81296,90733,53058,74094,29272,20527,84875,56124,37756,14906,55995,31961,49394,47023,77169,84400,18553,74776,87363,65386,95142,57703,70605,86278,62269,54711,63188,11708,89549,36409,64965,11960,85220,77674,46397,82281,54246,34658,43741,33280,53934,54803,28634,89002,98167,91721,75646,27686,46703,13916,92870,82642,15700,10672,50781,13036,71172,60778,99728,89574,18688,23924,19088,52544,49900,88281,40646,50319,93336,99417,95818,45459,36293,13739,73331,76913,92948,57958,63226,51317,80741,73904,72559,93366,48515,88517,10419,79641,35853,35381,28239,84300,69969,24773,41871,28169,21917,69394,40921,80643,75136,95612,25682,47683,13337,66743,37654,84725,17860,72722,51215,14980,53427,51374,10377,96081,72516,94085,65941,24975,45145,64655,26212,94013,77900,98114,69352,49177,16877,83072,82035,93393,87446,69049,22799,82288,60145,38623,80487,12553,77028,37553,46083,42891,77185,65438,61677,37149,16596,60317,19336,20488,42736,27790,11889,92776,36274,11772,88346,33205,40641,76959,81248,65006,35373,15980,31033,56104,88365,95933,99202,44858,17554,80514,44146,96250,59566,26718,59584,56084,79070,55703,58281,67129,21927,53604,71895,67988,75423,42075,35619,45005,44524,62932,87327,62822,92369,35286,11131,24245,44373,39077,33095,75393,27928,75607,99097,67331,48009,39712,59535,28441,17815,55711,54514,61395,24901,50808,76954,47037,12096,99830,72128,25713,16432,31670,36042,79144,84060,12127,32318,69800,18389,37689,10921,35370,51940,39486,12580,69316,74877,85119,96599,74119,43737,39354,29755,23098,98468,14684,55477,73093,58988,67334,46026,82020,63571,99006,88594,17385,84565,55585,70429,86422,93392,89996,32132,14015,32176,81038,81518,79526,60813,21560,79393,35814,56619,17854,45535,47408,12434,16456,51483,37345,34077,57910,32509,33905,92449,84038,13836,31436,58982,68047,19933,89364,10181,67087,87488,83739,72177,18406,55751,85411,26981,36301,79244,80147,14496,19082,41958,48534,16063,99066,80945,72322,29814,29788,45578,82332,96116,78269,17763,94483,35816,37639,56032,84594,96020,20522,19276,61168,77113,81222,92646,30254,35673,52204,51352,36139,75455,84061,70094,80410,55245,18322,69835,44181,30247,84787,87398,68368,86050,66829,18704,52977,37948,57681,74853,29080,32279,70197,39036,24085,28071,15504,85825,55057,91099,21132,70008,78996,62318,82485,48967,96907,63930,23816,61516,49208,99715,33919,18301,88851,19056,73232,16532,56068,18864,61778,45309,46423,58563,98203,51002,71645,74693,47807,44473,66552,56838,34955,61159,58770,97205,92946,69741,28742,73836,92111,50318,47715,50293,22430,88902,16335,59440,97325,56838,47472,18043,88206,24664,14566,89619,12115,15347,14962,96487,28065,37244,96126,79009,92004,31693,32545,83780,19953,14860,97696,30617,27832,45786,50431,81559,48974,95054,68749,87636,17856,26616,36982,42740,92029,81748,37250,22365,51391,65240,29457,81502,98560,80618,85756,44344,35035,59163,35583,69717,57769,57478,97305,69214,11790,33622,29579,84553,51878,99078,94174,98374,81235,21702,76706,85362,39406,95947,39182,25112,13921,70704,35647,12466,31263,26049,34156,23978,71565,65187,72428,17853,44560,19107,89213,88575,54006,88259,29967,65389,77958,37575,36037,24985,61539,44684,81750,59890,19381,73199,73859,20918,27475,81083,49502,93158,22313,59540,44864,68554,41103,11406,32911,62588,37884,36368,12767,13741,17405,19390,24227,78907,49174,42513,71877,60567,89828,97691,86586,21025,84655,59911,91179,91767,66799,93018,83511,36495,89289,82577,23020,78360,99210,83088,32632,86121,21729,30200,68266,15014,98758,68953,82087,64299,83289,46700,20865,48097,71822,40428,55380,67775,18942,43509,32279,16073,59874,84745,44024,21390,14690,14203,80468,89598,38409,74071,59258,62240,92453,43144,46039,41863,57515,15913,29237,62147,54398,15291,84851,82512,79017,65006,87295,95574,94266,59183,17213,93901,87666,17977,36608,46473,33045,42186,19059,63309,50900,96678,60563,79115,76829,82318,85799,81096,57178,70331,81315,62679,95593,69469,40083,89373,90964,24623,83752,21413,73292,17225,49476,81774,20621,91867,29076,60434,30017,71641,31348,42197,12271,74863,97041,15502,61774,13891,51664,19355,31545,78584,24762,85248,83378,53465,75767,81886,93685,75260,90081,75310,31793,99573,31835,43034,23430,89021,18557,45395,48863,38303,39231,20961,27539,32142,14650,16741,92767,44200,80232,82946,72489,27252,18182,45725,50062,48129,24653,99277,78077,86803,91586,52901,91397,61205,62377,13104,65973,25674,77847,54671,18077,29144,94714,10080,92191,27737,63126,73395,16182,77360,88008,75704,24014,17098,84952,65669,23928,14899,81658,32068,25861,17868,67583,83628,69186,77974,14260,32968,71260,49969,29550,95084,42927,37931,52854,38440,61002,47533,67527,25382,91495,94728,84968,93486,23561,18203,15758,17947,65737,20541,66624,70249,22630,47000,48124,87871,87832,79752,19577,66532,30068,22726,88070,57087,62857,38208,81091,33890,17219,21474,29366,36502,92175,10632,61751,79442,84908,62006,22696,81407,93167,74606,50133,95266,68477,50856,35863,72899,92295,25197,63514,11330,66716,38507,33932,45124,50200,42405,57088,17608,52402,82976,32472,91811,53775,89694,65832,56125,79543,86833,19399,31196,18962,45467,84271,78137,30259,13053,51339,22952,38325,67438,26149,40223,55807,12046,47189,86006,20674,75109,52054,60598,82045,68032,31036,93552,25661,19282,76238,62650,48612,20428,70475,59703,50921,38006,21260,95986,29078,98807,93799,54859,85361,11787,74573,90167,99591,97321,65826,44096,33098,90130,90703,11347,10054,59965,50342,94812,42323,22425,26344,45714,57443,47347,99535,38997,61186,13376,73774,99553,42433,50396,68418,46516,54822,70790,27432,93708,93932,51941,31337,93200,81536,85561,46783,87581,51186,15149,39836,11254,33660,23132,43074,89721,75296,12127,24991,19321,87914,75382,46391,14983,10354,57101,87146,33039,67792,66211,98111,45189,22806,11891,94158,56533,80539,23566,68207,36818,84730,66445,74916,53599,20242,17073,44737,13665,16418,48328,53308,48642,79665,35955,33616,89509,90216,26765,44070,49816,84562,63104,76783,66402,71250,54650,68140,90929,92574,15039,62829,73381,34451,37859,76611,13651,90867,56521,57217,84576,15393,60433,20550,59178,94884,50869,43656,41509,24950,39962,88243,35093,86028,95239,12057,35277,20011,32969,40759,36665,98212,21371,96121,18139,45286,85778,61265,41542,96206,68541,63255,92412,28364,60005,92450,63514,24732,42677,35646,78003,45159,21155,26366,28062,69411,18382,39512,67732,55950,27307,95901,55713,20546,29007,76119,59768,75493,55311,82812,30947,18486,95055,36378,62903,28216,50483,84374,55395,92353,21851,23251,73482,25253,88809,93410,59583,35630,82811,62307,38702,31155,13995,44608,70094,76251,56338,63733,44780,60012,42315,20608,74470,77753,78778,56761,27768,22297,58019,71853,25480,21642,89785,44908,35093,74554,34522,28288,45082,39418,59056,27135,63024,67735,65595,80913,86336,62843,53446,18227,16087,85847,34374,70564,43528,16621,33524,35731,51448,61825,48841,89440,70721,10867,87262,83446,72764,74939,31020,96985,36189,96176,24901,85654,85271,17730,51455,11030,60535,95925,68404,24851,95957,14311,57757,98482,52214,66431,14603,32750,69199,86737,43712,41247,13134,98807,35093,62269,31007,75161,24490,14321,58862,13786,29521,76221,97606,46668,79750,77579,52463,30509,29385,55828,95700,55718,36763,79368,83381,22487,67965,37754,39724,72463,70771,98463,86081,58173,23261,39561,38722,98149,27816,82010,27293,97233,37380,76781,61465,89225,78958,42770,19572,53812,39374,23191,28637,78655,54948,18845,21870,10528,73323,85986,12897,11747,56228,70137,34484,42848,10482,65228,40143,91756,17910,64410,81488,84657,67305,88651,99516,16587,49644,87989,69992,95636,38684,28872,66463,89448,14937,93070,36747,67657,37170,82264,80124,54509,52635,59256,55121,95713,72911,47733,72018,30359,13496,26736,95076,85684,42829,54939,62560,95230,71084,80768,47787,71328,82258,76545,44476,63608,94950,24383,54864,99635,17021,81048,70780,61562,50395,24731,62744,29460,88399,98282,13224,83131,92124,41614,23736,76084,98267,85843,53441,16036,17058,17340,14659,52453,96529,11532,26144,60293,66767,45372,63105,87247,46082,37326,93740,31627,88468,17243,61815,18562,54894,10342,33397,29003,87904,76352,97068,47857,54633,84112,10072,83787,36470,79453,29891,53810,88090,46865,54382,30079,46553,41099,86626,63376,19777,50613,32576,85956,43440,22199,46482,57577,75070,73696,34041,12428,57687,78764,77771,77916,83176,82377,97864,76984,34248,92631,94267,10575,52017,45682,52504,17138,15839,20005,66142,11298,69816,60269,67380,43867,34741,25363,23924,92192,22314,57631,66753,40407,66413,69852,53832,18436,43707,61190,88803,97214,53663,46257,98607,41063,60569,70152,26237,92753,59199,55055,34848,80405,93026,12777,41348,27600,14900,73417,74813,65763,43825,50774,79782,21877,26937,68972,48466,94778,95142,65158,87181,21548,14131,84757,14375,10822,23514,21494,24915,50067,53150,68261,47001,62581,51508,44297,74313,26174,49172,60274,91400,38502,59877,21954,91926,94622,50320,95702,20458,14530,21090,92699,78419,20093,90218,67274,66776,27824,85255,52859,45435,12705,37739,63393,18792,17822,24755,29712,29601,20465,90594,82303,28249,70412,22916,20033,55503,67537,88912,94215,70459,81842,73310,45988,18157,57138,27293,27148,46294,49456,74132,34645,47670,32948,99641,16505,92903,93749,33779,36605,42748,35227,45603,33742,88892,54614,24488,29978,71182,80207,29466,41152,35519,34298,26386,17472,94357,23709,90206,10942,88855,50812,66812,29049,36680,81112,51502,79278,36184,95034,82626,71191,65347,75672,15419,76269,26587,35913,81883,42337,63540,85115,18433,64385,67311,78069,90558,21814,34795,77994,11097,86771,50269,32485,29186,55181,60443,22871,49381,10100,35854,46017,87037,36682,57118,42393,68482,28229,22386,93109,34706,34832,50642,30577,79461,41389,39667,25890,20752,22316,18820,11519,79659,51197,67693,99438,98205,61355,34690,66129,32089,16957,41312,46235,52231,86200,46434,44691,48371,71722,97440,99376,64049,78119,54035,59951,27683,61252,66751,99875,49737,30179,50281,34725,92226,72767,58089,29503,24187,13480,27043,43128,91811,12064,29238,38640,57636,81133,59230,78630,59856,21174,70686,79586,27779,49916,34077,59618,66725,64681,65831,48374,57869,41900,10825,75677,96152,68618,10232,42923,47389,15820,92472,52997,95385,66444,24579,51854,36589,17535,20347,79088,73790,33147,16498,74088,84581,92248,99679,33986,31440,45199,62975,28517,61647,80832,41726,87457,18910,86389,41043,31189,95595,30993,10894,60153,41539,97216,54391,95201,14958,87714,78724,55851,67566,74323,96632,71765,36239,83807,93567,44187,80816,38343,52657,71579,55478,19239,17909,10306,38363,81045,43856,95357,89656,89789,23190,94394,79439,89386,42633,61568,98602,38437,86390,50304,91198,75705,84540,65727,74982,98282,12993,45745,15020,89569,37968,19504,44775,53549,47050,84291,16185,80804,46504,47997,96315,41299,21473,82885,70076,85000,50521,66003,67847,27541,62614,27839,77291,37081,88394,66829,41064,88805,34793,73870,11486,36573,73455,61835,34878,35810,52767,99501,23662,87768,48190,26186,75042,19717,85848,11989,94902,41225,56604,66552,53734,42062,73855,16847,80291,29147,89644,16480,48946,66065,56606,44386,54538,19369,37636,28862,35330,52869,16148,63749,61493,85288,65040,39084,82271,17503,11898,70638,82001,11628,91672,99625,16884,41885,93297,68999,28260,74602,28539,27222,72218,12583,26214,51789,68717,22847,32815,35159,12770,96009,64155,11680,37419,59403,98025,97006,60042,85082,30469,90031,70743,88359,27278,82306,81642,10360,25999,30925,70673,34673,31124,98144,31487,61148,80438,97853,16527,92021,18464,97555,33584,54973,40032,59858,98501,46880,26271,96903,17052,44655,17315,58186,88223,74156,91423,23843,30314,86798,92370,11766,32691,30338,40833,56487,24189,48837,71284,70085,98288,24813,96930,42251,46588,28904,35391,12749,61762,52216,19455,76960,38137,80134,87743,17654,83140,83414,42731,66625,86576,34321,19756,11599,59833,28800,81990,62126,14841,84704,87587,71820,26889,50405,20742,58855,18842,21464,43982,11830,69421,67293,87211,43497,29648,52975,33189,36676,77771,52494,65216,47984,16730,42859,98634,10039,98576,76555,89004,26908,47783,14981,93045,76008,95751,61542,99426,99654,28853,61843,28796,11543,23063,29092,38247,63263,32012,49767,77056,17473,22691,28996,46231,60030,81147,13788,12198,39885,37868,54787,74271,31000,59302,86860,44912,88813,72009,65186,35883,10881,66791,78793,92518,54200,93139,28824,28488,51191,34933,91054,81116,72764,20366,60712,75288,53195,15355,63190,41230,51972,60239,19940,35218,49987,70899,57526,45980,55817,96528,31456,72099,84431,83468,74296,92851,41176,50803,81564,55952,30688,40840,89567,58289,44035,96578,27739,92617,53191,39355,45392,10305,86563,51004,73076,17760,76881,27475,46984,16554,39640,66057,20478,82920,57622,99876,90149,70184,37251,60523,99413,15088,93304,19297,75377,56371,97815,81365,36974,20323,49207,97533,45785,92751,64792,60600,43130,20096,29074,92443,49590,84903,55886,38339,73416,14943,69930,54515,86262,15235,35908,51380,47324,10170,62758,79332,64463,37801,36871,88985,75880,99324,28651,21701,71146,10015,35830,62192,69454,78111,25168,68204,77781,74145,70779,19917,73322,20050,11210,39348,22665,25271,47227,75604,11839,49323,27815,39469,47874,30561,67679,63439,87230,95169,52938,74456,50461,13191,59355,30868,72950,81166,57930,15937,33714,73195,99862,96515,69540,40487,98010,11921,86080,56403,83082,16997,58837,64626,22811,25556,35713,44259,18725,25815,82100,54430,17553,18914,56395,74275,51573,80348,53071,89940,52556,36750,14222,94567,75758,67514,17033,96019,54452,75570,90598,20603,34606,41901,44682,48250,59068,63864,69277,70744,49371,46207,48621,95950,34028,13790,48800,19728,44137,18005,69013,91664,74159,98958,34115,32825,42917,32572,15087,88331,20507,45656,22906,96867,93815,49707,28883,90019,50175,61598,99154,11413,24169,36494,16158,95338,11743,32290,29820,18086,83719,76407,38448,47410,77484,73142,46476,76063,61659,97124,60383,60600,96009,84696,18236,93759,91516,76839,46229,63753,86841,59527,91111,55722,34086,97908,43483,12736,89517,23041,18580,70083,76582,21994,73566,17589,46782,84759,76302,74779,19170,80314,32744,48163,36652,92940,24012,33400,58686,19452,93211,87547,94053,98474,95551,28775,55256,19110,71817,49687,55016,40908,46447,11132,77362,50781,66130,63972,63326,31641,67714,96226,94703,34398,99883,66278,93900,46813,42055,56901,88329,37092,82021,23266,66536,14719,46437,90903,35903,93453,22301,83611,63107,10684,60984,96809,99552,21944,36500,24470,64574,55724,63057,94139,91780,39482,85212,80895,60199,67107,97829,40675,37007,55557,68495,99045,47441,62665,40368,92004,32934,14675,14259,35129,17120,48975,40358,51037,96775,38371,79241,74804,13389,20089,34407,41273,56297,10078,30276,25285,42728,82258,20865,47808,22616,50588,55956,86059,34616,53807,45110,73902,67811,17505,99602,61201,68115,36828,66882,18995,57087,60372,51986,48716,87539,45279,70536,17412,78577,85791,74618,33334,62746,10104,93203,75825,60461,90667,43889,35972,41920,13551,31818,55658,69375,63597,52733,20196,92279,79688,47314,29701,42226,12256,62757,95423,43654,77977,37618,82818,63036,33101,30747,25411,16809,34612,10442,82540,30587,11466,49096,83926,20011,36200,44594,29962,39264,93947,91911,99658,89988,12909,82880,13868,62329,80331,46365,61156,39083,77040,81353,65603,61250,87587,47422,97462,77071,22582,94650,69910,19309,19427,25114,49380,28790,96367,68703,97128,38558,33257,61159,51744,64026,21491,33128,39399,85034,98047,67175,83786,39527,79524,52142,45269,63459,43059,65847,34254,26414,39423,73372,29992,84816,82896,91196,56061,76341,83462,12871,18170,95869,34930,80222,93985,33967,21510,14433,58069,84375,41655,25822,20997,30638,93147,61528,15764,57313,91036,43433,84148,68280,85987,10558,92179,44825,40198,66389,98731,81704,37146,74448,77410,71556,99736,85959,87345,44782,81319,44537,33913,27539,96467,62479,25111,27100,96626,28350,71370,68534,38299,23682,62672,77659,10739,45521,92988,60180,85802,59634,54131,77364,90245,25026,39501,81062,86190,70155,90958,60352,22365,46767,19526,24001,50798,62539,46033,49594,33116,94342,62419,58303,80663,52823,14715,63851,38456,43257,20717,20682,43841,52966,95100,42099,21902,73083,24770,55037,71841,61199,10682,17302,69364,43632,45367,51383,89447,77622,66199,76861,37029,78594,19394,55431,13677,48051,99231,18299,38393,65972,32884,71976,74505,37461,69104,33123,93448,73545,69644,93428,10048,75774,53288,17696,28598,47731,89170,31076,16533,45755,21027,39771,49432,71993,72350,30072,42209,13777,99636,60293,72027,20353,99746,25955,66220,30730,32676,36809,25130,18230,28858,77420,21867,91660,42093,94827,42537,14245,28335,59627,21299,77893,84986,67771,51056,91037,61472,67841,23289,25732,30969,94704,13035,66569,60233,77087,32359,41520,58472,99087,64849,24718,95154,98108,77311,68749,86243,47240,46007,96085,62760,48933,30971,27554,32869,83931,72138,46938,96726,90221,26826,11075,85838,59242,20988,45706,67455,22900,96119,45729,81096,85011,79942,18753,73626,64244,28606,13447,92726,66560,61432,85855,64369,53844,97441,81544,79633,15029,26291,32949,97324,76313,68569,60784,63092,22520,15592,87865,69752,60131,83403,20988,90117,46484,57339,61168,18301,94074,40601,53416,53173,92760,77449,77163,20811,31078,72345,25814,67553,22100,59916,59894,91672,85230,89091,25565,49665,83208,38267,92507,36931,97004,10834,14516,41923,38430,71759,62047,88196,17773,20588,30669,88895,35222,75709,47394,93395,76353,19852,53121,11304,49860,81278,12290,39343,97602,95166,87991,47938,49594,33911,56517,79483,35548,53435,65684,48398,74689,20349,10830,79649,37209,19900,98247,27732,31255,67958,36054,42668,93779,79893,79314,24631,68260,60080,75640,39634,76359,46517,27048,23432,50691,29696,19921,46571,57362,24717,38668,32238,55977,72872,94758,42556,25665,65938,92542,34966,45288,90040,81962,27440,84872,55865,44531,21191,40083,28208,15398,39011,45178,24012,54091,96245,36289,34172,10725,43132,91742,79510,39701,23937,46971,73700,64556,46026,26805,29611,65873,40185,74313,40722,91671,28505,94631,55642,42986,86887,35766,60952,25263,19422,72845,48322,94489,52304,75721,71079,44179,43205,40865,56636,59002,16737,91202,18015,98096,48705,49025,61926,64611,50373,21678,69473,23367,51115,37504,80419,72201,71226,61048,12108,47323,95831,65243,70961,52322,85657,57041,87250,44456,80669,76254,78403,58444,36067,98877,78083,88093,37017,40495,42833,77673,11613,78680,87201,63105,70764,60687,19947,37270,48590,55016,64420,98440,35858,10839,55631,98432,79913,99493,14054,48541,41754,61307,65569,73359,14301,70150,35375,81717,88647,23548,93509,43526,49504,19842,79354,15672,15986,24457,12749,80803,90598,19212,71534,45392,84597,67569,82014,80824,59920,55505,20876,90808,63433,66826,10302,76495,10828,97404,27828,46826,84342,82958,11534,90978,22421,39548,51792,71455,58121,98264,24372,92168,49230,62279,76839,57527,15190,10894,52045,27707,91983,95266,72090,19616,94292,97396,68516,76064,36168,15839,77523,94946,69677,60773,66491,49790,27690,15666,40447,86253,12446,64902,74502,92809,75270,25016,62246,67462,83814,68734,25523,47232,72194,32925,88869,54352,73302,80495,84959,85786,87583,41334,83126,17993,70099,71053,87371,98599,81978,82070,37013,34640,82806,87545,27576,11952,39763,40150,69666,21904,31598,34390,28907,53118,28403,16379,92003,89834,93499,56491,89157,41637,62328,79773,67532,81586,33628,91711,83902,91205,43350,18954,83965,94475,95290,77558,11426,52712,10855,47804,61197,83520,46097,93670,93593,80558,59217,27465,64018,87722,77213,72945,70847,99071,90279,78370,72565,34050,81947,43186,26471,89556,90826,11696,13018,89323,74851,44669,54522,20535,23538,73056,61224,92430,58994,31879,90807,48840,71162,60102,76689,35895,84784,60009,25550,73916,91452,54979,51321,24661,74483,69801,46167,46858,89963,67510,40071,79540,81073,63649,68759,97415,93636,30957,99797,84692,44205,95600,59664,12981,70056,57000,89025,19772,89875,19531,36954,48867,88699,69437,43842,68363,89822,96116,51426,13065,41727,63025,26127,90265,43255,70312,79250,27165,95199,68723,78034,71845,43563,86364,89455,90980,76743,99575,89990,17150,33160,52231,51172,33857,86251,67899,88326,83686,45511,74103,31655,38258,45930,91753,14809,37820,77380,67245,55334,21309,82016,17560,73755,77671,79936,34670,39552,97216,31004,49990,55527,42883,17194,95556,89699,68824,22353,20006,38788,30906,85383,61763,75162,79347,36214,34852,40559,76337,61160,52601,18525,12001,52995,78474,61397,27853,64812,43348,15049,12056,11589,52333,27344,87125,16327,46232,52195,85944,67984,83609,18918,66894,74035,46457,44515,91421,67354,81576,59285,77940,90480,52590,96375,23902,86305,62029,37082,33631,78545,25398,98063,12676,21582,53161,54452,28841,91032,63654,54284,90717,68299,64551,44316,49431,90830,49583,19716,94286,66583,12188,71503,22956,58706,82837,23341,98605,85556,67626,45783,56920,25573,13086,81453,78401,90409,98213,44065,39581,95680,51283,44278,67570,99684,43790,70718,92425,77364,83494,62573,11606,85722,63098,16816,98201,75353,77984,46477,84793,47822,56182,12610,15476,96192,33317,62947,87167,61745,99054,86690,82984,97932,57192,51676,36410,25420,53840,20722,74427,55105,78407,72309,69641,39013,20659,25699,34465,12559,29773,27631,29786,40078,72832,14049,23079,21957,39917,49059,68617,55215,73550,95999,97676,69490,24761,91047,95189,90931,16267,63211,91099,59837,33501,25672,66995,76740,13572,49512,70802,84684,76772,55557,36378,40292,84701,52812,30234,84859,36008,30294,19631,41644,78020,93026,21646,25755,13380,88877,38989,78482,94755,55266,21420,26108,77085,45465,33464,55490,30977,12434,97536,30007,32916,18116,21821,53465,62658,39953,30908,29581,93420,24849,87939,96514,90884,24621,57751,80065,52922,52159,51961,95818,33950,30962,28518,91457,46110,46191,95321,89531,60253,23539,33077,38133,78515,89461,78509,43659,73584,90282,95039,22869,64870,67007,92234,97182,88609,54187,75398,53536,11484,82651,17538,15303,41862,36799,52708,98243,85265,59127,34943,69279,71627,36394,17217,41323,39448,20003,43901,49910,71990,66040,47965,88431,11878,62326,87411,65140,27308,68850,38125,61933,13810,90250,59292,56067,14478,86445,60845,87975,67176,61484,93356,42841,66820,10663,59534,22484,11060,20566,98385,81365,27090,45370,98273,44328,50750,30614,52288,82346,93356,42088,94469,81247,99450,49053,67366,64076,76881,86218,57779,60785,38225,71748,56338,99877,86593,56715,34881,50485,82494,73252,51787,90364,71471,51905,98486,97709,48907,50353,53601,15452,60742,58000,15648,55218,64804,88251,53568,17286,31537,45367,95008,44879,14655,91956,87854,14415,97552,99274,15096,44702,31849,90388,94425,95194,89531,11471,80388,24384,23697,50788,66327,11528,89803,90552,74153,80087,79495,89372,89574,21232,48017,48680,33149,39832,81228,53859,48450,54022,57588,58001,81157,10581,17724,17769,27659,34287,14277,97606,15282,35446,84094,14117,49705,96935,84356,12101,57616,95160,12683,49028,56438,31727,37422,56506,25760,84982,16011,87069,80901,80102,10041,12741,56533,30493,73119,95697,26619,73697,19978,20581,41632,26399,69679,82309,42310,50156,97304,48973,40981,34859,42979,74577,33864,30293,10300,90396,14252,95569,60674,21544,90826,21684,91590,91393,45258,28600,89177,26293,15428,65575,47725,87353,76471,39010,13918,30754,66684,88768,85636,12218,85822,35189,76660,30944,95176,49652,62334,17189,26360,53266,92761,77260,67206,47027,10316,38686,58251,99368,91371,36636,67692,15570,49763,94565,46226,27608,39226,22830,10825,14325,84123,93810,76113,29082,55031,72721,22980,87408,99937,67602,56205,39861,41786,29333,42518,80344,75342,43439,47359,30977,68177,47027,95678,16357,82761,85414,80406,51754,30027,93776,72302,20473,78682,36740,49793,68723,12890,42267,34095,36122,44961,23627,20415,24075,84220,71883,65719,94019,31996,14952,92602,18142,58814,78063,90027,58180,32979,40015,68805,21461,31029,76047,49790,73091,80595,10796,40268,44033,34686,70423,60904,52212,43132,39193,76283,61094,29928,67597,95000,62275,81821,46690,20829,28063,32613,40895,49937,85679,13889,88434,66112,44160,71186,10323,35013,77652,49746,34514,75194,17050,53765,49222,52133,21144,61614,10521,52031,37526,87219,15304,73345,43627,31847,61430,28161,54417,72148,66955,44971,98084,25207,55713,45590,50556,14578,14176,50822,65569,11636,37987,89101,29226,46920,82689,86763,82014,53655,64747,87451,47490,61078,65852,65921,64955,14452,87705,44456,78528,29788,15553,61151,87683,62872,54897,98348,12298,11659,85936,68537,21095,79899,49505,35429,57090,40349,45775,51286,88010,73174,46316,73038,39666,64493,97437,32526,47096,10319,80487,35483,37884,36066,91328,18614,75043,80171,69082,39876,86105,95633,35031,44184,36155,12926,38017,79264,16214,57500,70789,65794,71624,77657,89764,32616,88586,27338,17186,58959,45177,93858,77667,61018,61267,25507,56933,33640,69656,27025,51835,51211,43634,42149,73193,41219,37273,17283,15761,47425,43915,73466,17939,48252,15998,13988,33571,76958,36496,90764,90512,51517,65973,27702,33562,54619,54595,76021,54446,40725,59651,39576,55018,29960,69921,39442,22408,94771,70982,88117,69389,14761,10372,45657,90904,10235,31711,51958,28395,33168,78814,87800,52273,13439,56334,55510,11964,13088,10684,24059,50320,19801,52606,18025,58183,70834,78401,87783,35362,81532,17568,89624,23344,60235,78735,74467,46468,98933,39956,65153,11532,46389,98578,95068,18843,97771,89068,99593,89448,57423,28706,45312,88104,48871,54163,72534,84459,72574,15962,26902,30780,20043,86758,84888,20508,71132,94189,36168,45023,89621,42376,57568,77944,71832,55176,54382,36479,25856,41496,60010,57507,24985,87687,39653,88832,56094,42558,39028,42029,28062,74118,98606,71061,45864,97464,37407,81198,96180,31699,74362,66249,61493,93181,47389,14442,32456,71004,11253,83617,57332,17743,13002,97083,32465,59922,75496,31524,58817,34026,95424,51291,99872,39063,49643,23964,48818,24104,69285,41935,56353,35028,15540,50910,66883,95879,28903,21192,64318,23953,67926,26601,58468,86543,78358,24249,39424,57039,61116,28600,11688,61573,54787,92814,75980,40729,53639,49323,53272,75472,19112,20346,74647,45420,30249,16181,58415,72859,70243,17773,99241,29252,99739,74663,65432,86499,90363,63958,16305,38790,82102,91633,79200,22678,11637,91880,18468,29577,35081,14277,75861,72768,58943,49897,26350,30568,87305,30410,29249,33899,61948,16550,91393,12669,86781,64769,24311,23558,84149,88785,80136,93417,60807,90834,72765,13899,93492,76596,29320,87070,82607,21217,74796,78128,73569,32590,82788,58212,63649,73954,66677,86435,74380,96224,46308,79316,14657,83765,60407,78033,45846,44295,42508,68429,62579,81399,66761,65792,71873,29195,26735,70179,70538,17137,20664,37651,35371,90029,76691,70116,61545,53234,33308,35782,94835,76617,23127,39440,75009,41641,75880,42965,31578,56800,31717,52798,71109,25110,69021,87623,57184,28939,93660,15573,39189,32697,75788,97235,90482,90918,70928,54800,40692,11646,96505,14327,34948,26141,29790,83326,41760,93020,92230,82217,93251,52143,88435,14225,82565,95686,70167,70207,57970,26615,95203,65774,65609,61142,30308,10109,20284,30048,50574,73616,38221,70683,35512,45951,92383,43883,45292,42252,44561,56777,99770,66002,69405,85969,22007,93438,67128,23491,91631,41178,46987,20820,85209,45480,56163,60490,30484,85474,59669,58929,92447,10137,42862,53885,27750,99594,79232,56185,36631,37066,78377,18712,25794,67656,98783,79072,90988,27352,76511,52073,36186,66987,35135,84008,33357,43491,50788,14711,71686,47691,29560,35173,39907,60811,67750,94255,96900,79453,98908,11995,59834,32285,35518,29594,75473,72513,88122,66303,67297,62776,54202,84285,94827,57877,38643,45681,91089,58097,38133,74558,49214,32861,22153,26630,61637,26032,67866,81652,10432,70093,55864,24433,10189,64860,63341,19456,22881,95634,93072,75292,53152,34489,73296,89418,77512,19656,76909,57020,59650,82950,24184,64121,70754,51128,37808,62710,41336,89389,37327,73369,38500,16773,49876,20549,65676,41028,31255,84990,97429,64114,79505,93230,88434,77173,35421,67479,59809,49052,74522,62133,18221,59388,22512,46329,10161,56749,46486,33855,88471,62350,15371,58435,67362,76744,74599,24333,13164,71371,40543,42377,17145,18286,46880,95269,36758,83530,36165,79899,56018,47140,40548,41013,98323,84208,32963,62387,18093,56291,16094,56819,62057,12755,65753,14806,69648,22715,79203,71118,37598,64816,25877,18820,53699,46998,34490,93461,53471,17014,88721,95599,77201,49312,62387,63820,39656,36578,12507,97762,95957,79206,27266,20963,67719,19640,34660,84810,58449,66704,29787,22313,75203,92971,37682,37438,17646,19476,31177,42076,17319,15130,79825,38669,39695,36057,61750,66189,97374,47971,50208,84443,56252,29272,20800,44395,43431,35572,93118,98695,35592,42756,92848,72633,99329,94060,28811,27428,89906,14674,77522,44074,37598,13559,46573,55853,70131,81699,66752,81633,67774,63478,19546,83783,92056,56575,23182,47150,64151,31456,81267,81900,15225,79934,57867,75360,24872,64668,53728,50522,23804,62567,82761,10010,58787,21171,76805,62229,33249,89088,16532,37018,39960,29998,46892,75457,91896,69928,50883,80265,45823,76169,30564,72935,90282,23572,36450,86849,23788,31728,97980,26247,86125,56242,84631,96403,33148,17960,76141,44657,11602,13859,92082,26324,40526,61055,37307,52895,78259,65916,67830,75828,61301,84511,15132,36524,28209,90544,95397,79140,11585,77717,87332,93312,68523,67324,22703,13786,80528,46922,47144,85700,36010,90890,28803,45968,17830,54786,29902,26272,99068,67064,42914,15893,56972,24889,42987,72504,11146,95769,22859,22640,26495,11918,47652,26251,27045,98318,42860,36697,20750,25807,40574,34001,92458,66227,78150,57274,25461,75200,42998,65882,48771,10562,96989,60875,41243,67395,95290,55779,26354,36028,81218,72849,44805,58283,97948,83978,26652,57646,42858,40275,45305,84671,83274,93317,61346,52107,36556,27659,92443,41966,31449,49458,78399,73948,66109,40280,33062,18493,92700,19885,40944,96382,44052,65070,53933,45823,87478,60884,67143,16700,21170,63807,31376,65559,80102,13976,72043,72596,74975,22670,94401,18999,61361,67943,87958,52432,77218,21889,95423,11418,79058,17310,61009,92796,55017,18496,27454,76111,66433,70305,96305,81488,61034,93250,22352,41993,42617,93800,22845,38605,73600,23362,63867,24712,98823,36218,57674,53828,49295,94344,81759,76422,89673,56371,59895,30438,34618,35297,45168,11658,67329,52429,46032,92559,43335,58336,54559,61348,25208,89691,69379,94824,62833,76331,24827,60141,28150,90632,74732,16847,36065,99070,34342,23158,43234,43662,56238,20291,76099,60727,89507,67557,24500,99694,74670,50335,49297,44237,74062,81042,94924,98919,43943,26934,76693,82616,44499,35590,73220,30729,65906,32647,51251,15843,19709,59950,56050,66167,42574,47435,50411,81251,54915,46448,44072,47453,62183,77333,12196,99538,59834,88693,23341,82661,94487,18128,20707,32618,73133,62201,25612,96993,15162,69778,89464,94016,68836,54047,57994,58909,74328,47525,87173,48075,84729,93998,95465,85064,78541,51235,25205,97922,75053,88307,77025,75556,77981,15856,52813,98013,65321,74343,65024,99516,26075,98169,84976,20059,47920,90916,29440,20818,83532,18691,86161,22769,72666,63053,82575,27829,60803,97121,76128,87757,26208,86662,33819,61746,71479,66645,52153,83138,26022,93021,53919,98370,89238,31135,13486,66849,25046,85890,58031,36428,24091,64972,46594,75128,26804,43510,39120,75452,93030,39945,52858,90351,68284,79351,97482,47960,78632,24874,83939,88828,36635,98361,56264,18351,89743,57762,87382,15778,66972,78242,23399,95169,27246,27051,31844,62706,92448,58424,73643,54520,16538,30613,22568,20472,49579,97626,91032,80425,56017,92945,34682,54292,39641,82016,46230,93679,23075,38928,17850,44894,59395,85467,24228,97055,77112,31323,39639,84527,36557,66034,44671,93066,24263,90594,31311,10640,58692,59330,51472,94383,58070,22577,78608,53436,21185,66316,40484,19796,50243,91638,48746,76760,10460,56972,92719,80594,64902,17795,78979,18656,45239,46817,59677,49133,21722,89393,87001,14005,98040,48070,89062,74004,98381,10360,46994,99889,10871,21867,71351,36453,82510,73635,27911,40748,15617,80850,94765,39814,69956,23080,61306,73733,48047,87185,41431,67069,95702,31041,81725,32951,89307,95991,30464,89368,82262,96034,69024,37351,34152,61810,28273,93297,53442,14896,48002,13026,51990,68671,81328,14423,96536,27652,16605,27965,70994,95556,92430,93486,31976,22448,43526,11145,43212,70705,94471,70612,83049,69440,64890,49110,29070,66771,44254,45729,99954,75915,89755,98416,22681,93621,45869,87562,51457,62929,92504,82291,97550,33120,68571,67367,75626,66353,59251,58426,99473,34557,57973,84581,10925,45726,72552,15009,27650,51560,82261,13358,76762,53286,61880,48314,82317,80018,29634,46635,45444,67316,61395,25884,15906,91001,20335,61600,84576,39548,25068,65700,97206,24828,11470,96047,51358,97018,72513,48355,40346,39713,51135,17710,44156,75537,26209,60588,17645,61922,70727,80686,17525,49719,72535,45697,52283,91720,28435,97359,98423,65726,49935,85196,11556,20696,88656,16120,53839,18417,45525,58618,36322,92556,78502,61231,30067,33515,60086,60465,90045,92745,58317,97846,21470,89973,13033,43059,15278,36498,89815,31725,78799,64742,52874,39624,12634,47559,76108,36436,34946,77726,31339,59111,48096,69538,31164,67345,96749,73297,61595,80719,67282,57233,30572,79966,43882,24102,27423,48640,58974,95963,97004,26112,20772,10432,39716,70874,65835,55902,15127,17598,73915,13699,80122,43476,26518,55908,26988,55406,95585,28675,39679,77373,34078,90667,20465,50634,12152,70312,76256,88570,28958,58783,60048,37481,50510,87373,51687,87691,64406,27057,94603,74392,49718,32724,82026,91637,56798,35684,74448,63917,94453,20429,54455,71806,18882,68195,20684,18393,70874,71174,32068,92285,87567,70171,30856,34221,42736,98900,95357,92462,80054,18437,15848,20174,41624,83910,21630,37235,39827,40139,86314,11552,72742,21341,41899,61879,55894,33987,74993,68949,95808,67558,77538,99032,87284,90410,16698,26184,61232,39013,30659,59821,85585,40076,45342,98683,65062,71819,49696,75436,96581,59889,26361,55043,72875,30445,54854,85374,52725,29623,38552,47456,50315,38318,50411,21139,45943,21489,20597,69798,41963,31179,90330,11161,42534,35974,51993,59314,98855,68535,79697,76802,14769,72935,16925,42945,36945,53102,60077,80299,69017,89356,68364,59990,52653,16962,64022,29784,92460,46841,66624,13232,58941,66686,55348,61054,18231,81283,60803,36889,27261,39565,11730,89523,95624,51038,53885,15274,63037,58162,52067,57957,82195,55513,67573,39214,36035,22885,29928,97688,74877,90464,90395,20433,87545,47539,50592,23167,67180,23632,73633,97907,45926,92597,86055,10757,27881,37735,70034,78084,97181,55046,31962,42763,29885,59195,53652,50740,95854,17019,50830,34114,86239,23956,11635,83605,10994,82489,99349,89861,40850,28246,97510,94205,68184,68367,31909,69834,25011,21247,47253,44424,30828,73516,18711,72727,94069,52333,86845,74952,83004,36744,83833,73136,97977,24621,84748,30042,42416,28599,17857,70639,51685,10415,96151,56831,40467,35788,37862,54863,61127,34031,73849,41912,61160,47128,79697,71289,21469,89064,77106,38272,21224,42807,39333,54032,19795,72195,57250,55096,72799,20525,59835,76361,98044,61339,21034,20693,74413,25616,68884,21206,48949,55254,20155,61596,75142,16363,89803,82627,55145,74189,61649,44210,24749,42642,24388,47500,86673,39997,83865,11090,57229,19875,82250,78393,74162,58027,29498,20772,88231,20253,81774,30579,74764,77238,54330,56630,60207,34669,96226,46854,32812,76932,82888,74995,86533,78816,23755,76790,54674,98809,65614,66476,89938,65344,51255,29955,92566,98316,12359,46898,90245,99955,92938,92512,70951,19724,35699,42142,88680,62954,64794,61225,93567,80893,12216,65643,26155,35016,96340,64742,12457,64149,39740,18369,87602,48619,11693,87119,54669,47609,74024,60442,22903,90772,75913,15515,61428,12247,16336,59709,74817,17972,41968,59036,32745,14580,91178,70352,17686,52460,12780,73617,57095,79714,30499,36685,51381,24782,35264,55547,38247,76774,10733,70468,65077,37931,73556,92422,42201,10805,99969,83357,81668,50367,91227,30824,98253,31447,90668,26504,23462,35959,54193,58567,19067,60335,57385,14982,24734,61183,55952,69446,16703,55998,33954,84002,90766,37078,40690,62456,82836,95120,96123,89180,69607,58244,53805,77851,16633,62690,34149,30875,88293,10844,98451,22925,59545,23214,74949,45663,65297,83574,52119,65643,90095,18138,71282,79567,86588,75187,59275,46145,20402,72813,39879,16047,29259,92194,42672,36461,58510,99773,81234,31012,85953,30644,84848,84139,25389,64979,43422,71045,43103,25231,42754,11778,97109,18011,47244,32663,35414,63971,10838,16937,93663,63243,53039,63153,73885,26107,74887,54809,86148,51701,60011,44879,80288,50716,60755,95476,16908,88082,63208,42005,99419,68410,92063,57406,86801,25814,52618,23643,83914,68011,62434,47385,44947,61738,82417,70226,92235,65109,12728,43438,65058,12250,98064,82170,50911,86863,14747,11990,86975,68285,65669,95160,78954,99773,65933,93113,59164,58753,82188,57316,45406,11399,76131,32564,43404,76606,61546,20619,49410,61542,72967,34689,70664,30006,43721,93310,72474,50376,30214,87671,81513,61916,95027,40032,86106,93894,80956,79992,71164,21828,66106,10146,44317,78749,90105,78804,25384,60539,95632,25071,79798,63552,81753,69662,51625,97140,63898,85411,63671,68687,12866,72144,14529,57403,16709,84545,58262,28448,25545,99614,67410,40957,37909,64802,19194,38266,78233,90202,68012,23235,50666,56429,47115,84751,30458,44992,59549,40999,79808,42365,93072,76664,11517,83758,89605,53510,31195,77304,43062,31630,55351,95900,20487,23957,89760,27846,95274,29831,71940,20298,54891,60242,32325,21553,74513,96721,74338,35264,11939,52437,91313,98869,41319,76865,74550,76565,50272,63988,15133,86665,45775,73385,36816,45055,56028,88676,18319,25150,32710,13202,50249,28326,33209,84349,57881,69320,42633,80145,28883,50361,58610,96896,62565,53670,60376,11751,59601,36569,27684,34385,21655,23272,69789,93369,93116,31995,61280,72749,80256,13750,48563,16539,13841,48623,67790,59646,20663,40858,91939,79038,20558,48462,31124,82561,95042,46114,93824,10478,24096,44246,12203,63670,81981,92832,58794,82701,58924,63247,50627,77345,59720,49342,20929,27623,87361,82364,80078,73761,36746,38392,80248,80017,29969,68044,97183,22223,63460,74821,72063,21736,20579,72196,11980,12425,34310,93659,35024,39510,87698,37894,82241,26527,87085,82626,72068,53034,70814,37843,67802,86078,51674,54037,56756,65571,79857,72317,64135,27491,70638,17394,56030,33902,95262,60994,84170,31479,52046,35230,26031,79968,47554,87973,88993,85709,22015,71791,24496,64378,26963,86031,20780,37514,81689,95541,79562,45960,90397,96269,82441,83464,96828,71658,86374,58696,23734,23327,67136,70770,90814,33915,60723,55651,48429,14436,28958,54244,59204,31029,23921,48728,26457,11936,67691,84212,61674,68538,49540,85459,31305,84125,42418,39691,21189,68806,40842,78544,88545,60106,36679,50966,82156,28769,34447,81552,43626,29895,21660,43725,28397,66014,26617,76264,71761,45869,86639,30431,89526,34940,59975,35674,21489,47445,77002,71878,90190,14807,30234,59711,36372,20520,17305,67065,12384,80591,44641,73091,27096,15521,52715,27648,55850,28713,60697,96732,91415,65517,45879,53994,32005,91301,38559,64130,21202,82263,29570,38403,16468,70960,17308,25891,30395,28240,81267,43904,92653,17961,24338,52946,47063,99602,22174,13348,64248,34675,80760,42806,36618,92760,38434,99622,78105,85179,44281,55298,53217,54529,39617,46375,62403,78674,69618,84165,22615,14621,30391,43426,72555,26425,30045,26338,50529,43932,88664,49206,21046,44161,34850,58597,25182,46765,59520,21404,58419,21672,48173,14637,31525,64563,26191,44892,11663,21608,81255,50728,15740,65673,90470,39759,44726,61483,70245,20002,90861,80485,82046,81973,58402,91736,60388,28392,65909,12418,79984,51122,59513,54264,12031,36051,97684,97865,11352,69471,77791,57985,67795,34367,92110,22092,62106,54566,30472,72564,66727,65089,99225,14415,88716,59220,42294,33468,98303,38687,71435,87513,73894,65448,50206,26247,56124,40653,12526,93804,41797,99922,71643,32407,85433,77019,15279,57294,72769,80482,59706,30053,54642,66342,90737,73246,59494,76065,34238,41003,27546,62291,36596,81411,58759,13921,42525,74505,80851,26256,44064,50616,29175,29107,82603,96933,26590,75906,82296,48031,69276,76318,76273,27239,18429,98932,46592,15174,76654,57748,85574,95302,70802,66317,25362,89463,28854,69773,72959,37812,47707,46786,14395,86325,55431,77472,99523,41151,52341,14012,73878,77176,52078,63986,13306,19202,60990,36204,19212,27534,49651,38960,92152,86907,24532,32358,46049,80167,12622,29966,89041,39600,99202,68834,73328,80492,50363,21050,38835,97920,27789,98093,27679,57576,59959,71008,11043,46540,27032,42379,56189,94076,99300,18780,82406,39346,94637,47496,18171,33497,12955,89560,77086,48571,40063,59018,51543,30114,16276,48112,82923,76832,83327,64772,21932,80009,23063,22133,19985,39010,71107,13779,66923,61653,64544,88896,61935,32234,31869,76528,69365,82228,97229,58626,30916,53144,38303,71068,71588,78664,57009,97223,62528,73290,24656,50788,36585,65667,77060,24931,20033,59640,29163,50134,82664,47843,91465,86182,21102,47496,30572,18383,54487,92125,61658,12363,15314,46753,76429,74451,22486,90884,69485,62017,87138,98603,31936,14050,36902,57222,58191,27674,80729,85508,76413,90500,56939,10823,17711,88098,11447,84637,46688,59304,72151,80472,18510,58538,82657,81858,44487,39297,19238,31103,91441,70566,18367,98479,39184,49120,98852,15605,93463,87866,53524,20646,86526,48356,24989,70583,83158,82174,12313,16978,70635,46606,36912,33984,36465,14327,64018,85999,32899,16761,99951,87847,60132,11192,61841,10312,47450,45217,44123,67791,31086,14494,97213,22583,83776,30156,21684,17199,87404,29526,68710,46055,88098,99391,42324,45013,99968,27488,23958,21946,58288,68759,44271,49854,45916,93236,77263,59688,70650,93025,15452,51261,19246,41558,56187,84272,74204,32388,46593,41466,90462,45178,91744,52598,65411,15388,56335,15475,69020,19972,94361,86090,26394,53920,44432,82605,26814,94525,20807,57623,43882,92117,10016,83903,31814,43796,95892,69307,56084,47871,64928,15804,13959,84622,41327,90740,28144,93050,97149,34070,77708,24424,99190,21679,31089,70379,91649,36272,27936,79261,97919,82402,13418,48139,43076,77597,76635,19385,15923,40962,85474,36284,96333,11376,87245,74925,73505,47273,43937,87241,78785,85293,92224,49351,89820,26348,63475,12902,25897,74053,20402,21203,43255,41584,70888,61485,89107,53928,66781,93972,81503,68999,65651,73157,66549,42426,62472,96508,56996,36553,79313,24161,35862,94527,44105,41796,88598,17158,58780,59174,63443,36206,18905,95966,81125,48514,25539,65833,64195,76739,44568,49896,75339,34774,27858,93243,14701,74541,63526,22183,54889,92771,12820,28484,84841,14818,89609,92820,88370,68464,81351,40949,73739,53178,18243,70143,76104,24204,32190,56924,51549,98545,50962,28449,46489,17722,68359,78395,31616,40639,16839,64777,45908,35112,78139,26955,81517,25642,74741,59853,88459,80748,95487,32393,94534,29632,10494,18189,42632,69581,34373,15532,37764,79572,22024,70070,74830,54108,29373,40237,10195,76925,89072,10173,40506,30448,11268,75905,89486,80772,64835,50244,81118,42509,62001,33702,66478,86615,71548,20736,73320,55620,77750,16699,24777,47579,37005,83343,98126,91394,37353,50423,48643,34974,58996,34566,78595,91083,74703,81925,89227,45151,73511,21543,43369,34421,96647,81518,74308,15249,20180,36209,23774,81053,31651,88628,82671,52056,67949,94656,99732,68845,98185,60853,13633,61812,63931,75516,22908,94943,79676,15814,86764,40860,27858,31183,63935,95138,90897,89572,48585,13722,57429,71940,92793,72150,58751,88640,65055,47997,65724,51534,51599,61100,80915,67524,29546,50783,43034,47979,15435,62103,39469,74141,89469,15179,72927,66138,35676,21885,43821,99353,86073,79574,39079,31880,79508,89664,60642,43010,61286,28574,36196,92717,78845,19614,88200,62025,63920,56608,83011,86058,64895,97573,81802,38229,50645,57721,54009,10495,86342,56576,15449,55519,67496,52765,34979,66373,35899,64771,64209,32357,47580,43338,96061,32247,95635,96637,24486,73718,38696,28888,13678,47904,62355,22968,71746,23993,13694,56318,93222,33491,59013,90723,92806,24929,94269,44319,81905,84323,32284,96103,17756,66618,81968,56472,65789,24125,72933,19057,82972,52391,42575,53886,98657,85214,99319,40960,20056,77257,74330,23461,59935,39393,86322,99138,16231,73045,82084,78667,92690,17655,79194,10729,34543,61582,25635,42387,73228,73746,57242,76872,40056,38110,63902,33215,82756,10096,60497,47587,65088,58875,24004,96689,59057,85229,94747,91330,96036,24591,42094,52898,95174,43990,90841,91547,76789,60338,53363,69373,74148,40914,14950,71337,92977,99423,28046,83322,85243,62890,34727,35923,19914,65225,39844,30155,90140,76235,66372,51962,87142,59965,83150,46206,97216,16160,65843,98681,44202,11040,70800,81236,53430,26585,55953,93643,42702,12680,45522,40559,36195,30544,84615,47394,58842,93890,38810,90380,34952,57932,92521,12048,30068,56352,37266,65934,97198,48113,59835,19844,56546,38925,22609,76238,84894,61520,69345,58290,85832,11513,78566,98510,27555,32374,68178,57821,18030,38798,80413,31008,82233,85290,30652,38306,74471,26323,30154,26501,13130,75495,11152,61080,93209,69276,85437,55536,16660,43973,84653,19622,95725,14224,32965,82783,58508,55137,54556,25036,42567,41538,81215,44350,99338,41188,94401,39082,52413,15684,22541,64895,62276,48890,89229,76891,55894,33765,54221,94473,11774,62894,76819,65972,31450,46518,10996,65763,91967,42463,87615,15284,46928,36859,19987,53503,22050,47159,45405,75386,15141,16952,24347,86515,16978,93377,84009,93849,84467,78065,74955,44603,54305,40992,31048,28638,88335,77239,91732,53602,48997,65488,49903,78645,93046,67937,77625,26327,15424,39214,66010,10373,68549,29143,81687,20884,34367,66197,84721,83916,12348,64814,67566,12197,27915,16447,70435,64568,42860,24377,28023,60900,51654,77690,39323,61446,72528,11562,66168,67075,94364,71302,83126,59054,22000,23854,12412,52496,21164,60912,33737,20556,57760,31079,19324,39752,97577,73759,51016,98411,68391,48384,44119,64397,81625,77091,99707,96978,89718,85622,21880,70970,89897,85111,58933,10348,36515,48231,76317,88786,70429,18466,76482,97050,55180,24750,57708,89003,78616,28449,74204,22203,29579,83655,90553,84817,41221,12559,37016,94430,90912,94133,58048,11861,71780,58873,16090,20158,96480,63535,22389,41680,84357,52376,15773,42363,33116,65914,26521,31316,42121,98860,83367,24500,33340,80456,48449,57141,82880,21267,34922,60742,72305,88835,52706,45260,82383,67657,17278,84819,27965,67281,76462,30512,81541,79458,98355,42170,35432,10194,40334,87184,69636,39642,50898,31946,52224,54500,83427,61852,47111,62842,43653,78535,77053,87095,28652,34670,34901,23432,98614,32193,21697,59950,99834,88325,90169,56566,51683,26757,92320,55345,69840,45367,64492,60286,87895,71171,41585,91251,86339,52377,28120,35552,24069,34563,45646,75539,18430,37322,10630,92868,89050,36025,36700,15886,77421,78929,56074,59098,99980,85390,41980,17144,34779,74456,66929,19757,60821,53614,45668,93846,31214,47720,86612,68522,99518,29200,92173,38208,37865,35144,46173,31480,22161,80768,47213,97464,91218,37507,75216,24735,43584,46623,96001,38237,56754,68960,11632,10374,34125,83739,36032,44806,23359,70446,80453,64628,49320,74614,86144,73338,74985,80519,84809,37182,65622,14579,59870,67789,62197,57885,83007,33340,80395,43051,62021,36828,66319,58891,73613,93584,47892,34204,46729,35165,94372,81034,91305,99746,14183,57743,30245,69372,39175,81974,67708,90496,19755,59112,21179,44665,70326,52247,45286,97674,44621,27796,97670,30794,93591,38958,81975,82296,23893,36432,61418,10811,12664,74192,94836,52753,83915,75353,50211,60616,96995,40323,68121,22473,39314,44030,36297,94458,99701,11579,26761,38202,65811,81623,94128,89088,44232,63700,26105,11803,20071,42241,58361,32915,62818,19479,67932,59738,95646,60496,47267,34150,60741,36311,85072,63034,67652,90124,93110,61149,93210,50722,36115,54875,60361,60594,48180,10973,23348,22375,57206,44719,77857,75828,63095,93975,56995,61861,84179,98582,19092,74817,75929,13677,39294,54807,35394,30184,17403,51166,61905,99037,36013,49340,41197,31555,60586,17876,52493,75064,25638,62278,24461,15032,22186,97137,65186,64961,92353,84479,69635,78402,69256,60007,60408,29386,28002,62019,61290,22468,42529,50829,20760,18663,29545,51980,77877,83544,80618,73149,99306,31063,33659,54954,86027,96972,12293,51965,17967,20451,49380,86769,10711,10376,85295,48753,96433,93666,88886,26365,27864,39563,19716,38052,70601,84417,51170,52263,59280,59070,79918,60702,76718,88574,33180,63170,67191,72932,44253,45001,21674,23983,89971,67888,16038,20678,79205,34533,68254,85443,83111,14924,32708,85691,35501,82535,90126,94883,18976,51354,64331,73348,37159,57408,74586,64833,74519,54966,34831,72462,62219,83531,82572,34336,43903,54791,15669,16812,22389,33044,64410,98094,53200,75588,88018,56949,63653,57611,25777,72777,16878,45653,85417,92532,50907,50774,78007,40049,22665,86743,89217,70183,59108,27614,12287,57262,64734,60768,87274,89041,32065,49952,30835,64398,22288,25359,23754,35900,78883,90615,90763,76135,44902,97501,13128,56669,58380,99519,80130,13273,92227,71456,43111,39980,11516,54946,39371,20706,20708,31023,80544,21053,52097,12701,93874,62442,75151,51305,78979,18477,57468,26664,12688,42961,36188,91005,17730,44288,72521,76875,26787,64112,91686,43099,97419,44727,71692,38121,51939,24640,64305,45482,16931,24277,17989,81041,71025,56001,56697,88611,74353,12888,19015,51323,62755,20066,38450,28972,76457,19854,89477,62248,79600,53776,25399,83612,13771,28471,74363,82013,96343,67002,43816,65927,78430,69007,82701,52983,88411,65491,61567,21470,10227,33967,74065,21559,49816,99207,97352,79065,62730,53789,70679,15300,46747,95615,74377,68774,34409,70407,33704,94357,34827,15565,39225,75423,63910,81266,61066,59944,26779,55327,87060,35824,27337,93813,29652,98576,13849,20268,17640,81719,92752,55810,91197,13689,63412,71756,65627,93650,53567,78790,97248,78342,74591,22819,48233,31870,92687,77495,40395,88508,77706,15585,22546,99826,95738,81420,81745,51416,90072,81185,82628,73335,64640,47497,97175,20843,59429,52730,69563,49950,46526,68248,52721,15107,71859,83337,21529,17289,38169,98777,98306,55585,64395,37808,92943,99220,72341,45506,12283,68822,50004,84201,12040,69083,94425,25652,79454,58661,24319,58538,36976,79211,64998,19574,50539,73775,15461,24765,54468,33295,54526,65376,40911,43322,24338,43327,80905,39370,72288,17442,91119,87290,58514,49278,40380,36270,96459,80485,28407,61592,89383,88222,19813,61678,48082,70188,50295,16256,90221,87541,20528,30923,84329,53913,98411,22093,89811,51153,61354,86882,55749,29601,40239,27119,84776,92566,73254,93277,16042,76975,41444,84152,14098,97374,61124,28228,61915,51166,76365,34193,56027,63430,45484,41717,20948,13844,28214,70698,21650,47224,79777,99033,35892,76410,94344,57767,72212,11249,92010,10756,99319,17980,90957,94872,61940,58140,89756,50131,91900,75062,92077,47138,32891,35565,17095,72230,21207,31973,19056,10567,75583,43833,15084,60827,22662,88379,34186,40642,22026,25380,82075,48652,74311,97551,40543,24340,78475,17116,99734,51027,35652,85273,45862,50299,51871,79928,13060,55245,21147,70068,54865,45439,35245,77293,60085,25795,29448,36953,36846,45080,81894,48379,84802,49120,77937,70517,68207,25848,44886,35169,62871,44580,16696,66250,98414,67286,81201,59034,93769,24837,80880,74760,81474,24074,11748,38889,88982,72401,92455,41708,21405,53045,31145,34085,16224,55769,40452,17873,79783,67574,93501,40110,12252,86471,92209,32163,44784,25994,22293,53929,64678,75609,31316,33267,57312,21857,75564,56465,83017,51293,58381,56138,71523,78022,22020,16580,27034,87840,20642,73218,92941,12580,96787,68274,54050,74522,10974,50119,39816,94672,46404,47641,22286,24547,51641,35062,91187,49821,62382,51879,87817,83096,35279,73020,45328,72331,82348,19241,27500,97486,21889,90616,56523,81675,27637,94803,61589,26884,59680,70616,50009,79759,56869,94846,46667,88476,70792,69409,91057,80974,68153,66758,46673,36866,62308,98415,42356,39280,68731,16575,21134,20627,33617,62377,10638,84435,24499,15703,75257,62162,63054,16117,60533,95842,15369,11421,64784,75735,81852,86281,10688,77987,92167,98583,31256,90923,52697,82135,40156,93511,81633,71976,57583,13361,62133,32704,11212,63936,64930,27033,90617,71079,57184,66175,15904,54036,70887,10922,11251,74236,44422,59642,75383,22149,69731,72084,73487,67968,46729,45237,26296,58665,26948,92660,17382,70662,75244,79467,33819,44627,46841,71113,99094,41274,30224,63401,53953,69064,26207,67977,85143,28587,40787,95036,39118,96172,94770,73527,25182,17171,54378,53012,24960,80682,29333,22160,26450,78140,25577,46249,53286,20465,61994,92070,65820,50020,20197,30338,14935,84685,20290,35700,45565,44220,83211,57124,55164,53452,81348,52447,96904,63044,21682,53797,70189,37298,74993,79504,20809,15999,61410,48667,96005,77453,77399,30385,55698,40648,50400,95929,51398,38284,95361,40114,22782,79825,26783,40791,10669,56360,57637,61564,62918,80791,53983,53840,86587,86016,79070,70002,39536,45506,91842,74391,53744,30647,28708,36623,87471,28144,18134,19017,42391,86372,51085,86230,83741,71019,28615,23554,69578,36581,68360,54479,26382,13112,56027,25957,48103,46017,18207,90266,27162,69291,92521,77648,27936,72765,70234,94763,84173,68168,55876,92853,34423,40641,72840,81498,52045,53940,34989,52404,54201,87847,18115,68555,96690,33694,62092,54755,71280,70614,81993,83023,57743,74163,79083,77923,48866,15404,25525,82956,46643,65806,47272,43062,43692,46340,37616,54435,28606,74999,69732,76891,93307,19308,64235,31997,91412,69366,88363,64313,65084,25458,28667,49915,52397,17279,45735,66593,53876,11314,59320,66206,34984,94291,16902,43116,26059,90449,70958,12513,54087,70532,63715,93718,46669,95386,12351,19078,87932,91601,36557,56933,39357,83342,38976,93589,81665,66185,71380,72126,74025,80270,99960,40709,10142,73471,30778,67435,63674,89245,76865,61930,79622,29382,47941,48624,57622,85994,80900,93739,59777,18676,61030,96666,18738,59456,83173,33663,56927,70352,44015,29603,91870,83682,58215,30561,52311,43621,19202,19680,96326,96719,64909,36383,30198,66158,34207,37099,37702,34485,70275,51203,88243,14124,32992,70494,59267,24433,70732,45366,37442,19509,51992,43522,20553,88687,69613,65796,32741,71994,65147,42904,45464,31520,69603,30018,78636,15829,20006,50347,76585,13841,98873,36088,51330,31070,68865,50016,45572,98307,10491,72622,44009,53206,14207,22692,51537,45345,64494,29203,55619,54836,93335,88732,57942,49241,54423,16514,99253,77708,46705,11589,11162,48062,64056,94050,88774,53721,15771,76977,45735,55677,72301,95344,10243,87659,85101,79144,49781,30135,93234,24102,79736,70623,81795,93351,94403,91863,97631,11425,84326,22764,96372,74772,88138,23736,55008,90090,36536,59812,42349,74987,83165,53185,55832,64234,75023,99341,70444,30513,49518,17548,68587,44803,65443,68144,99047,78608,10327,91037,97710,29382,11802,92639,61432,14032,78309,34859,67855,82778,56354,60241,49686,42120,96479,37140,48301,18170,55059,41473,28141,98260,35189,13020,19209,46381,89332,11550,57912,68445,67976,49786,46715,53816,62390,26229,37223,46814,78837,90687,16143,40478,10519,88863,13914,73604,76893,75008,45251,58522,21439,43899,89591,89633,65656,87023,72561,46586,99439,23293,78541,94806,64989,53246,96567,14263,57855,54677,16661,94599,58610,97270,19442,57309,51553,66517,94491,29868,21481,73084,20906,28160,33828,69374,89543,11615,33914,42089,44321,76197,25817,29999,59876,42347,87617,31695,44044,21091,80926,65528,54114,10919,75895,69661,88828,48845,21318,25102,50039,49642,28569,72444,76898,67262,39899,96176,69154,20090,26555,72602,64729,44623,30029,22879,76417,99658,84619,79174,29480,97983,67169,57564,93851,23308,57179,67247,59679,36601,83063,73264,51035,81537,25796,41348,22578,87919,85055,36385,80855,65524,20911,98566,84768,34587,66157,11663,17930,96758,46064,44471,67929,92908,38878,30474,39145,47624,80215,41533,12696,56780,85183,83001,43171,61355,32385,87854,66895,43602,67735,42883,69614,46014,18968,93004,51290,16097,21527,67536,85762,22253,85267,22981,81940,38677,43970,12545,31691,62218,77271,80276,79946,74384,54903,43568,78101,95792,21416,55488,11461,47320,12807,42592,83860,41827,25995,39943,82303,65989,55587,29668,63468,95149,36224,18599,26453,30238,25091,27434,27900,48390,25080,30702,49169,83422,49497,74886,41646,76388,23456,91553,14231,51550,97734,15137,33310,33654,35275,89239,74440,42795,55055,46063,82620,32427,20939,26778,40103,20466,34711,17611,97359,45498,95277,30098,45284,94108,47329,25570,17347,43020,69596,17460,79666,45421,44015,98672,21716,20921,31623,89457,39651,11197,44026,89980,51951,67042,90616,98320,22814,80047,64852,88632,28960,17278,49802,73022,65504,26134,58057,18426,37841,34706,99725,12776,37598,92417,52464,84888,79345,11896,91964,16516,74269,71871,63663,76726,85369,21794,40658,50968,47771,16358,21546,69181,98371,22728,86650,63893,30838,66108,52420,36199,14558,23822,78044,81683,67499,75753,16198,88932,81018,51783,72814,19170,32119,46249,26911,44274,97736,80937,73798,50146,36654,92064,89354,19452,75221,98527,72742,98006,75680,26052,70931,56709,30066,23727,23578,94966,80562,56324,22408,72278,75201,27977,39203,58707,76366,37369,26312,15615,46897,62069,56338,54511,85242,92277,58870,63136,70446,90496,78865,76804,42892,49373,17034,73886,80537,73797,33115,44999,30121,92158,61371,97162,59018,65144,29683,83230,27368,98263,47763,16487,66946,67324,46025,15016,82619,28252,22666,69448,54587,80755,72088,29805,80106,24889,31799,28753,39111,67419,23303,74892,80744,67228,52232,76436,42761,20539,46829,56214,98073,60222,33500,68919,75312,22940,17976,66797,64821,87296,20494,17088,65962,34397,93999,23752,79088,60789,84327,81169,97667,41833,68823,54019,39973,69661,39670,86374,40255,89745,15900,95883,10830,87293,90215,17403,32825,40779,64195,51573,69698,80100,99351,41905,36360,66898,94386,31034,25203,68981,36018,21364,93565,72229,51240,15978,28889,96839,82735,72710,84855,26775,31468,14117,46415,47796,77768,46071,12449,37853,21216,29989,67023,99163,79082,94268,44704,33156,67068,29334,56301,51345,99837,99391,98613,23426,35354,82954,18196,95796,32820,17900,96048,84723,30459,61087,40561,14951,76845,79539,84952,56760,95738,18515,11308,87429,36735,22305,19708,15646,50197,31687,17879,47583,56112,19036,54954,72423,57741,33197,24070,75795,60800,44701,90243,87717,71411,14367,68506,87874,77802,39566,13112,61650,23388,68652,41812,74097,44974,89718,39352,72772,77232,80969,34081,97086,95603,24628,12084,42888,47390,76013,46492,81648,81514,13697,16629,21228,95599,63268,12281,53345,70310,81367,98203,82733,46888,43795,70793,77787,64501,51257,81223,78878,93799,22733,42201,18945,36657,59920,97911,63723,58203,90995,24360,27991,85535,33791,64443,65247,21881,62748,36668,82217,32652,29142,95141,33179,66670,54120,81527,44345,57857,91376,58299,16121,21953,25711,48318,77953,88112,45878,34870,66604,30945,24822,50182,75930,44182,52925,84310,96422,30673,78253,20707,25656,88383,83367,96782,84234,94564,91173,34182,62005,19074,62940,80728,59430,67754,17304,29202,15948,81922,39372,32559,89119,35817,82042,65116,21163,54087,71878,30710,67349,78590,41972,56527,22385,82044,40116,74825,21643,30264,38848,78491,58076,38426,96402,41711,62637,41432,55201,43970,24434,24565,26376,45333,52126,80870,91624,18359,74841,43847,20307,68933,23890,93209,74776,99004,14987,94632,13236,75608,94801,74515,87471,75528,50026,26411,57655,41720,96111,49677,19904,11199,13762,60805,73765,51195,69335,20083,62533,28330,60553,70952,57643,97377,71156,80775,23776,89428,45696,23286,30532,93567,97031,25894,96984,24840,24657,29806,69161,69304,86863,50101,52031,80702,28494,96802,62396,26149,37739,48951,69344,30868,33882,11290,13568,75559,79508,32237,54525,80961,64688,59585,92079,64894,62529,29242,73622,32739,92114,69380,10036,84501,35409,24122,76179,68111,45193,94674,36367,18473,47233,72574,53810,50860,54221,24986,64765,48513,44938,44175,35884,67208,38573,86286,25311,76344,35137,40892,27396,74801,94885,13116,57668,24373,39417,70884,91725,59877,68950,79529,98895,78192,69401,15223,67328,84791,61012,32705,12093,39748,70456,24376,61489,73228,84038,20917,86063,66918,21413,32650,89339,81995,32641,35200,27365,98294,70574,60610,16820,86323,81357,73671,52435,79561,12287,49117,75352,46816,23273,28808,13662,88562,95171,64452,82683,40461,15345,64538,19340,87090,21760,47620,24915,65287,96607,23036,74882,46772,37718,11541,71136,36273,40256,25865,94509,44972,63964,93370,60922,57467,53783,66672,55236,98567,52887,32849,13308,72176,75006,85973,63762,86352,27145,17790,52328,60997,66483,29530,76050,83912,15530,41226,33770,82374,69678,38317,82288,33487,37787,92358,65732,73404,29195,23974,10116,58741,58503,12900,22431,11725,82326,35446,85526,75205,88014,28723,30054,48265,17167,99738,52813,68905,28211,37621,96518,97869,91847,90866,60232,36786,58175,72883,40111,10763,54467,68667,37530,59290,53098,93542,26602,88004,87663,81100,80933,13791,39086,88024,74572,86709,61708,75089,64537,14719,51101,21713,77703,92360,30036,35660,28617,80036,60758,96472,12468,52794,12621,75048,11799,10175,99281,64709,13941,78441,41349,90430,66388,18947,69467,71949,40455,90153,13920,71466,55880,29728,41757,29108,24000,71547,95608,64664,30926,75864,58417,22296,49313,65530,85020,28576,31568,62110,38314,68414,69899,68837,64258,37372,74741,23256,57668,35822,18006,79815,46849,82986,70759,21414,97985,32340,41767,62472,45152,79115,10425,30703,37901,93633,68382,98138,31830,57190,79283,39907,79442,54734,12150,98805,35296,53998,37365,89036,73125,73568,48180,83351,16821,36088,66538,22425,12889,15745,57581,96771,96915,62170,92950,74848,71401,83865,59073,53900,23995,39476,78290,62190,71461,91361,41819,66802,50907,46458,61227,96040,13113,45352,54631,17355,19328,55894,56928,48614,39417,94975,58654,61932,10272,96449,54187,80723,14663,51471,93001,18596,95541,42117,66941,14448,36960,29639,29996,68527,66740,75377,75694,72505,23191,89219,31275,18806,81968,92003,60497,47734,87185,25745,86922,61259,57442,12756,81037,56883,89831,51453,20457,15870,96734,26211,72605,32969,27314,63828,45450,50154,89150,78365,40879,77387,16526,68749,94799,80818,47212,69744,64775,37182,95885,23661,70566,13714,86633,24903,40150,58591,79028,72761,10718,70236,14696,63631,16380,79015,28356,73101,50401,89700,68982,86659,38594,28176,84906,44909,83214,22509,93787,59507,22753,23882,31967,79635,56211,67151,96237,60021,39640,28170,27700,76915,33424,42776,99094,43917,40075,60538,45910,53935,58120,34352,84632,10318,89838,35585,79618,36019,87662,21744,97294,24879,77969,16327,60324,13585,62825,81215,13964,16516,67248,26330,46555,22058,14860,74371,22328,47319,36979,63954,74379,21218,27329,49871,78827,91722,27958,38246,11209,28909,74649,75325,97641,48383,67282,69415,83334,30954,23918,50080,60961,20437,45627,67285,54719,93749,29237,40148,59722,11218,82855,21153,74527,87838,52345,88034,57209,33673,14903,43466,99217,68900,17713,50610,82153,16273,27708,44188,46087,44045,23520,31015,36282,45635,24626,74660,96610,52969,59463,44579,20163,81982,24928,50083,70565,56457,57940,15652,53818,78427,49962,70503,61982,30895,90531,93910,94768,12840,95060,76970,50203,71963,21120,57926,66310,90110,60900,40002,38044,68027,94569,38760,60430,94279,48355,18312,77021,66678,60291,98806,78317,53941,26036,90150,91908,48926,86079,64969,67407,16711,64359,57826,92813,33573,92133,45173,94312,96371,78799,72498,10722,90052,85207,94047,22478,44528,36270,22516,86704,72767,34080,82323,42790,91782,75119,19385,64040,69085,62045,66818,21903,87572,60658,44983,72957,35152,34088,44076,10210,71199,19736,10880,29887,33719,88033,25452,21290,34698,89461,39275,99688,38739,56233,32784,61298,98307,14004,77918,88767,85015,63130,75330,76934,64260,65176,51483,35210,27772,37368,90080,17147,78962,31470,46007,76714,13089,57914,46492,54198,82286,65164,66285,69363,13837,13127,29201,90128,10238,14476,68971,20412,14649,47144,48607,67819,15547,96407,86749,78107,62991,10395,49837,11846,32258,44972,60724,40209,59811,95702,49287,34232,23126,25011,51662,23866,79454,59254,56241,39367,42745,15271,14992,96394,18683,33881,19215,40056,89808,53009,70369,82743,45851,77746,98728,36058,71088,73466,10969,45490,42984,18073,17369,53078,76917,52680,65418,20727,10820,84931,81662,83392,51524,54661,54760,49567,60609,54980,38228,58790,56882,46196,85612,76101,40221,66388,38415,12616,49531,46663,73990,40137,50417,31162,89719,46415,63252,10206,13316,69821,13515,62339,78649,98090,49877,57547,35886,85495,28422,78185,51884,65502,35131,47882,62161,96412,28917,94463,58443,30943,12795,97642,30381,96923,28307,87239,54701,74543,99140,73223,56253,56675,59970,40524,67929,27760,95496,26239,56698,53347,84020,13524,43577,92149,23826,44070,20869,43343,74102,90054,36726,16693,73795,49286,12114,14641,89952,35774,14874,13450,93696,41280,88077,12697,21015,51239,32593,54689,32098,25367,34504,61869,75384,95120,79133,62231,30158,26133,22009,95992,82561,45654,42178,95026,36736,12967,77409,62940,65014,93847,48037,85278,16345,50374,20773,84423,14223,27301,93722,43145,46190,85136,17075,82739,80443,78928,97305,19597,98727,20796,16580,87799,11699,43165,53907,88551,68742,46840,97948,18050,46717,94309,64166,68710,73169,12578,46248,62770,43332,14791,73233,86640,36984,45345,25682,53685,33677,89893,25529,58423,40617,30338,33373,22878,61388,53916,75393,86496,18472,68246,64204,95119,21184,62736,74136,55755,74589,47298,50129,57404,67633,48295,35049,22849,22204,94752,54172,18374,20624,83719,35656,78964,78876,23895,22669,78796,85382,25523,66443,60564,24953,14745,71418,18826,60706,73511,14969,68943,75537,94392,44054,67732,46067,66362,23391,47966,64028,98810,86229,16261,59908,38018,81544,64166,57541,46905,72740,21393,84489,72273,42560,93653,94116,19794,91052,67494,77185,62095,13082,43616,78693,86478,26841,51398,87443,81941,71754,47744,17913,22001,68357,15241,78067,69473,53223,88535,48343,91893,90700,70047,89809,33165,19466,45642,19832,77904,34884,52442,46040,37894,55206,85509,89555,58007,44766,59649,89203,10824,77509,49009,29913,85387,27326,15316,15681,95355,36255,78783,92494,66815,29714,89077,64550,40776,37075,88873,65861,45168,78880,31035,50052,43418,73798,23376,38685,48943,85095,93622,11511,96262,94852,97888,46685,21279,49071,69195,18786,86834,40743,45799,91452,79977,34357,80802,24058,68819,24240,54620,79693,77025,86567,74192,87326,87362,60565,43444,46877,56017,10314,78074,42962,96031,38768,23439,62614,29029,43728,46129,34081,80797,18356,42134,82379,74717,78827,37688,88225,89063,20248,90251,89442,98769,14567,84550,90791,86883,67859,95541,71797,11361,19852,45061,64866,54867,22860,81514,12933,19798,84718,15096,20688,20187,56361,11487,20456,24326,16442,32801,89537,46977,31033,29891,26091,31290,48545,74368,30429,66660,40519,42298,57227,38049,18198,44034,43995,62995,87740,21332,46851,63328,61717,98096,91655,85814,63298,20487,37445,11227,72749,21382,22893,33047,25537,36884,75151,99663,48182,49960,41924,77883,29927,21288,41001,17967,67118,31919,13997,47061,89032,23160,39262,56227,99949,57418,37431,20669,75996,77254,36247,91162,67297,64796,66875,53411,84981,76884,69870,91497,67506,75425,14654,75906,52168,63813,48568,75935,93146,82624,46050,77516,74774,49946,54217,96847,48229,65195,82675,84714,65324,98583,86001,79945,66465,21077,71163,93533,37689,93104,58087,98292,68672,65161,50269,13091,27791,35699,54735,76700,70517,46814,40925,34342,84665,66543,72953,91769,59708,41115,25889,36165,14532,73109,69776,81959,87188,17464,89040,59875,19440,38116,76836,89007,89761,92311,47913,37617,82700,65673,18373,76384,20794,81875,33991,33037,19038,74083,88748,26464,72342,46219,58866,71035,45208,74947,61849,90421,64604,52559,78466,21370,81610,83238,84286,36700,34466,50072,33557,32948,32723,83276,21792,52918,18334,70966,53635,46074,15137,66911,33252,88268,65022,80049,51730,59584,33656,62788,84016,17587,90352,62469,60217,23902,39964,45707,82235,48370,11839,84685,34251,89320,92554,21425,11752,21778,99391,13632,55087,66826,68908,17329,56740,89319,48796,82860,93448,23554,74629,47030,12534,98566,89522,16768,68841,21540,13430,44560,22707,31070,99005,58437,72802,87489,32324,44194,22610,38193,44301,50985,95349,69649,46672,70800,34848,40858,93381,84793,46900,15355,33585,12708,29091,99097,78976,59594,70477,54927,63031,71577,65968,35694,32725,19992,70390,87313,83797,59231,25247,79676,55800,55980,80164,54222,96785,40078,73693,30895,29361,10580,52690,16676,78623,54645,20510,89502,10777,10212,89572,53005,30751,21317,42622,57421,43249,80715,55988,38297,60199,16452,67239,26497,27641,95549,61865,13349,20928,30528,68249,14274,31731,43430,76515,60896,57046,39909,27850,96446,95840,90361,62182,82964,30504,12371,49944,12099,43186,95039,39937,99760,37439,37084,66840,37584,35123,50701,73400,49075,83469,91553,77844,72688,30705,97086,82641,17749,79197,99673,88255,53253,97442,89914,61829,87201,35312,92208,90789,36714,30105,11196,97333,46885,31933,88046,70967,41552,41754,36864,86106,55391,77866,51487,33181,48722,28778,23953,75743,28792,20348,67228,68509,41289,57197,21553,84419,62152,43871,13363,86266,99396,18698,90253,62102,33513,74183,89452,70837,94951,42932,36138,99751,42773,71748,36002,99680,69227,86475,92902,98116,97668,26817,35913,25802,53201,28643,75131,60183,58583,40102,89794,59056,90118,23293,98013,87357,79730,99120,67810,17156,34999,23840,43826,58923,72624,54374,60850,58850,17968,75101,63436,90337,28509,99965,69074,14221,77391,66317,28561,68809,42868,26584,47055,32681,70089,70856,46258,63676,76722,39514,27889,48915,45951,27952,46665,96456,47715,99383,36425,79016,34950,72570,38769,37409,53481,68435,10896,42461,75985,21113,50579,85049,74072,35358,91833,89105,12888,59314,37580,77105,60366,85919,63769,92596,79783,16693,63026,74687,84667,98124,13095,72438,92412,60374,33413,70077,74025,96193,36126,12576,57436,43170,74000,70365,99490,79610,93273,58117,88076,66580,10519,19730,90393,55434,60352,99068,25855,96592,24007,87927,72280,40158,15170,26781,91273,36306,56241,60069,13490,79951,97961,36197,88491,26287,85285,19996,97897,93095,65473,38121,22773,36757,20459,10330,36853,27795,24957,10529,11604,74919,11787,32760,16698,47359,70118,10228,56048,40678,49215,49041,18886,64815,55626,14952,71701,35574,29804,81126,89853,81345,12288,26906,42434,17457,68535,75154,49429,89591,73935,33646,40270,27164,93013,68244,49090,48449,64238,80777,79625,40862,73868,43362,37118,33791,21308,24919,62801,61181,51925,54673,59837,50767,30774,29785,22648,27187,94783,93326,57931,61591,94705,27045,80723,47870,23504,69212,29904,42037,55975,72028,88247,51073,46915,55866,44669,85687,34599,45920,94386,63426,64498,61054,97314,69104,16940,43472,45510,13556,94062,14217,20084,81487,57857,45323,86587,80287,25757,31994,76158,53114,41235,44096,63383,71439,86900,16700,28077,50576,35617,93494,54016,62393,82440,41963,58231,82026,16468,70450,64266,36560,87809,54164,33412,24779,40231,16607,21196,66837,34903,49115,92798,54645,55026,58500,35763,47519,77385,33388,15681,70482,35207,43853,88744,94568,23922,21097,46195,94456,55265,34507,74808,82305,62705,11860,21380,33153,60973,20300,91256,57561,79819,84450,38526,94611,51479,33320,73118,48820,37098,29364,81796,35805,52264,87420,12866,82748,79504,54855,50143,32849,38907,46300,40499,11910,96288,31438,90758,85107,46476,41451,17285,98225,77110,80065,10671,88918,94088,93593,64411,32122,54431,21645,71684,96633,80810,22756,93198,34367,60156,41304,32589,85039,30834,53021,93640,11284,43070,80243,34648,78310,52729,43353,94934,24263,44987,42694,16885,10683,61500,88603,58698,33387,73418,35333,69808,53388,63684,30519,63718,98027,30918,62038,35745,85572,96706,60725,41326,98848,38396,44311,95763,66230,96009,66914,46666,35041,46760,52518,24215,82020,19122,14046,36542,21322,52270,68909,35927,32972,72443,39727,94988,86457,59143,66022,60984,86943,12985,36275,55238,59997,76652,10540,91020,93469,89523,26588,24460,21082,25056,67413,63478,65254,43515,85091,60043,90824,10538,63741,84052,56766,80426,26058,88726,27893,85879,22994,71939,99275,48847,86498,59982,33499,91466,45875,26882,16741,69871,36000,23098,33848,54724,94259,55617,79162,87885,64207,72599,66343,72627,28008,82827,68451,17638,81890,84585,72284,74208,98506,98422,10171,80469,37045,25534,91316,63705,56108,18719,30543,53904,47563,53568,76624,96345,17986,64812,17047,73798,99660,99240,29055,91723,53815,28120,91787,11259,81633,65087,88172,81710,63953,27115,33044,90584,33052,60167,36432,52739,69920,88367,33168,15547,81392,83393,86725,30227,17712,63254,44232,42444,48573,78250,36306,13229,49798,63433,88479,46986,28113,29503,12141,46367,36346,10559,86452,75997,97457,42105,54722,35694,38033,99449,45435,15533,43042,84479,57804,34716,89972,66189,33301,67547,88429,75327,29174,58943,66646,81407,51219,26084,89551,96704,29282,23407,94256,15259,17084,40447,49982,47332,65132,83771,71289,36363,40044,63386,30174,58671,57788,65150,56529,80710,79085,91392,67088,86524,40506,99236,82380,54609,50805,91596,40040,50297,46822,43181,57366,19472,81458,61094,36948,18630,77377,78723,15278,31226,17793,13891,11498,59527,62118,38672,32887,68732,58356,14423,38070,19538,89301,15999,34263,14693,19686,79124,88094,83580,55097,78916,25115,55858,28486,53928,75909,39872,92990,59628,26840,73938,17492,21185,60520,90256,44500,99984,91066,58017,98777,59335,49852,75857,18284,92717,47849,20892,83254,29637,12993,41343,84158,58424,74072,87977,85830,42615,13684,20426,93199,84107,12470,29714,93858,47254,15543,67969,25623,87693,26091,81249,91544,96938,37278,30924,74686,31504,79383,27410,35917,49651,84076,15686,81734,59976,12515,13970,26742,54689,67042,83810,69316,35270,20552,14941,12946,36227,50912,82388,34792,27969,83065,30082,81975,70732,95027,22647,97647,52597,24332,93678,13808,92507,49162,69276,14430,49592,23394,52788,34082,46107,65030,42022,73179,88061,71332,69800,32928,93396,26904,32968,75396,81972,95295,37003,33157,18401,53230,79462,33635,43212,67041,43328,90088,77414,14322,35588,19925,40726,74911,78044,87249,75162,16799,98974,28455,64575,21695,66743,12130,84495,24074,89634,38381,72728,25810,53172,90527,91100,50393,69231,89866,61887,27577,29333,23826,30194,74115,20279,66099,37260,34239,36081,39183,25209,55634,76353,87938,90846,85063,13099,95394,50502,45604,32795,28388,95436,17745,26004,91916,29162,46893,29552,26536,94173,22416,24841,88091,38540,22961,98666,26802,81223,95443,41540,99562,30777,53854,19472,82016,34286,65765,91024,81152,42502,68507,51279,64313,25635,51849,41179,15687,99923,66654,27700,61013,90564,42223,27613,33545,96477,98325,92618,67571,89144,43229,80587,87414,32157,92310,36099,99295,77808,42471,68559,83682,34346,46719,86643,14481,69492,27622,69581,18459,52268,47915,30848,20628,72405,11814,33249,33281,91786,93261,14909,30453,32051,53806,20764,66016,55223,96305,53319,12851,46910,70039,38172,88606,76182,42728,43333,49119,32194,75612,62185,31039,78946,59653,93155,44772,88900,92787,44711,67335,10728,32242,45119,65632,84158,99285,97884,77101,34490,81042,82873,68671,85041,47754,82591,96070,30486,82472,74157,56728,57245,64134,67445,18425,28411,29865,49091,48837,46440,68771,39038,58029,80586,87927,38990,27742,86963,35433,12455,27100,62602,45905,65428,96225,21867,81471,30239,51341,37818,96685,56125,60393,82916,77110,94252,74671,15860,28427,93068,68807,48714,57859,60881,57322,42459,90024,98391,32316,60145,74284,96706,81007,67603,14069,78337,94120,32472,74822,33612,52706,48366,29356,11432,89837,99843,85071,50459,49665,95034,37970,65078,83175,28796,36501,53759,37183,19788,46896,73321,65867,31504,10036,92653,14538,66847,26249,90625,80686,32533,12931,28379,69310,23095,77654,28948,22828,12609,23741,99771,61030,74130,35079,58482,76102,44770,89018,79697,46948,82579,15921,68617,38951,22306,96233,82210,55887,50133,77607,55620,57155,96152,21838,85770,79108,37395,64366,24187,10672,90579,15696,87573,62670,51149,58026,54323,96926,16327,79009,54308,96595,31537,97704,74732,65456,70386,28395,73237,22237,72996,36312,21581,57771,13418,84332,69015,81919,59384,95862,44936,85226,75977,26388,16784,42193,38577,31976,68840,21199,20267,70431,23698,93377,42389,38909,81653,94360,57978,44059,68399,78055,78852,82439,81907,46786,52394,34293,15501,73901,25653,11415,76598,20084,11014,47627,92945,76120,75228,21900,11234,81093,91276,48025,20502,83628,42255,62461,45722,33819,62686,87781,99350,14791,94402,56286,14506,12506,10681,49218,29763,83834,14419,29331,40874,67851,37734,58525,99468,69858,95945,96058,53703,25658,90108,72648,13087,53138,56862,96953,70993,87257,82458,72531,15513,81619,81670,75161,31143,23451,90111,10126,14274,25778,80648,66223,66314,37092,19563,56480,77730,15740,66485,41109,13391,76560,82127,62201,49183,76783,92557,26403,57720,19752,10015,67117,51061,97349,97700,92160,99116,94510,29893,34726,10798,79410,15016,95553,94409,92889,78348,94548,16983,95119,30724,66084,52665,86629,42081,39632,63006,49628,24684,68322,44809,14859,62489,69275,44923,43140,39202,34392,75205,13171,28114,48363,51857,35000,68238,83075,34833,90914,96413,20003,84237,80754,95827,53631,72309,36757,62823,75953,74065,41542,78607,45229,11973,54835,72629,43367,79923,12111,80291,71544,79307,72776,56575,73195,67092,45720,42957,27730,13969,59279,82198,57249,74311,18667,23778,48514,82583,23908,94739,78330,29496,50582,10490,52227,41574,18974,63706,73220,14895,73369,46578,81197,72972,56807,97757,26381,14249,33815,15945,19505,26290,47393,83243,40374,82903,41062,97853,63642,12045,66071,44697,73587,88040,38498,64832,53432,38340,73299,93032,72082,23114,60283,79859,53221,70417,78032,91392,60481,96524,42139,10062,91861,25287,90558,70708,39704,89124,28626,31064,20902,84555,99574,48220,13843,78918,16463,21261,40021,37378,71383,46136,13007,69834,35309,98200,99653,37481,58171,61220,10768,97040,64342,36644,83526,34978,68336,85504,47588,19313,21235,67775,68164,10179,95239,72348,19685,55042,58832,52793,98633,62755,66503,21877,87348,83974,45372,36011,52211,15147,58601,88318,36317,69289,56940,98971,86041,25391,92917,55567,57939,94743,80075,31680,40183,73574,43911,95036,84739,45239,57644,51847,48229,89783,99649,26544,71783,80575,93731,74294,17030,74962,34902,93982,32382,38612,76835,79449,25161,61353,31588,57211,56345,99947,55874,72771,64891,70216,33120,92138,19100,46269,53867,93110,29147,12758,27552,40533,17517,37497,34515,11225,45254,42527,35826,68682,48808,77111,43232,71346,74586,34653,13404,61429,57069,13118,21329,32334,46217,11979,18281,50229,89779,34354,48174,26054,67771,40425,53655,66187,25731,27999,94710,35102,63669,31159,76647,67852,86715,44967,87672,43370,87019,89373,14051,93250,22026,23136,56410,39124,32674,44134,82050,19170,86275,16373,31804,66508,30707,29453,14326,92369,41544,71819,29793,20986,24180,74317,52841,18568,71640,62414,63360,14544,74194,26578,57347,88981,62630,95599,93720,49063,51440,97627,91295,16012,76546,65165,60820,29496,43410,52933,36880,77078,12845,12038,71692,79703,39125,55499,80185,51946,15081,88001,92650,41446,97411,44409,36225,52883,47600,57501,59095,65802,10479,85541,97750,99049,75285,98447,69441,70024,87938,12252,75387,52894,81231,33416,97712,12834,58441,62783,21963,95279,39562,13913,88269,17108,74797,83374,59986,99298,16764,83833,69767,74464,27945,74740,15032,97101,15776,52924,20753,64698,94167,88168,69001,13942,93233,48793,82086,64860,71210,99123,82821,15351,95605,97493,82571,85943,59781,32189,31937,14496,38520,79274,25595,51775,54035,71759,38853,33933,13540,41140,72304,82340,58119,96872,42323,22037,94743,83685,28691,63782,98329,67324,90185,38307,88546,83872,62195,41512,39789,43894,85272,74078,31197,44581,28664,39029,24456,92487,21404,23947,17772,11672,67459,58358,46919,47048,28555,24214,40878,70412,75809,68462,46660,37374,20607,61251,40018,41342,80255,15892,21187,34414,70838,12652,62510,50313,40479,11502,50597,58735,63927,88885,17953,12549,43848,61833,24465,81487,47792,99554,67500,10563,92596,67112,60514,84114,22449,56585,26755,33421,88802,89599,71228,63967,34601,38981,88485,74411,17243,10344,78151,79812,80192,91328,56441,65255,35725,88745,73498,72952,71486,31438,31999,80521,36143,16833,57517,29640,91174,68560,74407,58640,24485,19615,39455,75475,89392,51423,98487,70548,55158,94667,48206,35676,57517,55555,53573,83010,19976,77403,71235,43240,25352,97853,41816,50288,12261,51867,57398,72741,40568,72987,23100,37003,84381,47590,61090,37414,57834,15863,77392,99758,83141,81164,95124,30369,58878,38904,47829,17767,31595,61381,77575,17648,24616,66020,46312,91907,65238,37894,26407,96346,92087,29669,19057,60741,23799,47262,27427,99701,56712,72132,20276,64001,34169,41945,58041,87555,50618,59066,77791,61638,29573,72792,24385,32746,85383,12655,36490,19043,38806,31414,40525,35445,57760,92332,24434,93045,58571,26050,22462,55504,57578,24196,47760,12454,47623,84673,64679,37182,37769,20354,40371,88832,55015,93699,28164,72948,60347,15997,56050,22449,95518,10376,83629,65276,28203,66109,20121,18805,23686,95186,92918,97964,10222,76321,18607,16579,79232,82098,19849,54459,12272,46509,95135,63407,16252,20178,52927,28879,86430,80402,49236,40824,70061,39018,89893,51117,92417,10077,89657,30385,57985,46457,13956,94675,98440,63485,33198,36965,69053,93599,85920,30627,71105,54637,33021,54624,16779,18894,76890,82831,20945,24546,48782,61947,53344,21822,37216,61436,87553,23924,88184,43069,94466,62754,98655,65260,33552,12897,61505,60199,25296,77640,77055,55917,45562,42356,86005,87596,75191,21070,40545,54544,69558,55436,85288,41407,88494,79577,99627,80116,69963,57196,12046,83490,63651,64467,65884,42216,95071,12471,67992,41392,45082,84862,43084,33935,98693,45758,67880,56509,53652,47696,74239,78688,67707,85070,66033,35684,94774,60820,77158,48144,44635,46583,93541,18809,19804,19907,70733,27770,88340,53172,58108,55870,66960,10563,95448,67929,75749,75245,31333,19249,28458,13770,16736,87077,50394,36994,81688,77561,61722,31909,45487,23123,50152,94157,31840,67315,92655,58237,16781,12273,40943,24585,82691,49018,31080,63275,15755,78392,66903,35051,67392,28270,65933,54454,13763,67199,58208,78761,34275,36713,67683,95263,81765,33148,61646,16103,79657,56142,24825,99861,30828,63737,57906,66279,36192,21076,90194,29528,20339,92144,70521,29082,65475,63408,99137,31447,18114,27279,15628,16599,32231,37294,97091,77403,69177,28244,28298,55299,47340,80205,21007,64691,66977,99604,14786,98817,57824,16177,57440,27768,36217,63440,16927,85939,84870,83642,42402,79321,98785,76910,56883,78713,72407,97943,10562,72465,64186,10010,63470,91386,62498,70904,54148,90124,95998,35694,68582,54182,36046,72210,71837,82889,64326,69714,87873,31917,16280,21680,38321,56807,48522,54777,68105,49899,25061,34365,62485,74954,38001,55746,58803,63947,61115,13850,59513,32528,66139,44896,13699,19765,46753,55147,92736,57296,92972,37655,62850,54863,23170,34236,53042,14144,64202,47373,81821,62723,15532,25738,82992,76963,90161,71977,58841,76942,84897,65069,98256,82177,22968,58740,94859,97222,14667,47377,30735,50911,51960,44215,60684,85197,66381,88187,45531,83810,20705,96165,38633,18333,28211,55772,14264,52150,24184,28729,82266,25615,16165,18042,12704,34274,75665,57421,32026,71162,57578,79083,59707,91514,76968,92331,94716,37875,70876,12233,96851,30525,80819,68699,89860,87727,60131,78059,38142,32307,80592,82793,64522,47723,74923,80911,41472,35522,22898,18731,70002,28264,63197,44427,49182,73897,75718,48904,24268,13568,24663,25519,28741,32864,63609,30151,31069,18244,23768,38122,97092,60026,67516,47032,29238,32716,94933,67856,42609,74871,25659,58293,99315,66831,99270,62294,49913,27457,70517,61756,85472,36855,56180,19551,30825,28174,70498,41621,16501,93603,15244,60563,12079,35767,62028,18589,31502,21158,49479,23390,17936,16497,60666,73414,58883,81715,67298,16147,89199,33412,16351,60564,27226,57761,95115,87455,52403,11364,49928,55511,51583,71620,67651,43019,63284,88429,55259,67372,17151,75145,17621,11558,97266,41711,89173,10512,10218,27103,33071,49280,65507,78993,84450,50887,82956,73121,31751,78950,86143,37693,81317,52731,51832,55684,43870,21311,56632,83236,14333,76473,87492,20980,92248,12733,69325,86215,99288,73268,73242,40005,96247,40046,19301,24992,96515,59864,60656,64397,81858,85037,52509,55875,12958,85301,64380,98132,19123,80314,31497,57808,22097,31623,54551,10165,38893,80826,86386,91315,43493,29570,10201,63793,95868,75808,98052,87641,87124,24123,94372,50815,46922,45662,16407,40762,50971,13350,76339,92293,60877,35162,82345,99339,93495,21385,92963,93309,97964,25847,31531,32081,48581,72567,59475,49534,85020,86744,47760,45710,32490,28925,24833,49895,82254,33771,84853,92024,51549,92039,29811,90281,71944,16399,28251,10276,40756,93927,17350,28405,65000,77223,81002,40648,48109,84705,48138,45012,14887,53497,39211,51173,22310,22686,14290,75085,38906,27391,78392,41875,62395,30771,75578,53008,13582,50822,28435,39933,39468,16980,56158,46097,22395,36726,11300,12893,44467,90462,80768,58289,65627,74774,83390,62562,51947,28655,36619,81481,57842,46315,40422,98513,79799,86080,39955,15170,55710,16742,97098,71445,29420,11610,58511,20342,18956,83814,80389,16668,44431,90549,33732,44686,54463,16915,94485,72658,64889,85250,57927,94848,50477,47588,78534,46588,76302,74606,30764,60064,96349,36061,78489,39771,49628,58244,69705,39387,90188,88844,45190,61695,79499,22375,75915,93717,76055,55944,75425,45150,31475,51901,63222,40034,69186,11393,89062,97209,12242,97036,37782,86526,69564,26337,23302,86953,82542,28490,54591,72872,59465,48346,58343,67207,87337,55405,54824,16914,47725,97728,37252,27099,28824,48239,53676,41320,11383,65328,94147,85331,84355,36607,26335,78984,46331,14774,15084,61278,59209,21575,16260,15840,68700,76678,28573,59779,61468,13099,28028,55518,47827,76888,56152,20861,75269,78590,90981,26114,32483,75709,27080,72613,19070,29406,32388,46480,98837,52176,66565,45489,85576,48037,48611,38136,68175,94285,70926,13072,73933,56805,28100,76734,70512,64731,88985,27993,31056,81324,92681,56581,70822,78973,34654,59504,91958,97225,88591,50985,89420,19106,67981,51154,66533,69610,14175,80306,47298,46336,26508,60219,83650,98484,84059,66578,40435,39308,36186,22526,72089,63221,46744,98607,67371,97922,58403,45774,61899,18568,61108,26853,44862,42752,82557,58544,64099,77338,37232,78718,54006,53327,95664,11659,20098,64542,67046,53657,13546,30280,96040,90396,22753,53706,58228,20557,24227,57148,73571,49256,78221,54653,59084,10855,65405,10398,55281,94439,28101,45731,44599,96507,71826,40734,35164,18711,88163,20906,19518,37284,84161,33742,36516,16607,97436,60336,22730,31622,22931,74160,75630,28073,66240,33682,84022,81992,53943,33010,18160,34804,30090,61889,59488,91768,25585,67909,65063,98781,23738,72703,57737,52409,92643,37155,58381,92205,79188,45639,87780,68713,15166,56648,86539,80664,38732,60923,36026,40236,14869,31487,62646,56072,93499,66133,24373,82865,21764,93602,46154,53528,73668,93942,82737,76105,45820,99824,70615,87292,34671,45750,57445,86408,69609,71037,43347,55303,66731,80858,54563,66186,69370,51848,45132,64005,17466,37338,32162,28976,23070,70092,61602,56050,77276,49237,25893,80284,24967,57846,13724,27056,61366,12511,39459,54689,48548,30627,61907,27736,31538,52876,48625,35305,22851,64259,83513,99663,93611,47059,75937,18993,13872,88416,52254,64363,52850,62471,33120,92824,64225,94272,51095,60676,62877,39528,56199,40980,27197,26581,79073,73828,19726,41390,58795,16084,83142,41716,12680,63922,59717,96801,58353,98672,19547,90600,76663,76324,33586,39356,23342,19319,36050,58715,67536,15736,85095,41292,17394,43561,50371,92442,51297,79371,81997,59278,24487,58919,46275,40935,55616,44908,10904,19919,58859,60255,48510,97503,89494,30852,11980,96376,73248,38164,70867,16734,47282,77140,91439,26703,33374,77494,66438,55105,60405,95110,90975,29692,29891,15441,47861,31211,36741,49094,87931,41811,62593,25544,43029,11627,84164,99901,91339,48574,20473,42041,45253,17132,12976,88947,70309,28353,81891,12805,14351,32492,85937,68694,78677,40455,88933,90583,91709,44193,77131,41208,50368,41963,55501,70035,24477,78611,75640,19387,25047,30090,40107,95950,13346,79950,54003,41343,25522,47415,90348,22497,88352,56408,65736,13862,10183,98186,57483,71741,12981,29566,97966,46123,17857,56121,28614,18472,91765,83087,26233,63821,91539,74049,23709,14976,76973,46915,18724,29275,94179,46537,49578,27123,48122,14639,47889,46909,13751,38520,76076,76728,50024,12041,55519,93312,76895,70401,59747,19464,42753,97464,80093,96919,75821,97763,40810,58738,27421,22637,21779,48400,16317,77272,29543,87879,63458,81082,83802,10846,85933,52804,19132,94843,92010,89429,97474,54877,78152,13185,62215,50263,68013,39028,40509,38593,10716,99218,43256,76189,95559,99006,56317,77594,30650,61334,74231,37570,67871,36832,27678,25430,76919,31181,78829,13177,91438,58123,47552,15828,22519,63405,43623,91552,13340,72513,10299,29909,45391,98885,54344,91878,26610,75160,49692,69289,82355,16987,79060,94661,56346,20978,22588,20393,71425,49331,88084,46391,34687,40798,15998,30732,61222,32681,71663,87586,31007,72682,36335,53583,65448,56507,32437,44698,90529,10633,41159,91604,67268,63323,30300,65289,67449,44942,93305,23370,67945,26604,48563,33603,83287,81164,34949,20284,67645,58145,42243,57174,49382,58508,44977,52258,75015,93370,67362,51109,41881,78160,49768,15308,71274,83778,59204,44961,45383,51459,12789,97949,81885,57640,88325,73202,86254,11330,52827,18141,75962,82216,63216,28270,17425,51595,97204,37127,96405,24341,41933,48170,42304,36181,34994,39824,57288,78419,10482,50610,72145,17113,67233,50002,24720,78175,28916,71842,52408,12747,67402,91419,76074,62539,28628,63768,17734,74223,28453,98495,39624,91984,28012,88352,22479,89987,93523,32674,98627,15968,51658,89012,51610,38845,33290,22824,62214,65932,27043,67402,80062,95368,61298,97658,52013,32000,64520,42817,27383,25040,92754,49875,88608,43257,34714,85612,51216,95909,20234,56226,91535,21694,47382,80607,38509,14385,78669,17892,72003,77128,94634,52955,39695,33470,32563,40291,90659,97689,89899,91955,71654,93885,31287,21526,49493,13672,43838,96118,44885,85821,22027,60422,70716,95181,75941,17321,12095,11462,47661,80548,62218,48938,97444,56772,95431,55517,47683,79781,77000,57601,90581,96547,18396,21025,81524,54698,99724,45323,90681,81447,67369,79783,31306,77025,32416,73357,89429,90356,68843,85038,83472,84420,30470,13017,58449,53635,86690,25848,62080,95221,35092,13874,29707,75210,30537,32060,75884,93338,24574,43010,63086,19329,50448,47555,36023,35700,51980,56887,77203,72075,48770,68813,96493,48247,61321,19883,33577,49566,50431,80067,90188,21448,29531,89626,34494,30529,58864,33084,20710,75163,82812,16010,31212,69941,40861,61550,91491,18831,78686,66230,66702,52266,94106,96482,92132,19816,24045,22351,87158,35125,79867,75470,84541,23566,42038,65318,56381,10589,16252,55293,91417,64696,70600,34089,81557,51612,96309,16572,49147,37432,24134,92040,51929,96776,41011,58139,17132,72354,48480,33934,78617,58392,78571,48053,88383,82087,16327,56156,12130,74286,69226,47543,83254,91369,10249,77221,32055,88865,66558,29795,72217,20051,57309,29052,81950,14566,22681,59303,61942,81528,74468,45983,43608,83845,39481,50518,15889,84140,59715,73909,40814,76069,88046,91346,91755,72426,35316,42361,49746,46448,62079,59565,86564,85082,78522,81653,97574,47086,77283,41475,32611,24655,39682,15631,45539,91110,56940,52919,89701,18542,20308,16472,47376,19948,66923,15923,29570,70233,52614,25901,53320,47177,58818,90301,62473,46582,63603,97936,26186,44136,92846,82467,31034,16056,75364,17039,10878,17372,32376,61928,22593,83283,70098,75337,62829,43489,94187,25648,47410,24473,21725,67950,52376,99612,43892,80640,77751,28257,30846,40601,80523,84520,95374,50833,72313,82526,28951,89959,57586,20995,58769,94967,80363,71606,57195,68141,16163,86478,94878,53965,45847,60493,18477,85245,65972,45850,27286,81587,64812,10702,30984,97990,40126,73850,38337,88850,75961,42210,53073,67218,21953,10822,16380,79667,52385,83383,47050,87331,24968,97057,10341,49008,94112,85158,34067,24314,11743,37770,54291,52806,48170,56061,90214,51427,28376,86511,84067,14003,89077,46459,38670,59981,55210,40604,59971,44954,85377,16430,17102,91235,36743,43557,70021,10218,80895,36438,56920,15033,86339,12021,18397,48106,59784,18659,29774,31296,83893,59032,91623,56773,48356,32301,93214,45087,18940,84835,23011,11132,21301,28325,26911,36329,81419,11912,14467,25599,60292,25637,12841,55157,18471,47566,53638,39642,38659,97924,50145,12441,37091,48870,50941,84868,36398,28580,34255,67687,30362,44701,27415,27275,90162,58074,86417,46916,61557,90480,69133,86353,80396,31223,28094,78708,72076,59657,48561,72077,53060,46067,41268,81953,74717,49957,62803,74486,31799,95139,85510,28067,61858,92934,97587,78561,64174,74304,68372,57009,13760,33915,27070,26261,72706,12809,55366,66357,58794,90041,63695,38928,31510,16991,85647,57220,27927,45980,66473,17103,10504,28187,75976,27030,33300,93614,96718,75173,93048,81222,61350,88699,44582,39917,24736,98153,53321,32921,69085,99197,35124,66207,46661,21087,43362,83631,94485,86159,99362,86415,18233,50115,38888,53140,13213,45287,59552,19874,28367,45923,10470,76759,20584,47134,76109,61781,10949,76863,49324,84358,44491,37740,21294,96892,82724,94168,71274,32034,27342,89914,84929,31701,66563,50845,36299,86797,67597,44299,42803,95466,42076,16114,47579,66262,86502,40167,28207,19039,97927,32080,86958,66520,33960,50572,28405,35953,96805,30389,47798,69504,72387,87696,87857,38614,54691,97234,22754,88855,52064,33451,18248,18884,78643,23113,27247,65278,91894,46279,48546,23721,80980,54013,18807,84010,26787,72666,97413,34415,96303,33147,97802,51702,61388,40383,70480,83688,54436,13723,56179,81870,54589,31516,93500,44977,79772,69196,98909,18759,87761,43962,77054,25875,44182,70829,70339,81157,16924,86365,75878,80959,75709,46087,53839,78687,83662,61042,82306,31601,66920,16609,27964,23507,11304,79419,72849,21116,47275,38784,69874,97186,83807,50381,83531,23552,75323,23516,99584,39405,77453,63849,27976,28079,52602,43072,65178,31517,87172,94969,65617,43762,74464,98672,78593,16067,45134,76618,64698,56479,36437,57902,24039,61216,44484,68182,83167,99299,41158,84885,73956,89832,47448,26536,60893,72143,14187,97244,23519,78685,13951,30897,14751,46019,46267,73913,93969,15285,67081,83969,62864,16607,89689,36836,49241,90223,37914,62677,26494,56980,37072,17355,61037,23838,38914,27142,51717,79103,90955,32306,74658,40287,23333,56252,37288,55515,24082,72536,86208,63283,82784,66756,11700,17860,10988,93773,66518,72607,51461,21754,27413,10481,87734,39053,37283,66778,98773,66250,84319,10687,18558,10352,25616,44249,57765,85228,12323,31723,87659,11696,60847,43059,30066,97377,53287,50045,76281,26460,92055,79298,77239,27947,47227,76654,10188,85025,60406,75305,21847,27215,32233,20808,80319,91791,49148,83619,40254,14501,63561,91645,55899,29339,80293,44644,60447,75363,37422,86083,97660,61385,59238,14126,70648,92043,82233,45902,11696,48894,90484,46537,67899,14270,18279,53681,12665,96160,40011,56828,91318,30580,94611,64122,69960,29528,59525,74966,75858,73679,87374,66190,97835,69988,63719,82304,46972,81968,10674,76417,16182,51498,92077,46542,51176,81527,31126,68751,48462,87954,13586,95017,74129,32331,84542,79422,64359,93743,54656,56604,38818,96802,43414,30742,82992,31427,22079,53921,48719,98675,59870,99375,43676,22989,36049,53325,90988,30941,51396,62996,48777,47757,92990,64927,76678,36790,91040,81541,15902,71573,14193,88803,72647,19349,48683,85976,40279,33792,53678,25745,21995,91524,78345,15624,59470,70804,81464,46302,22070,70639,80207,40132,89771,14683,12357,87979,92470,72029,34802,13576,25427,80787,15867,16956,92435,97920,79578,56464,84228,89214,53630,48472,98992,77767,87210,21633,58203,85335,88652,26811,55425,92133,97853,18065,14592,10909,58665,30700,42735,68708,42537,73164,84398,64802,57990,14141,59578,85400,86856,20411,11997,18943,79025,77180,53540,48370,19452,34788,40421,65074,76530,99549,98852,95388,53898,21177,32541,53755,89839,82894,81516,53957,14381,59419,61896,51596,80323,77572,76283,55366,39693,85411,92745,53376,31703,34318,58090,48415,14895,15207,98451,14996,17197,43370,91409,99735,34851,86969,58570,58471,48419,81185,59626,97429,41322,53628,16870,53925,82118,17034,69447,52368,78155,66365,43415,72824,24524,74149,19032,95759,35266,83539,21960,32609,37185,10779,24354,59320,68824,95932,58904,53243,46504,49124,92346,25825,69030,64054,45759,96308,61571,66793,46443,75533,72117,83675,90574,19846,68221,16524,39393,28243,20089,75013,86613,33201,98669,97201,51604,38480,12201,29722,66877,46985,10056,91902,37022,31162,93156,18844,39188,40320,68694,62013,97081,77626,30548,58960,95747,76264,79028,81099,54715,77550,34963,73899,35136,71502,95635,27588,27802,35792,56472,45255,62154,41216,89752,40226,84861,97549,41928,27052,23689,67113,71769,80903,16788,95020,54421,97224,87554,77977,64881,15735,10812,82560,79147,77892,43193,29983,94588,46494,64806,54797,15126,30388,15207,60510,80524,88118,44934,76516,61106,77810,13672,64625,97722,59947,94003,14549,57053,31165,33497,41964,88994,64070,89909,94865,81403,46011,34767,73432,21679,18535,39571,27368,86133,84691,63746,58291,32231,35964,90196,92513,23649,68397,28064,80937,39524,12258,15180,60932,21134,65306,85196,43915,29106,86353,17163,38850,50269,38504,63728,33704,66447,83298,72261,42162,37099,40969,40306,99439,52046,25510,61745,21228,81640,69549,44454,11992,92783,42289,15994,17080,84255,80145,82376,39720,84516,36891,62944,44832,41498,15384,96391,99623,64751,89839,97507,85340,43973,61790,22922,96489,56998,24690,85766,33926,86221,74937,27307,84042,46317,96680,32263,79617,22532,90019,91133,24879,81325,86348,24778,66882,30421,30836,36151,73995,56974,79269,26685,99572,31422,80034,15790,80278,25750,32774,37582,86082,62488,32370,81707,92754,74407,59867,28960,17836,45709,98524,98778,69471,80230,17496,29940,27620,22959,82418,87010,19035,21812,79712,68140,15985,93102,47887,47252,32415,19698,99386,35332,67221,72747,57294,10445,26879,15991,85914,62516,67036,92287,69601,88043,31197,35309,15849,25079,52906,52053,14099,49203,16894,52253,97046,60474,62187,33174,52203,88897,19392,36508,19023,43876,85865,41468,36956,78236,88338,56537,56927,81321,50816,54314,42084,57655,72124,66027,53038,56008,56977,34813,20476,46344,55169,19060,36954,97377,19499,17223,74184,20571,66177,20083,49107,57130,68297,45565,66712,77142,28400,81678,75130,43213,54561,92244,83754,90565,29134,62891,48196,77567,39483,45395,83219,76384,90781,89325,89552,70779,84544,28083,57384,91190,46442,94208,90209,75392,42388,43620,42966,45569,19864,39187,20556,72944,39669,28160,16381,92885,43617,54689,92786,49769,72306,32494,72140,93392,65221,32649,85722,23267,84297,16578,90429,46169,43701,51971,24744,78267,44566,52804,11311,67116,78432,87515,48991,28722,64209,71631,88752,56310,92892,38303,52244,18157,31566,99334,38310,96800,71167,71051,94355,96144,12348,81159,64395,53654,76124,37172,16722,86926,65667,36930,38360,45056,10318,93014,25686,56490,63198,54429,48017,30999,49922,26774,90580,72657,76357,96600,97324,90577,64981,15455,88328,49579,29157,79590,28551,79011,17885,71509,82667,95866,42800,13753,44725,31248,31913,68811,96257,81760,23808,53931,92632,80503,61778,31944,32909,69904,99227,77367,61474,69969,20432,34336,78693,31916,29810,77814,84797,57837,27145,88746,82837,73387,16812,61755,71622,28710,67871,80502,80085,11796,15901,36780,35980,52690,89983,29681,10612,48746,63614,14460,67624,94488,96771,29820,15575,51628,87639,98418,54195,87900,52190,73647,32386,92550,16444,87024,87319,92966,70164,29804,66773,23690,27193,92765,40248,13354,80806,81846,29031,69136,59693,15773,13303,86313,41333,50936,21203,82031,46419,20731,63664,23216,48871,27553,64689,91995,52193,52390,86761,27266,58956,28737,53652,41981,16864,80944,97737,44595,88682,86232,32177,52193,98819,13435,48018,77827,61828,26283,57195,56422,58681,61203,65363,63532,11525,11540,14107,68390,68300,59733,87112,40407,17239,95504,14180,70861,36366,63970,48877,94420,43150,54769,91381,95329,48128,15118,42563,80144,25544,29566,58526,85129,72237,36069,98948,73944,63742,38516,64271,10118,22582,71767,33845,37298,87870,15460,32773,16294,65905,31307,74257,93116,92595,99562,60123,47742,50806,76421,96194,82395,49385,64232,49163,96863,42643,14828,40049,97889,39360,39624,22461,90926,14179,89990,69661,16696,53080,70528,64337,69487,36112,32922,12596,99774,66165,93872,79490,85178,20301,17273,63880,48597,22720,14927,87454,92840,10399,67590,57159,83875,91846,69406,75351,80951,71963,91425,81285,63051,27894,95191,60541,94186,60569,69146,38580,65852,91324,91656,89835,88586,49549,24384,23333,45382,22586,15609,34524,48756,68415,89171,39358,95432,29216,73727,63143,68992,19973,12806,17792,45319,18146,39589,87401,38217,61369,27229,70922,35738,19851,85563,58812,32205,85488,17814,66100,85312,12752,55711,65793,47892,57311,61001,82196,45727,69807,27758,59177,15715,70941,86137,69222,35335,18066,34900,97147,18552,60845,41959,19195,32641,83784,31877,60947,94470,93991,38631,89970,16991,15301,24784,92296,60014,53261,32307,86788,52146,99280,96992,68518,76422,73088,29316,30031,46504,17277,88467,57471,66941,88690,40581,67087,26491,87589,56009,33696,43444,53449,32162,30592,12234,95625,26438,22147,80060,86279,41956,56810,24319,42032,70459,99035,65673,79708,41219,26603,21788,62221,45198,78479,77792,14732,61968,23660,78584,86966,32614,83218,31813,10985,39637,25187,53458,66565,41278,58297,74254,58621,85336,50517,81860,78068,36959,75701,82864,12197,98945,56180,88949,54590,28139,92727,81189,54200,70324,70624,42398,81594,20542,81295,57514,65422,64110,46136,98879,56896,39931,57608,15624,52449,36451,74950,54475,37363,91842,87783,12175,72386,37426,62891,43961,88908,32739,75664,12273,45300,98428,66770,47384,75083,53123,62881,72504,87173,67015,36551,57778,58401,25695,29639,98080,57849,12724,90661,69650,16678,49230,46028,15354,65517,76418,32787,52076,78167,98176,51756,71210,32623,23580,25255,61643,17871,57163,29269,64588,25250,25747,46418,76465,14927,52568,21663,10693,74328,45965,72774,11529,81116,21325,82637,59124,74077,70055,57830,47201,21463,99326,96275,64354,52161,52664,38612,99753,14294,69880,70931,63639,99758,94119,59863,36570,41043,44056,75186,46307,64102,60605,61127,87596,11265,67335,91764,61026,97627,76313,16136,45677,52986,57664,31763,83694,61902,85604,44229,28454,57522,98228,47926,65359,35023,44981,14671,15884,10331,60712,49676,96402,63679,46865,74356,70129,33238,79884,46146,17803,16216,41942,43357,41568,63388,28955,63778,74597,42235,93296,18827,97061,49054,34069,38692,64950,86419,36443,52154,76663,78982,10726,21573,66885,19426,94633,14995,33589,83984,28224,80472,38558,78361,88672,52635,33949,29610,18837,15018,35393,86958,61788,99201,68776,86208,81637,78232,21802,58134,46693,13152,58338,72746,12867,83063,27283,27341,50623,68080,98754,73262,39743,95386,54804,32451,86018,68158,55497,12485,93559,67088,12626,26135,31150,86366,19007,98421,52225,68541,31668,47171,81189,91553,52396,28340,53567,79929,22902,21038,43111,58161,31825,93944,55055,16735,50821,37322,40628,53180,74546,20653,52078,38263,68497,25464,95866,97939,51378,52367,26451,58129,68250,53249,92885,15662,50925,94595,16106,47070,56561,93780,58439,85806,90620,68987,60283,98985,83593,85329,39111,44916,24095,58064,40797,33270,17604,25604,42665,90787,16388,74371,72858,33449,43517,92112,31584,34141,31041,28677,27142,85293,46641,36652,56201,58140,57992,15084,21936,15270,85011,26627,64704,98797,86799,27471,52634,92821,64739,69886,94104,18299,48378,49216,32565,39901,96869,85400,34088,46024,76531,41329,12663,86179,78453,65251,84141,45266,79693,63506,92704,65597,87193,11183,18669,22971,18623,58775,98945,68777,82571,80218,60069,45144,94690,33305,91380,38067,41244,90435,60970,53056,94265,38431,34289,71250,75659,31805,72415,22024,71520,41650,81601,61600,89241,99408,64770,33401,38557,61622,44256,14615,46679,90290,50144,82800,49741,76183,88156,69788,34644,70892,98966,96698,96411,65626,75165,91982,33891,35657,76271,16762,47533,37457,45659,57521,51098,77809,15154,85225,56502,15423,87414,64300,37841,38210,39299,46412,85132,39580,12868,14304,30788,79614,33927,29286,69835,12137,64166,71361,12062,52991,39198,51073,40047,33020,13879,65758,96391,92274,13542,24986,16107,91868,95579,79902,99164,39588,52316,77616,62178,67090,77155,80184,70024,29276,65580,91068,27445,18535,52200,97042,46261,37929,38657,47896,42635,73682,23866,54250,91904,63328,27965,72495,61853,97685,80783,86756,89372,37244,94139,45634,64451,83480,15011,65045,87388,98418,21421,21396,45273,30223,10388,84321,82231,48714,86861,18847,87565,34855,84804,18828,99113,41293,72244,57100,96497,45221,43827,16979,40601,67431,42571,66418,94947,35025,94994,17176,66341,15088,46227,49383,74336,93278,87097,93099,77724,65718,34230,45727,69698,61936,88310,93176,86996,97250,93340,96377,12056,82248,42125,76957,47434,44019,92387,10955,60702,33272,71682,84540,44953,56707,42925,79919,38098,77607,79603,62634,70900,95468,23258,20046,64799,56688,50779,99400,81503,14789,81968,74337,14084,11068,49896,13049,24227,89888,66941,98000,93208,86852,25421,49994,83534,54438,81113,12026,49278,90111,69480,54860,45064,95954,32568,16539,36110,83571,61852,46827,21634,82837,34237,77975,77793,67517,48548,79270,74636,81060,94826,13987,75165,57266,64760,39721,70738,46783,36916,72940,34371,23157,36802,84056,73402,27137,94529,19022,45420,14855,45814,88486,97693,18351,77961,70037,27889,83900,97763,90612,67657,25242,63632,90937,93804,35697,64948,32746,18025,77754,34699,53980,26901,91729,46489,47556,40284,44924,63699,28332,87940,15666,13966,95186,14531,17297,45860,96290,91785,99668,32003,68856,42763,24970,45649,31880,29079,79377,52345,72447,55010,97493,55091,96658,14445,17063,61686,12025,17453,81267,31564,19743,54779,54499,93136,38707,60910,98047,97762,89446,80091,65307,25394,58999,45438,49299,11568,98358,70202,17143,13975,69691,18436,75729,28594,74221,93957,73605,27525,87751,60079,33784,57740,73840,62216,54366,29222,52364,22405,52422,57652,18046,77167,61938,41459,54625,38405,96114,95848,67935,72996,83478,15948,67136,63744,26763,25984,53826,81160,66246,48161,50450,29375,72745,16882,12536,89819,98385,65373,50202,97324,16392,12844,72042,89310,35165,21785,36049,31984,35864,92236,27831,41540,93180,59602,55515,57000,64086,30249,14815,33854,12430,85810,90264,28377,39492,30970,12757,73998,73835,45083,49219,23361,54183,29522,71634,63547,53062,62280,74999,49565,65230,40361,29730,37293,27016,75720,31411,78869,51281,59715,76607,35651,17380,14819,81144,76251,58381,93550,14871,89581,56305,56838,68403,32130,66247,75390,23437,70581,85883,94248,80428,98632,56810,46542,95129,79799,25197,34034,32934,17173,66688,37750,92056,45892,38510,18080,13618,16060,15413,20589,44133,68509,87554,83585,14807,10359,86204,48050,41069,89838,60935,99127,62230,31976,34689,43886,25919,41959,22681,77522,26382,29811,95627,10711,27155,58046,20607,95827,15940,24011,20477,32667,61978,45570,14323,33838,75488,59606,89825,83477,55933,45665,49471,71017,78841,95039,85250,25009,93939,71268,44020,28918,40020,28978,52829,91056,16578,65807,63724,64198,15923,80396,59214,84525,42007,88638,55292,99629,60296,42520,34238,66918,39113,96563,67176,97178,59866,72463,52762,97993,77401,21508,58461,82943,83439,22533,16588,55323,85139,57581,16010,17639,62569,73664,70542,90242,61755,73192,45774,82835,37882,51370,75207,76171,68298,60841,41883,25016,46932,72777,59596,71378,39808,94445,42285,99277,46206,60304,39228,95629,55696,56443,87523,40598,13654,74074,52778,37091,43046,39086,98630,65415,21999,96401,94945,20484,18610,14953,60624,90384,70015,48489,16746,86829,71341,21354,46803,34239,94159,68357,78877,50633,13046,17915,29864,67585,50258,56433,87609,81832,24166,73938,87846,43208,95386,13466,20248,28429,22859,97515,72560,89257,62924,47376,20888,49069,12489,88974,95481,43927,79793,54278,72152,86816,78644,77597,23049,19096,32135,63302,26427,58929,40631,47464,16923,42720,75413,95512,45676,26585,31639,26257,38677,79478,52153,56420,49339,49933,75456,39808,22294,98805,21726,29184,85944,10457,46449,70009,57550,74553,69191,99740,76867,83737,80928,91811,61712,48862,21501,89303,83839,46439,16184,38643,68480,82231,69839,45378,52179,11939,91709,95931,99270,16652,22104,59356,49825,77670,19692,83304,31838,87675,90780,68208,23517,35048,85052,35319,74591,45061,22838,71565,40261,10705,62852,16807,34883,32359,29203,68749,18008,96174,35924,66202,27464,51734,78165,75430,45344,95387,78730,22691,46596,64814,79699,23047,59497,67837,91581,81130,80092,57271,70763,36984,55993,81598,80996,46388,78175,24959,99522,51886,14189,34999,94576,63169,17543,49408,36872,35408,30138,35171,43085,22112,19924,32861,72022,78689,53143,28648,81059,94915,49959,48504,31653,28772,56477,42447,87070,32056,70845,54574,69495,85580,72076,62281,16965,52401,13788,32064,17107,57426,51062,79477,85738,74034,65925,34512,82626,31470,60998,14639,75449,78895,33827,69069,80414,85308,77293,97450,84610,57726,11004,58305,76546,89262,44517,58598,73858,91377,74694,15466,75762,94155,51550,54835,51087,70468,68201,21415,68784,39528,12749,91168,61113,53073,53748,39745,12512,31926,89245,51652,39227,39797,19309,11736,95360,20525,89240,95485,30920,48924,12777,49339,24990,17699,32354,29536,14841,90392,75863,16763,86562,55677,78433,36194,79938,38883,89000,93002,93670,90940,35338,85400,46081,94508,54374,98277,40330,38267,95475,72572,51891,56609,63114,97817,41537,54605,16796,48624,28688,63311,89582,35299,30022,38587,82666,46568,49239,90922,52608,65877,18519,67446,33102,90427,96332,99156,98279,54532,97593,69635,61193,69140,89185,86714,19537,32194,10100,70028,81952,67522,31021,19535,22753,86443,35076,33582,35392,43921,38138,44095,12489,90163,50938,79439,27992,43103,24213,10624,89128,70876,36165,26294,72902,49515,11828,60705,65577,70912,84169,97955,47632,87071,38454,52147,23026,26587,69297,83056,75984,78239,69877,65111,56992,68157,35101,88830,80774,99564,84174,90366,88217,95687,72072,29707,37775,50691,24951,96371,74358,35775,38318,26616,80760,51499,55397,49839,29222,94005,35058,99274,30935,65167,68854,91012,38794,30541,23097,37239,86326,47614,10711,56839,11746,48296,51967,30904,71242,35963,49386,15309,10708,95574,71835,74615,10268,76428,15176,33454,28949,62018,68386,85509,35848,10123,20179,23932,75743,25815,99475,78809,89885,86144,25735,48374,92126,76275,91145,71361,91085,67120,49872,30339,73258,13130,54338,79807,67710,17182,73476,75705,94466,61631,92919,29210,77602,30858,32970,63988,56733,50799,73229,86256,35450,75142,24905,70764,41556,12115,89543,45963,84436,77244,72254,86499,64397,75755,51222,87943,88840,13844,31577,97056,16786,36419,33637,67055,11723,22444,67184,52810,59631,18024,73668,94099,97579,88233,53307,52488,73517,43512,12500,34586,78390,66695,62288,29038,21413,41301,83366,95842,28481,23014,53092,23151,87538,48753,83007,40833,42506,52384,36965,58133,22351,42210,53288,45374,57483,95744,94421,13971,80606,49711,66697,39241,62106,67285,98994,72392,88868,48647,72682,33157,52567,51097,24780,52388,88737,16179,33235,69557,72780,18600,33386,65789,92581,22587,18019,75743,11552,46846,10987,22219,29786,43998,12708,72018,27240,40626,22518,23130,59214,39993,38800,44787,78043,38076,95061,84789,43051,71882,76807,88600,53057,58874,59020,79751,89278,19109,44362,24837,24695,22147,92814,40502,67240,43904,41890,11260,67430,95557,79564,27408,56038,29353,54309,14382,31208,97428,23921,23830,30137,60143,28681,21963,40023,45930,89440,30828,71193,65377,69763,94271,47158,69624,86490,19598,62363,73390,43367,16972,31410,25625,37783,53811,13509,73498,56207,91598,94211,35829,38322,66318,55996,11759,11323,85865,72113,65427,91546,50564,72026,84140,20114,10098,15572,82486,12312,49100,53065,71738,83946,45808,18255,85084,70271,35481,23620,38294,41732,36595,68950,46711,45069,84494,49642,61402,93551,92285,96716,88666,78259,66976,38285,81828,98557,57972,19524,15895,67983,60841,64913,76914,14975,90036,89287,71971,41222,49673,17087,50185,64624,37110,87426,62657,86707,93150,23557,21358,43779,87216,65651,47560,63483,14548,83757,59195,48416,10453,78103,64110,89377,97080,69862,91136,57583,48864,93916,90713,33836,87830,78901,41726,70826,20781,87316,18379,94966,21733,24074,84088,25868,14132,28171,69058,13436,54572,71284,42030,42908,70118,27347,60279,10096,15716,86842,88801,30816,87154,57653,25925,66066,57499,24416,34925,18806,63384,39204,95621,68414,49828,88531,26740,86393,44637,34783,56240,66714,54827,47411,66647,53985,80341,72533,48566,36660,60940,34817,57400,33608,45164,92198,31540,65465,14458,90375,75026,36574,60448,95809,32997,31880,63454,35664,41268,97636,86487,35111,53654,33853,73473,68843,13236,39065,47323,26230,69737,49492,43634,29610,56257,88399,87099,11528,14266,28045,24346,77648,81466,60384,91869,37250,52864,25374,58057,17536,55672,85859,40721,38337,61796,31095,89612,76892,35186,73668,49992,74753,65036,64855,97451,65502,60974,47408,71746,98885,39036,45301,69918,85235,95891,59394,89038,37455,24182,78248,89143,73519,78002,51610,42064,73014,65118,66636,91768,77441,83126,72011,69681,63705,80847,83772,30698,28929,64029,71887,44465,86638,39747,42710,80093,98723,70031,91783,55421,52767,13809,18270,85873,34964,52428,37057,13964,10109,61599,52079,47476,76180,83751,61426,43007,31232,63656,23893,96171,84838,17676,85567,76091,70605,29216,90144,88904,84619,14546,60820,69659,47768,97833,29466,56357,88910,34325,14418,88364,59052,24441,65551,60413,22732,70826,34923,32546,29481,36668,75300,68329,30759,78613,73838,56523,90408,52507,56419,91440,27937,16052,88413,35146,29092,62751,49295,26875,49909,17483,21254,58952,55356,61262,63659,26705,48216,89133,57515,70034,30159,30605,61110,89869,89852,79562,62262,64115,34312,85670,99059,12472,76391,46051,85338,74358,97936,91147,46220,87970,52628,28540,61482,37865,86906,77225,67417,91143,77088,45094,86400,31665,66166,79716,11740,22786,88232,88113,52718,71983,19507,46337,32025,87733,53326,72891,45100,64434,51966,45745,26465,32255,83327,79730,85299,66399,44026,57841,17490,46851,39802,58069,20376,79756,61131,74423,41212,77482,45539,91092,20462,52969,26714,80316,40689,47745,70191,47352,77978,62581,62990,28538,49028,17872,39544,70880,48987,29783,36735,35459,23079,12078,68132,61643,82380,48449,44894,87249,53605,35159,32240,29251,88301,31189,62742,34815,87654,58639,81358,95289,55502,84287,56981,29530,55760,91737,84060,97553,68546,77634,15600,96021,92729,63335,16953,95033,37418,31859,42255,20564,34406,41132,21996,95330,20707,54430,38230,77385,29745,49328,61090,40806,35946,73663,29953,97868,61392,34757,73032,37717,14809,19357,43683,89948,26972,23441,12552,29966,58529,32933,29624,77432,67365,49345,72301,46536,76464,11330,51588,86073,21561,81626,84417,95389,55583,11942,93222,52849,87167,58165,77456,65935,66224,33851,33515,30675,18356,43696,56698,48750,82875,92702,65848,82919,52410,79843,18003,46491,53918,47037,61030,50108,59439,95087,59868,45784,31725,23009,70109,66458,34411,68037,35678,41201,63669,44311,47199,96425,73487,89416,91323,15361,19929,97228,36816,46881,12619,75723,99930,92593,90603,78099,56565,95270,30572,18452,97674,82171,85232,92719,85267,55745,66818,82933,34919,60169,21468,81836,38175,28347,15079,89616,51477,10414,69499,21326,71460,98785,50404,22984,54890,49102,20447,60875,23616,21252,78758,21622,31054,22712,41748,46467,11977,19204,35952,19586,43489,92609,96991,38175,23996,59168,73530,25192,98336,89290,18842,77971,18012,73743,57965,95103,35730,75973,58584,12127,29219,75952,55908,51177,46064,15890,25449,15566,51276,66133,39005,47157,91953,46017,56139,86233,44227,29977,72000,52756,13227,49086,86418,88649,40533,16378,73209,28279,52217,35443,66097,84137,76398,11370,35476,90155,48061,54512,91529,65484,81203,69251,47833,56639,14056,74937,47398,34551,90698,79086,30057,28527,79517,74296,97183,73988,29170,34170,50567,89873,46602,31668,98735,13664,45693,36834,27382,17569,67083,64271,13764,78754,93385,54058,40683,44950,54442,73125,92574,36950,32525,94813,59785,54607,17167,27744,69739,20889,21135,20326,72054,73554,55434,25601,96291,55539,66334,90229,64155,29692,78050,49151,26623,32741,32278,30298,75853,61252,31171,59615,82876,60884,17943,67990,86864,39262,26049,39288,19472,40804,32386,33695,93031,25941,62219,38606,34112,66298,51579,78180,50162,85953,36389,68027,80241,80679,48941,55828,64789,95228,72047,55746,40461,65057,98264,51521,59853,83597,34012,34648,26119,61562,38996,52283,89819,57815,40535,10636,67352,39689,51092,77404,80790,92347,29167,67170,13642,92644,21011,98629,97240,61817,93024,99530,50885,89503,54112,64663,38683,19179,64895,10406,58716,55329,45103,50030,52407,32008,38595,43309,17207,44072,72896,66172,86550,41492,64302,27096,56268,74611,35647,59151,42735,54449,95677,85309,30864,15941,34128,69849,52854,57434,90842,92498,88270,23832,85998,75535,45963,59983,31157,32957,96858,41032,29784,20730,19759,53201,69437,47924,34768,79283,43086,47471,67907,47015,80845,71659,18217,53680,64457,44758,72935,33823,33583,63140,37714,47688,99387,86844,38394,87921,29968,49786,66815,99290,68149,84999,10691,59631,20311,95482,46216,11019,68028,32024,90453,45724,98024,76661,58004,62749,67775,55328,53747,82721,74904,85567,48434,41975,10253,52615,50966,29361,34055,26242,25750,47790,64270,29023,98863,62242,70348,86559,55544,72861,30825,52121,89774,69302,61559,24915,64487,28508,30192,20908,96586,37050,97238,78870,42829,45398,24154,10399,34250,76483,23279,48718,66247,56217,71986,53217,54708,83495,21346,99342,63309,42909,61003,59048,86899,80632,73990,35150,24176,33512,70168,26936,23172,82230,66306,94455,98456,19572,85056,17538,36387,10356,83473,18721,35107,36314,18017,19125,21037,23953,16262,67635,96360,32083,64166,93742,82584,74669,47802,55776,10867,87886,44116,69107,18273,22348,81837,28334,15024,19185,79357,54441,15332,98306,61459,96761,63406,87858,66884,29650,92124,28783,85498,82237,40020,14387,21483,60134,31985,53908,14527,26500,68908,57982,74236,74424,83867,89665,64848,22153,62745,72172,39475,85083,10822,30192,24130,25320,20598,64461,39369,34458,94725,92282,96242,24832,78060,51603,14565,81699,43795,32282,72184,32684,55270,93232,73612,33172,10803,70326,61135,53606,52578,80929,14594,74579,75380,25707,14689,25073,46423,57989,97996,55710,25270,51345,48169,68205,91519,49741,11851,94501,24460,99135,92144,83601,85961,66509,33953,21915,27133,37876,52325,26894,34205,93273,77237,23547,69451,21474,24443,34843,57094,88268,52634,35661,96947,60255,33696,60648,75088,84651,19557,60371,38043,25515,79926,67925,98473,44377,75632,33207,24715,80072,43537,20709,18056,78620,33925,78208,59785,54157,89465,81357,65700,40414,37343,25342,65229,23014,16069,12913,66872,51827,30050,66216,42805,75959,60007,97035,68843,90171,12657,82982,50499,84088,34220,53911,32467,42120,51419,65327,56849,49576,27063,24198,64596,10426,42673,54403,82324,21438,28804,76811,80301,41545,49147,77088,79819,24237,58379,28581,61798,66798,59235,86206,96491,71778,11897,11616,66374,51882,22738,13358,36003,72215,89006,41983,55933,15468,51089,85816,62846,90318,84886,96048,91633,82927,69031,74240,14631,33456,76852,88613,85836,84761,97432,60061,59040,14802,77778,95165,93707,38213,13908,69593,93937,73868,26202,67587,57145,82149,77823,76230,31594,44391,61575,31664,61023,65613,57803,28558,67868,49955,97190,79940,91206,81315,18564,98291,63487,38796,20018,63471,99301,20218,19157,25274,93359,96666,71341,93328,67513,21725,90285,46005,57734,19177,61415,38487,29687,39159,85864,55410,97830,66324,86928,32054,50416,59706,53148,72446,36716,30468,41651,82121,19618,67215,78433,69726,98331,93745,70370,19853,44713,25693,16588,30588,90912,31754,81470,53265,91487,58436,82817,53816,21894,84829,17922,54465,47410,94692,32249,90239,19757,48780,68991,11475,61718,35745,86178,61965,75000,74048,56223,22601,94646,24792,51345,79417,34146,16397,99913,49789,21797,32909,63921,41765,98404,16055,10276,93046,15200,85627,49681,96557,17382,88606,79503,89010,66046,41814,54870,30092,10613,41652,81177,99588,93123,25228,38336,53701,71152,38346,85259,83785,67325,31418,71438,69252,18870,62932,25396,53001,25299,93550,67240,34201,15347,57744,90240,62185,58618,63216,15098,81775,57871,27848,95494,35572,77018,48629,52272,56403,98066,40076,77524,98024,75424,40656,54728,24454,81014,85422,20849,91692,48258,18248,87904,30233,41793,79403,11599,21745,29459,32409,71245,15606,66393,87320,58280,70871,24223,38671,44950,84048,13658,21964,26932,92152,46061,46670,23352,85699,62068,34478,23963,17901,23054,18195,38068,94661,17693,43939,15684,42418,91359,53751,90304,59030,81550,42980,67783,44059,22324,90518,65688,34670,25633,73355,93523,12264,34893,36034,45287,62581,82063,28028,11282,48216,48744,98194,44394,14495,23967,98206,56023,67115,72317,73681,11449,36139,51558,78377,31330,98548,86702,30766,31265,82236,89738,92528,68495,24268,87574,43872,21190,14967,17278,52513,27306,30929,72276,11003,12551,18718,82307,83791,24381,23126,46637,73283,35020,43679,31476,31287,23494,68652,32366,42258,30303,70499,49244,57651,49063,38728,96349,78985,36063,30045,65274,23701,10005,28640,72187,47205,99781,28344,69611,51986,73309,21860,63635,28537,66822,72904,35928,42798,52956,32243,67774,24928,28393,43222,23494,39667,67031,19660,77998,88249,96152,89286,83718,85730,97772,47037,84994,33889,34782,12777,13133,71968,79530,94302,72713,40988,42136,85174,11196,64400,17715,34800,72353,63763,55596,58436,17563,29566,73550,53249,63516,93072,21692,69190,24686,42759,68477,27015,33246,98381,57214,60798,25143,46158,14430,21716,48737,94125,92068,38770,98011,10368,10418,48648,28430,15644,31373,44432,48699,12727,40810,96775,66156,72695,53934,16213,71766,60608,55210,87510,81748,59895,11051,32799,15035,89497,27085,89483,20546,44434,80875,35428,11750,22228,52010,47764,78250,33766,63091,51271,59975,86798,66589,43959,69202,28944,99796,13402,95185,73368,53879,43635,56334,38511,24330,53509,92763,48152,94779,79540,81631,69232,35733,59351,74926,14438,10943,62952,42428,62077,12170,55281,38298,27444,60823,83238,66555,87604,43307,94839,35659,71183,53923,99361,24720,17728,85293,98435,90056,26880,74356,25331,87190,23495,75809,55346,48590,66831,48577,93855,79834,81552,53165,60221,22053,75263,80596,78551,35021,78138,74499,51458,44338,67020,56432,85128,29874,63769,82477,96866,25697,87736,59449,39638,13758,42568,99914,38447,56434,92469,68286,38371,34347,17594,14716,46961,30400,36377,33615,29108,52257,99459,32252,74287,31306,47517,68959,68640,46739,10574,64898,23668,57712,10347,52271,62021,18667,54774,39869,61476,22576,81700,14230,63359,80095,80732,12910,66829,93257,89044,88521,86119,25976,86148,96844,16949,98257,53076,44222,57709,46475,30102,23004,33279,81309,65097,17115,69079,48442,72137,48877,37987,52011,70563,20715,52272,46568,67033,15678,15356,91722,88271,93951,11398,53776,18879,55997,60224,58686,48243,37813,47418,88321,85642,25183,54404,36663,44371,60671,86741,76372,96642,34799,41959,12056,61541,20696,14169,86091,60346,39831,33877,89238,89758,29817,31720,38712,32954,14727,55829,73917,49165,74740,17971,81614,74243,92933,81987,80876,28850,41094,71065,19616,92267,40812,82432,96327,50585,85811,35426,68466,58164,91443,94095,11078,60386,92967,67149,65271,11267,63143,14957,87845,26826,84366,63163,22873,14887,65041,60354,72868,20114,45928,91526,83041,95840,43856,97271,52851,81628,75783,28904,81999,42184,58548,66830,57490,28033,50781,11786,97384,84339,46636,35521,16054,96876,70834,13617,69091,84976,15164,44308,81849,29480,91177,96099,51363,77178,39821,11833,36093,86795,97210,11760,45849,83767,94821,74575,99115,97256,83408,14378,99347,32026,62553,92847,58499,65436,31949,86552,55923,80605,81370,44576,63898,77776,11197,42111,64532,88909,17446,14408,24238,83245,67346,91705,33837,30666,41795,20625,86207,24547,20182,69738,16238,78324,23907,97754,30653,91618,53500,42404,92061,89432,68354,47164,62442,45721,66530,79968,94268,79608,49098,17994,94525,36572,70440,15537,50636,13235,26240,23462,92291,17884,78161,67447,33800,90686,84651,12162,67038,10947,95215,33472,25145,45968,93890,98067,69339,66862,94566,21535,89234,65672,62873,42415,46472,75683,15453,74236,74672,59564,48634,94218,60329,71126,74415,18296,37005,48564,33764,37672,91289,53989,80131,30039,34777,99053,56405,64273,31112,24113,98277,93162,34818,16579,89828,25439,84831,67462,98561,25379,86875,13959,76275,98855,93198,12750,65889,10822,28555,65385,37741,78251,36890,46554,17748,11222,34752,45487,59945,25127,89457,10896,91240,97649,42576,40084,32306,61203,57897,75896,80776,13697,23986,58571,84373,51250,52229,62750,34589,80354,10201,19049,48842,18544,77712,94709,85005,61092,54259,42613,32757,80180,86053,15421,58786,25651,63785,62677,11025,37784,77107,33546,10696,53979,33998,26114,30677,86740,18977,39741,68394,22397,86510,18867,59493,96390,71811,93234,80290,69487,37519,31481,26082,92574,18269,75623,36548,37970,92157,65583,36606,61297,67607,84476,57334,81686,50248,26413,91365,64434,46855,38431,29746,88038,59146,41651,91383,85303,88058,56202,72109,37081,68334,56110,52909,80548,36583,99820,19633,91094,19171,12233,22521,25907,65338,93585,80069,30093,59219,59895,93734,51584,29730,67014,48820,50964,35589,10633,36343,92458,26051,25115,19711,15656,24828,38257,48855,10745,76741,52653,33418,75379,16830,56487,68313,90722,74422,16402,24752,81091,56126,99263,24562,27678,17546,51676,97543,77213,75971,46159,92878,48616,33874,16053,72353,76997,27037,18714,52202,85749,30511,45799,19514,90665,32736,37437,17108,12004,99247,87031,63274,93811,38619,15070,38332,39204,87493,97837,25020,36193,26451,80538,61228,51803,30709,62428,68911,20864,12176,25295,48050,54298,70006,14950,45258,61216,10935,22287,82477,62884,48712,54321,50200,11168,39128,88795,24385,31265,39143,74570,18732,18626,47996,19697,45927,75794,41610,95288,61037,78255,29782,76483,16679,43173,87503,58943,49528,17978,44281,78016,68078,70833,23903,67995,71304,97383,40110,83275,87818,14398,93802,74498,51177,84138,66890,17258,82592,53486,29187,34237,62645,65077,64948,99282,25740,87736,65972,30790,89633,27026,79280,29559,99419,67110,48134,71165,58139,32272,90018,76009,58263,28184,31075,94096,90238,63438,36339,17492,20747,10248,17150,93755,99141,22358,97600,55475,22557,15184,73696,59303,42673,44804,54765,89773,91717,29827,17247,33558,88964,59389,20304,85060,59995,60327,53614,33923,85327,82625,20807,87840,40197,75605,26318,74114,50857,15106,58890,51665,19036,78624,93940,50381,44611,92329,76268,83308,90903,71172,97113,53675,89455,57433,53571,23212,96463,85579,34287,24647,89403,83057,16323,14025,87199,58855,52821,53699,51054,38257,16449,20571,79201,46628,32137,66440,40942,64053,56293,45003,29123,59768,19251,78464,82365,78358,78848,26280,39874,14176,53928,81150,60208,93968,72028,51334,91625,76639,85625,30815,31045,56544,71097,62809,66381,55369,13326,78873,15722,88206,12457,43559,52366,98989,27327,38068,74225,32452,93802,37248,22687,97624,24748,14746,73684,13217,88497,71427,45680,22658,19603,46064,74350,97925,65269,23363,76437,69201,51347,83630,53268,90011,20135,27070,50088,17571,41796,77789,87161,24239,99330,74971,55737,60302,25716,28246,31376,11593,36944,60418,39842,33576,33337,97487,49190,69064,45808,24627,79987,19718,42169,34186,56193,52005,15866,77856,60913,78564,66345,38540,93099,11651,57790,94110,90465,32391,23224,71308,21873,38335,47906,18857,11551,13529,76304,15590,39810,25986,38733,99083,19660,72151,31114,73133,20888,54429,68366,54146,94116,86086,26973,62897,52679,43769,23774,85359,60470,59792,95501,35971,83643,47733,64204,82776,16881,21097,31130,73963,11905,34992,23400,49932,35391,62193,13941,68349,65504,81757,29047,22026,85505,30140,18170,59225,85563,21230,82397,96274,30014,78850,19984,16187,30753,29171,83575,61629,11549,69600,72081,82039,84500,71769,53472,26214,19042,50810,59507,79214,36798,45004,63411,78402,86170,41072,86848,54127,32523,65038,94344,60584,40094,71755,50739,92641,32320,11853,30137,49632,26279,67669,16221,69976,28881,94563,26793,64240,19280,77210,84822,89691,61955,30345,90065,32427,78675,35252,18728,56953,42276,21929,23996,19794,40272,56908,61109,52473,68584,84712,47140,56656,63803,26360,38357,42692,33131,29290,64347,43625,70572,15036,88487,52304,12122,69253,55104,97357,58801,52736,31415,23880,25922,64958,70834,27384,25918,38477,66643,82407,47752,64733,59579,66164,66279,81895,65513,92369,88299,51921,77709,20176,43590,56095,65531,96007,58665,31234,51910,64932,97721,71427,43950,29621,82375,12866,93323,96148,50418,38276,15072,97547,63419,63306,26458,75709,99763,11379,27515,95489,70364,14115,31316,52637,15326,74149,20225,53280,11362,46787,44692,18953,28107,36201,76375,71236,29317,42775,86163,88847,83189,16095,84892,43843,19171,22792,54928,69845,89213,47141,16152,32862,36459,89789,84975,93636,68595,30108,96438,91962,58415,78532,65864,69515,87257,77439,32279,22619,46841,18074,30937,62298,29524,14828,30339,86733,47955,48677,27826,21567,40986,61315,50610,21551,23965,99163,70824,86170,58193,47338,14289,28623,29802,71067,87126,11702,73966,20948,73741,43648,78672,51981,92856,76267,65229,59415,69821,87971,17179,27785,78815,75899,57790,70383,94334,92544,98291,76982,49606,67083,80488,82469,34960,13086,86888,65294,57803,11655,28516,26237,18383,52305,39544,53769,74376,86815,42836,17032,57297,63534,97782,32686,79259,32140,19177,14081,48906,37699,29404,70306,19966,88058,52957,70311,41019,47733,37511,66619,86804,23849,44959,58243,50691,27775,72705,84100,24913,89282,61235,79945,39025,75256,79707,18857,22242,55855,96763,87994,38398,81257,48242,37064,88189,81867,24269,77559,55225,82643,68362,90834,11285,16223,65809,12261,89088,46495,83868,54291,54996,57793,20796,87607,65942,67483,46399,38933,96233,40736,85874,20000,40510,75900,56075,43274,14483,68728,70864,42736,36336,21383,41217,95111,99160,13535,33956,61727,27030,52676,69134,77114,45091,45153,98435,71957,47927,27547,67292,76761,19797,44805,59148,10735,15861,75020,30359,72974,37866,30562,64804,93574,48536,53229,73007,42380,38564,73021,79826,11987,55819,51779,60847,61998,93277,30566,35438,76209,14990,13321,37143,16222,62937,78552,73101,21761,10807,97438,68251,42499,83787,35675,17275,84602,57323,25494,47684,27001,52671,17312,51410,34756,25807,68462,74038,17875,16796,23659,33058,91862,96903,38093,59624,10213,53302,47892,75368,53485,74280,13320,35368,74968,22089,39368,49744,25007,70247,25824,51091,80227,88402,36570,68634,67407,39974,59905,40142,92042,68451,37922,43821,95430,21415,24717,86271,18586,39063,31899,36687,20293,44853,70297,75453,97088,45516,25618,76674,31981,44168,41653,36190,93053,89639,18790,82054,11970,43937,44438,40865,76257,13189,90758,44221,73626,77737,93455,68538,27547,67073,32760,77195,89035,98264,26539,23836,82201,83815,73458,30896,38764,39439,18302,67696,19603,17689,21830,68786,60900,72513,61692,39087,14192,10246,52966,23093,93038,94321,57164,82455,88483,78848,43054,74031,80709,10717,16819,86429,51034,86703,83775,98981,85966,62042,70300,30684,87812,54045,87986,71337,14957,91255,39304,12270,80824,76153,70784,65142,80876,67341,80095,30415,32460,72545,27409,81845,20260,27405,89329,67133,44721,31245,62368,59769,85292,52276,75515,67000,78469,54076,87171,12318,23029,48326,10317,49856,81596,91221,31882,87333,86504,23981,52247,12209,17956,48427,96531,48428,47503,71123,38876,84375,58667,68456,23513,68774,93404,13158,85128,18884,29644,33515,90494,92729,29590,50341,45457,81396,97613,43342,40501,13450,49769,29627,64303,62919,33106,79824,73413,26639,37167,63117,22775,57591,28019,88919,49964,38613,15909,79681,72411,23716,55431,54012,29265,86499,81345,27719,61292,34675,53428,58396,79976,28570,40433,52936,59572,67556,83637,82044,93541,31533,81605,16600,49784,60393,52069,60437,38461,74617,20780,39308,34199,85445,58083,68336,14489,18675,84737,21131,58825,75441,20125,76910,44623,34201,21912,51547,99077,80494,45258,83769,74894,49531,73293,63715,26100,63693,48760,41606,38906,67257,16333,16636,22930,51603,61768,29822,71207,53254,45570,44838,59946,95748,34888,22986,76978,52313,47606,11275,34815,87643,73430,66028,71962,43370,11427,41931,85965,28708,96286,76247,40431,24883,57729,41327,80320,46925,16921,69859,68289,13991,13256,56526,25615,75052,50418,27801,21645,91664,82917,70602,32124,37556,48115,64443,83543,62897,90818,19008,53988,35044,88548,75888,35398,58743,63329,47384,80612,14380,73102,89509,45806,34755,22404,38286,87444,77226,72178,11320,91191,16051,54395,96098,29893,20124,92946,10412,74687,43922,53506,53907,89269,94793,58677,24864,38666,28592,69810,63052,12726,32413,30686,79991,98332,37162,64133,46500,89183,76335,90412,41026,67838,67572,62865,10470,48654,91036,10460,24846,13421,64115,78775,74916,59744,42056,77456,79175,44756,21336,84731,80767,12196,68836,40952,23054,36684,91400,54183,90436,95426,83172,56503,30051,10747,38379,39150,11484,51569,43468,47236,67310,79679,79501,48534,40474,97526,14394,84284,53811,90410,75239,85164,53978,91627,95370,16536,61712,67618,49428,10522,32541,83195,53832,39087,14180,59624,40950,37216,27194,98118,22519,72092,46825,62799,12562,25336,49178,61453,17660,30874,36444,54022,93932,82182,29111,54433,65415,10434,65175,92453,66900,67562,17327,78778,70064,96911,69684,79392,60487,62225,48211,99789,91103,68974,82946,38836,44514,61164,82307,24495,38581,19751,22629,48878,45855,85609,29711,75961,70141,64184,80958,58069,58639,76233,25509,53753,38585,69994,89544,54619,39487,20567,87664,60738,20168,80866,97768,49737,15645,61573,99085,48689,97050,24992,57033,82908,11520,41669,16764,22195,65700,83154,16846,76590,64631,78060,28530,95480,69258,23873,33818,91088,58698,56723,74757,75799,71469,97919,68692,68966,69685,55640,39722,71826,60330,29111,87389,31741,88219,13196,39072,71156,51843,75783,72248,99458,48032,60907,73561,96596,62673,28939,81042,17096,36045,63079,43428,43514,36647,82536,48688,72210,40649,16153,28648,39693,41167,78557,39107,52717,60928,75581,63174,90078,25253,59520,75060,94238,64497,29017,54645,20457,74488,47358,19627,13159,10959,88111,73977,87826,60809,10048,66886,12828,97437,47930,43994,13379,73949,78374,17601,61134,71860,64643,85915,28802,55347,32690,91358,57285,45244,75790,27783,10095,13142,45441,50076,40927,89488,66394,82249,59651,71649,96871,19553,98293,20703,43254,27615,16102,89533,91615,65967,99579,73717,11923,36273,57469,93666,50442,94346,37565,47977,15774,97284,25085,26723,21865,63945,96410,92076,67893,58604,42528,74125,84346,68472,98337,73176,83707,74999,74349,68904,16129,12035,30408,80599,48126,49264,39912,56831,92507,56840,56897,12424,18584,43257,21478,60275,62147,27294,94404,73881,66453,91491,13667,74653,13544,76203,37677,32811,63167,60579,93932,53541,82999,20248,12397,38819,29315,46167,32197,42100,16081,25572,98346,23136,67185,23583,91439,65966,48349,40596,26435,90939,54728,68421,40313,67332,39761,94533,45435,27625,80556,87381,47657,31285,89189,58499,71630,74796,42613,86079,21518,48288,66602,58240,32808,55420,84590,44365,69260,47132,19868,80922,43718,49924,39749,45047,76440,56498,22330,23446,60946,65126,52060,77466,95661,78989,81247,22382,34245,32718,97579,68302,30337,79846,94913,31145,46338,29096,11238,12380,63153,22045,80327,21246,88749,69918,70626,98266,45913,69449,47042,32077,94383,17199,59065,70950,67016,45150,66268,17581,76202,72123,31721,33324,32243,98876,53722,58751,20797,86846,99372,79810,88923,18016,75482,69608,49828,35496,94633,18429,37016,89617,52019,86017,27857,45045,30923,12450,89033,97354,80266,29248,10781,66223,62571,27919,11524,99756,69430,85775,80950,75732,37846,93151,12736,59253,83720,76352,44135,27255,33095,69252,22165,60679,58584,60724,56594,41425,93326,14890,61181,32225,81440,68547,32792,32904,57547,63516,73628,50078,12969,71085,31226,96823,16234,57076,75753,82836,59309,30231,41310,69896,37588,51921,20331,45221,97915,32651,10203,47024,35598,16055,88653,84288,68204,95073,53420,74158,51053,44093,28909,17366,60336,81655,96789,52270,10116,44894,85743,29659,41527,29221,86186,49416,72305,99701,97622,11795,49548,13330,27012,18087,16519,78935,45053,51938,73838,27776,51774,82298,73808,73955,52364,27503,51359,38343,27218,54136,43460,31822,61233,28940,27970,93491,82575,77915,54520,46064,17097,51613,43662,75816,57747,80901,13210,11687,81384,55350,47519,77200,16716,28365,30655,38405,19052,31694,17674,54397,60046,99927,39861,61923,74897,60128,89095,85855,82731,36860,59164,31187,24178,97011,87044,34124,42246,89270,87912,35490,73521,57444,80325,62804,66308,27430,29630,62751,33347,33789,19780,58414,66967,44674,43245,28351,51163,65421,64866,20499,83636,47708,90070,58722,44363,71601,69283,36228,65424,53168,56544,46887,92188,49421,72576,71292,13613,43738,71534,73430,69957,81346,46859,90270,11833,92228,47403,57148,51900,18305,91955,82061,73049,82115,18683,68648,38436,22911,92196,55386,76925,41849,42894,54549,63624,21074,82036,76434,79172,37441,91120,46262,98148,12367,70674,39689,67816,59697,46564,38065,90520,98255,67478,60458,41824,17891,51961,87020,74880,79984,85481,53766,44227,54522,35655,15471,48977,50406,79653,63896,30424,71503,78973,91403,54171,23992,21265,41862,76508,83360,57578,97100,85886,74821,60334,38434,79314,38914,13685,90834,34634,73908,15542,39132,93738,99478,14759,30422,99288,16756,17620,58051,83214,25059,26454,16009,78056,41719,38363,47323,98203,57624,91516,13588,65028,50791,59565,40476,71924,14178,81346,86660,68224,52894,86778,19818,46236,34696,10524,71088,88407,71136,21417,40294,17614,42800,57888,83256,79622,60191,18241,54503,77717,92162,50062,41109,79506,32009,22887,83670,61872,58738,95956,12312,20332,39883,45780,90947,43388,70565,69427,65889,56576,41985,12422,42091,26045,20060,42277,35637,22433,50894,37166,78179,84978,29026,18232,81883,67681,70604,57944,50071,95648,92431,18605,82156,80155,61330,98097,54345,48083,24325,91127,51618,32218,80296,23513,67618,32037,15286,74885,28284,95320,20156,22818,30299,74063,83937,39817,19959,71713,32137,61839,45546,51528,85295,91593,29168,64360,75988,56844,58576,63304,22711,18661,94485,80839,28935,17661,79338,52201,46906,73903,53604,66002,65589,96573,87072,32410,87286,87762,22037,86769,61041,22860,85709,28350,50567,95845,73567,84490,99436,91225,37839,53137,51860,56412,17756,91031,21949,24668,18181,77901,92603,44419,46987,63959,61325,44489,18431,53401,11417,17080,57164,24679,74920,27844,75612,72959,45472,99895,15966,95031,11501,83530,90143,58296,61760,74844,12942,26718,60800,64589,27161,24159,51642,88893,92125,72293,97716,74284,32619,80531,58155,22650,29523,65251,98158,51660,62070,20780,50222,72747,69950,86342,68059,12865,59199,81124,98274,66204,75183,78146,76164,83355,92720,65261,33597,64182,15567,69110,29594,48342,75868,31371,90069,86655,63503,63405,14549,43262,26925,19724,89281,98526,54574,60041,98826,71911,76815,96820,31100,66256,89561,19967,22346,56398,98647,12430,35253,46385,88192,42696,52937,62629,68767,53082,17183,67151,18914,34402,47986,24695,94673,39096,56531,31550,54786,73139,94494,19930,31823,65123,12333,90258,45728,60896,95502,62004,32306,65952,46566,30200,98010,51659,54110,61693,10444,89872,21862,63941,52415,42543,63333,84140,11159,14781,10539,80086,95814,27481,44431,61383,88810,45205,45406,57763,40102,38801,92224,93250,13138,59370,50302,10811,34165,37183,19059,23281,31031,23271,30518,93346,57883,49822,83244,88872,60830,23940,51774,77405,31174,70916,52715,37939,83202,66162,22742,96055,99834,46092,81203,66241,98935,81364,13988,17918,76660,25234,94645,22345,30566,93348,43492,46897,88352,92090,80441,39146,59901,93748,11300,28364,12938,81383,48963,26245,92020,17009,70196,14129,45151,34071,84139,89327,57500,53593,53755,54391,59867,81778,49120,83216,49135,95565,58430,27867,99020,55622,10910,34078,21839,85166,63301,60125,14738,99818,74381,88879,84903,89528,31267,96535,61000,58156,79838,56255,54429,54170,61241,82325,99071,17461,61880,14124,16377,38812,79939,42619,12712,91704,78219,37555,60483,32533,75095,51502,90914,76328,13815,36199,62839,54216,73972,21500,99878,87803,52548,34654,78638,24612,56752,48929,97481,87458,95359,97852,87311,24945,78117,93783,61446,72063,63462,11441,46046,18878,26409,20396,75832,55638,43680,67743,94787,12696,41289,40942,93829,25574,67211,28906,71329,96348,84309,75823,32121,63861,87494,38825,51473,47382,24994,47727,13984,21709,37953,25379,47103,51808,79760,57277,29082,69062,99493,18701,67805,16244,77851,53769,22569,43212,30019,58768,90907,18821,83158,75775,39842,55887,28718,48389,42666,31773,32902,67204,32813,68666,57285,66248,58290,57829,66857,83381,93461,89461,44292,39369,57617,12163,87172,87374,66041,33318,85281,71800,62141,77476,59098,15124,24818,13391,70120,27691,92836,18675,59743,58356,73381,19208,62127,14095,14917,75347,92085,33603,69956,55217,49167,64050,59372,84202,30101,34380,77651,73869,12989,99560,77442,98126,32376,22399,49213,78743,56055,13930,50379,45623,60449,87135,47023,64095,40675,35530,29849,73451,55001,13831,55130,58594,76997,78089,71819,14128,42325,51768,21343,92317,13100,89782,67651,44331,76000,69266,91518,79727,56522,90913,99902,23667,43813,62645,50025,91158,49714,27538,56501,40678,11411,71694,39991,75308,68292,48209,44312,63861,50393,49423,89844,99303,10753,64951,38649,51005,51555,28007,97704,38204,63607,36608,94878,63631,92948,15147,11436,16256,93664,95995,95641,80737,88545,39810,46336,77610,74173,34695,44041,63112,14039,62436,11844,57429,36226,25520,62059,64468,52425,37266,91810,69375,34512,45413,68542,41212,22934,14626,44613,35025,13677,99132,61143,27150,18922,19618,99863,40850,68153,62330,59396,54188,51179,51005,84880,74617,57048,99824,68766,70858,86052,88466,24649,72741,27833,29441,86201,90250,41313,81757,47091,59577,76356,60370,27656,52678,74864,89023,21733,49373,26109,45625,64829,85478,78229,89369,46671,50680,25928,64108,24201,83709,64408,65378,73160,81564,88084,47746,80563,26856,43478,95798,92154,57873,72005,51234,67154,91205,91627,58867,48682,50120,16024,53862,45925,86721,63772,47386,92948,79120,30093,47681,61725,57572,59077,32360,95515,97958,61103,28172,92596,65277,97898,96778,59649,68911,22131,47774,73516,99296,56812,18199,63843,70026,94756,66180,25853,76596,77631,27055,92170,50310,63552,36151,92709,60895,93522,31519,32645,61057,67576,78877,42018,47959,76347,40039,18142,48112,84377,91999,64468,69502,57628,28880,16381,47490,32141,24074,80390,24927,59410,85941,94139,36368,98424,21473,26149,37134,29161,27370,65541,26905,10968,55062,26947,65585,96588,86126,44016,57232,86034,94186,35304,98293,89277,61392,30965,66864,60329,31137,28559,83332,70482,12663,21431,44334,30945,20977,22028,62853,46996,76262,84198,15140,87103,27217,36534,85086,82087,27700,23338,25566,62278,44596,68360,40431,86802,88952,10667,64782,37287,26335,93964,69315,41843,89350,65030,96656,52942,42506,29260,36929,47747,80196,11153,86319,13473,65428,57862,22507,65708,15960,24512,72919,54918,90730,42809,83683,51635,68799,82422,98002,66294,28431,40932,69016,87079,58285,97567,78882,49782,69561,94226,32961,39922,33322,51654,88358,92216,98678,20930,25774,98220,78751,14205,22171,52867,58125,97283,90293,75707,71096,93499,68437,64028,66388,56487,51747,56032,88481,42251,41298,84390,92151,61339,87327,68014,79574,23574,68160,68622,54989,61523,18745,38454,57534,55950,40588,91037,97839,71712,87125,78574,60853,67789,56456,59549,45824,30290,76620,46226,82877,25880,99019,10978,18363,88653,41085,60643,92034,34169,24830,71058,75941,60978,28458,62635,39031,64387,26448,98795,26338,67793,44039,45109,50978,53470,28055,77661,47790,74101,42450,93474,47330,69865,35023,90602,14137,72500,38521,28436,30348,43715,26013,11701,93354,42769,22426,74587,16392,93622,51146,81543,12191,67802,77747,74754,20887,47987,73170,90005,99946,66407,67454,50733,34534,23080,78887,90230,65763,53945,73470,30365,90687,14197,74905,53454,30387,50656,24054,69152,51576,11585,26306,73058,64265,24761,64229,76938,59155,88056,28000,34466,27302,52442,62540,20630,48094,53620,94209,67116,77714,29932,16709,78790,15641,29020,85377,19206,16923,18224,81127,58129,52236,85735,68592,66650,15256,56647,19848,25698,41044,47695,15939,60115,64634,81469,87750,24427,18909,62728,68627,97743,43258,73770,27305,24403,10779,67650,12134,86199,74026,24187,51658,37285,15580,59228,63882,91974,69587,60793,79809,92716,83128,34152,44271,10814,85264,62452,15731,41033,51743,10327,41260,28387,33254,96141,10826,55345,94504,60083,60622,74597,49211,27530,76602,50178,93307,95006,85377,68903,79582,37638,20678,60322,45124,96063,76033,38661,78487,75013,82653,51282,57287,14496,82269,23772,66959,19868,19047,22642,43233,91393,16533,95706,67020,52305,35341,78731,13686,92909,93542,19139,72279,40999,19909,83096,34715,91924,90034,46483,22997,65958,91440,84810,66272,29727,48696,90719,68417,53511,47990,19213,75242,33503,46505,90874,20893,62893,33313,96566,97728,99872,65254,37841,98118,99416,54744,47755,42848,42495,51912,16093,58943,23451,46266,65351,85512,84900,77108,55703,10082,98021,15952,74525,37813,15457,81394,16605,35791,91293,91003,81636,87344,24137,52278,25731,10352,39264,12599,83959,23617,86509,50518,49958,52831,77835,70593,96326,79418,29399,17822,82700,22188,52192,98387,69265,21617,83016,72403,53501,29677,32489,21383,72505,84414,62157,94406,37216,27191,24861,49140,91943,38366,42019,58799,55516,57977,40365,87590,85701,36853,93423,71151,78931,71428,93485,22027,45137,96120,90005,86261,94468,49854,38736,98240,54680,12779,71620,59355,91689,64277,34728,74653,42292,84428,27229,63782,85733,42332,91246,72647,72869,11145,91577,27503,88069,93483,68604,27120,95161,81463,86364,35762,12686,40804,11800,39446,37717,43140,80383,88862,97341,24229,28176,19722,41669,17483,28172,44652,12572,55421,87771,50631,47440,30200,50658,56855,45167,60451,54196,99141,16820,43785,58363,67466,33482,28009,46178,71277,63549,34610,75063,36636,64501,24933,84360,39143,61444,48770,66436,65464,60843,86173,10575,89009,76231,37160,11499,96436,40088,51178,54213,14699,35335,96502,35374,14694,28227,22127,31296,91590,78746,86692,87314,89813,33340,39474,36028,53953,13704,27486,20688,43554,22184,59457,75450,16218,81637,73182,36386,96004,53087,47259,78984,16885,74463,91516,88234,76668,24554,91786,17136,27105,68727,29728,28061,46637,63730,23277,55955,44618,63562,23809,88766,77979,42834,92254,70268,28552,50490,54301,69138,90130,95775,89423,82984,66326,21729,73790,44232,70623,79896,46398,71866,76983,62697,59680,82520,75032,16058,54927,46967,76282,66810,50108,11513,96096,70195,53693,83575,30426,56797,39277,41878,71257,28766,79736,90088,60550,16404,68164,56741,59861,62586,66032,73575,72064,93967,39152,78669,97081,41845,16919,55776,86941,82682,34071,93607,37278,91754,10224,42412,51208,31951,48913,84659,78954,26879,61045,18362,24233,89565,56286,89512,91680,95574,16193,10485,43397,64943,32607,95795,61713,58183,66874,79903,55615,83545,58757,15082,62420,49656,99243,77937,31709,93185,44269,78486,40772,85913,33827,67377,24458,71489,55138,45028,95019,79216,20282,12610,51804,12238,84515,84757,82752,97830,55542,45664,77979,43886,16344,90787,43961,81737,63436,80502,53735,68226,68819,67152,38635,90266,92842,56406,46862,84173,27526,79604,44693,97274,47006,76570,53335,42091,49504,23024,11547,15822,24808,51297,98916,38997,21257,21931,32398,80051,65539,16612,67285,79332,36660,20849,73251,21103,42881,59021,44249,41165,76038,70039,86757,69870,32955,16858,81784,11714,28057,23249,94941,96243,44901,37014,20085,44596,76853,91687,79897,64869,88783,59843,38374,96652,69570,47260,45100,28624,39801,43729,72090,41805,20180,95838,33471,24705,33077,14085,59373,81413,56086,14946,65638,96360,17838,72918,32964,90002,34472,60140,39910,16455,41865,60434,29981,60327,24434,57668,56440,85092,98654,12682,62870,10716,90903,26111,44134,86623,39229,90215,59986,46014,37479,58801,21285,77435,44867,39621,25118,75147,27848,42090,49497,44532,78386,13506,63683,50133,95565,92405,47737,57524,31313,35960,57804,34112,79954,49416,90271,10245,61238,53412,36221,86044,56350,82254,71744,20702,98718,59215,27702,63218,19134,53454,19746,14920,99002,95595,71808,41103,52447,39291,88588,39036,13429,24405,83420,11174,17088,43538,41344,62518,99240,35697,72897,14866,31692,45966,50353,57554,24431,59234,90682,71148,76369,20272,68498,40667,48778,23103,96260,99349,81054,95057,62065,29639,95406,37016,81841,92635,76478,67100,89916,64563,46381,72966,45594,81129,88983,34485,19883,46590,99810,78219,65207,47868,12073,95859,59012,38239,35590,14099,21180,55653,30250,13282,40490,58122,49896,64629,50287,71538,17376,20655,38271,23546,56140,35712,25720,58644,27083,94062,83074,85973,18886,50544,35917,33885,85259,14655,81618,29161,85568,73388,45330,61537,43497,58840,53303,34869,32022,40012,31318,29640,10398,28831,41872,92300,44014,67432,61400,68642,12601,46421,50385,53028,58009,33154,29563,35235,96403,29420,84894,52192,84608,83618,71380,26910,99427,38023,81233,74075,46187,43995,15028,17098,97016,27995,68394,67823,23189,90227,16104,86196,43192,96579,27521,86225,12544,87594,81246,64070,83547,22929,24663,98185,52082,95876,65837,80506,22965,34738,41072,15353,51321,64477,96928,54037,21403,66663,58681,95834,36321,27444,33962,74347,32753,97702,17281,56625,61144,72632,52954,64813,97558,70125,45473,51075,24987,39278,50614,40385,75410,69027,27345,74725,12674,90183,91265,70268,29625,87581,81381,84076,31392,11414,93885,50727,67950,91665,47926,25102,94237,67453,48824,13718,62298,43178,26677,12304,16435,24216,40021,43020,44661,87673,95460,39167,19428,65608,57674,16324,14051,26337,63940,78778,83860,67443,65567,63444,30708,77009,31151,48002,24736,72838,34320,64179,69856,28024,75186,33262,49203,43992,82480,30363,47410,11185,73802,59622,11564,24420,17409,81764,39438,35196,78761,40201,78693,27544,79862,95551,63584,67270,93517,88268,33890,20367,38578,13741,98108,15542,34163,46836,11632,36658,88452,81769,46886,66703,87742,77680,91081,89864,81166,56328,95099,49853,62002,32938,14605,87195,86981,95448,66226,59044,44920,81707,85507,74300,98681,51616,62950,12231,70102,35525,91347,30744,74143,37856,26232,91853,27001,78032,88019,23895,88064,53415,79009,24862,77163,36121,45508,46730,92188,61624,11249,15636,97248,76014,11034,61753,74620,10677,78173,36777,82417,83329,30603,41570,24607,83152,94177,82218,37881,60110,99358,77616,89084,26525,19907,77688,16304,78284,71822,14700,13702,49524,83081,95695,21732,34080,74024,14967,49691,73212,67128,35406,15967,14102,93592,85653,51127,27748,30238,45182,21322,86358,43717,60338,82019,52224,89882,26925,85473,14472,25101,24241,56427,79643,98421,52104,12502,61847,58421,87254,77151,42141,14674,91400,40901,55990,13841,25623,31635,82653,59494,57348,74077,42826,97741,54478,48578,75346,39651,99935,71468,71082,74746,51459,95877,60911,36045,28564,12721,70256,13409,81397,76498,56859,97195,19704,65882,97837,48684,56484,60395,34570,24187,45735,14392,91241,87522,10697,99819,70403,31212,97973,36724,10346,74121,22220,80400,15036,30134,87567,59041,42688,30678,77644,34524,12777,49723,34871,92234,55274,54566,35744,12163,28522,42299,42439,64949,18991,99852,98363,89388,14612,94310,27158,31858,83908,44589,31297,74002,82796,29029,10924,31061,90928,53317,38151,84252,64088,88413,94309,49192,52654,54090,95850,61218,71484,19244,30252,74557,65392,65093,57134,77204,58215,88138,66077,96765,87721,89913,33030,83022,34642,44524,93629,68298,30269,33237,29173,63592,43523,78718,57579,35546,51864,73141,69834,38758,71870,76064,92977,42005,39820,51659,91337,34557,93470,77820,13358,12461,42684,57193,33663,97583,20250,13858,12911,72704,41649,22530,90501,80506,44250,76575,60743,81935,41533,13865,46912,93491,36571,54169,83709,81799,83370,68884,92172,75853,84138,11315,92308,48094,42006,65402,34364,18320,40741,92269,60042,83351,77728,94615,84166,29789,56885,21190,65211,40327,23114,92614,56755,70907,56133,13781,73508,66809,73876,54093,68281,37758,76817,22630,94352,93581,39586,39473,56523,79000,11492,90487,11091,96043,98168,49638,33765,55289,11451,51369,94413,37957,56723,84049,30267,48324,34542,37073,48616,69166,19427,34366,56007,12814,86645,72867,93937,90842,85468,45269,39510,17899,77473,94248,93712,14255,74777,59869,99136,79270,10869,17193,11938,97658,26687,69116,28361,65314,78211,73318,97561,25828,84300,84022,56632,27550,77074,58634,76870,79872,22881,77261,11492,40617,97289,19793,13088,98412,47686,12228,41482,21888,87336,45598,50739,36419,17890,52942,60215,47026,18327,70909,45647,90331,29082,68452,75703,24569,40165,70230,37995,37915,58938,74786,25849,33727,28252,75105,12910,77129,80637,50960,44253,70811,98627,85328,76238,88272,31204,40010,13293,75937,54706,29766,24963,84979,57269,21202,85843,98145,30234,89161,34460,76176,17934,13834,66846,92768,98497,46224,66526,79670,18133,80344,56703,92750,76909,56609,97602,52280,75677,18104,88959,69117,64378,33674,48289,51797,15465,88783,77849,58577,70957,30606,93620,89322,49533,91349,15714,50257,89324,93928,72033,79280,63024,72309,34569,87632,23744,48781,85923,81855,69980,83232,99807,63665,36584,30917,56102,63475,28526,82480,95735,39171,98405,24005,28842,72531,46777,64401,46696,32935,40225,81383,46411,26422,39610,64896,74502,40929,44178,35666,61542,70128,12107,49444,29686,99473,98023,20482,94470,44470,12391,35581,61195,35210,50904,88850,62025,87176,16734,37953,89505,26377,37497,35308,37774,82119,55554,45055,28699,98702,38764,94561,41924,29762,59476,48054,63434,82496,14890,39500,66565,57233,31691,46497,43003,96485,93509,82941,78905,90091,88074,98181,77888,61539,77443,74234,50607,15020,77888,52540,71765,95807,66834,24247,41706,74008,84338,69041,32439,34638,24961,25712,96785,33565,42311,45836,91296,31933,31149,27235,53371,11857,34576,15488,25947,69619,24048,86155,96335,20468,94302,44952,80775,87102,42325,83667,28618,45112,50168,11681,60839,90379,95197,28853,60691,34653,81945,90976,10782,75347,58068,96164,47271,73726,21030,75280,43732,41973,16080,21278,34438,22833,12291,45123,81052,80790,45259,74687,32035,72584,46157,86969,93609,74470,83415,69762,92787,75988,27492,72053,96776,71485,52739,91562,83919,43196,86429,29874,39879,85261,65358,87524,21945,83137,97983,27754,11076,92749,65633,16218,96199,12980,17785,33812,33418,30786,41060,41633,49143,27079,36759,72521,89521,43082,20320,32380,19723,56268,91384,57171,60786,22658,31992,99649,36519,24500,87017,94243,63332,79215,52657,49540,40061,85451,38243,76955,66982,66268,64717,18382,24786,98544,31977,89286,69550,27129,50074,21149,27080,36618,82572,90741,96980,14592,58640,14235,38217,42136,29181,17129,98776,52103,49080,17036,64398,24661,42647,99601,88291,52287,37433,93218,24125,26325,75295,19211,66457,95077,97032,83400,90178,30952,39247,35984,46243,22965,27098,81158,81215,84868,24986,94448,46266,52215,29651,91590,18721,26583,48764,18914,19388,47306,68966,10606,59742,23778,41245,84847,28010,24714,41283,15694,42128,50013,30789,14908,52847,68094,33834,91243,47975,58645,34929,33055,19572,34388,75104,97367,58150,80270,47382,21457,68634,91653,41312,65097,61039,86666,85954,90501,37101,68166,38798,95837,65014,82149,60659,31889,83345,90452,69319,32919,57319,15274,40827,94124,93007,32158,56501,60807,87698,86706,26661,34069,59652,30549,29495,31914,95336,95844,90686,59599,14949,35448,55557,82925,95644,81598,93214,63904,92923,99060,47583,84959,51357,19834,50477,15786,45396,30705,59475,28417,19974,24266,52205,97950,79124,52718,99640,73696,52867,54053,65240,62451,73860,44963,18804,71364,32165,42717,14221,39131,12593,73569,33166,13659,87229,96132,69662,90781,65157,72252,60385,28520,26112,22803,97292,24820,21927,17384,99672,70259,14098,90132,67213,86136,73076,84628,48719,67389,20456,18452,40552,58579,53809,63457,64695,37900,96691,13103,43260,42373,37157,81762,32083,38967,75090,57208,91505,24926,34563,42318,68353,61569,64499,65631,40815,34593,92601,14055,81111,85455,30498,46832,37287,39314,10026,76500,78924,71986,75003,45380,42961,46765,84333,35442,86602,73289,50245,67344,73273,23932,53448,40758,74678,84482,24917,26427,49563,14258,99808,29387,74801,62030,77372,13258,12908,47037,64930,71406,69922,54109,88994,31838,79991,10855,74984,21472,74110,97593,70008,71672,89927,25514,10594,20047,71694,90566,20385,27545,20914,79762,46731,67385,61235,93080,85165,62653,83977,66047,49834,11053,40081,37842,57610,19456,19839,28470,28060,37136,17179,44649,17155,45032,49371,76011,27447,85047,27103,45518,89209,28694,98436,71499,63076,19096,93809,90455,21544,16233,45861,23580,62162,97870,36657,26320,98342,79740,91933,17249,36261,97235,81318,47463,88890,57842,57941,73731,96564,33205,92347,89532,56813,40360,85514,32609,96744,40799,24629,75320,25115,78733,95032,74255,54189,41109,86538,63203,23658,93496,38704,53792,61069,15377,11056,65510,26210,67692,20873,65362,55553,10184,17313,29357,43876,70358,21631,91611,44571,53362,29005,48217,64496,99558,42313,76034,25316,91922,34928,84771,16527,15798,13182,59733,47524,38765,93583,85596,81317,50202,89118,76070,77783,82305,28146,52008,15146,83785,89616,56382,60439,57255,10928,28912,41816,80807,71331,50558,35697,29192,29106,17098,25422,69036,44900,26540,91439,54306,22741,70186,53744,86663,53768,38278,81076,95815,80659,16847,12460,56093,57241,53408,47672,72196,73194,62258,82678,73528,25439,32289,43364,83233,83234,37274,68178,49126,50273,36694,58352,28380,68891,12131,47849,95896,55167,84345,57048,89909,43112,78050,19863,13304,84670,18474,25610,82377,24048,11072,61970,15309,11364,98408,51860,72544,88152,63940,91149,78512,42145,40243,90846,29713,88576,89089,21065,95955,16881,87317,29571,62120,46698,12553,57422,18747,72392,75938,65622,96860,11031,39299,54724,92080,69018,65321,62376,96163,57066,24574,43272,20209,58740,49379,45689,94610,72653,65191,61759,67348,37299,18305,93621,59553,48618,86013,33688,54500,47766,46174,39330,55408,79398,92349,82878,95844,96425,77913,21741,27491,56661,79454,70654,56384,36659,61954,80590,90559,10679,64139,79505,75458,33152,89156,46482,59020,23317,65706,38355,29691,19272,67314,29767,96452,94077,50800,32463,41148,23880,24923,56837,84471,22219,56576,44143,78786,18815,52210,47400,11073,69385,11549,64718,45236,13489,91393,89867,90864,61491,20946,60698,81748,90137,93159,61344,39136,48215,91931,99765,57294,86032,33531,94752,65208,11291,73840,69756,12094,41953,52522,40411,50177,21142,98657,57814,74623,63385,66379,70566,29991,80368,22177,63579,66880,69694,36671,20426,77587,42416,10680,33638,36476,97900,47713,20146,15224,57506,43579,98140,77724,35220,44387,97098,33014,75139,83155,50095,78188,62431,17479,64901,39572,63314,76683,72224,84557,86898,90991,71565,27119,83001,35213,22697,36634,68719,91892,67981,31221,54354,91788,25575,95169,12844,78568,51717,38714,21281,53393,95814,31852,37518,48976,73212,36112,40195,12655,44956,12065,84598,59811,79378,39384,33332,49486,62228,13946,39295,37331,28846,24931,21793,46756,56416,11354,61252,35302,32345,72429,90710,93296,91537,97128,82591,30342,35182,77686,94923,25319,92210,35545,61224,97849,42544,28579,36064,79671,86215,61939,62597,29393,95104,31358,21139,96093,36936,33679,34522,10022,98205,24774,59082,68911,99504,21254,11504,42644,83998,77216,11699,65649,19790,28966,85507,41207,97892,42344,68475,42239,42348,37176,18453,80634,97198,48264,32785,34162,95416,55298,25290,16818,94700,58543,25077,83656,61697,59209,62126,71094,35630,43919,76956,73239,34899,27750,30177,32640,18815,82669,65475,91577,70691,92513,49299,83971,75911,17971,51208,73452,78265,16665,53685,72712,34480,11532,41783,92193,60226,35593,11732,58540,62462,98129,85205,37032,51092,38736,27753,91826,68938,70247,74580,95949,54195,88710,33744,52435,64136,15933,35427,68910,14934,12247,23700,86340,59701,28937,91587,47320,21181,41814,57395,82559,34927,46195,60475,33127,59279,65378,92457,51168,82664,85668,14986,29166,61410,29837,56746,28327,50973,23545,79647,71832,22724,46193,20029,13169,37484,42033,89532,63914,39524,96823,50397,16301,96088,36943,56490,45650,40518,39374,49305,45392,44855,49306,94408,20946,28728,67805,98442,70214,61230,53128,58442,17311,35260,10682,94174,59648,94838,84020,28314,13770,77859,40132,29635,35966,27786,20284,28329,66484,90944,86375,82877,39175,17682,71616,40603,75622,22090,40552,53636,53020,85853,46214,29289,55051,93070,44448,95801,97827,38993,67953,70459,84143,38470,54636,78831,41898,49133,45949,53734,25744,49059,78566,75827,41156,80702,53902,25718,53418,61716,69566,25308,76531,37209,47914,86743,31008,44089,76195,66961,43329,48724,58564,39841,79520,43276,76494,67099,43998,30151,44254,16478,20525,48021,95510,15762,27054,13700,17567,28971,60386,36610,91878,59645,84833,75440,72519,27327,30741,71136,10500,36391,76003,96889,44125,99164,29210,39565,17465,93717,88318,12094,30477,84484,58226,99271,23456,73457,69405,69431,53714,88969,98190,74108,89589,60997,75882,34979,33917,33668,15635,30820,68934,89264,13324,21640,94934,59968,43468,25299,83303,94314,53058,71026,67875,66998,49327,79798,27469,51809,40613,87247,30987,59161,93502,19833,17216,36300,75021,92564,35286,13334,48651,50386,52970,54735,17655,52902,12248,43720,64809,17795,71832,80279,90707,94149,57919,49585,42409,19619,23426,53446,25218,63183,70370,46918,37617,80059,53567,23160,58039,98223,47937,32406,28156,36540,97809,42785,26603,31378,59506,20510,35845,50707,82254,13212,10503,95525,19169,76257,51299,67777,90839,25631,37689,62316,67458,45929,76295,25150,63659,27297,21893,63683,27251,33358,36195,65292,47426,31860,61399,49774,49719,85324,88563,28232,90438,88205,19558,45165,74184,25294,71903,34690,44194,99310,68113,63704,86768,85519,70916,67324,66787,47542,18213,49950,91542,64791,93310,24459,66469,82613,69475,56358,90912,70700,85140,75638,54562,16606,10489,71580,82590,71119,66946,37103,27878,64239,93738,51646,92917,48917,13249,62833,59520,85765,57294,86783,21826,30430,33153,45532,87882,88978,26518,79658,96169,37797,83887,10428,37074,72743,77875,34736,89446,76800,15601,79797,10538,79324,14554,23695,38191,79482,72872,72393,45804,62421,95376,78477,89335,51251,72386,94296,12356,92271,71396,13207,24124,30524,90188,71985,17378,18857,67757,62025,74196,73376,36346,51186,71665,67093,91016,89043,80395,28266,63969,48324,29976,93121,92295,33884,14786,41410,32000,40881,49600,28333,29028,35101,41950,12162,44977,12790,83794,50276,63039,96003,90206,43842,14312,34242,77870,91029,25305,16187,15234,18152,89914,32870,55180,87886,54632,48963,39427,85170,80090,71691,94518,85179,51219,29707,14022,65758,40590,25892,49952,27585,90752,13550,31983,94310,82390,69232,48512,71625,22293,25340,21224,70813,17499,23176,50772,72291,19902,24156,86195,38650,34900,81062,29647,74076,29173,27041,75225,98745,96475,73596,56256,45537,57220,48838,22489,94443,40967,21066,88390,24242,20095,35602,28229,82237,34701,29348,11662,97190,99468,83806,83396,28069,17861,68004,13882,74562,85880,59977,33903,11214,80744,36336,46308,11343,49271,49889,39803,30800,91765,84082,56034,12140,79672,45804,22341,29027,96453,13651,63882,39123,66826,43673,75673,90196,76292,98316,38575,16946,47697,27580,15251,33811,68745,15526,21907,89926,92543,67236,65538,43928,19038,54021,94809,60748,69810,39336,54460,62878,47797,31958,46396,27345,31210,23006,21466,79387,21284,21772,72209,67069,42610,30228,46809,35930,82263,12469,94175,77052,10659,30489,48432,25069,90500,98600,78920,98627,75291,35057,35122,78709,13999,98342,39462,81546,77626,38669,45021,11575,94502,31086,95080,26923,12741,84222,61606,41973,62063,90408,92281,25940,17187,63847,86664,92221,65343,20504,94854,76472,70056,17701,85407,11770,25823,75252,71572,13885,15362,20283,24458,63775,18328,74728,35207,59529,54032,69849,76073,61844,84640,11023,65529,79803,59740,26660,75665,49373,11301,78496,75079,60204,11656,19128,56190,85923,97176,37902,83980,60100,78237,57203,23038,60419,40255,43286,26817,30419,52904,10464,49190,88824,71025,10691,43776,79637,77272,91325,56279,72706,73430,92749,17553,71133,95862,96549,73784,33665,52183,65562,20914,55781,57642,67390,72393,55794,69836,64303,39045,50289,86820,31546,87693,40653,59331,81114,16728,60051,92033,92863,79708,88233,57414,93586,89421,67416,47827,41474,22085,23412,98230,99645,27941,29174,13298,79055,86936,56796,68064,79401,76139,88462,61846,61340,27918,37193,34851,12212,32865,51962,58911,27224,96922,45492,53628,64287,52439,73281,44946,88497,67461,15310,98644,47165,23102,95719,46521,78076,74314,93362,61348,25951,98554,35933,97880,55760,31231,25535,65748,44751,98916,79824,49253,21258,70901,14168,63373,43173,78697,46162,21370,27157,84021,10497,79235,79757,39959,67082,36095,13353,92017,88809,31480,88509,58940,55530,63736,57071,76657,84180,60853,68310,66364,70011,16568,15469,10178,35617,14387,50901,92619,17540,83068,20959,15435,49375,61448,69725,74351,58684,82713,21458,41927,78254,92389,16567,24316,43455,23894,53727,32495,10613,71165,22096,16128,65262,33382,70876,16334,61108,60559,30925,10452,32531,70409,52500,31306,83582,50349,88332,25508,94822,30930,60541,52788,23350,78235,84841,92795,12974,14202,48744,23273,27345,11030,94082,70722,68323,63836,69907,98919,48948,59891,52844,36043,95887,69587,82932,24209,81298,75839,57120,80795,31723,58301,86446,68983,10152,97186,56056,82452,56286,86383,12315,51601,52431,71860,37325,43847,58886,26366,29770,67248,75067,34607,42172,21699,80286,37461,58110,86702,48717,21426,29915,50900,56879,94014,76046,88390,61362,71260,84068,57483,40835,14303,92238,40258,47249,96452,38343,96750,60718,81259,62376,12167,30917,56668,44095,97557,30505,34120,63622,17131,62382,32129,39294,66105,45347,65552,40468,30390,66966,55940,73703,20249,98859,29406,51619,94367,90809,38022,64990,75032,55858,84138,39923,38974,58920,38613,21712,72578,43233,52322,80980,27241,39181,84516,85309,81334,66584,27720,16587,38396,57472,86061,95194,34188,25858,74070,35849,75701,73939,41653,10239,59735,29097,25919,53792,55708,19842,99519,78004,23398,45132,66792,61485,24587,35875,99917,95266,74757,94922,31663,10398,27072,75107,49954,70771,95154,44784,82307,32056,31946,75509,65107,42444,89259,32290,26138,31102,62525,18895,30838,35488,89083,46611,48632,91557,91975,91384,82693,20982,87310,85614,37547,91496,11563,25023,81073,78482,60414,21595,31748,54147,23974,57307,12592,55062,51913,61846,15704,28772,67443,50797,25680,65812,20570,75717,99231,24488,35462,82583,66972,54308,83322,83634,36351,78410,89535,13124,37273,12763,25851,48740,17594,43020,86204,84621,48074,35547,50957,78646,18505,51669,12374,11921,75215,12068,53192,18280,14535,26834,59306,34432,71259,38516,75340,28544,69991,33468,30781,21369,96766,65972,80495,33621,49833,35680,62035,70797,20584,99485,28044,49848,26650,71505,80008,17148,38014,80333,37089,99606,29141,61875,11469,86530,20709,36879,83854,77795,70797,59798,47163,25745,50932,44635,43991,58081,63802,27722,27857,60374,64813,64200,58070,13125,91060,13343,43276,68751,58978,28553,86521,95450,67587,92811,72932,34708,60694,14177,33897,29678,21245,72289,20992,28666,49925,77512,40546,47110,96878,39420,11183,40473,24290,47063,13865,90274,96589,52647,15469,97282,83268,20202,16298,86106,85677,75661,60556,40534,95904,68751,97684,54838,51308,40160,31389,58929,95623,30335,58656,14885,57994,17828,63916,40705,16333,31585,32460,31891,82107,78799,79592,22230,36080,22511,26269,99662,48493,99968,73297,13626,61467,34899,60914,27877,31878,35875,89300,51366,84580,97901,54780,61531,16469,65040,43154,36434,37392,34661,99207,95291,66888,22060,95639,94663,36878,10273,75083,75034,59156,44333,83281,98729,32700,61364,39865,26223,88877,78747,62314,44104,27072,43421,50386,32875,79752,97136,53948,88286,57380,78814,62413,83050,62911,72238,90487,62364,18651,71568,93994,79342,33376,21855,41586,79768,53402,87383,49017,21854,74089,30442,49829,77654,97148,46205,83389,56226,44024,18717,67659,33257,46462,65422,37286,75761,39708,41521,99243,83148,31429,42691,83139,17193,80538,11463,60936,93603,55291,88361,73395,83112,26164,47210,42437,71362,67196,55742,68099,16234,48175,92204,52070,24286,59732,33711,84112,65746,25749,69049,85391,54123,39669,65166,74452,47050,98037,12882,22290,89185,32359,54238,61853,17227,51044,41849,21470,91670,36471,41253,48009,35632,28168,67044,18345,10265,63497,61404,40678,33076,70620,11302,23448,69860,94770,71889,65479,64013,90522,36494,32383,31995,32941,57906,46228,44508,39840,60633,39484,72008,83229,51861,18819,96016,48384,21264,73935,55827,50798,46376,12956,98594,18810,91251,58892,54960,87759,67169,36826,19127,61049,89743,21234,93801,22091,25590,47602,27691,46063,50547,43358,26213,80584,39470,17242,98134,33079,18719,18186,85796,13130,89302,27530,24098,37445,86351,39950,53960,90322,44720,19181,44197,25550,19255,51042,24868,29127,85112,76832,74852,25152,60959,22653,54336,39793,83207,23281,71757,75374,13102,14672,37602,73399,91531,94340,77493,72945,51785,88939,18489,81265,43126,40231,73851,35451,87722,12496,94729,56185,27805,81182,87099,38122,30433,69980,48629,66550,65632,91612,94508,49747,30669,99078,15233,74279,12958,49956,22791,11872,83348,45229,88499,26466,72871,97681,20406,35304,44541,94061,80187,29999,38293,30711,60334,52904,12415,13598,79176,68910,11748,69211,60348,74453,88524,74167,82436,91085,16268,27715,49649,81704,19170,83549,22899,81211,54940,93678,26017,82160,13373,70761,86278,19137,34027,51517,92417,40523,81339,38504,22982,48557,32638,27717,35333,54485,21739,77383,17456,89560,15626,32554,32766,41211,73393,65207,92628,66566,86425,49815,50718,54242,60906,33039,78450,65700,76704,13489,94517,28601,53074,51769,53560,23834,68253,43228,43352,87223,82124,20204,86010,24808,15337,78316,14695,95778,90431,36144,41247,69236,73160,60765,91423,61899,53981,30604,40777,22408,11266,35972,81642,86892,10015,96748,94979,22439,22313,36938,32342,41784,46409,86454,24804,17025,66144,98316,20252,58207,73325,66311,71962,28345,31285,32399,53434,85329,18825,80215,45894,10654,69649,60789,16311,72160,64484,29630,96267,49068,49904,67564,66244,93262,57768,25783,55797,89360,23334,62190,53912,58021,73268,34678,63042,75016,68518,84497,41199,95275,57457,16687,57779,42901,36302,18893,62579,79825,44978,68391,34200,98909,74577,29330,35787,76744,98497,81330,69055,26101,31457,43923,88275,48618,21444,76968,81484,74907,81205,63414,24806,31398,45318,36436,65797,33818,53270,73857,97418,92929,62387,56084,41529,98929,19115,78541,21724,88772,25073,78397,15074,93811,30461,31440,23671,25751,99404,42211,39190,17220,30753,25163,85394,72073,71131,83254,60186,49662,69157,73348,69359,22184,64599,94855,95252,83561,33602,97500,41797,14232,63327,37889,53336,59949,45817,18712,46542,72178,74448,13389,36773,82729,61609,93152,98737,81690,37805,13505,88019,87368,22184,88972,66678,66758,67474,66750,63489,12940,27220,84958,10055,77286,68885,98216,39606,27595,56397,61504,25448,25695,78121,41962,72236,49758,24421,23026,78102,94307,41408,38386,41123,21289,91094,19484,35546,56795,51912,17990,17654,12003,56859,83863,83808,91271,88049,99725,73808,60165,45303,70116,33246,59237,19694,28421,26338,33014,70843,48497,13326,13019,56288,58182,47600,28436,50371,85758,37973,19292,57877,13231,48963,76024,62405,90088,81518,48517,17653,84998,92706,74014,96440,34821,10970,23194,92107,95567,77706,37792,13576,56454,74568,76101,84796,21589,26461,55580,70761,37727,68977,42589,77224,46775,71718,31997,58325,45676,60657,79865,93063,62939,80869,60348,22251,52855,39678,85817,63673,57038,14718,52548,92732,95610,76846,91776,84742,31695,27526,83208,45120,69271,19125,87706,76117,79089,86341,61685,89731,87918,84170,10898,71311,83802,36516,62301,29074,19357,67394,45206,63987,93335,17713,25705,71239,84670,52657,40218,42795,75520,66183,39729,46728,66721,20967,41935,29055,74926,59347,88660,13401,12677,38791,50241,30932,36181,41968,44010,34810,38779,97537,30451,45611,36682,86400,42227,90728,80601,15143,76821,53044,61685,10517,33762,75494,50772,19128,49817,17510,96652,65003,41772,10545,56420,97015,25930,27505,44084,74929,74390,54023,60275,11262,30108,37421,74215,96612,94459,91315,61658,55138,55391,50595,34998,47663,17829,69672,29507,76762,97532,12313,12345,34581,39093,72889,91297,22604,36380,89371,33937,82389,27302,69225,97656,91047,71674,66240,94218,71488,41744,22158,68529,39459,57593,64317,33899,50614,24336,79988,22439,34070,80298,62930,28521,22960,94238,82912,99634,46709,81821,52945,59159,90799,86574,61613,46609,61537,97582,53022,27014,14321,16555,72027,28763,80367,79231,36686,13646,27545,35168,32650,10945,67196,97420,46919,29070,75867,79531,90173,38515,65545,39817,21993,72683,71971,30636,67544,67222,24587,36146,54677,13343,12425,96295,84612,91673,38652,16766,56556,21566,46727,84250,53313,29624,13181,33450,68130,45128,62427,46953,73948,80602,86003,22361,57237,52655,54353,13426,59181,49360,99984,13496,29478,33860,52176,39748,73703,27538,29176,43276,20907,57948,26087,93451,61326,58069,97452,18181,10084,35099,36568,26175,58492,99181,75643,90844,90469,79816,97941,50629,55261,76459,35407,51285,84757,55050,64100,36932,36972,36246,73519,18143,92493,11816,21106,76410,88370,93758,95807,68068,56962,70393,31747,55937,97306,53740,61683,67240,91491,44033,45140,34422,42179,93797,44401,40137,94119,16144,10663,10181,48977,58587,34567,33534,98919,76674,32299,40678,55051,24421,28668,29074,88903,69017,50194,14705,77500,42620,33829,47380,40412,85974,39109,45550,60704,30715,22653,25665,16781,25374,61540,67286,36784,22521,75969,68756,45442,80741,68198,28611,21419,29585,49339,40233,86657,43825,62953,80558,10411,22988,25504,95339,61908,17993,59775,11074,44044,28439,93495,18520,50899,81989,47377,88451,58920,22148,10518,56953,59707,17105,31353,28848,57127,87938,77839,75736,19151,51279,57524,45857,19497,64093,87244,74243,80007,46221,57047,99105,80600,91322,96339,37519,32094,32689,90175,45824,49533,16148,72746,47786,73383,19588,12363,40972,23105,86960,68313,11966,82689,56212,69586,75371,25925,51489,45366,71283,38082,88564,70087,15871,54864,50124,69359,53699,35246,92478,81512,46322,61910,41719,67490,50973,36090,62818,60767,64196,81431,55011,88728,94632,94595,30323,94045,20777,72674,99301,86246,35293,92203,85237,56467,45027,63480,40902,99183,21331,36699,63685,24210,34540,67343,11735,75948,17661,58250,28636,36759,18558,44118,14162,42687,23318,73736,29284,39721,21568,78225,86052,55838,39584,94750,39751,40505,52336,32913,48308,14329,56664,81661,77225,29577,96412,28584,98563,97885,43308,62099,69124,14702,11691,99321,91065,66117,43943,56143,23427,13995,98035,61567,90982,91226,81619,53333,16024,70819,10042,56581,72375,54494,66161,11606,40665,63163,95881,38546,99813,81562,94971,30535,11150,85816,43835,62587,35279,77197,94281,62414,32694,33270,72636,16023,45372,44541,11072,13793,57292,56526,76062,82095,25452,97425,87421,39392,43626,45153,85196,18999,30127,97918,76913,14695,33778,76292,38961,77611,51840,95055,93861,47028,25668,42658,53090,78394,72431,89720,62780,61062,16589,38576,81956,22330,20134,99463,91385,34725,43608,78532,68919,57431,88117,21655,64549,24586,23775,96386,94005,79147,62268,90032,38158,55161,59833,70626,25566,36879,64275,88524,47933,60112,55261,35548,31489,36038,79449,72498,38640,56064,72284,21735,85825,18456,48311,86271,94355,97233,66848,64433,71320,79744,28542,83140,61507,81895,60742,16519,97698,50098,11711,29707,48942,41562,68156,74891,88203,76810,51772,18840,85917,90523,44472,74594,41315,31119,37379,98645,97634,72009,95748,49648,27177,15752,41293,94101,81475,61928,91489,90248,78622,65035,33850,79466,66107,55975,21034,44934,46196,26950,65311,63002,59123,92462,97459,10384,20045,56066,43503,26273,33346,39062,92257,67421,72592,58366,24611,63841,52690,24753,27674,93078,36907,37866,10361,46739,73157,54013,36307,91345,29888,47451,56055,36358,40910,20777,26384,35766,78352,82285,70563,98110,54857,91491,69561,19933,57653,82178,32186,12189,86447,86900,11694,83761,60247,64717,82400,21381,15737,69633,92447,55014,48140,50986,78915,28285,93116,96357,73505,12939,30739,11733,58467,53797,96402,26691,87364,25590,51985,31016,64323,45561,24284,82613,24452,73332,21144,67640,53298,48434,97219,85982,64109,52048,90139,22946,42405,67853,54012,34333,41455,49401,63716,77315,47296,93564,99092,17953,53248,72287,21911,84869,33033,80370,60484,71994,57630,76006,87621,87617,97555,63009,52791,13832,88364,81750,90002,93558,53436,48402,80098,17716,52857,51375,28369,27282,92326,43820,38638,73628,77421,69098,27429,33897,27943,46584,24974,98395,35660,99457,94971,49483,55797,34295,31083,82537,23959,78275,72229,94774,11881,24784,93103,87611,49182,16114,98379,82541,18151,31845,30012,52553,58167,24139,68968,92747,65560,21637,11919,52901,28000,39973,83784,78437,97322,47294,73865,29371,46345,50221,56625,73343,71452,12844,76497,35588,95415,69538,39887,36515,69033,38338,44920,15243,83268,82050,38125,97184,80230,98135,56488,11142,81179,10525,13878,61768,87704,55347,59990,46366,32840,48990,91716,75421,38177,87410,60328,63209,29639,65792,71596,79758,38903,59843,93806,56728,69618,40498,12332,17597,89956,95692,67111,78628,33680,98081,46014,94594,65936,98826,73897,32529,29000,10461,17491,82038,62141,56034,53020,16576,98128,67455,36242,44425,28406,82881,45907,34378,97552,85079,66472,49818,96592,42005,80035,57580,40229,45722,91218,64736,33171,47083,96446,59021,76210,42587,21612,73687,19459,92790,75224,60448,95389,61542,63091,68787,87834,55470,38398,40686,58777,81094,89144,67885,72251,18774,31170,87617,36729,33053,17992,72386,81619,94866,81631,62855,28059,44959,20329,59797,59707,52449,77659,44061,40141,23620,17807,91820,76940,14596,12259,97045,62475,10064,40222,60210,23300,42333,94433,14825,71678,68032,27802,25693,41942,32600,85118,66725,44286,13557,76380,60743,17114,25211,17715,22347,72868,80594,20718,88754,52118,25876,78158,38550,19307,62811,56851,96578,18386,32951,11747,32289,72227,63546,33867,47608,14179,44725,92862,27555,86908,88653,24622,36464,46242,18198,11308,30503,27465,42479,78603,51291,39143,53245,20340,98410,56956,23115,10993,72181,12401,96323,77947,92236,77679,88550,20101,94634,54965,88083,53006,51848,73244,39238,54148,21010,23403,90654,57859,99671,16770,19799,96418,62858,58864,55000,19573,68906,96034,62094,32249,40787,84846,54340,33313,50472,74839,49690,22236,89053,23285,19193,56680,45914,41657,67677,25115,96485,57182,18582,40560,76638,95869,78350,24739,91211,27041,64788,99523,83552,58069,69590,78305,10784,77671,21954,41826,52713,14769,83434,43463,60526,74999,42020,53598,70106,40891,86614,98951,91718,36459,56309,94847,37690,50602,83605,75794,93225,78771,49967,27599,62379,93072,49257,26048,18784,77505,15645,57474,71031,56411,65170,32567,44246,70772,43330,21153,85958,24056,47649,85650,95101,89660,71533,72431,18997,37328,22363,57139,12178,11910,92789,45188,34342,80127,53060,20203,54420,44795,81132,76308,34944,61066,58962,64644,50997,75078,93320,20967,43240,40924,43746,77199,10246,71772,86555,35307,74959,69153,39813,78170,79070,64636,13112,37584,75751,14697,92593,24871,24227,12272,39337,82277,72244,66322,73954,68555,92628,52089,48858,18176,41157,20277,70181,10515,73228,95124,98942,15331,83410,23308,48661,24230,20865,97748,57546,94317,53833,18316,27587,51583,11270,89228,28859,72791,63516,39997,33641,15488,58818,89019,53298,43532,48081,12762,33318,87366,42618,15702,13161,54877,75199,71855,59931,49008,44105,52846,41637,62852,59820,29815,93577,39571,17326,65437,90768,60893,60271,17258,35699,27397,80101,85544,43988,64722,72905,38251,35639,30606,51688,63047,99701,94662,64774,85803,65078,50839,21962,16940,43346,49352,25553,95242,57196,32372,92812,32639,26529,98290,48159,83273,92417,16100,22632,71944,91512,97697,84039,88447,90481,85824,75105,72422,61827,59169,35725,13164,31517,78190,83934,51745,23431,50901,94241,26823,30592,41144,51973,77403,34340,33775,60801,96678,90335,28861,74766,66169,21053,30877,67684,67036,12562,40049,16710,44149,62303,66143,21830,98052,62369,31342,83758,29891,84808,57246,92670,85204,87665,84707,46838,92563,73196,63908,49358,76884,68272,56483,24957,33092,31443,29004,79851,29125,61763,77392,25426,11421,58595,32642,57095,31827,53378,56235,51780,47568,94598,89565,32989,75426,72586,41061,22538,22731,30313,89027,23465,82302,89267,32500,40398,63915,50778,82974,32082,25289,14308,98999,34318,14570,57507,16600,71017,14552,88651,13812,91374,11338,15149,37300,37800,97916,64012,70627,92820,91728,21026,23102,31749,94792,41863,94727,12919,69852,17239,17646,42131,48655,66764,49509,54894,42778,81201,82978,27705,37593,67566,31901,37796,30136,86126,86675,87782,65231,23942,58101,83208,72723,51022,61808,10591,20654,58428,82797,42234,12403,17382,26555,15991,33451,61982,44964,61361,28608,39707,45798,39694,84633,52894,15532,42811,53511,91856,25428,18545,11839,75156,66591,85854,29664,87745,10077,83511,47504,15963,44810,47129,90527,14919,73959,69161,35422,47274,87901,52780,30828,66952,97124,30783,32828,55005,60351,94712,31738,80312,12658,14739,79924,55674,48527,58051,65342,72009,38552,18374,73249,42402,65800,29242,46575,93267,54559,96147,36371,11227,42421,55844,28370,79273,58411,85512,85128,18021,83454,84245,25652,91493,50354,80381,58089,31293,25954,39139,15783,15417,64268,92810,66368,58251,25839,99363,48831,70376,70236,17141,71079,93913,37144,77766,13554,31339,34340,72096,16331,68713,64980,52879,81653,20086,57244,76445,35408,94772,73276,51978,60733,21143,46083,62044,46561,31487,99573,42605,74653,17155,67933,84065,88204,28420,44974,72532,91698,54524,44186,32529,87094,26147,42895,20140,29107,70016,42680,80940,91727,70013,67056,55676,32154,70947,72251,28421,11560,90081,33051,36788,17356,80660,50281,60525,42091,13455,11281,10666,36908,14756,86431,41680,39110,75285,68561,53095,32371,23047,76780,83181,68607,41104,89679,41481,23574,31839,71039,98745,32218,25143,40056,47221,87118,11906,48482,54397,69895,21747,86328,59862,42554,51930,61670,18813,13872,51856,56198,38909,16665,41454,88111,99902,20960,29421,35770,81988,36550,67753,69674,54026,53522,84091,72507,29027,60417,43525,95946,47247,51160,27387,44254,99436,78134,82605,30604,56390,78108,27641,37198,35445,85365,18784,17028,83509,15546,78436,49512,57528,12162,42572,44570,99530,74070,21231,92211,74084,83458,21945,69834,38271,21556,51324,27971,93222,62036,53707,42228,85034,53481,40652,26741,75573,66521,31458,70555,69281,96957,19110,24776,28941,34917,45507,89933,82716,49357,12247,90792,53223,65311,53076,66722,82413,38416,16282,93141,37524,38860,42996,87181,43264,35004,38664,78579,81482,80765,99571,63196,33265,43631,33257,88623,49736,25030,32510,61994,36325,56382,47473,57020,86780,79460,62213,82857,55632,59484,27502,52022,13437,69537,12828,19354,84716,50580,25302,59483,53070,12871,25884,11863,83539,77307,24555,42885,90600,94186,36158,48253,33675,37932,66883,26032,18288,60522,84778,65687,81452,73285,38369,85365,96679,97955,95981,64384,64256,66709,37409,88265,61328,56545,32943,20527,21975,72786,50660,71934,47765,77029,62130,79804,95517,18836,93957,94057,15987,94476,47509,98593,94391,89451,47517,33268,17877,66584,79987,17972,66849,55336,92837,27016,61536,57763,72077,28047,24017,99694,77221,96581,23218,26380,65505,25055,39801,77599,55010,74755,11613,37069,26831,40753,48242,22461,95388,97285,86182,55867,98442,91390,79670,22935,19397,30995,44800,98727,98267,12650,73053,10932,81344,44830,74706,80652,34565,23358,57142,12160,69903,31765,56911,23510,48286,57466,51007,16994,88220,75663,60060,27419,51560,30720,23671,97482,42420,21013,16814,62771,66891,78846,57414,61087,51430,13950,45732,99803,21838,74102,71413,20535,71579,84431,68806,46696,37569,36236,47118,43704,26151,30272,40462,19667,31277,49385,72523,85091,57682,23648,36604,36951,49931,56510,86045,49762,88603,80615,49561,65854,19364,78149,40260,67473,20749,24361,54130,23944,59343,79631,58198,70962,76672,72040,97060,34056,99106,25374,26169,23747,84906,17947,91085,29236,99362,64742,59912,23390,32189,56131,40230,25463,97044,19830,45395,38737,46226,37052,90675,99170,87164,24015,67848,20739,25068,58138,31082,21768,38861,10586,98108,79888,90594,77995,23761,73465,60368,30868,42029,29969,40450,58413,29075,95113,24999,13399,23154,32713,29467,54675,15559,93700,18781,13780,55950,34993,56773,17513,62904,78579,19211,93101,31330,54435,30934,60761,91661,84814,44159,30724,67477,83003,48721,17523,73312,61162,32912,46347,85568,87256,41555,65804,22885,98846,55020,48842,76124,93379,42180,27412,24092,42577,57737,89121,99140,70790,64080,13167,87578,75586,48896,84914,57809,82597,81009,93515,15350,16037,17498,77157,45740,91777,12035,65411,86120,48423,85009,35816,73460,64616,37670,96814,68943,51586,55953,14174,69835,19578,69650,65636,28715,97440,62628,49423,95553,95588,86462,37758,48500,68967,20446,75501,43118,28026,46510,38612,97182,78198,58700,58521,42340,54621,55960,13723,16680,33101,12587,18581,35416,55653,80656,82606,35043,22115,92680,75970,40661,23927,97850,73754,31133,14438,22834,88263,46818,87635,23400,16563,53388,30990,67587,32959,62763,82548,15167,59246,28562,78090,49972,35169,56208,57956,24462,66617,54510,45065,14261,91031,77229,24020,85903,44227,38100,43949,79964,89225,77385,24717,62147,89731,84306,54502,80653,77508,40246,10783,61679,90456,23135,93775,44515,59566,95674,50073,96255,74389,58332,98731,58725,91299,80256,11253,41791,17728,59118,82339,79306,90046,12388,18505,49318,22268,64049,73147,67404,67646,44114,81766,84092,40546,10580,57961,18463,84744,27045,97307,23099,36830,87545,76252,23970,71237,83741,58843,42203,46052,26447,87618,44939,97516,55875,88470,26734,33376,32171,63830,80261,90732,40829,56109,37139,25533,14113,45812,80967,49659,24235,48957,99527,97446,44698,74455,29747,41197,59841,82882,71765,89389,95644,83310,93619,53693,61162,52638,16687,42916,47058,21213,88984,84379,27624,40217,96223,45661,74493,20237,46836,78104,83136,58995,24819,85602,58047,39628,70328,84458,62388,96623,51279,10980,61533,69408,22704,55225,68594,41223,53961,87340,61068,81848,32085,96434,49897,91574,95842,87030,42981,16769,38219,50384,76888,46566,64730,41698,91680,89417,92877,52936,28236,45334,29636,47551,21644,31897,70233,64318,27193,19267,17370,27484,57798,78555,34148,81356,88035,81909,76839,65123,37864,84459,61310,56768,59473,39425,94652,88423,11005,66454,97874,51648,30615,12663,99461,10874,78493,61272,24166,75024,51962,34919,73645,86859,25376,70115,51400,92805,10053,44156,60138,47786,90634,79263,94368,58368,39148,23893,68605,84611,87171,50989,75077,39898,56657,53684,31924,42676,60280,95966,12713,43231,10020,44979,67636,84981,25811,71607,91400,94198,43276,10306,74803,40000,39805,93175,33211,97034,55551,53560,63926,14223,92277,62763,31556,38834,96934,98445,70159,60608,82445,58201,32076,55705,21743,70678,29669,34623,97102,73562,68060,34915,83067,33588,86542,61534,23142,86535,17268,90360,79464,62235,31135,90277,56314,10125,49542,59887,26900,16066,63002,48565,60120,16111,81442,58110,37073,70569,66332,68348,33733,87264,74005,62808,12002,16867,67158,17534,74642,16910,21956,68407,20507,19307,31415,56154,28174,54106,97257,68584,30687,79447,85522,92845,93813,44660,35439,98824,20428,65398,39271,45591,80270,53114,94533,39199,40452,59679,82979,22823,67694,71426,41959,15202,85192,52112,72579,27759,77785,66514,39845,12979,22010,65677,15882,26169,60927,18883,39204,53679,95728,27939,47733,32520,88480,98879,20977,51711,16862,58208,65038,92698,50838,15586,78453,55826,22661,52646,38981,91266,45384,87574,35121,13799,98766,52508,25238,10483,52314,85904,82219,80276,18803,57348,15180,43770,18771,80511,97686,48296,37779,84690,10223,55686,56578,74080,65121,98648,39513,90361,21894,96745,63962,92990,86409,52770,67100,43953,94355,40717,43618,80628,24743,22584,63871,29273,40286,67131,57136,82308,39376,67755,83283,84519,11483,47079,95251,14677,31034,24487,52477,20723,94062,21175,14977,40486,13414,86017,60419,91367,69405,62974,96356,38717,37447,28249,10317,58625,39867,46020,32132,70790,76051,81309,55680,48913,31725,68947,22060,77705,96339,17679,21752,95678,27462,19141,87677,57746,73536,45014,67128,44064,73503,66601,87595,31425,30486,89704,58430,31208,43595,33942,18552,42020,90987,66951,62522,89520,10519,13447,24777,94961,97787,93099,59117,26725,20200,77865,83108,14727,84053,35188,56336,15101,51844,13558,69970,24497,91698,28749,46153,21442,14561,60958,11160,94733,50597,65526,56826,55715,33515,13392,87289,65215,60789,13149,57322,47000,70816,82773,70170,30147,21707,22890,53150,98134,98127,10291,86132,70742,65949,81231,73447,95727,38014,52522,96641,94611,35830,26181,21344,61590,97348,12744,97379,52113,78965,71102,95725,54894,58695,62244,19691,14560,34752,38208,51433,73281,73334,94185,53985,31756,79100,76941,50231,26401,77652,35983,43110,55207,11182,15429,23970,60319,46416,21932,66273,27862,49108,43110,24386,64698,92891,43874,18087,26681,17826,41400,68513,43445,43488,90357,27261,23692,66676,20497,37450,86944,95498,85107,88014,37451,66498,10118,80077,26753,91478,10080,41587,58715,72583,59512,87494,67817,83434,16710,45831,48676,46611,76473,79261,28911,67356,46197,96884,77756,52274,57685,64487,98998,54485,39319,45596,19915,36468,22874,46380,44207,12156,36060,52088,84343,66671,96610,24811,23779,65653,73239,87770,45190,34219,45258,88778,45966,33916,48188,32071,43883,43617,10262,82428,83298,19562,60895,10430,21743,70598,31433,75978,65722,78200,50650,54592,55763,61710,33081,27607,16917,74866,63336,37076,45077,36522,30077,99440,14043,20484,74150,72695,69105,23037,15555,83901,99371,91733,78075,66460,57142,41569,80867,10107,78879,30467,92704,78143,33643,18060,66981,35975,40242,52159,26480,85287,45693,95255,60508,38140,21635,59934,15114,64994,93323,89511,80659,39455,37773,40754,97761,92157,94036,15547,87014,50279,79928,18553,84661,65595,16141,48296,69916,98128,14203,88899,36862,61739,39610,15800,84894,14649,21048,25200,21604,30122,75613,49918,66488,85338,37211,47220,74529,82939,33216,47185,61689,44138,99436,58989,89045,43133,91845,21480,94730,85865,97958,71962,47767,60295,17241,37264,76086,48311,83414,68530,31757,47909,60991,67980,37137,60334,62229,91875,71831,17873,59237,16471,22097,94122,11802,33309,67374,85180,68940,12693,15564,51934,35449,61016,93801,31859,16117,90116,72946,97900,32696,94666,86328,89966,38178,38280,77462,21689,40519,55100,79173,43921,84447,10282,97330,32571,95227,77609,67735,13027,13851,53959,55620,13211,37817,43470,51704,43307,20832,86287,32177,36248,19694,98705,16118,50994,58645,67054,92511,17959,72901,17430,62239,82429,12419,17742,40624,40743,88930,11446,29064,84279,56578,19949,38126,85815,64119,68865,38931,89691,10851,69225,60853,69697,42506,89335,92656,96586,25989,77632,10604,93704,33491,39939,53512,69247,70706,15131,90386,22616,65271,44449,95453,17904,15141,52833,74262,12281,66028,80932,11170,55634,11291,62499,91976,14559,30039,71422,40866,95410,72342,20495,95289,99235,46395,18445,57932,18118,41642,73622,78390,30173,70004,53604,42885,44353,25852,42464,95760,56018,11460,98488,18027,12101,30452,42345,83450,28782,88660,86707,63492,62967,47150,83941,74144,39506,95111,60205,45045,36983,31110,21279,20782,92930,69245,79292,83430,37721,59555,91034,45875,71934,17604,51564,98155,54868,15686,76296,97069,95409,42718,75806,52939,59671,37225,43082,28574,91440,65047,63746,68705,62276,27024,32957,92193,38498,91398,74163,74994,52336,92737,45185,57965,70966,31559,10289,69524,86712,57107,91436,11854,99611,25260,73246,86756,58982,11654,15126,50406,63897,66630,59360,16974,84893,34157,97024,63156,76442,72824,62444,90504,95796,97732,58629,77250,77286,61784,97554,49520,64416,39792,95282,38956,25274,24392,85476,39109,47168,32728,68354,65135,26460,58324,14103,46638,88698,14084,85202,55068,40399,41340,15194,39141,47125,39208,30256,50478,84945,51391,22772,58992,37628,78314,89239,47440,94863,59148,30443,68020,92608,32420,73902,87164,25828,15459,97491,20760,65403,39824,32010,66008,83191,51687,80526,30182,28487,38220,85813,28565,30346,43917,47858,50536,57205,95344,27479,41454,94970,76619,36361,55231,67206,26582,51080,14461,84907,99237,17725,70012,64194,27801,61673,62368,81419,14230,91141,91697,10593,65055,83881,64223,86630,30200,72368,77711,65021,31428,58491,95385,12935,37706,11623,25319,76197,24574,20851,92550,58150,73965,48813,93766,40890,97387,82703,42026,19559,23191,14153,59320,80018,91504,37705,20920,61843,68842,27326,35453,49501,11192,40606,25895,72475,82551,45127,70833,16150,58323,86238,68078,25232,30007,63672,80017,45104,79168,71721,59075,25009,46589,59157,47466,45255,70693,93039,92010,50588,10812,90468,95048,25244,43242,12868,93663,69920,17016,43827,99644,66931,60254,78727,67975,96547,22022,51274,31340,39616,65768,20124,36441,13684,29338,63352,71158,20948,74017,39313,49403,35070,89156,33390,39295,51499,24623,58776,17871,70319,22813,95050,49126,21980,35930,20311,44676,28600,26163,93873,22882,42325,80660,74379,78296,18467,25087,21245,26620,91294,22999,95025,75330,77144,49451,73850,19962,79177,72395,43545,70150,96580,23488,14100,37169,94962,44640,78094,65564,10384,13624,26674,95127,57678,51524,81253,31761,39530,61108,19396,99986,60528,53696,53460,97100,94937,70726,77632,30298,61418,84579,55251,16571,12957,32500,49759,23349,95383,71627,61375,14358,85785,92179,98102,91024,97827,29388,54490,63633,21274,71295,50673,27159,88072,29195,19110,78947,87263,22378,57552,53253,70512,74216,23755,59692,45875,85558,80816,25346,70316,92907,50555,58075,81986,70727,80545,16718,39513,52523,40908,49618,10906,76893,57102,96293,86850,29012,41952,98154,11249,55886,44969,67950,44169,28341,22507,37415,27589,61316,51091,96012,43187,86453,62071,39803,41491,44357,27613,35197,12355,42971,73833,67064,12340,17603,39793,61192,20785,58663,16378,56275,39303,34359,58781,10786,61417,38333,19023,87465,96688,38018,93011,90404,70524,52723,44412,26007,30805,53994,14947,59338,48198,17291,78667,97023,82169,52468,37961,85827,75108,78313,60079,48575,92456,48682,34882,75405,94782,17439,80900,91148,18928,71706,75090,27994,19436,69559,35968,19132,45130,69697,10301,23295,31185,93773,43592,10415,44349,87415,21248,81850,36797,37899,81773,70376,68351,56230,93320,78450,88159,11497,33749,92947,43230,59605,43095,85822,43047,63703,29748,54079,29918,51849,48069,35268,85959,46762,29361,29515,51537,45285,36654,40748,60557,39392,97354,72348,57895,45681,89415,69926,52319,63983,92299,85723,32305,33364,52551,35191,38091,53085,92811,55845,76819,37726,75009,23939,95017,95404,18696,14081,69381,38884,85454,24925,70487,67532,11192,17238,94978,22447,27489,16725,74578,30605,26264,62280,61378,92594,96000,78675,93447,50445,48798,48204,20381,14830,80320,92016,30009,27759,48925,43609,61356,22615,86792,64472,44401,55333,50513,43187,11678,60498,66208,18986,84310,69907,38861,15936,88230,59402,71291,41253,74881,74233,86095,38831,94022,83930,13447,23733,13694,75354,34256,57896,20764,33131,89047,14441,99331,41704,22614,54587,19039,74100,36131,45078,32792,82232,37910,96669,18444,46615,23555,74046,76229,81738,71482,27640,74132,77093,88991,40584,41954,33655,84438,24316,11133,65276,71634,41507,10628,47798,48917,41809,79461,98935,58435,72294,27577,32157,23624,10581,65098,59336,21854,51226,87080,93262,14183,76912,30384,57514,80746,93192,90315,15029,10494,70627,35242,34092,10584,56090,12953,15550,13320,59241,53143,67804,29753,75316,38648,49534,24127,65504,82047,95867,36839,74979,68861,27217,71763,23266,48911,42390,27306,44586,29419,78788,90715,43301,44820,65426,68686,27859,37056,13531,23966,65561,14203,16014,85526,88594,82325,92531,34516,41898,36927,43989,29609,88162,86534,76525,80762,25383,81497,65809,57712,70438,92243,16428,11211,49857,63898,64084,38462,99312,39269,78545,13800,19440,19464,84213,15467,80109,38685,50775,79366,16799,43702,99409,68037,15249,75712,47549,64623,75508,42650,83803,84516,95883,86299,87414,60765,82852,95819,85974,41318,22756,35208,91547,77313,39297,60009,85298,75026,47944,87616,52231,27898,88548,72857,47201,37800,22803,35915,16259,64636,46343,16575,70136,67123,43493,11999,82336,31574,94303,25155,27279,61146,65367,86476,73835,76463,14751,96322,48625,51328,32347,31210,99088,93335,13826,55235,39124,29472,52139,47513,83064,83985,26185,26724,87185,91719,91782,10352,39729,40329,43982,60917,52490,33366,62124,43482,16881,73984,85533,46094,85763,62655,62513,39564,65785,25454,18770,45591,61147,33068,86273,42942,19678,25829,53754,24958,92346,68618,24596,71120,16401,24237,43988,22481,55241,42579,78870,83075,69219,74684,89229,89500,74067,55877,29505,21615,32716,17413,44171,91946,19306,41748,14392,72971,44962,19978,93107,48239,35622,13010,17239,36650,82677,54475,15997,90334,39969,10732,22911,40160,87342,63649,23452,26825,88708,15786,25981,36052,13789,30363,49675,66056,71007,20752,70537,45779,75103,53169,65912,50840,80394,43999,10952,58229,34062,90002,24661,74492,54434,62690,71220,35564,73168,14692,11143,14188,87862,14262,17486,89911,63433,45123,45916,52189,77471,54129,59918,99964,95953,68968,30540,84568,39170,43347,32813,61475,29235,58003,41226,78751,23495,74222,98725,14710,91322,10614,49318,19094,67097,63076,83262,92828,65747,79803,66620,28508,54257,38443,34572,15756,10507,84168,23341,82197,36253,59986,17722,98471,36705,77770,17384,99889,90747,84793,95450,97509,72269,67105,38147,28243,15899,84830,95365,84688,50745,66477,67477,40632,98411,22792,94520,78810,52832,54129,67884,94389,82771,66091,15853,93668,81793,92236,27150,70834,13698,67358,52749,89502,51695,39800,14144,37540,64777,34739,27374,21694,79520,73526,34453,66761,22728,93023,45836,56754,44765,18300,49045,18781,86177,62681,54065,57194,84716,65771,95194,62245,69125,14677,10142,45975,23245,86779,80405,99542,78390,87831,44570,64395,11946,32899,61006,67314,13186,39223,71973,23429,84833,90723,40659,21109,46796,92093,59594,22413,84296,88263,14900,51413,61186,80552,33031,19681,98086,99985,10525,58481,54617,66660,65467,82891,97945,60102,64801,34157,12819,14489,11777,75213,71001,47181,25904,20683,51931,66039,56389,57152,66834,13365,73575,45744,22385,64446,86155,90098,44719,42985,49857,43106,72966,91188,49910,43729,56201,65917,61617,72290,27922,51788,24584,42185,51865,27910,14733,96985,21754,44384,52081,45296,19215,62861,14271,24955,52750,15567,57712,81222,38431,31553,83501,56186,41211,78579,75687,97249,32264,53282,44935,80407,90481,10199,89020,81178,76904,60993,69024,29263,44901,62111,31310,36438,55877,74469,30784,19653,69808,37763,12224,84773,72838,18991,32530,48291,38770,95330,19586,36427,58370,88560,74045,83503,31775,62349,15110,86421,45280,22401,76668,27914,71567,91549,43082,11846,11487,63798,78459,27198,71097,35142,92805,97898,95192,90484,57550,33535,48960,98895,55312,52179,53435,54140,24590,31954,83088,59274,49937,11150,31226,25657,90014,14591,47680,56359,45044,29300,25399,15160,55723,83192,62472,25269,13147,60504,95233,14352,58743,50788,61005,15067,95212,32041,35296,88280,94146,25073,95833,22453,44795,34453,50741,12600,82085,47187,89580,61458,33888,55358,94468,16829,51333,44815,73958,36570,15601,91477,65696,78886,28900,38034,85224,67838,92494,56241,26902,15946,31526,74843,93484,41563,86354,62137,68415,47073,19218,54852,61605,52621,33692,36185,64622,64876,46687,82062,97316,31847,58050,69147,98147,86920,95712,16272,11887,63654,91256,40789,73670,11705,68438,49886,43601,83743,35085,70778,59911,45772,36754,33623,97087,82886,15591,90318,20110,46367,26537,68576,97857,11129,53270,96197,82195,18484,17996,48256,39936,17487,30298,82333,52211,84876,88644,30474,15875,26375,25768,13302,56665,80959,84080,80903,82521,68681,68112,14279,72377,89626,29028,74152,22924,27908,74603,79465,37369,63906,63146,32574,94968,70978,76473,56357,15839,35151,27539,69843,30686,15256,42872,45193,95128,72550,55098,81913,33113,31713,51264,32472,59519,13904,97501,84945,45609,23125,47570,41104,77851,57652,56569,90024,42096,64027,91834,74372,61120,54368,69026,15793,28817,52654,95338,44965,59104,47762,85105,97913,40353,46351,13514,31959,96974,78821,82365,80450,56242,65131,21810,97590,25847,26812,86012,71088,70652,87961,75217,83188,63478,98111,37912,91176,24247,64159,45290,34896,67893,46326,54229,79987,54449,20998,4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,40019,20000,15115,49279,93611,91851,69743,90705,87273,98584,36898,21698,14528,95947,27403,46612,11340,91026,10155,97910,16322,19074,38731,22887,82057,87202,25665,66130,11807,80594,30997,30805,90507,44604,92382,20132,70137,40183,19729,55723,16555,73060,37805,72284,81354,81722,19394,77569,54630,96989,96172,88116,58345,85638,96233,96921,28708,79247,44694,99032,80268,98559,61353,77036,91519,84390,12584,99789,42096,79724,92135,75792,94837,49670,92422,71900,29259,75842,89889,63703,89084,14119,59052,28713,38714,96009,71857,44148,83147,82732,53512,55225,68245,47380,41831,94523,43638,50721,52562,40650,96970,14273,69185,55711,53723,24218,29923,92619,29626,89947,25930,68330,40426,18867,93241,27930,67418,41859,55121,71419,58799,99109,47710,26246,47281,40145,46496,30654,32302,53391,70360,27399,87312,39205,74060,65779,78109,57964,46299,71842,65545,17647,43034,44007,25710,45276,62375,24976,34992,50376,13346,20347,84512,78718,72834,24898,96637,70963,55951,88853,16768,32512,99432,33567,99947,90981,71323,76637,15049,10625,48202,55851,74022,43186,68741,61713,65261,18082,47021,13233,25339,25125,42507,87736,33453,78699,65926,19836,41228,57311,11201,39402,89264,97026,32121,66734,31124,16536,75214,52400,30140,92687,86594,48151,36881,22806,12448,99599,50415,30275,82598,42448,79108,94216,73506,26247,59075,63246,73311,11753,67347,52365,14069,76912,11918,63458,94614,40033,22365,12864,39980,87341,53159,43680,55279,68993,43831,40371,36194,11024,47775,59676,13141,80355,80455,12831,93266,63917,53994,33383,44121,32493,45272,39057,10408,29003,34476,27738,61758,75621,59216,54095,49313,42682,43875,46242,84194,81695,97052,48056,53097,70684,61225,64030,56113,99228,82495,85063,11034,96989,64842,77703,66540,65054,54514,81471,99646,30957,43212,24176,91702,88184,45284,49055,47515,18126,86821,46140,14619,96123,25547,94979,61555,90876,99916,25863,24322,95048,91359,89034,75688,57898,22618,98492,98515,15275,98169,17496,15876,76487,75824,25133,22299,74429,88221,89762,33514,30287,68703,45331,22077,24596,16394,15913,64968,70259,69215,47069,74124,11987,54419,25599,47523,32215,38083,29373,71171,29274,57812,62856,97091,90788,97444,52587,94475,27561,23542,42915,32976,49043,38536,18569,82356,35116,71727,38238,17883,19415,41991,27307,59740,78361,34866,58576,25248,63832,92481,74644,15973,11948,84281,75898,23657,21115,45298,41051,66017,80264,13846,38464,30837,15071,75850,58813,54731,85085,35578,43411,74209,24761,21303,35603,26451,96258,12999,88537,29294,71107,89771,78465,51842,62267,16293,16566,14763,88886,56686,38743,57520,89288,78120,61519,26716,88146,19646,16655,35240,90604,22343,38516,10251,28909,28146,62390,55201,98561,81370,57918,37993,96556,17971,84377,85607,67414,48672,80502,75197,33249,56801,25504,36607,95786,79270,77377,48428,13670,87793,15516,57568,12345,35158,79207,31348,69107,39975,67225,84228,30594,29687,24347,37432,12830,41193,10125,78192,89782,40424,68368,55763,53924,36445,56152,10924,59228,62562,23545,41019,52879,70119,30278,22858,10211,56949,51174,86971,24410,78046,61678,11849,74581,24756,57107,11547,22594,98858,36831,47647,48710,80449,29667,30963,84615,92375,82302,71128,69911,83999,91088,36268,55950,12837,19075,40895,15820,22543,43208,76718,25426,15402,38296,13166,36102,29691,82668,23491,46345,32708,30341,88402,21451,65607,78802,10830,77854,53810,44121,99375,27478,43110,88531,80426,61238,36327,77835,38684,64973,96328,40057,33150,28612,13005,88622,47596,96836,46571,97047,19724,15472,77086,30900,31516,81142,43035,69846,15561,59993,80681,93272,68780,12498,47862,58967,71464,30385,33936,51822,73095,25807,55956,46545,92943,98943,83486,20945,53334,38920,70604,83096,88196,23518,49731,20156,66538,82955,20793,37380,84382,34245,81009,99711,36425,87540,96678,65958,64526,29776,55861,94784,23556,92039,54789,47138,49209,25568,92540,46004,10477,40450,23790,29768,72623,86088,52739,76304,67215,88768,46859,35300,87184,92557,62554,46325,82662,16729,17357,80335,26315,81447,68853,82140,39263,78599,64131,29667,56223,18830,67669,32772,62250,93582,41546,47634,26409,48600,23328,95717,72374,64386,25534,43234,17331,78958,64481,94262,23065,92074,45432,65707,47006,48685,22373,34830,83855,34906,75478,22761,95555,26857,75055,12332,47422,96629,95745,51954,23825,19572,23066,80333,38390,66677,96537,65092,92229,96696,25321,84403,26220,75988,69684,42801,33255,44106,69835,24636,46644,45874,12856,40348,93223,61592,18100,82747,25274,75320,54120,16095,16710,97243,81844,68952,32310,89419,83554,41611,88771,40215,95497,41095,54902,29780,21325,89216,78883,58525,85094,36603,46265,15072,43703,46926,42882,67337,59976,34926,25115,18351,53514,85114,58761,42256,32945,80768,75527,88618,71336,99615,21879,56023,30986,93726,38779,44638,45811,30118,70400,77205,17202,94124,63772,28546,93709,59487,84686,14215,88668,18193,17854,30548,53103,59149,36022,52816,73628,36312,93006,81897,90251,98613,73776,83835,92613,47105,51677,77097,64537,99578,43137,33347,86112,62879,14386,71669,78061,69429,46630,86585,91950,92864,59408,43818,15336,61555,92237,49187,70373,97720,79749,85145,20880,60374,40120,95233,98142,39157,66814,58906,78261,80520,89723,94148,27163,95641,62285,41097,59049,18309,52289,28092,48156,18307,59404,78606,66351,37116,55208,54292,15764,92523,18559,83720,27591,76534,72289,16576,91739,42528,29309,99522,56957,41244,31836,18799,48390,54600,84599,14321,62609,73053,95375,34752,88986,99185,45713,96141,17674,14664,16727,32022,27900,51594,72614,29691,48432,10816,15839,49761,31377,57577,35216,89408,55519,19166,66542,36848,82761,39098,48639,15714,67217,99806,79747,47759,30622,71813,85809,17175,85992,67347,93659,32006,61240,90406,59939,20302,98517,74210,21108,47309,29881,14945,53326,20080,54388,29090,14602,31479,30122,76816,75248,95375,71791,80922,55859,44741,88383,34856,28965,87894,62399,59609,49274,43553,83351,82279,86542,69887,20065,76951,50511,93830,53624,70152,57264,40770,75756,10960,84536,63498,79390,34998,51843,52718,22167,24328,12302,96084,93755,34452,23717,49784,55181,54982,32280,60277,48748,18180,71764,42799,34916,61350,40622,86405,86672,28170,16784,69103,78928,38117,95095,75414,22425,65826,97363,67733,77230,21087,96802,25746,42878,48369,45380,85168,48831,23230,59564,77157,10432,22090,43280,95582,54850,75970,72067,93072,15370,57485,41687,18557,78053,28455,39031,64255,94126,32689,37753,55772,17214,15630,63099,16414,63446,22972,42657,79535,39718,77823,68828,71839,59559,65171,95633,76200,15327,68712,40084,28403,89827,42902,82728,77545,48719,10166,75321,68842,46037,91682,69288,65090,87891,40498,90787,34462,87838,71544,94787,84603,12919,19605,87584,45126,79432,75762,78352,38925,27505,39832,29487,17445,61832,80730,17613,23676,55146,43702,22502,65286,56979,60715,89246,19268,19156,34367,61041,34891,34857,41781,98319,27937,49964,33378,83774,91174,53483,24695,20069,38929,88300,51434,87996,32003,61834,76724,38803,85072,75353,27616,99691,59652,98499,53231,93595,49378,43057,15809,21661,56748,69974,69953,37017,59617,72753,24276,24713,23471,64985,72769,54466,23225,57723,70376,29614,11840,96309,28736,45856,88981,61818,25076,50930,12994,46623,38391,40309,53976,16141,16566,51255,11903,28924,11500,48227,38275,88101,23524,25326,54582,73037,97115,80227,61615,98938,21256,88709,38255,18085,35524,32968,43543,82030,21361,99376,13986,78481,69120,76156,94997,21968,86179,10964,26438,45729,18031,58083,69054,23551,70121,14614,11855,13658,46450,60907,24309,91957,28336,18644,15737,60867,71768,18784,42668,88126,58373,96597,36709,34002,20376,66522,89045,94802,22296,64366,15805,36409,34224,15075,96056,16045,26170,99634,72859,80684,31451,28240,18741,17243,60349,73199,93188,82591,99408,92001,47259,33967,19341,84015,96011,27101,92076,77534,54321,21695,11236,11818,90998,69064,16387,87966,24299,94137,16126,70687,58314,65053,45713,15654,29397,16512,99428,97371,36844,82460,91972,71431,31590,89747,52996,52539,10050,43216,39937,56600,97252,65095,64814,44151,89306,79421,33314,66793,87861,22989,32064,76036,89868,49947,66779,45076,91949,24366,70790,54842,85436,59573,98902,99793,60020,69118,11839,30063,64994,98413,43669,94329,14149,41762,13485,89699,97144,65162,56226,58266,58414,89608,17923,28307,12530,58895,72333,37962,21301,94544,34798,72200,22834,34719,77707,17935,17217,99833,32492,79421,45230,65137,22877,80944,23899,14255,47612,55714,11285,88129,51594,20677,71656,38439,48571,37614,78667,39976,29795,24591,57860,15115,16203,55659,11384,50170,41308,93990,54392,88602,14323,46360,68463,24557,86828,98476,80053,97671,51798,84179,64620,23521,59883,62100,60520,29586,27789,50729,62722,76781,43133,76902,31540,95956,65619,26537,71653,60937,21496,58954,40872,82981,36500,10799,24719,94160,85749,14658,78402,90519,16287,35565,75893,20036,52956,82408,37589,99235,56885,72911,98497,78762,20074,82208,58297,73786,71523,71343,40115,77797,60616,70934,77980,65933,28925,85966,85946,88707,61936,70681,25581,35550,65797,61424,52888,68343,38962,12967,76691,23937,10929,66631,62397,66494,95002,46397,41030,30932,91074,78097,82899,61822,68069,69731,73144,31223,25881,16090,54515,33145,21437,12209,52326,14546,23950,43987,98686,30166,49244,83005,92105,95434,70056,12450,29586,69106,12784,13561,86977,87550,14657,26766,66135,78998,72624,11093,24965,89832,43071,19608,36541,64559,17868,30278,19500,41111,76744,49395,85937,41043,33382,39143,57831,56736,81162,97841,60923,47104,49219,89542,78460,92799,29648,87564,42040,77504,77629,43781,40574,41806,21831,30117,28523,10367,28726,70925,87220,80244,67407,13681,23265,66771,91721,56280,85472,42285,54092,31903,16109,14452,80433,35284,57867,43121,58836,52097,25249,20314,14148,29799,74415,78147,10591,92861,43995,56194,69417,47911,20182,84705,13982,35296,85083,41837,43526,81440,14047,62325,28156,43623,38566,38301,64829,34230,36766,12285,89971,23861,38403,18058,51736,15484,53573,66826,88893,47748,20904,43067,10087,16113,90628,19729,78239,89496,54440,88533,77039,26628,52946,52910,99060,93901,80154,42056,28950,46804,78638,21665,16341,28778,80338,36069,65104,64618,62584,92075,41413,28725,20358,12243,15429,89275,52959,26638,94968,51679,21302,72857,24758,82906,33098,10701,63654,60215,31275,67036,14149,63229,90275,49799,98876,52763,16275,89233,47597,17342,11255,35529,34772,76956,29207,57097,11875,65361,49204,27756,35734,17204,71501,85864,66532,68800,35268,57966,46428,51610,84342,35314,63682,88644,16327,16039,30745,79192,31018,19483,84490,42811,33781,27711,46978,13986,88040,33609,85096,46225,58249,86544,54712,63381,33720,61120,50227,54070,75465,39704,31488,61225,30823,44984,92349,54122,52172,98845,32883,76128,70723,25192,17859,11641,76597,69892,97382,47619,57481,42889,54715,34399,75855,50604,41203,16652,94391,52848,88981,37208,19651,32148,88322,18802,54632,11817,39517,41091,83082,91327,23918,84555,82589,17470,44133,19933,62908,39576,55671,55369,86054,98963,34469,81389,96222,91020,61608,61853,15917,73016,66731,53142,37384,83762,14062,66108,15960,78974,11009,23212,70515,65221,78684,74636,49980,73004,80574,27784,31821,37370,41131,91596,74208,61537,55542,99482,29059,45249,59693,12594,94171,26976,24426,74138,79995,35458,36464,16587,87668,91498,86013,14313,72700,42727,13715,21401,31978,23125,59460,38344,15834,96837,19119,10150,97873,75004,67867,76789,62997,90777,40474,32891,91581,48622,79972,35454,74693,37766,71686,58360,91786,95528,88308,68791,60183,44709,83226,71708,98629,40605,28069,26959,49673,50365,68355,21578,14964,86733,32802,44152,22096,49992,90132,42752,66517,78740,37122,97674,92565,72412,44099,67150,58502,38941,47737,76029,54406,73657,54293,20358,75067,86129,70606,63640,72484,23991,47757,79372,58015,14557,33170,41908,45902,93486,93761,48990,96137,81161,13143,16981,13003,46021,38003,51804,82230,53917,51469,17226,85137,16682,36514,45085,65395,44698,59996,88277,24332,82262,90712,61658,33231,88340,40189,35499,53029,61122,26704,38784,54994,93824,25974,84656,50603,87897,84476,43798,74131,17400,31039,94319,72404,83258,25320,34435,44821,17015,37990,78616,47853,89842,89620,37662,35145,49381,70649,19496,52159,53416,84696,92149,38323,82173,45740,55495,14698,79550,80945,41134,34111,91939,35664,64453,58242,65809,23549,45534,79783,81136,80806,81996,23747,60814,84691,24159,50537,22509,41657,23374,83324,18021,12037,50963,36655,16961,23860,49223,11445,46420,39352,22799,46096,46964,95591,59057,27710,72640,14966,67472,50382,85872,39256,89211,93741,32074,24271,45391,28237,18980,29700,83087,29225,43394,47783,52272,33264,87354,33783,43369,43903,61969,17415,48398,76746,32832,12057,98033,66707,37187,19156,58331,44733,59745,53747,62414,96054,23375,53749,98359,69023,11953,46090,47474,68057,50054,47852,68235,99065,15642,69834,13097,86770,28232,69458,76465,27802,85111,53531,89722,14957,37330,54175,37527,23058,19404,79957,62371,17639,53891,65667,95458,99241,76532,27920,61961,22851,58507,67709,98705,62663,24050,47116,69770,22916,58555,69465,92799,85419,97072,39454,43278,48472,25489,87052,16002,91761,24696,96443,51611,75691,90113,63740,85151,98945,75618,51560,78957,68367,18601,14119,12623,49828,29395,32934,74226,48841,74262,58131,60883,95908,47855,42842,30956,34639,98762,52239,32116,22397,18542,25721,54112,57866,79409,61384,28303,33877,15624,63316,36510,16884,91686,68476,96392,20808,16175,32665,39105,26778,29502,42464,25276,30242,60171,95761,18788,87561,46655,77393,10295,91563,71536,73469,76125,58084,95596,44694,25882,30611,20522,85450,96984,56509,39350,64133,71572,85107,74509,57518,60773,15072,51844,43407,21900,62196,62621,15296,40437,23757,21094,59192,29768,27983,15347,28791,38286,79356,12512,65378,15599,68510,86204,40310,96762,61131,73681,92224,24303,75616,32066,48003,53642,33289,60337,73895,88492,29141,50327,23418,49406,30527,24070,31254,33403,59174,77235,35154,80279,64647,79961,60183,53767,34635,18628,12043,16363,24934,57632,94277,81796,42456,39243,58814,89643,59288,34435,46524,56273,78813,25177,65872,13431,46094,63480,45522,25344,51110,18742,96181,31530,70399,27370,54079,14836,47155,92787,71891,88825,21546,22206,78372,87383,12910,27511,93448,22271,36099,62172,88479,51520,37876,77386,76332,49115,22336,42818,49830,39164,61958,62922,62269,22573,25420,49816,46524,55920,97757,39179,55207,45646,31253,41753,85975,76456,45554,12692,93749,12085,94597,24960,80902,87127,92915,29280,98359,82981,47255,36029,21896,10595,77980,15678,85849,39819,66729,72707,11359,68838,66037,74677,26949,32913,99371,75446,68659,84996,49332,28956,26059,66323,15465,72491,99074,67358,12566,89778,31846,42859,21110,11341,37242,61645,96657,87953,36991,30956,33966,33482,50312,85105,84630,43039,21084,86184,70400,99752,58692,34641,68328,83220,64370,69229,18571,96594,60267,88032,40326,49065,76994,60070,13737,57094,53450,51277,68098,39735,74985,64586,50422,68891,94055,37612,45446,49672,78473,47421,92021,16235,61941,76541,57610,22531,31216,30132,69169,11641,43507,45028,22796,30614,97153,87332,98475,93124,95102,55857,94606,17399,15918,54513,92875,72440,74969,52881,15558,51775,38282,94128,13079,95637,58051,82051,45986,46364,95775,82130,96715,28460,82650,78293,27816,65976,38228,85264,60932,86234,65382,62171,87410,34215,30662,60012,94480,95853,41270,50636,71847,29943,27693,71911,87584,63079,11017,80948,19413,33672,30041,28796,49169,53866,82916,80642,61515,29855,46888,25667,16607,34883,22827,61502,14560,39814,95399,77435,93247,14185,82870,74056,39276,54858,91386,54496,31727,33457,48194,82272,10394,14642,37362,49638,98955,90795,50003,21617,54722,56947,25693,87155,27059,47289,12431,30781,84415,92248,62361,32595,57821,93356,30712,17120,76007,19891,51242,53501,40161,33712,52127,74891,58475,75153,70700,65604,56977,35071,99281,19531,92761,50453,25473,14545,84429,18154,49562,83327,15255,50738,97548,26813,69451,40599,69149,39632,13575,81535,54770,55983,99297,85060,84494,21075,85626,54692,98066,82803,48511,31529,32835,42083,69153,82167,10487,88954,61840,73616,35637,13022,94032,42619,37620,79109,66748,78275,41799,67231,39223,57608,35786,63876,15634,20228,65600,43317,61720,79470,30050,65996,80926,97364,52541,19137,62916,78354,26836,75554,22877,83875,94696,25865,32244,43065,26617,93651,81449,28695,57890,85247,31102,56927,86470,29844,79619,36581,23174,47130,85990,79461,86724,98173,12503,55423,95229,49471,86629,58893,23204,15754,48591,57315,50412,46385,95746,86308,35585,82867,81700,83865,69985,31378,84557,62456,98158,44334,39961,56489,18614,10749,64451,41146,58726,27675,49655,71374,58243,26956,48136,61552,13356,14854,10519,63381,91186,90241,85966,16347,66356,25721,91755,30907,52115,74735,70489,87186,73601,79206,84414,57682,73347,91017,20811,22092,82963,46884,85329,22778,94951,75813,38183,81084,44822,49173,32991,12985,20374,59956,24068,34918,93609,43724,22533,88133,28044,72311,57217,23576,88103,67826,30801,17517,61252,15182,33610,48624,45275,16900,64018,57302,53528,99406,60607,62288,97302,20163,34892,61970,74297,52910,20126,36755,76195,66804,81243,90853,64572,10366,31156,82744,63122,36202,34626,62965,18921,75188,93459,52344,39793,14969,41189,28189,42550,87288,92056,30897,94650,40266,96050,86411,71152,67506,81676,70278,24688,11613,86247,49544,61277,10350,88522,12499,94644,33064,64055,62058,48978,19840,97231,41083,11724,68966,52707,26288,97088,41985,98192,83542,61072,22083,49495,24895,64608,59935,93840,38326,22662,25258,66926,23492,75296,40635,87170,99324,80999,39674,53939,58154,22340,29018,75736,55898,79871,82248,80375,82245,96032,10951,76492,58227,91879,75110,21773,10138,40481,97250,10568,82480,80748,80752,49845,66953,35061,15449,55511,83417,69732,99495,76135,23117,96586,27862,49847,71530,10764,93421,43197,63955,47520,46368,40572,63611,85471,25973,18989,34901,37618,16798,93761,63882,18358,91640,94079,24588,76107,21301,82767,84772,85175,15489,39571,42337,58696,65218,80985,85112,29578,28607,77459,49295,35430,51904,91565,70734,73151,25790,25482,75126,16409,84700,33300,85525,56645,74390,91808,79223,96076,34777,18378,87362,54470,75458,28086,20546,85311,73682,38276,81386,17702,29480,77529,28546,99472,87578,58401,24088,58295,15378,11365,43753,25055,77236,71291,81092,19875,17517,32342,34404,82079,14669,21923,64565,54625,66544,14143,80834,82515,10031,65538,42868,72114,58354,35451,20740,25708,59534,42974,35291,55268,24476,91690,71567,95504,43875,25538,63809,78695,70389,43238,98177,10715,24874,60774,87436,39450,54793,70252,28352,93585,34205,60033,19073,73372,88992,77357,34670,96518,55753,46655,98454,31819,19006,29835,72369,19936,34199,62348,80789,43293,47360,27561,56166,25969,29967,69879,53447,35578,61161,58844,54358,78962,20763,75136,62337,38849,14072,91778,89257,93291,54868,64862,91297,88779,46066,16795,46856,59950,94086,73970,79813,61990,63335,96115,52345,98095,45533,81242,64025,45601,26967,37479,43634,66386,72735,35784,57357,72333,36465,70615,57425,47651,64068,12939,16263,85723,19288,61108,50428,45078,42588,92724,32491,44784,56683,31423,24882,12064,27974,55545,74046,98118,72688,32838,94411,58420,99233,29136,88948,40240,99691,86413,75324,58822,53451,69772,93771,18819,14933,46011,39801,95454,97561,16316,83444,54939,94264,73123,96723,82578,91192,58658,63695,29452,33521,73894,86054,55673,59704,57168,15179,17290,28027,40780,25123,50425,23265,15945,99531,56559,64523,22769,31153,98870,65768,94441,87393,42145,50588,20447,92010,87746,62635,40210,24540,28353,54233,29352,93096,16363,55782,10095,37256,10225,58768,58599,34419,93166,33172,87646,21479,87157,35576,64742,67453,40501,96716,56165,49246,19892,18280,49177,18349,76752,90038,55645,48301,64160,83660,82621,43890,38335,13786,59195,78470,30025,90496,61341,52770,60591,57501,99926,53924,60280,78428,28351,53277,12097,24102,52306,13586,62276,16224,21789,62400,36686,65365,77355,56512,13412,69707,77738,76486,57798,18909,65696,13210,31493,26616,84566,84183,94701,68983,93664,43050,88799,57448,36266,59478,27545,48990,49053,70852,37267,92696,79985,45267,51331,66711,92320,24668,61294,16528,43204,75913,94724,96714,42315,28407,22639,84697,89368,95747,76043,74540,71957,67690,93133,92278,24286,44374,52780,38234,60560,49818,89953,48016,47506,86827,42248,27691,28730,84332,59221,53239,31417,33190,55781,52433,51524,66253,78188,13684,15157,68870,36321,39434,74512,26410,10226,18772,27485,99548,14008,84199,44256,74764,77151,95533,12492,94792,41382,56572,79879,77160,35688,77635,43814,74035,37399,28222,58386,86876,57048,28831,51540,32195,17113,96553,14166,31889,92465,40917,19068,16489,40462,94526,30127,54138,85079,62903,45802,18526,11756,35832,65219,68256,25599,72746,71431,26999,65839,49368,82989,46545,78401,27655,49185,51545,83774,46443,33346,51217,21836,51954,25446,95737,35422,84557,14385,12076,94978,70997,82394,27391,39926,50621,12319,21909,71912,93390,52350,78130,95952,64121,89149,61682,82057,52391,32914,58980,19263,61005,63068,73518,26505,58319,75692,52706,49650,89005,93507,40251,16782,14352,74841,47101,82538,97085,79756,42355,66927,47381,48662,16389,92277,28943,28449,61424,29501,96123,17151,88794,37512,14557,91873,84574,84690,25929,52924,49104,98063,64351,65895,51560,99394,34166,46073,48491,53598,93113,59426,25119,40182,63757,21723,34630,86051,59709,44462,57987,56080,87107,54726,51145,17557,31984,53066,87546,85059,44836,23559,14659,79805,37248,22448,35875,25310,73119,66383,89771,28113,97836,71136,50830,12613,43811,76221,99856,71338,92159,79188,48252,51358,59416,50846,26011,39045,59254,21247,14265,45164,90437,36319,73748,16113,67146,38730,97620,22369,75896,54275,78364,19752,42442,96067,55147,64878,31075,22460,40344,29893,40325,59495,51739,43225,36664,93207,26765,97376,17286,14891,10181,24515,35826,55550,84813,30679,90189,78042,53450,97180,93352,64499,90461,11125,89013,66009,32946,16869,26797,66475,13641,35776,95572,17527,12115,79346,77719,61410,30509,39424,97708,59367,51535,63651,24856,70440,78530,38270,71278,47802,80606,54668,65199,94325,13594,95231,17599,90835,83673,47343,98317,70640,85833,18312,90373,76540,85115,71119,76948,73103,29063,66551,41568,25976,64790,52995,37148,74733,55226,35675,45283,14861,18572,52639,16637,91944,10486,91032,44127,12487,33131,85211,48537,68469,22763,58647,50949,50563,69510,61670,91040,43142,62307,90725,70548,18727,95836,25940,37541,83546,74068,22192,96931,31355,87232,71025,65412,32946,18657,61097,16045,54729,47532,63160,89659,30471,28827,62831,68154,45998,16320,37525,93040,41405,31838,28066,78398,72218,12822,18811,98034,87128,80945,13347,86564,61697,78116,27798,41157,80098,30777,14210,23517,62682,60039,62316,71429,16032,40573,86630,95392,29118,40513,57189,71234,50029,76662,36719,75769,15639,48706,81137,58931,60078,18485,23193,43547,59455,54440,39554,90460,26654,67797,16126,53536,77730,89640,58150,73362,27564,15461,93211,37030,20153,46965,35961,55300,10487,28940,51783,16686,52962,74729,56830,48134,70364,26342,80860,68665,16866,50619,75303,38197,28391,87162,63846,92189,81663,53845,55031,20576,94469,28003,90628,20383,57542,17294,48688,91127,60260,96520,94490,52178,24364,74886,23348,85773,30070,91752,40290,98334,86583,97581,11897,10055,52053,38664,60695,69282,61247,82605,70360,71673,12500,74402,58209,29273,58105,17610,57046,81756,69873,20309,72552,51783,85049,29470,44872,15298,73481,33116,94488,83191,27942,36392,70434,31071,60621,81655,83240,44014,56835,80318,88196,54285,83621,13107,80363,10326,69496,68582,66221,28989,80335,27651,36352,21047,14989,55945,47273,16731,82306,63579,53455,24081,61153,10810,38128,36963,59126,71941,68623,46566,82704,86002,29070,92734,46063,42880,96865,50879,29385,62898,43718,57747,55243,40883,18217,89679,81533,29455,30006,99593,42345,58774,18282,14053,93909,77924,13121,12043,43789,66409,61590,59100,55213,58818,35404,72229,88724,75810,92786,32327,17455,28956,57063,49950,26300,99107,59146,82648,25790,14161,52164,21545,35571,43501,97786,44970,68450,91941,89168,93289,33763,35133,42107,77621,25217,23030,37681,81356,53259,39567,34133,96663,71459,14049,36157,25692,42413,90880,27292,25105,72272,18756,11172,80986,24192,26677,34268,26275,20759,93487,11125,15144,63017,79768,54134,38902,50855,83226,36045,62318,24246,63461,57622,61872,34586,12946,35194,90579,18958,75862,21421,65928,26349,52644,17209,40187,38634,98217,61669,34525,42153,54135,58819,80537,95014,47813,15713,66031,83012,89993,43546,90961,89109,15459,16799,32837,32095,60147,88996,56761,10297,26532,52666,87718,75508,39946,17133,10515,10875,95145,40129,51108,23359,84726,63523,90242,57284,36005,96479,80754,32529,24445,40805,60054,38793,85204,21993,93287,41912,60227,78252,76873,77800,26218,35003,37203,38296,87837,87682,92818,82022,92208,24968,16515,91097,22478,34629,81146,71692,81200,71314,37532,63614,21312,37443,95789,39812,51152,61850,94037,65451,79374,94049,20171,95852,21335,26836,51841,30047,85488,94003,45678,95635,45955,74049,17657,76021,56341,15718,13027,72871,38532,54772,25520,64676,31079,99859,73282,77555,28768,60616,11304,30808,88931,37365,89872,34145,41970,10944,45052,96808,17568,95749,12098,85039,85537,30774,47878,68503,89775,81474,40201,24445,72787,98122,51549,40086,73567,12600,93875,73150,65378,36829,36364,92387,92220,66828,94651,53991,60514,17378,90796,97171,19637,93210,80141,94545,62937,28419,36494,88132,30672,64800,76685,19670,23309,95072,29374,84424,64903,31557,79424,63219,47117,48239,21668,93977,15102,10814,16591,79202,84704,26743,27181,81464,30076,93516,81152,23953,27025,96596,32214,14004,18992,11482,22164,39474,67148,43059,82839,29105,56553,25209,42841,77853,91827,31217,53080,97547,42595,90577,49879,13768,11934,35612,41534,98095,73885,80596,38022,90941,19389,66338,15469,91384,16410,39541,15478,20047,39460,30149,73981,97117,69749,13275,25374,90821,65040,91738,68084,25778,48008,35333,72354,83953,70247,45524,29609,72309,72176,52515,86773,42155,64780,86398,23886,12104,59523,77328,80159,15370,17453,65071,74086,46181,51941,28882,66699,30946,31649,83519,84268,57897,91535,47626,63777,80388,86643,50500,71708,59371,84304,89329,33116,92700,18741,82310,24724,32839,69935,45490,19530,23611,68781,13432,53324,21263,63504,86927,15666,40922,86293,99213,97278,56023,37232,69421,56505,93025,88031,31717,73722,97443,30895,80221,47258,12729,69348,96543,83269,92612,66802,68224,54142,43766,47573,79846,71736,95966,39023,86275,67776,98888,84710,44416,44862,78921,30705,44124,27115,74497,76874,57651,73958,49659,48439,70009,10575,53137,42682,29804,29950,52847,31962,65287,78496,81769,94396,66723,92692,12776,64419,52963,87709,68484,65258,44894,44468,24665,58857,14234,25960,66341,54953,75873,72392,34905,97817,74076,19911,80991,46836,58159,94037,78083,75861,69355,92770,19613,91860,29872,37668,90865,75758,53532,18178,59596,58936,33425,76178,49000,11635,88224,92195,71909,82687,82449,31630,15311,88008,96165,55195,20118,19294,31228,94583,66055,62035,51207,44572,43633,62647,81346,57742,42090,41016,63829,56863,61058,18256,40102,86405,82585,86443,27662,76701,51092,74640,46566,96854,93040,45971,81859,76159,35780,76889,80456,61352,89252,11723,68651,31302,24951,57905,72430,50341,92936,86132,32326,23529,86047,96248,86370,97979,59227,96147,79829,99489,84929,95690,87912,44785,12479,10007,99519,45138,43331,24912,20962,20904,60022,76255,40231,87756,80543,43673,80121,68879,24168,30370,68641,88159,73915,95493,86817,42804,54820,48784,32688,84581,24345,42556,91370,68590,18422,90909,54161,22921,13961,30745,44086,33640,16599,43709,60147,71235,79668,44434,39213,49264,89425,39637,36508,33559,42823,66882,26531,99508,37743,59894,38193,99614,13385,64628,30557,42671,90521,78857,86862,31827,18825,80101,25707,81793,54270,91173,76070,31202,87162,12667,69463,70616,88790,88637,55950,69409,65275,53964,15572,25613,34196,42453,41515,96493,50231,16050,11293,86232,77458,80792,10094,43533,79309,97798,19113,35577,44369,80695,55831,57176,24287,57513,19304,31778,13299,92050,84986,37132,10369,87590,48217,79563,93170,83316,22136,81757,25184,63873,39046,45356,93615,27428,79461,95842,37075,36173,33573,45231,60789,66155,16642,33168,12870,86948,33426,87440,22989,85435,76343,75942,35007,62878,37235,28284,85315,51329,96848,38837,23797,66089,61001,12362,37445,24836,61911,72443,37089,85475,82459,58328,60906,50569,77124,15761,66903,71291,55124,48268,37020,27363,48578,83807,32237,68333,95029,59473,64976,43074,42925,66239,74116,67793,38178,34304,30505,93248,10097,71113,40184,31484,29490,28114,38813,12675,12556,75473,89222,25966,36751,38423,10653,20867,16668,19332,10806,27798,12669,47925,59953,97013,64140,46044,71159,40888,82218,93575,92029,71123,81132,17710,59194,25836,97360,74275,85494,27286,60666,25369,29955,61256,42247,64300,18442,25229,62563,68188,46022,37439,81257,33268,97560,39650,77052,44715,41242,88997,30134,24595,85362,90129,75486,95412,74197,37547,43221,27851,25546,61809,57038,63016,73800,21852,87035,38516,23300,71773,78859,62828,20501,82719,89583,49637,89962,94930,90828,27756,41461,63129,96581,68748,15397,90119,89509,87929,94667,25133,88603,36388,72001,95698,42921,17040,51408,76068,46041,61400,95823,74482,49800,99674,57187,72275,59476,27504,86926,19750,32823,91582,49138,83749,30044,71903,51165,86607,83173,75138,83553,56529,90253,49260,99149,21079,59977,81453,48833,67883,61698,86124,85305,80583,65570,78834,92163,34342,72100,36671,98270,76531,32232,23022,43323,75544,74400,24422,16343,38234,79414,32392,32723,71935,34765,10850,23108,46576,70511,85046,17515,46354,92612,60096,92609,38662,42830,61241,22650,77065,68246,76579,64564,72465,56060,76539,22357,19624,15558,71513,18049,30893,53847,63128,27946,41778,17080,22576,51631,24535,60503,86801,27122,45470,75314,37142,52688,91008,48345,22846,53058,24395,51544,41656,11689,35057,64122,47281,80865,91457,20903,66403,40178,60930,37875,38368,97270,14254,85023,22458,32467,40284,93005,74227,62501,30891,91332,58481,60331,17682,15054,49270,35633,58478,74768,70511,91155,24887,76812,12278,23161,69774,49809,58620,77470,43179,53282,24149,30826,19063,80984,12615,43537,13918,41079,33519,79055,66617,19063,92209,76976,72060,47765,80714,26042,13006,22753,97224,40370,97680,59568,23880,29180,13891,78830,77326,76281,77935,62478,67394,16914,89239,15860,36909,74786,72793,70294,80584,68597,82577,13792,96634,84023,64809,87715,63562,42988,97478,50072,54922,14351,15513,46470,17186,32486,53507,87084,62915,78739,55305,30403,62897,39460,15504,11362,89679,51954,71519,67661,74753,80134,84011,46792,16699,62003,97420,63936,47017,46107,92895,18419,70693,55210,19186,71613,31030,19019,78509,30923,34727,88366,56601,30055,78289,58432,45860,14300,54718,89231,62656,89860,77210,28931,23924,72439,81490,32316,50059,79246,63115,61753,95810,50905,45558,85308,10393,90326,71729,49022,65359,14391,78409,66798,18189,10769,82580,68490,64580,88839,75860,18524,96317,51337,25532,27160,51833,57524,88674,41906,62875,31006,28302,81474,76888,98849,48832,62677,70206,33259,79597,54238,33712,28822,33993,41036,50447,46845,73501,39857,70773,44283,51499,98094,98835,34387,51152,73104,63632,79076,82608,98416,53634,84132,19280,11351,73424,88978,56992,26439,15487,83209,84670,26593,56186,26208,28224,54948,75118,24913,25106,45215,73492,81374,68743,96522,46084,81112,80874,48004,43107,53192,48946,70408,83172,47216,26943,73247,99849,68199,67649,26944,16607,98772,53998,46657,51243,94194,43972,58126,55867,34192,92627,17211,59231,71492,80520,54178,93247,95967,70965,31272,60934,82140,43835,30865,76589,75763,87213,90395,37590,63069,94519,94610,57865,11566,27725,58442,79946,80015,22699,64031,19296,94021,22557,34272,32595,83287,83067,51315,20089,70715,68669,35807,32528,20166,77022,81139,41046,45304,23892,72411,42089,19051,43143,70687,24695,61921,30459,43101,29417,31488,46231,59820,29675,74041,98791,41736,67480,71486,84641,15791,88541,94786,68410,12029,76044,87979,20669,68613,45972,93070,56673,31509,15030,28870,90110,58653,87397,41640,21509,66936,16450,35049,64396,64145,52443,91951,59720,85149,95688,74618,56129,19019,25691,10975,22842,32898,32221,64011,25082,74483,80884,62843,62440,59063,59940,10909,66543,73115,14952,61811,62130,19698,48281,39039,62609,29637,76933,67816,24061,76635,57923,36972,49148,78719,25423,93223,80930,70350,91278,41157,78986,40209,21831,70244,59486,35984,44245,93242,59843,45010,37460,84071,54406,32454,45383,43413,26062,25226,50137,24872,67811,58927,80461,53304,97837,26175,39722,69869,88829,40423,96867,68306,32266,27231,25833,58258,23539,76279,60639,59373,80850,50677,14771,54360,25807,89148,27477,63653,57126,62643,83625,41725,70171,34713,92372,88163,42839,29100,82415,17749,73918,15461,57846,60512,93967,67235,52860,11582,76016,56021,94053,52834,28178,76956,47473,73001,92257,22732,19117,76981,14425,60307,99851,18874,12326,34430,98494,83184,35946,14609,24032,85891,23439,23385,20644,13286,57087,21759,35927,11000,41126,89160,18525,83241,42134,23734,78244,18830,77975,41417,17002,40962,79056,90829,78278,28246,88882,65820,68066,75209,44682,48741,85182,43500,60461,86631,49988,72953,20715,67420,85351,74616,27632,45723,93691,66767,22375,73130,31784,70608,82598,24149,86478,16199,96683,62596,71294,20658,90311,60918,82733,41016,22538,27961,52266,27245,82661,87375,79291,46544,98400,45947,47229,83603,53820,56585,38778,38831,90865,80182,69819,44843,60510,48099,52527,48509,55221,45985,70378,96545,47071,87746,95895,20059,86990,84452,13329,84928,11678,22996,72632,83823,26634,43674,96056,20638,33552,16701,21127,57717,89691,23195,99252,66808,66177,47310,64724,49143,47760,59072,55044,20027,40812,51802,63467,65300,78671,80606,54641,82964,33356,66947,43987,33707,69042,31533,84559,70173,98727,49191,74267,55578,39670,61812,36611,50782,54214,92989,63146,54778,64972,30249,26131,38336,68879,52014,95035,80148,50313,34798,41709,68755,37325,95544,78346,58966,73935,93516,54113,97369,46657,73000,22425,14031,93599,55723,86320,42007,74409,32297,42452,93022,75140,15675,31138,14907,60208,13597,52130,75825,86363,53186,34453,71062,96704,77511,51184,99143,84639,58808,96746,10424,45956,66520,72192,36200,39174,43286,68081,75453,17294,50788,85935,23078,22855,89747,40565,72817,77680,82205,92448,97350,75273,29294,19468,84831,29822,10605,71187,82387,73705,16979,86569,15074,63972,10289,80640,12259,60754,97447,60429,50795,23873,97954,26449,34515,19008,50416,15906,49116,83430,35279,94233,76453,76019,56538,20778,61981,89330,28700,99847,33318,62341,10029,83960,39095,38590,55622,37943,21406,30682,64197,54100,56459,53575,80590,75519,63702,47234,16433,42296,42037,56341,84031,32377,14084,12709,12407,66129,63926,32130,73328,38316,38238,19152,86220,98378,65540,98394,33901,66842,95571,42287,63402,68029,41071,52318,62654,40086,43726,38488,14419,73280,18423,68309,85346,20200,11306,95988,95123,33305,88927,10958,32824,82650,16074,54825,32373,29395,48762,63160,43881,15272,17386,38970,88980,80896,22682,89005,25528,73977,95773,23726,77230,59728,25970,14433,64025,95449,35064,36300,53046,74499,96789,66905,98018,61855,58247,45121,15460,55307,42365,93802,15356,36737,28780,52766,41480,74388,57208,24899,39593,65553,71418,75023,38103,93120,45842,23344,99028,45385,24368,18613,59422,64733,24782,71445,81909,40451,18878,54738,27235,15692,94508,23574,20984,79400,69742,26431,77097,22109,44595,15919,73815,54391,72494,36397,32087,13559,79111,42229,98598,39584,29367,44177,14358,93045,71951,11024,85517,24588,46545,92171,41987,69462,19380,44895,10252,36201,68113,22215,91994,22056,30079,90797,69606,15790,56820,72007,72305,13242,81840,99499,42186,50222,49434,58290,33559,13251,69661,17308,66250,20933,30997,55261,92085,72496,31688,55172,59119,81100,56837,36109,50280,91570,61115,21735,98299,83118,50999,44207,46821,21615,36402,96395,76423,84137,74898,89981,94482,16009,86681,92802,67915,56577,37333,71799,52291,11589,66355,92138,80678,28044,99432,80773,29869,83985,61225,78727,81807,39101,83246,33134,28017,52776,43067,47380,23535,31896,91805,43039,40943,49148,51998,77287,38138,62372,85193,65201,34858,69269,83450,74654,65951,46166,10264,53030,12540,91668,70324,95540,96931,91978,75365,18262,57647,93747,79920,40208,70691,29437,47941,59950,36290,38374,73900,16262,50639,45994,50579,30667,78647,44697,55938,67034,67702,85114,78773,77225,86682,49579,92239,33657,48535,62968,18362,33124,33092,85830,58756,37617,34664,85873,57075,52701,26677,53465,35156,84472,54243,87437,91103,52388,61822,10503,87484,29626,13689,60347,13146,75926,56884,96493,26649,82128,54506,39189,85075,28303,29857,46342,39560,71204,22317,86678,13470,49295,77025,81151,96537,12818,65330,39021,24514,75128,95033,91251,14721,38485,80184,67314,35028,87896,88066,50455,26409,98295,70489,61728,38638,41166,24430,27942,83307,49491,99909,10173,87613,45382,35826,18623,84912,73218,50615,33111,39106,55523,64030,95002,63527,31425,49562,48919,39210,90747,87826,39624,23831,37229,82305,68527,69992,91442,71986,73980,40355,93317,35368,40652,43992,90077,54747,33723,20527,74104,77276,58802,32072,49998,20480,77090,58686,78042,61829,52614,22622,37925,45147,87551,45180,25136,11178,17897,32803,47116,18985,84383,97187,65932,61243,88900,16361,47420,11918,40268,69622,59279,44736,32750,22117,52481,84764,79212,11104,87652,79284,67877,84688,77077,17894,33415,29719,25538,40336,74742,70899,92666,53814,37132,86639,56514,20771,23652,53910,11389,30897,81287,66305,72900,87589,98366,97142,16733,24770,43255,73260,41754,90342,58766,84021,13839,21419,12469,19288,40602,36048,18194,63504,87521,37355,17699,77018,38773,43066,39140,72892,95328,34010,46535,56081,29904,66291,70515,43824,70374,38416,16727,57480,62584,26738,58456,91174,25769,63950,99797,27028,99884,82698,57313,20245,34593,75837,43269,99959,70121,27765,46618,92078,86059,56965,52714,14583,38292,69333,55514,62958,67984,88700,92545,60473,45249,51552,66966,75836,25708,12839,31104,23290,58608,62689,37742,47222,34802,62334,57460,71854,20205,90266,53118,43390,83360,13957,22115,62466,21620,25255,48253,25322,49223,65895,58589,52682,89945,21475,26200,84346,87795,37634,18883,72609,78947,41795,42877,49599,55640,96308,17994,57414,23308,17997,73811,77702,22239,24998,42384,72171,27533,64962,53655,46117,85949,49027,29740,59626,15562,54577,51101,30396,26822,12516,88225,81117,80688,43109,36204,78003,54736,69593,21590,67174,22643,18541,31442,23878,41424,65091,52136,58837,44492,91133,14348,52062,12970,33785,92002,19578,85915,61886,73782,12737,94513,48045,78172,92078,20668,21112,42930,89265,11605,91443,57632,17588,88624,10580,72111,61435,63189,27516,94415,59186,55024,14094,11940,42969,83136,93392,60828,70426,68580,35841,63181,31966,47570,57657,58671,18113,42566,75100,13758,64505,42975,16823,24421,65284,14815,86087,22400,84932,44194,40181,45113,85912,96387,51189,29735,12677,78771,69799,80202,64126,61966,91556,63748,55282,92133,62201,45626,66204,66473,13802,71314,81255,84355,36542,24088,77393,85352,72544,41796,11407,45943,61185,85973,49151,51222,70931,29072,47408,96525,92789,78773,52717,49231,13346,13756,81677,51320,48052,68251,21757,19527,83004,13407,69446,95928,73610,10362,27500,22901,92223,82944,75159,87791,37767,55172,95086,68098,68689,50256,88961,90550,96995,31037,75250,47969,57589,46545,37171,48955,42566,30111,82167,87112,73108,97129,67977,39435,97028,57538,83458,47490,54544,27779,82945,94088,64402,45279,12751,56901,76493,32840,83050,77543,26915,48526,46107,75081,79335,71780,45298,80730,82065,89552,80893,61091,92265,74974,60542,38991,59737,11878,94976,61032,28058,50629,68529,71916,78287,25603,34760,80223,79885,46907,93043,57538,39370,51606,44422,45613,31900,95882,63748,83319,99635,92629,92577,86994,70963,29837,82251,77006,84652,32799,83264,23397,23990,99269,47329,58249,18964,92144,63526,72148,84354,45547,31554,28100,35849,28730,50769,55254,37062,78887,51157,36239,86904,38457,58121,70098,85063,93099,18867,40767,18987,20609,96762,13366,53264,80756,74003,66742,49167,87791,66504,16867,26513,21703,50717,85934,82963,45632,49089,75398,31386,60638,64842,81988,95608,84127,36532,85407,16500,19661,55352,55818,49758,32150,42069,28483,19626,72340,84035,46373,30304,71658,81008,74046,66470,59208,34600,24269,94545,20861,42354,59117,69457,64836,95353,68950,14778,45793,19498,33786,55869,89494,75835,30390,71672,39907,93588,91000,28855,34274,29559,17874,39880,15204,34245,37069,73038,19387,97462,26757,93109,61352,38176,62903,98545,75406,45146,11902,85652,70272,18876,42149,52774,42416,13785,39575,18242,73817,67535,73751,73146,48260,87669,24913,86741,84917,78219,81253,51171,57973,74900,45912,38008,19850,68797,53500,67009,82489,22227,57950,22419,64462,74857,95177,17047,86740,28874,69890,26211,13763,68731,96339,48309,62230,58291,89717,99955,89802,83259,90121,42103,68551,69823,44897,34653,24909,33370,73920,46257,27818,24459,98239,96624,35521,41999,65425,83707,19475,61388,63165,66939,84699,14619,49433,40900,46869,24304,49230,23215,86369,29344,99912,91116,17843,92988,66753,32096,20679,93647,97115,23144,48538,94124,69735,38396,17753,22087,29189,65382,42409,96593,53084,28848,70663,48697,24726,46494,61340,60521,26195,46457,30916,30181,58194,89676,59684,98032,65704,30575,93818,87186,98375,61144,34706,48629,26060,47222,95704,30255,81509,22970,14610,16560,79371,83802,68472,90965,21850,22197,22266,68901,31768,87049,87424,66231,24006,51482,38058,21242,34582,77689,69894,14139,47274,57318,24018,29949,28029,10467,51854,10451,37832,36540,49486,38617,59004,34532,79307,22392,14161,30840,33010,95361,45669,36219,45202,70941,93899,58183,74181,99379,26149,60402,68287,70743,20183,26924,61254,97439,68754,87179,83438,87951,28973,25402,76098,32763,58926,54108,17501,54654,56717,57066,47918,66759,46087,33766,90412,60890,78200,67332,78267,14824,85557,12202,23719,83632,37641,73417,78658,55526,85866,38119,13920,75099,92376,58872,47722,59221,35297,81972,33001,27208,56542,51463,34673,78464,41429,55359,62999,55422,57361,38382,85484,60273,36131,27974,50299,74732,84880,33610,75392,35035,11033,51399,38914,34436,83859,33261,86035,45074,68222,11910,47435,45423,85920,71043,34564,89804,54731,80074,37752,58731,44444,21688,63988,43954,45403,54695,48450,46756,64261,92288,76819,72354,35438,75981,69521,46964,26915,97523,76875,16354,38023,65561,95433,13972,61571,40644,82442,63845,37999,83277,30145,93406,96999,20676,24206,13611,41187,51767,73215,42416,13069,58893,89715,79880,75180,66583,43277,49444,99866,81453,37287,80891,90159,25373,76798,55800,77149,43786,23958,85158,97066,86285,56024,46762,30121,25852,38281,44638,31652,48250,29421,17208,53814,11852,88063,71021,35260,31281,93204,79390,91218,50143,33953,86200,36286,78083,54778,95994,23039,49806,64647,45337,17026,97995,77268,57213,98199,97995,32481,69378,87009,17037,22819,45865,55557,38573,20810,38608,65607,38431,35127,82520,27149,67507,39382,23328,19847,71896,11530,66199,42076,47377,43314,37730,49599,23405,56220,56006,14952,52022,61009,24747,18272,68063,25571,52059,11042,51810,96409,52976,89110,26785,43819,24275,56851,16971,82867,94055,90453,39068,63556,98892,13507,64974,85658,77169,64880,47901,18534,28697,42557,46395,61715,77240,74609,39720,55311,71943,69772,60697,99657,36112,30682,23391,65027,44806,54311,89922,16497,60310,88983,42689,66392,62389,48783,17115,67616,22973,66636,58623,81201,91797,81279,89925,59717,60785,35308,52249,55454,34670,21976,60156,88808,80104,96279,54329,53333,13126,32487,29937,52427,67027,82284,92555,21180,50615,55953,79986,51811,29411,70981,71196,70352,84272,81084,91020,32268,53765,81510,49730,84347,15137,50137,91209,59287,74981,12942,87655,12827,19718,71492,91358,48933,62209,97918,33466,70155,98139,70347,42286,73897,59045,31261,75793,81328,81848,79348,39542,55890,10595,17603,20478,70593,27100,90323,11882,64417,36599,46511,66049,90460,84133,65140,22496,69969,63046,23022,40653,40722,11880,77609,59530,31794,48459,67893,41523,57259,34883,34433,76922,73812,72633,58136,13409,90960,94336,45008,86223,28555,41670,53816,17391,95799,29038,60036,68347,62696,61975,67572,66341,72214,41878,27031,11451,27887,32310,61358,85003,42869,35179,17899,38518,94292,82983,12213,36760,58382,65804,46834,37166,46751,85229,49013,39336,59872,73440,89194,91961,76132,52295,88045,23168,89153,25688,45303,12292,41739,99935,19034,58278,24153,28106,72349,37083,10304,64777,64782,14422,74192,61981,76715,22317,98885,39106,39814,12644,72802,88307,74545,84073,91914,96557,18496,48902,93555,85551,74961,14960,43629,16950,40995,69640,26973,72088,47900,43574,13403,63198,25569,42130,74768,74596,58866,63105,22159,98324,21842,88115,63834,58484,27173,10635,10028,47341,55556,82376,85866,22907,91744,36555,57094,43545,59349,57205,91342,59895,42925,85565,76633,41868,93568,99579,42401,28255,49122,51168,50284,86271,18459,70842,83089,21889,89919,86292,64647,35682,47666,70870,16298,92059,96701,38617,19455,51882,74630,71458,73812,84864,40965,83818,55156,54269,95054,86514,98480,91860,55559,83165,98583,89348,20450,49485,44969,68764,17960,16841,63693,22899,98084,41778,51268,68957,28979,20191,34694,35959,31420,94346,33703,78295,38120,62767,81829,59154,26977,72136,48975,40920,38533,29582,70608,87600,60498,99656,29502,39838,12695,68832,14935,88220,40810,12181,43982,15655,73400,27782,19270,94005,29635,94718,76943,78204,31890,52285,94832,59347,92514,37325,53813,23088,38241,19740,19487,76704,31080,44311,59973,97836,54949,60331,39247,60379,77292,91929,52707,82320,49631,41383,67499,64216,15854,88083,78091,58847,55675,52281,53558,98128,32989,19144,94895,92243,18227,63546,14634,62699,55423,79564,17143,28300,93826,85248,85222,95925,25342,40660,80453,68198,11019,88394,90946,41190,83624,36285,39431,68173,41239,84094,17437,44748,56692,22384,50379,81346,33532,48462,90977,11703,15688,34795,59513,41136,68467,35383,12335,94031,30685,48398,42431,55471,90236,27625,69410,59500,68121,29233,95046,77916,56616,32521,24926,20710,99296,45289,59871,32075,39899,13994,61731,41858,45967,73975,50621,59719,13220,60276,24666,37326,88632,62170,35984,93033,68783,90722,55840,40523,56320,51719,30301,17599,53554,40609,45814,95414,21452,84544,59847,38350,88229,24332,85588,15065,15377,71924,13440,90023,69443,57681,95243,89973,61859,48200,52857,22375,28744,58610,59627,22438,68749,54299,84960,83842,19529,81052,29678,75051,35200,43170,36763,68880,74175,92023,25051,81189,45456,18551,93833,24196,33569,82879,52814,44134,75633,73840,29240,39094,46234,19692,47438,24785,88362,91402,88747,60941,79042,37990,42604,53182,10648,80771,54309,76491,72634,76220,21309,30737,99599,95185,55147,60226,20533,15889,72567,22447,13430,93432,48900,19646,92587,64487,40760,99743,78502,21155,55721,52214,38126,94214,36123,14931,13069,98442,98968,87637,26045,88094,80416,26830,47840,23457,14383,40814,63830,94894,50905,10546,84545,60897,87767,76358,71644,81808,15646,95881,31652,75656,98254,32175,87902,36003,30303,30137,24054,41956,55440,60849,39873,80931,14943,90570,75170,46375,96478,11475,41950,48861,17636,96861,93524,46160,32370,94513,93334,14461,45819,95814,70042,62507,51026,26100,43086,78274,23743,34413,21781,91424,97495,39857,87609,82104,61228,21914,42445,24997,15176,32402,36950,15136,34665,30901,76845,68413,99789,65110,92818,35991,40181,72994,44268,70611,23257,43341,48185,96300,62960,87171,36731,91604,27562,56094,89234,32701,91430,52275,57810,52807,31792,70063,49016,50021,73414,33625,51146,75646,41329,91037,53205,92942,38317,52508,81200,66143,24043,80627,75787,72658,67607,23412,58923,36572,55100,54071,26892,25584,75942,46169,77596,55279,60377,73409,10635,14364,37341,23977,84415,62789,67928,44127,14318,26655,91064,41186,57901,11809,77144,57006,50134,36139,96805,64937,23015,93369,14967,73287,69537,75118,85413,40665,87252,34440,51762,34124,92353,31724,27596,31380,33759,72463,56850,98511,86420,34785,15342,59290,78658,23173,81276,48470,21326,49867,95933,70912,82794,39130,33868,50129,80126,34526,19968,40247,30115,14118,93390,58330,88762,17775,29891,44102,24624,28844,24399,10180,97014,26551,19043,17650,21476,71016,99415,27282,24609,13784,63715,82023,67569,50916,50005,72971,50228,76645,35890,24954,52814,93224,52850,74987,13980,25978,14472,57942,74229,41548,60860,24049,81066,61185,78018,94137,60102,61778,46605,47764,49888,95003,39776,42283,34416,31168,80133,50257,24255,57476,58322,79279,95835,53485,11668,21036,16279,85835,12720,12772,82527,21920,60121,11465,75573,75999,95733,31960,34305,63827,49540,55498,32877,75833,33789,64344,56398,12713,82228,85007,77026,76357,28812,96209,14391,41623,59200,58140,64157,36686,20392,27676,34692,86593,77542,23147,46509,38146,49071,15005,51806,92317,60292,73294,85306,94128,59688,32467,14249,34742,67457,85673,60351,39729,10529,21168,43485,95909,46748,76068,29533,59080,65985,20611,43818,61047,10002,59467,58105,78586,96022,49545,34013,83823,35023,93327,66018,81325,91646,34001,96605,32827,82774,60764,48444,57985,60075,72784,47665,14859,98792,16643,91478,26807,94209,25388,48970,66570,74486,17738,74104,76328,90662,43826,59562,33444,75954,87184,83380,26561,49547,61434,50178,62904,97769,53473,84549,83085,59456,93025,19417,35896,52948,37212,60581,52416,72964,11630,64725,12438,46461,11698,78794,42019,74337,98884,31496,57024,25657,55159,43017,15607,30174,69356,16967,56520,76362,86456,22285,20019,80661,76802,68552,47737,93352,41323,10692,95504,26407,91778,25877,74881,60318,90159,42793,98670,93306,23582,97561,46531,77802,71351,93638,37841,63543,55533,53741,80304,16661,76782,19006,69914,52471,65934,98177,98731,99759,74501,39980,58531,47968,48785,51962,18713,70416,19059,98818,81021,33842,47094,37663,38153,18902,27109,85809,85824,56857,38880,85843,41378,99981,65050,14493,65715,67130,96310,89143,31157,69105,79785,68947,57691,14667,68713,46762,31579,87843,60880,22277,75769,39540,45658,74006,83628,24102,85730,70071,85323,74081,86300,24766,30899,10690,41276,47465,27243,74788,33063,39184,25081,62889,75618,77359,91795,59871,39756,40883,29643,94362,85441,95060,76681,55582,12405,64462,13825,32610,39339,52205,45463,25383,67468,49996,86028,29713,76419,32186,80601,17425,20682,18607,34264,10862,22093,79598,17225,52214,71007,42634,57321,39711,67747,44544,37301,58248,52379,58528,38136,28295,60391,90806,19541,36098,44845,18830,37467,13676,95802,39327,20278,47228,29773,64539,60900,52678,41837,62565,18001,39301,90650,52544,50299,64516,64319,25213,51342,90768,88079,38889,46023,71174,13019,74656,31906,92520,86739,65692,40648,32782,55350,95199,68269,23072,14171,22768,77151,37847,67817,82278,49760,16673,64241,77773,19929,18178,77899,99347,12871,85287,24598,16149,71458,70498,74051,85657,65841,97626,95947,28600,43413,59799,56776,43545,42834,37176,59037,25678,61496,42066,30948,17253,18447,45152,26155,88100,31407,35738,32377,43919,53471,77620,81889,33157,68295,96056,58759,55729,91977,15400,33305,13623,94362,18253,72580,17646,86809,61542,53786,98741,55448,84611,63265,74551,84160,22387,29332,38833,30766,84507,91248,24427,67701,99858,10815,74351,40752,14786,28892,35299,37287,15888,34815,88151,61497,61164,96054,51746,24668,24214,19434,93683,84647,57391,55358,90704,17072,80346,97353,13577,29468,67453,97236,22388,64620,76512,61951,87394,25884,32700,37586,32374,80160,13501,33228,27868,30026,59911,97436,94677,81561,49130,51408,66797,12115,45721,15955,20800,78478,31260,70139,69721,29048,69696,64040,90590,10556,97565,16584,86435,75375,20895,80407,82648,78226,22802,94415,27731,47963,45690,69179,83344,35313,13120,53972,37490,84149,69680,28848,49902,85680,33648,23328,43965,37421,27680,88874,72596,42285,82450,39091,65828,29539,71746,54415,42612,37656,71657,21891,92303,59416,57613,32058,94583,54601,24702,60473,86825,49850,87538,22795,22248,72538,79302,36389,42209,90493,39174,15747,73207,51283,50117,11187,71615,77521,98322,65767,76014,34674,94291,34161,52101,89795,43784,43426,48590,77905,47847,47381,78574,51301,99736,36128,48558,22351,68050,88058,49831,50873,69964,55773,54967,56849,96037,27889,96979,46706,43070,63670,96682,42999,92889,76295,33563,71171,88740,46819,61748,12230,18795,88632,35417,91097,26000,57576,35287,71983,66922,56206,24628,62599,79901,73521,48897,85893,25784,52228,22759,54886,37285,73841,74863,98059,50350,99039,21645,31780,96176,13728,85345,72687,22727,89711,94775,99158,12263,14097,63037,27176,99242,45359,70517,26270,63256,73144,76446,29678,65585,93820,14349,29133,38816,51539,23657,76879,89380,46670,59067,47617,15175,11733,87489,13713,47299,10284,36993,67952,44081,98991,12940,47176,63806,26777,52631,66676,24446,36418,55317,21158,53127,97627,67282,86871,58083,61116,46557,46790,88073,24455,97718,36127,37435,52248,64214,88905,31586,36820,51468,70652,22869,94645,74727,43936,88663,10611,14997,48433,63685,25410,77544,77921,46882,14651,27314,91890,79825,61994,78975,59053,98012,72409,37418,29456,84207,45005,18438,75835,18630,99680,94249,66151,69399,30429,15597,33339,91421,70955,27464,39176,35317,81592,12697,15220,37715,48449,18559,93375,96987,66899,64926,13425,63959,80668,15704,11330,49245,23891,64127,32030,59940,63695,15641,79236,97217,50955,35420,29665,31577,35583,52011,46581,50397,16457,66225,21079,12848,17676,97324,75161,33078,51876,23265,43020,73550,10095,93409,24213,27890,72011,82707,46767,13659,76528,37692,57996,33580,21208,83040,95635,41890,99596,68285,91961,88686,89856,69463,83996,93893,48128,79646,84068,35806,65180,30182,74012,98496,11288,46535,84184,24409,65855,72836,62745,98730,58256,32341,64770,28605,95364,58766,23703,90408,38969,86325,17688,83795,73736,87576,50703,98520,74294,63154,97843,76436,35377,57952,58671,79794,15383,94286,62436,68968,46014,28583,44201,82571,50794,58589,66426,77840,71010,69444,33042,77078,69979,48047,42552,97936,84804,24886,71426,54005,73179,39711,57079,60083,17934,95645,12765,28741,29636,58270,64864,17054,77760,17525,50653,68412,39915,60745,45905,72974,28676,39577,36611,34965,74781,49835,84144,56999,42720,51511,37621,94203,45387,44641,38778,70366,54221,17642,37244,83542,76015,82305,60077,77369,89937,76615,18633,76250,45568,56573,28648,56208,90911,93979,67902,78627,60354,92870,75361,77958,42251,47467,79253,24549,69760,23910,27845,63689,93208,87222,93467,86784,35560,70022,74342,68718,29150,71602,40425,72524,83465,24312,72550,20808,40975,88776,68788,10625,29105,11154,53994,52769,83693,94872,91270,45067,77629,21583,67484,19104,52031,88293,85077,60920,96851,65087,90043,60417,91171,53580,70089,17070,24264,98189,29176,65207,67884,74143,18383,45788,54890,30248,43673,27707,91521,62284,44365,58353,12216,75270,63309,22499,25954,88088,61657,10312,81674,89726,81400,50427,64602,69172,44767,51371,80656,52689,78642,82545,74622,68408,46671,53655,52184,12520,21564,93989,30640,37334,11935,92676,29255,35313,46556,40599,39936,92559,85279,24053,73488,83784,52565,70250,85577,60553,30098,60417,68818,95660,53439,72814,58919,27473,42554,84079,34887,58835,58613,45452,35162,67701,25393,61736,90385,76119,63536,86359,43071,35531,29251,34920,66888,37130,44657,83555,48842,55614,68623,61145,74242,42363,73314,87286,82085,10626,57533,64379,26745,66364,52718,91463,25742,48871,22016,53479,72574,49369,16811,11522,21780,56977,10118,67360,71162,86014,20515,91366,53762,88495,11595,43444,72941,20608,61521,23646,53519,82135,12670,67875,81641,73881,53595,72146,66886,46386,27041,37125,19417,38272,92569,91206,17158,43677,59913,24841,88069,20747,96451,25933,10941,78036,34862,71865,14903,78222,67062,49206,63629,49007,39450,61793,41897,77890,44697,89747,79778,28854,29596,11586,20236,62297,42535,67335,60482,74147,21652,47059,59321,22231,40783,12658,46960,46667,84642,56867,85145,81621,70637,27092,75627,61072,43056,51098,35104,79711,97994,97557,41661,44705,43702,90253,70151,95731,25508,71846,12251,35983,19693,90697,46962,92725,59866,83231,10638,33927,29558,65777,64143,57392,93762,69927,90969,78823,64488,98525,51770,35642,26971,39516,46716,17067,78974,71258,88330,73003,72496,84677,80633,33935,13648,72137,56173,66844,11730,10457,66816,67356,76080,60793,42132,52678,37506,29189,36838,49940,52245,65494,70166,88339,67364,27427,86636,28178,47961,89177,39188,95683,11127,45507,93506,23102,39818,64063,82252,44614,49350,16741,51653,26235,54401,29817,96737,45523,12403,38092,65779,77731,15320,18141,85012,35682,68044,17843,30710,25562,35617,69064,67921,37547,90494,13885,96230,94514,58933,36807,66094,41164,54620,33903,66640,80858,25410,35088,57946,66193,56518,36852,10486,86003,37060,43974,22423,45506,95811,63186,84740,32499,30644,98426,86836,64906,95749,20494,42885,43870,38651,73250,41354,56072,94282,73436,65571,86569,89692,99860,94471,59766,98434,84008,81518,84628,52523,84990,30641,29294,22295,11549,39334,96542,42014,71798,40087,40215,78443,65350,85737,25687,32091,16788,66826,13336,58154,73207,90511,78179,47384,68738,18593,80606,90708,25703,62306,63891,73626,42495,96853,10897,12690,60237,93990,63464,69418,16981,78089,61484,50250,75279,48474,55629,94613,63267,20715,45281,34138,12491,64478,35977,55835,53334,79132,24833,21180,29427,43792,47956,41902,70477,69864,64783,26499,52763,95178,45215,62550,60399,13578,89543,58514,72760,20520,39704,69467,74369,86367,75660,41859,67281,72359,39274,45326,55050,19489,84801,11176,54930,19891,21921,77891,77849,31283,12417,55192,81110,30404,50008,17780,21230,84449,32920,68166,68713,53570,73962,80122,26900,63445,15748,28491,25756,26145,83045,85364,50256,77596,93189,54193,13049,76376,20195,50068,77347,34716,98900,53878,55711,89479,97363,85828,73002,32246,78070,53121,29591,87063,31415,65996,88746,20071,25006,77005,79557,67925,90261,46960,85064,45798,75937,46270,98386,65605,56928,52258,50125,76072,79240,94553,16929,73699,85645,46283,28539,11218,25305,13334,22152,71343,23035,17459,85125,17935,30686,35297,24681,27336,86481,60041,52404,88747,17568,29347,24352,61241,45457,58122,37300,93353,48574,49528,50654,59168,38996,65783,92606,48526,10340,82221,81001,17916,14184,51621,10345,20806,29116,97917,18829,27179,10622,29526,35116,37677,11352,70021,64800,17061,36496,35062,47192,19369,67301,84300,81112,73806,71127,47224,72745,22778,54652,16443,63668,89544,59176,49097,48600,32090,59634,62512,37723,27256,74961,88274,34569,65331,57543,82878,95204,59558,69167,23034,97129,92573,24661,23655,68002,41921,32250,30610,42066,40001,99952,40495,88106,31512,96342,99328,32931,84772,71817,45274,48364,12767,67376,85626,10766,47426,41366,51584,87958,45693,32672,69791,11260,91882,14647,16568,25310,15691,78917,18826,39674,13798,31332,15763,36364,54004,86263,63212,63694,96304,14334,74808,16140,37573,56727,56878,38600,28122,96629,86355,94525,25037,95998,26931,70283,49096,19658,59289,80075,55528,78582,96905,86285,91118,59881,46914,22876,50869,26452,86722,41686,19858,36016,49107,70031,32503,60169,81231,61962,10447,77124,22702,70199,55827,83370,22826,18103,22712,66968,20538,13911,57948,40111,73562,47789,11826,33444,35861,64278,61193,86598,72424,47235,18773,82106,61526,55371,23190,93373,62831,85534,62980,14142,28243,77603,55244,61564,79937,44504,20425,16771,48907,40353,30220,34400,50421,84137,57789,82158,44600,12725,99301,80780,39896,63057,39313,56901,60689,19910,59353,61682,20297,40902,67654,42002,81335,71651,94047,28203,84302,25545,27336,23764,72272,34049,74037,50018,38894,97970,46332,84236,64846,15533,54321,22037,82230,40239,26193,13742,75807,40148,19116,15249,97667,58869,38169,71420,83651,80426,76923,16932,96315,57661,11350,36392,84027,49366,94462,54887,47329,66985,42309,65175,70150,27988,48472,48320,98094,66390,38516,57904,98455,11160,18600,98480,36735,68817,38489,24541,35315,35377,61634,42087,44899,86820,51706,97757,63253,18151,65982,47174,17730,62899,67648,47124,64417,96106,46768,55349,69896,35814,68532,78684,74456,99946,77147,58394,95228,79544,23234,87954,71417,46483,79477,32914,55497,79849,28431,36394,63066,20888,97373,37565,25475,41572,75129,89601,72836,18847,92697,84875,98401,82884,80122,32394,30304,84119,55164,10692,71878,58743,96775,68556,14639,97729,73317,84980,91688,78580,13156,81807,71414,44087,65655,13395,90336,99477,96714,62319,32367,80114,15585,10075,42601,39501,13262,18387,28839,12214,75808,38127,95886,21897,51677,54225,40327,96388,93579,19968,35232,11404,99786,46771,35865,25601,31566,47284,30127,58735,50536,40851,84592,41692,76954,79328,78567,83886,73854,74949,56173,43941,16367,41233,54960,16372,41157,52427,99788,76637,73907,32553,15787,17632,14333,43267,38102,20824,72942,77641,74604,35281,42724,51630,16071,55319,62988,55946,42075,35275,97287,73093,42781,72456,97716,63993,97277,14932,33480,13434,59432,87872,96012,24403,37011,85262,40689,40527,20913,23151,65797,22855,87971,64971,14396,98928,24061,98288,33955,99497,62384,97127,82740,25774,31840,60806,41158,59276,26018,60294,92628,26453,87981,13918,16693,23254,44033,63743,56057,32694,65113,27435,44380,39832,67290,15439,65088,87487,46216,21054,14842,63731,46502,58160,72566,70180,82161,95078,35782,42634,42420,26073,18185,52329,51437,42328,15435,55327,39106,18754,23454,47218,42687,45267,26309,47602,42100,32097,84727,63974,35658,27603,99297,81072,53150,99647,21511,84681,71544,17710,26938,88407,52956,34174,50333,14317,67487,55294,66074,11454,38287,15846,53459,50462,94288,12457,57200,12826,64931,14366,35950,36215,82734,50256,43130,49380,15184,69182,94727,62729,64080,21921,90766,49454,32987,69359,82081,61439,43939,60453,64170,18686,16101,52366,11658,69154,59226,15824,76466,66038,19418,69500,33036,64858,23644,83751,56930,35669,16347,17350,57993,42787,35916,73952,39605,45078,10039,97518,57490,93175,39666,62373,58689,85514,50979,18596,20918,25279,26374,18509,53673,72109,48889,21151,26583,32260,25935,15990,55813,40560,51772,90222,43561,63576,10829,14168,42252,50603,38300,61649,36263,22685,52885,53701,34898,32521,13009,83843,43860,44330,69202,71948,35420,27720,45364,36628,35949,84600,12637,94608,54680,75653,48239,41792,27007,57568,11980,62965,75126,89048,31052,90387,85174,40668,41044,55246,27837,29927,66864,84034,26516,38121,25793,47316,79173,94843,26250,34313,82354,48014,80946,76895,29189,21912,44335,34867,23998,75279,84634,27957,26797,97250,37278,83370,57595,18740,91797,86848,81784,56572,33992,16387,21484,87656,98086,98614,85181,94799,55168,37081,93603,98448,71415,68118,88020,21908,67705,30422,44472,25787,84431,63614,78803,37655,43978,93318,11308,46132,75652,95011,55996,12454,67494,50979,73382,29449,78722,32772,72100,17920,57813,52355,40997,50330,79779,45060,75418,21987,19930,48974,82038,86452,16043,49486,70112,28420,95487,46504,26707,19631,32117,42327,17491,54461,38722,54262,95347,37765,57707,58865,46238,95411,78684,83481,54286,95359,91639,59434,87989,56597,94183,38204,84294,54061,51885,36699,18070,29282,43726,65152,18886,78705,40807,45767,12279,86601,67400,13017,40600,91295,77938,79262,79838,99870,75610,97273,33583,61112,49727,68641,42437,27233,53562,50987,72531,95326,18136,78485,49029,48809,92874,37789,26337,93122,75587,71385,12128,95825,19541,12157,91494,97996,16125,44652,97888,24790,54199,89885,54725,54902,60701,57427,29820,61679,31551,38493,81988,79087,10858,31546,68718,96871,43445,51746,52282,72911,85644,78681,48178,76774,31847,78530,13769,59475,31439,94286,70684,17533,21493,22247,70617,19719,86897,70620,91103,33620,81611,74904,79409,20334,84153,34818,41077,44879,22604,70447,11710,67527,45002,50216,89999,36743,10668,61445,19680,31490,75390,35924,14712,59535,29083,39244,11847,81013,55361,53518,54741,35523,93331,23008,28146,34876,95823,42357,99861,43766,15702,72757,81098,43934,22087,89930,64476,49093,52794,89174,30526,94328,83724,53426,53205,73817,19960,64125,41258,29728,25465,94792,25379,25936,99401,31612,86291,50607,93433,23075,33900,47999,35762,33558,34789,25662,57691,71211,48882,77342,25525,75668,51896,47145,62510,91998,13834,30337,29256,36328,12861,62338,36683,53793,53121,96807,70435,53309,44399,51687,86245,70003,91591,90863,77723,95771,43291,51037,65238,31891,38001,68208,85599,56907,90869,23937,86304,35542,86054,18228,83323,84795,40248,35904,24784,24609,41842,84890,86225,67917,76327,41985,88252,54778,62072,99828,48000,87111,86128,73886,97641,13158,83621,63189,26911,41980,12611,99025,56344,14240,79721,45263,11761,75502,38570,97155,32210,86755,58952,35387,65631,60873,34526,28055,22421,28906,40225,73452,37629,17800,71325,13464,97037,95446,86192,57331,41670,90499,34633,30308,58662,96728,19100,16527,63080,84760,65414,59739,45858,68171,84645,11739,20324,26539,50179,30318,75798,11439,23471,35502,93516,41406,48352,96238,54848,98031,79102,56628,33084,18144,73747,37015,43571,79618,42694,81208,16923,89346,81457,76898,52863,59843,16640,86122,91803,64641,70965,55660,78023,63666,45055,22039,91839,27878,87891,15307,87421,59263,21661,66185,88890,29321,50420,27627,86986,99435,86028,48998,82705,64231,15343,28171,27321,36698,60631,21884,39129,45915,68434,64418,93906,66232,92411,77027,98886,66797,30605,26001,68926,40364,51353,33538,39944,73218,47558,35312,27956,39928,81932,20192,24738,99016,89031,46651,32520,21334,17567,68195,91621,65113,84114,98630,12843,11084,68507,63094,25312,73391,19047,59001,90196,87593,13988,54937,39253,49709,35223,24644,63404,35628,61084,85952,95896,46547,98934,42890,29290,98066,30498,71844,47002,55732,53643,35262,69493,18994,75135,75127,40907,93476,51847,59491,95371,24888,92229,98684,80255,79828,59894,19385,75188,81873,89581,96700,46012,17749,34563,92798,65981,64648,52849,17404,57756,69849,44609,54521,59749,31435,59629,96964,20839,40768,18413,52460,39010,15660,89011,48260,97251,68144,42763,71941,51882,47596,18848,98834,56679,83813,80973,56962,39509,39855,50433,39289,74259,36604,63529,25475,98846,77821,56728,60165,15349,76891,10823,79187,49055,47397,60245,24971,39412,52121,90816,61426,74099,90086,92439,96320,53149,61501,67115,83208,57505,10731,36120,73169,33936,74979,80212,30260,48915,58329,20707,67790,53027,48338,55455,16615,90635,64639,69327,51242,50686,95636,74874,16031,88269,79134,31982,50699,15905,84196,90404,39761,84441,11388,40945,96029,15012,37915,35714,31248,10932,73760,50776,10254,45934,60359,30593,59023,39986,28747,67858,88238,64350,91841,44661,92600,41651,32473,50523,39339,83540,83868,21256,24895,68156,76750,23124,94455,76102,47153,56575,76189,55097,98488,40662,16444,61931,17382,24589,34171,93948,28875,38445,81106,28064,88042,34325,30514,55882,35934,14860,15053,69076,47768,38706,48696,38175,22536,18594,65412,98711,59447,91997,58430,84423,82682,32717,36319,87933,70125,75396,58688,23700,79761,18030,68419,31603,12643,56479,47742,41377,49934,19445,34214,76198,76687,73351,69245,39802,29382,42744,23801,78447,87092,77304,42263,30048,92270,17614,56482,62902,38252,12312,94548,37528,86094,55151,21709,50017,30720,66921,52171,33365,37665,19905,32631,34936,25628,20586,30367,90545,23953,66346,34054,55491,18601,33063,26096,36329,12256,60213,60489,62599,65000,53485,31029,86136,97232,25048,90924,13488,56219,39843,34421,91566,63538,81979,68992,64980,37846,26808,88080,91025,27671,39405,52151,48474,64207,25429,36591,97388,13637,58271,69062,80542,98071,84011,88292,26786,66751,35749,74606,89867,28615,21924,82548,82524,90293,55563,54205,53291,46943,87172,23875,17710,39852,25826,98972,36589,47147,43593,53315,88793,84527,53726,10742,41020,90554,51539,99448,78995,42268,24346,95097,43219,24670,20373,40154,63579,30996,38954,37026,61131,95556,34902,43496,63701,89660,53775,54557,96500,62784,24364,78366,31559,43659,44211,59303,33006,29271,94004,70591,97513,57275,37656,85706,17299,63195,49916,18388,69922,11083,38474,53952,10650,85063,66746,63177,80965,73657,95163,47489,92932,76732,25555,73804,55757,15791,53675,10117,75506,14484,32196,56313,52960,16790,84289,82634,93912,34560,50920,45344,42053,32546,64059,89779,72933,98444,47887,12797,20573,32633,15053,12306,67573,20036,20948,77594,12370,94687,92974,37347,59427,88675,17961,76172,22000,24771,58190,55214,90927,44192,73690,58503,60186,26216,21038,43984,52201,61770,78535,10101,93316,72571,63704,44100,61598,78147,92145,70619,34475,74656,99934,92580,94094,59525,82857,39974,44050,80942,30484,52643,10503,38892,61840,84844,74581,85111,91343,93547,48258,12837,64833,49494,65857,62163,48372,23181,82092,89676,10607,61909,84042,75272,54741,72436,25493,38919,91436,21751,80977,17521,59921,75782,13324,60473,70412,18131,15336,49446,43313,24624,40524,34607,22731,32361,66671,40460,27810,24385,65808,17333,60398,62131,71598,69774,28666,13161,64848,76597,35653,26512,74238,95387,72756,56535,13240,34149,75345,34834,37563,13228,13032,39632,27828,88023,68321,31977,92698,88352,32340,94926,60319,62972,50598,52168,75722,72530,77709,37552,58968,34518,26864,38647,45342,48932,99195,92694,93442,56109,98058,12056,96849,33881,83815,72361,97049,28732,91037,28822,89961,35833,21513,72088,72812,80557,74810,42802,54453,65881,94070,91514,87308,13466,26265,85957,50536,31571,84905,30421,76147,66139,17827,40205,10128,93907,34736,49459,32590,33537,70073,12157,78162,63313,98772,96494,66526,62990,21442,38156,86237,52114,71672,33054,24972,32196,18753,93645,82490,47470,42153,54185,40800,95925,82142,36777,29794,30264,83283,78977,95541,40690,87472,20475,70470,50039,24701,81100,16683,90711,76174,32567,62330,40866,14453,12563,13063,38984,52663,27754,69593,75454,31298,66738,47964,14622,67529,37029,30098,77305,25958,68478,10249,36238,39393,37381,33264,45207,11655,39442,96013,59275,35971,29732,53671,54433,54670,19063,80602,31336,62593,97667,98452,16940,20439,93318,51552,62856,19174,94399,79715,44532,38171,44351,21674,32361,23787,13743,19067,85296,48978,40256,66811,49133,30837,29963,67080,99463,62053,20942,92672,91051,49848,15677,51533,30376,45547,97335,63034,40825,74411,54002,19843,86590,89697,15176,27855,27177,48477,10709,43091,72238,96076,51573,72047,65465,90664,81393,54225,76855,73056,67456,25131,56417,23194,64541,81379,93262,84698,40742,32631,79496,34845,66876,29128,59629,96935,26077,82355,31123,22672,62580,36703,98242,59326,86108,84292,81354,11194,24690,69377,52973,59058,82362,79421,74852,28084,18474,31313,71746,42894,17204,95421,67924,12225,47778,64849,46594,93645,76116,38143,12724,55707,20499,18253,64127,23187,77860,36704,40043,96275,63504,75814,95928,75170,88193,34432,36419,11460,46107,96824,17494,57016,18758,57302,91683,76920,33093,59234,46482,60815,47502,34841,51542,48601,38412,24563,70269,73656,17821,36616,95114,20460,85558,88391,67234,22997,26619,64891,39858,28163,19340,45949,29786,33380,88988,25378,87124,91513,83225,60116,35229,81809,27006,24123,22947,80383,66804,47112,84005,65005,59125,95854,76803,31193,85600,66319,82575,76050,92193,54315,65829,44185,83416,53192,11661,31909,64372,70959,10967,60787,31265,70958,52975,75790,69294,85032,99810,43514,17155,41937,20664,77991,36266,44728,66289,36290,17802,42216,27230,12335,31437,40741,89495,14714,47619,95778,88185,98557,26085,54164,95592,31223,50748,73745,77487,19252,34004,43806,30599,55026,62353,22565,93641,95301,15081,88103,46110,32715,26660,60116,58784,19400,70404,16503,60657,46787,84827,11191,78610,43494,68995,79340,98864,58720,23674,60629,17656,93289,64036,33059,45302,48410,32350,60924,45461,93858,73789,67330,50419,78388,31814,48925,33928,47294,55475,78963,19808,34800,40701,36023,80370,67049,81405,53006,24320,19360,30497,73388,84434,66873,71922,77259,15594,23666,12746,63325,42946,52991,78176,51039,54455,39715,82545,58548,16953,63278,40991,32943,35237,82272,95498,86691,41669,17905,16185,91489,92760,10805,22472,48319,38135,84364,74297,59024,10221,88757,59705,76164,98144,25598,96273,81048,52865,24475,99546,63292,72728,98922,72917,88407,50492,70561,75567,78532,15772,86200,27538,54218,26995,66497,18146,43012,81811,30441,97186,28546,32441,52158,60973,70171,24284,27446,42778,34490,30108,11477,59479,10092,73406,65601,34648,24484,91977,89137,23366,18937,37755,13183,70418,18712,99227,44979,96186,89068,90727,14635,67802,64620,36958,21336,56982,51821,33371,64647,45836,62619,62436,18017,67763,13622,24410,69518,43644,85246,30218,93529,95956,65603,94832,34699,66523,28564,37065,86648,40534,73365,52028,42752,64390,61372,84314,91401,98589,36960,87146,65796,21158,61861,36681,45173,47775,71112,29331,71778,51777,62089,25303,65654,99281,36989,45078,56011,79817,28626,88507,55685,52353,68673,48234,50739,60156,33358,38059,74923,22458,58712,54235,46447,58961,56921,85664,66665,85981,35707,14442,65687,52449,91790,53859,92240,49831,52179,44326,63650,34303,69411,38313,35801,96308,83356,92642,57887,65363,10320,10371,48043,53894,84130,35110,63207,76431,38253,49565,98549,12937,38691,78079,30544,50239,27202,53650,28822,60961,25350,58662,59916,89689,49926,40890,44466,97773,79757,73916,82416,46865,30141,36064,56201,59591,11460,56443,91919,84386,98414,16722,66522,32119,59451,51634,78110,73251,65934,54523,19014,46998,94274,17683,12173,58947,70813,82886,69196,57600,37714,63163,50372,82864,83420,60356,53383,43336,70206,68644,59523,89638,31197,26330,27202,94660,51020,28316,45351,54979,91393,27563,22165,53973,36632,28385,57794,30448,76665,13858,43973,49546,79768,71840,24226,93371,38461,72675,41894,98305,91581,44758,74178,25537,26958,99073,14818,11296,10205,17516,30314,94424,43369,35075,44360,76701,34268,80131,94021,23543,67850,88783,28612,68585,34579,41060,83398,50666,18165,13181,80318,99928,82835,59195,12874,26198,65952,96193,84617,68634,64069,28776,69913,73325,96376,73692,45521,96543,57766,60114,44926,24658,51957,63030,40137,61844,36779,36036,24610,60981,80809,70100,50749,84309,18843,14043,15970,18506,81482,88581,46471,86800,92937,79547,25372,13972,58627,73044,66124,88689,49145,93308,74834,38830,75815,94976,28488,76336,78432,38270,79904,73446,34164,11266,13404,55388,41258,64854,68910,49720,31076,35564,41135,18644,32029,75263,56234,26493,80182,46821,98187,81323,81434,17582,26252,83851,44603,41588,83549,94813,41652,11709,29177,90784,67153,16186,67544,25255,21088,38978,94600,33346,84520,30488,33243,50629,92447,62525,98347,43793,84663,91946,57064,39931,13392,45448,97178,95893,30485,12575,21830,81844,18557,82471,26792,20275,42510,41888,64599,27844,21730,67708,62246,13555,11494,31046,16359,67963,66386,25897,75373,22212,87257,19752,45527,10431,46127,35241,91010,27056,40206,32435,24835,11718,83467,67531,50247,39024,68303,30153,20901,59025,16496,27707,92266,88245,16996,33905,25669,15703,35057,60936,18059,69826,69881,94877,56445,36461,55082,62416,15621,16999,15420,54192,80639,21747,59469,14980,79486,93969,65653,85530,16892,16696,83311,93152,42086,43133,24108,16080,70739,61154,45310,64146,43979,36808,99605,72487,92865,45317,90094,87134,29760,25337,11503,61286,78071,89157,10264,39173,97382,91388,37993,95449,15146,47873,51919,86398,33347,41226,74294,10264,59484,91273,36193,64409,31482,49383,53219,65914,11851,55455,74544,51990,70944,53555,57842,23049,96200,89054,17201,77747,19428,52452,16664,29845,19744,13227,13949,61738,78128,92721,71502,23967,49800,62165,92851,98176,92877,34370,92163,86134,79038,96140,89993,29249,79812,30976,40172,17816,27781,78444,47665,31081,55453,36351,63989,18328,78722,67816,63936,19077,27616,49775,14919,62984,91532,51512,53399,80091,30842,73825,31979,61716,25252,56251,14873,46839,62678,17509,23863,43299,42099,43117,92781,40787,24693,32245,98299,34305,70206,26916,78157,56764,44826,26244,26989,26871,61398,57461,74674,71763,53529,55523,79401,60526,29464,30445,41657,73287,14582,22600,57973,67627,85963,90413,67489,83050,95769,10056,17605,45208,70793,10982,23099,22170,62333,50794,62185,78909,76120,71163,60176,52261,81913,21537,12149,48550,76103,79652,18419,48101,77974,70900,50633,19260,71772,85470,18085,62397,19783,19923,15363,16259,27749,48628,46531,11842,35218,91155,85856,19567,53857,31151,68236,71038,86622,50846,39417,46320,23798,22687,71079,97288,65615,96382,41474,27140,17325,14850,75831,13636,64091,94225,88215,66852,13171,89345,80909,70307,39476,21852,18418,55595,94683,75906,61230,16661,89069,98078,15250,49416,75210,55200,12871,64168,19283,52178,63253,65248,36352,61487,91666,28669,28743,53977,39548,15557,62272,42012,72123,97807,59770,91862,64608,91686,65775,98338,86027,93166,14110,25648,72481,13305,23867,19932,73109,80716,53363,40740,42220,58132,35044,36233,49087,67302,83265,66602,29295,56229,28413,24279,19819,11279,49901,26991,85806,38492,76312,74380,15576,59444,93966,16716,32562,75707,24411,52800,37337,99501,53526,41051,44353,12115,52426,81737,21669,16867,23592,37096,36293,68956,90436,81503,46114,22518,12165,37448,20525,97621,44935,87686,56246,64472,15948,77196,69740,40134,72142,25652,69992,57297,99235,82421,37040,67350,74601,66271,46297,88710,34292,55624,53707,89915,56194,97532,72540,90094,31843,24619,89893,83534,46588,99310,23594,19709,67447,22079,46237,62199,80126,80808,86968,61931,68019,49269,73611,83071,20407,31769,45233,36388,16944,94985,36888,26609,34519,31917,23428,42304,72033,74274,73400,80225,17551,92803,60832,11663,86874,69587,51877,64811,66651,96853,39941,66745,86474,67537,39243,58083,39976,50851,69805,33202,39647,53549,28346,96525,68665,64592,25757,75206,48308,64510,46178,22888,17050,97610,33914,90619,84640,77321,94004,66200,41959,70538,26899,91207,76695,71170,36660,43656,79050,38010,22428,75461,97099,70143,64975,72207,88772,20364,99844,35144,73415,34383,22910,38153,89789,26661,19145,41308,46522,93205,38353,25171,86219,52803,25040,56909,15146,11530,90995,68104,28616,63995,59939,86564,20557,35413,42592,77757,27938,46297,44638,52751,35216,78607,96001,76286,45152,90071,36617,14720,62575,82524,46478,39013,81811,91423,23748,15734,20973,14586,84252,31399,10463,59244,51062,71000,13404,21637,76399,50206,58108,30955,57905,58961,11811,98409,23547,92224,79524,11423,50925,94625,38459,56651,71139,23876,28871,77310,89307,84782,37145,59801,48601,20257,77242,38917,97970,26860,35482,28054,11487,82804,16479,84830,35062,39387,99107,27407,37132,43194,77946,87691,15677,32765,26380,64443,12391,86269,78615,49684,94738,85977,49199,36108,53332,11059,68993,50478,37690,87398,22026,14310,58081,20720,12120,97735,68793,71848,49080,20457,92332,66572,80196,85327,66768,73714,67811,41001,42621,96896,24434,55519,59067,78338,76714,78895,98689,77529,15359,63931,52565,36002,58511,42159,62089,84192,72873,27314,48578,23748,86091,88501,84760,84474,42023,70654,66437,15587,35147,94042,85753,69294,31180,53951,35700,19914,88703,38384,40967,31911,14607,97637,78625,58402,31059,36237,68327,25949,62086,27489,23829,48132,70277,33337,44240,56587,19831,10279,47903,62281,70388,54023,84585,92909,41333,40356,68670,56261,51936,34439,78798,22455,79373,42380,88886,41690,30521,69393,95443,37445,83318,18312,84764,41768,22074,27519,27428,36413,45088,86080,82481,77157,67749,17193,11724,42109,61628,10314,43279,44011,84102,49419,11303,53189,45188,17056,74011,86925,54897,55973,74021,12046,80954,54082,12086,46895,11369,74928,75341,37004,13191,58165,79132,67196,40122,63768,35074,11688,60080,78477,12392,61031,52562,87891,86405,96198,35068,45776,67261,60680,82653,33378,87753,54597,96685,30467,82575,41097,33380,64840,62286,52832,29979,99517,48456,40656,17600,15329,90676,58945,89723,36375,29964,48763,38605,62662,73697,65529,42535,62179,78779,18478,76214,55056,33833,82961,33827,86349,24828,71967,61377,69104,28556,91212,98727,52789,31726,43534,74570,71212,93862,77805,55445,88400,65597,48081,71940,86541,37770,19525,86855,31670,73877,49268,99386,91557,34883,49607,26101,60110,68336,42504,70278,71021,63579,98721,54890,85385,91444,64218,26784,77286,34857,34050,83110,18723,99848,85177,10490,75107,15646,82286,47203,19430,70232,54157,77729,36741,19335,99429,66585,96436,37922,45355,39000,52697,32738,62164,21278,34642,81822,69453,90298,86193,84576,80378,36875,49409,75301,67745,63042,22356,27631,25701,32190,41272,91312,90199,41671,43783,54671,50655,96598,90908,28740,17049,41024,56566,73896,10135,84368,90059,58340,31550,36422,71937,50735,14102,31878,57012,55901,23131,61741,27490,12437,26211,69329,66819,88486,70311,16752,84957,10570,46278,55895,61896,87330,16580,95869,55926,97062,74321,22506,71772,28061,51456,38872,72506,80754,64850,78297,91679,74090,44727,63622,30750,72520,88550,34720,89257,95836,13027,90545,32710,68953,95585,75143,83560,21246,87784,99658,28891,64912,82473,64390,91882,42472,61879,71395,15384,53630,47591,27637,93561,24565,78074,88602,38960,91740,79897,79647,32503,70177,65274,81109,57412,44240,61479,47525,64578,39897,48035,30853,71546,69345,36995,92925,23328,87825,52664,39121,51635,77006,39515,90115,86284,59580,50070,69794,66840,12711,88797,71709,65338,55672,84901,78237,61410,81623,43130,45288,97227,58041,32282,21425,84670,82326,79003,35125,54976,26607,37908,94067,34205,11426,63190,92617,86112,32340,45180,97842,20319,59163,43492,49803,53000,48924,15167,53417,89166,52565,37093,30809,74167,59986,78323,45522,36211,20752,17344,40956,29205,47289,36847,52862,54008,44092,25876,73353,33882,51989,73403,22234,97295,70858,24629,67389,22106,63581,19652,94845,15957,42283,87864,64381,25984,76970,43000,69676,29749,73320,28966,37684,75185,92371,25729,67040,79151,91328,26657,42596,37968,80237,76581,49000,90017,74530,94632,32612,78563,59492,26231,30404,33612,37064,88902,16814,13084,31116,17899,63776,32977,70698,74693,77891,91257,62438,99239,67635,55037,94171,16870,32884,96590,31524,81921,60376,10894,22237,73788,70923,80910,31658,97601,49636,90746,44395,14723,30555,45691,93024,35107,63973,87850,60570,30775,89687,29672,34277,47590,46296,75482,48997,27097,22334,28574,40955,33618,24242,80116,56438,28004,62416,73961,27203,88772,40401,93689,37601,96186,33662,88652,74880,25970,27829,62248,58918,32402,83084,10829,33998,56582,17569,32721,62551,72612,60165,30764,95018,82377,76630,10258,47956,71828,11586,79860,98744,42894,31425,64008,42811,68381,74854,43824,55406,41660,27287,36690,74120,77524,54914,57017,86702,36311,21917,72672,19533,34031,74840,23837,33962,16099,77822,20970,89903,13108,33474,64966,65200,98765,67463,22671,61143,80970,59046,27991,51192,10349,25463,43479,54388,11243,48490,63453,88842,31624,16889,70852,11132,84192,93176,90936,88875,43059,32270,13918,76681,53098,11226,62984,78853,11561,72303,50011,12134,51742,93339,50253,23053,82902,30597,30192,32596,22098,90829,25370,84897,72860,27860,21630,30623,99791,23543,13246,59871,71740,91349,55755,16840,74939,10637,70690,98403,74390,72486,62289,97190,34767,23750,39130,42865,63725,21602,40861,86563,39576,16746,62215,91886,58008,48316,19665,14378,94570,55777,32709,69002,32749,76083,16051,31451,32510,41516,43073,49915,94190,68106,65786,25221,42699,88353,20530,93326,25024,82762,70318,24702,16223,66908,19082,26262,82282,96145,72576,52479,48322,64304,42965,73318,69006,93989,96786,56108,96472,31476,61600,55932,95422,58846,43265,20601,97175,37767,41862,55242,21804,86183,50902,92461,19860,24909,67955,48443,57686,31278,68071,98136,75954,73902,80498,46483,83090,13361,82089,19510,12242,83527,23773,24637,16625,45561,29678,77375,55003,92401,22667,73400,97915,62972,97668,34916,90446,51653,64856,35529,52740,30763,43384,24091,41054,40595,40386,26332,18002,80890,98449,34185,20043,72317,53772,77436,87397,42851,90774,56632,40554,91617,38664,62834,51962,13843,45429,50817,23763,72146,71272,96580,47026,12550,44000,79472,41656,82276,25914,32577,67318,51092,95398,36263,47679,60132,92941,40457,86288,67915,73354,15035,97941,84715,55489,49008,78200,17848,70590,87010,25350,82810,36041,52191,42563,12179,42509,19572,39500,86293,22125,53780,52617,56064,66727,89182,41967,31144,95732,24429,54365,63967,87971,41744,26764,87536,93925,73689,77574,55169,45458,61664,40044,49969,45143,16409,40374,40313,34326,83911,26941,31425,67133,40953,18641,13102,79825,47425,32410,61052,27612,39114,82025,76424,72745,53578,53708,52501,74017,59947,87401,68587,76696,14015,36602,87578,25166,72135,71263,62042,67471,42385,58029,48096,64886,45251,58540,20335,34494,70413,51261,11727,65141,67554,40037,66543,77518,57897,28740,94866,82531,71829,33616,82611,13283,38700,81846,51385,97207,97418,88469,19827,41066,93114,68037,42181,23372,68117,76669,36791,82742,46575,67165,34495,11594,45188,12324,36578,80669,14870,49086,47631,20527,42051,88333,22295,39019,41612,58366,38908,32434,41782,55997,57132,41831,85639,76043,64662,75158,66004,74492,42014,97501,81470,16205,69438,27779,87303,82588,51081,58470,46584,48150,47312,30347,95469,60687,55561,37159,11699,91702,39591,66421,50760,49725,63982,67322,39156,85325,52370,98984,88057,72572,65529,38189,80746,95495,96870,15423,39101,43049,67464,54276,76334,97670,70509,11141,71393,71336,18999,22803,46509,41376,96348,25899,79709,73747,14164,80622,86455,82697,72281,64851,77345,66724,34983,13879,48888,99863,68344,95108,46964,90707,42550,56786,93747,91767,58577,80532,90734,32255,87751,80166,86048,55366,51955,55910,93106,27168,51445,37260,38393,78098,72486,80767,70896,66242,31483,88300,88184,23235,46055,73949,57162,24267,47493,34015,54046,97462,11878,62191,30773,27510,73537,56754,78574,60458,60541,93473,87426,17431,22198,39877,71997,14451,68963,15758,33505,69585,81785,71168,34725,94004,88508,93660,57358,67627,23919,22264,64975,39270,34805,44841,69309,25789,60797,45453,97836,38938,94322,64137,32696,15139,56949,63186,17020,63657,58194,34167,24797,10756,15893,54509,30880,27894,44173,21108,71475,82080,93689,22968,86720,67450,70875,36617,29647,54921,25713,47819,90271,17493,82906,68647,56036,41385,43483,62756,82877,62220,22849,63393,22527,98396,21739,68472,25498,75861,57016,33801,33755,53622,41327,97096,27141,76441,88388,12442,89625,78077,70247,38917,58438,83596,69492,28474,17305,29652,60614,72787,66614,65361,79577,91363,55051,71527,86231,55842,34386,96834,43815,53907,26510,71406,98664,87927,93889,64340,95600,61307,16675,60277,11262,40691,73725,60322,80401,65334,64960,56917,53440,47487,55693,83946,12822,78136,15862,52845,32939,11977,86950,16626,24748,84961,66396,27777,87339,46219,91020,46393,76884,60388,76902,54876,59193,79712,89228,70406,20270,52178,74176,23756,21088,61507,60443,94581,55452,55119,41158,97506,77994,73092,65358,28505,66576,43173,35418,69533,58338,64165,99204,29959,77708,20007,50941,21973,92620,83538,76164,60063,15563,60870,86120,79316,60709,17343,74186,59575,53917,77439,51439,39008,80545,50527,45864,37110,21910,49279,42589,66596,19514,50124,91415,32796,62659,77320,65730,91445,48061,39259,76434,40828,58746,59898,28646,82201,37520,36018,77638,50070,56623,83836,82796,93985,71434,26112,41410,24724,47522,62965,36717,19627,74548,89384,92537,41792,99850,97397,67509,22372,57731,11249,74658,65278,21640,25453,23141,89719,94327,36319,69610,11370,44940,96638,62209,65788,15167,85001,57382,14808,46282,53537,54055,44554,68572,36949,28641,96363,37492,69385,49320,10294,52059,96765,31098,67615,23183,56599,82204,54981,84023,40962,14846,78773,41059,14726,25883,58679,69819,33731,10821,90976,83821,77809,80359,36307,45755,96439,88509,24626,57228,24996,54543,29311,66382,22786,81784,35927,53422,58197,19675,37751,80580,72058,37678,60417,99120,31212,72614,90953,23615,43139,42588,28488,11305,34302,68197,43092,99493,65661,38726,49746,45248,80732,54263,33297,13157,78064,87458,48604,84558,19974,89746,78605,18413,72862,55087,83971,57190,26967,60018,12138,48608,88384,65638,99933,56512,42730,75709,90916,25778,22084,43997,50225,22561,85815,47414,89531,93585,30785,24046,14513,39175,21481,57354,72643,84034,59211,37310,42131,50206,78154,46960,65049,22884,45327,32238,83236,63086,41680,49139,55049,55264,84835,62756,62293,98159,12159,12636,26541,98017,39375,11755,90856,23527,88934,83333,33419,10943,39575,71584,92902,33626,89443,43270,22934,79196,99403,34586,14227,55425,39915,42799,20677,54877,63130,59000,82297,63403,24715,23791,25862,45951,69185,93685,73315,66930,61850,71533,10308,58443,32642,50557,84814,35309,21460,70166,41001,81524,65270,94792,78819,99924,39703,68662,40323,50573,39790,17356,74548,22645,72852,64877,23245,40912,65400,73605,46431,79099,50552,77007,17852,60730,83365,51557,56037,28908,85833,66525,69775,80255,69220,52111,33134,65096,86625,88050,69654,62968,93256,53702,92181,84238,99501,48250,47999,25196,13232,20825,30103,18112,44444,94277,23582,22759,56056,55419,68486,72839,42985,17158,29518,93042,64235,90627,20341,10964,14555,48928,49577,26354,29739,89382,25945,39262,72334,68928,31448,19184,85340,91057,11790,51744,31700,84259,51901,53026,11208,60652,24582,77391,32255,79709,43373,78407,39672,27684,62135,19664,41541,29248,93459,49657,45919,81111,73807,46171,40248,44008,97920,35609,49610,82877,39470,61067,25483,75300,84214,64531,65224,92272,68711,29483,83422,73706,50988,70072,68078,86069,42041,36223,74992,48339,22424,35466,55567,52580,58951,18099,40373,99818,39321,96799,95626,90038,63099,20862,54168,36728,72059,63653,80863,10566,85305,68413,39023,14388,77477,27266,20126,45912,17609,81976,11009,77653,74114,98008,27391,37974,88276,45053,33858,93522,54184,39657,80752,77137,78299,82115,87538,34265,25627,25074,41421,37701,74467,64146,36629,60601,16365,67147,87248,70192,35689,54927,46764,13963,22742,30302,70872,73034,52984,32218,47572,27688,20496,50203,81348,56347,72004,21796,91305,31066,62867,30061,99698,36456,38919,68623,79096,45228,25854,75290,71784,79165,42377,87123,81288,79437,86820,93157,24257,51008,12575,49812,52999,78123,81305,89529,48471,45766,20894,29133,25152,93374,57112,83658,74103,57330,78617,59596,50756,69463,85089,94806,31000,91965,80377,21413,74522,87047,51362,31326,45482,13473,79833,23971,16100,52298,59830,28596,74825,38680,73656,90843,37331,57470,99283,99134,36556,54764,89444,34096,80367,60738,47002,66956,19566,83312,58234,38607,61888,27707,22717,99741,64573,61835,94455,18789,36936,35769,84923,47860,66416,44001,71722,45263,81845,73815,35542,33547,25285,22898,63225,38217,77488,64317,72235,70091,26047,18875,70251,80496,10774,85539,95442,55096,45744,65237,18787,77564,69546,24411,52967,39566,33144,78317,75833,23726,59306,75605,46228,32248,96162,91991,24495,31919,89979,35947,37832,25527,65749,21757,36883,70311,38199,86376,53416,29618,38030,22958,43408,39794,31855,42291,25887,71584,45663,40586,44611,23730,77914,67595,19502,28246,22673,78028,26259,47715,25032,39288,98213,98982,51155,33866,67294,79561,11445,47522,94003,48105,76357,95576,14644,74835,36916,83739,80662,32862,51402,50702,31029,34076,90510,16077,37508,83525,86173,23542,30255,21158,67619,53028,98113,58292,20925,43010,29873,20252,15550,97689,71653,71555,99991,27388,88735,82232,10851,21988,58986,43769,94706,46480,86318,51832,32040,70635,76624,60571,66969,82309,47990,49919,82769,88345,83997,87481,28634,76065,10513,64821,49332,99079,87977,33054,55977,41350,22072,37079,86384,93423,32234,44846,40372,17990,49624,92798,37165,88554,98341,52497,33097,24381,19253,87497,55557,94531,80844,97642,52983,56176,68017,20897,65998,83566,24286,89082,54400,72544,52668,49257,60435,35367,35643,95332,53320,12270,12205,23660,28563,59537,94197,27053,69441,97721,64088,75434,27792,51157,37144,40001,83774,47435,34176,30369,15066,14416,32567,83217,99352,79527,51780,12800,79902,45634,50693,79357,60876,45686,76567,97691,61373,16967,82253,51121,59133,65265,93525,13638,69983,52894,31626,27792,23010,98630,89171,35663,36920,40423,89703,38007,81281,77985,50816,91187,46277,52616,51601,12073,22387,17794,25216,17153,13115,30613,35605,80163,49694,68715,16077,39521,76698,36327,58797,72976,81427,60947,68277,46071,42792,88335,45941,79243,83030,81153,76218,74687,97042,64091,34484,15124,15177,31425,81996,71310,43806,62116,71092,26335,75307,97325,97444,73754,85659,94402,63555,38076,46502,68322,22946,75755,34428,76763,96698,91234,48860,77098,53030,50182,71623,95224,51348,35861,61529,73678,65774,61738,35577,44849,14379,97976,43661,78540,82027,72502,57685,58226,49191,39443,63816,13231,81189,73126,87424,95512,81333,91828,47656,15520,83695,89868,64737,39821,11117,80373,41639,72071,45730,41743,67800,20958,77471,26091,91888,48743,10586,95504,83840,36600,57570,45640,78291,89428,74867,77668,67104,13012,80902,44696,61534,98929,47158,48010,96736,65356,24360,71394,90924,50272,61750,60802,10312,43814,14042,20086,11831,86535,31713,88840,58152,16487,90251,34549,70359,10077,58639,18369,96681,18442,32257,91567,17348,99641,95178,27639,17352,63694,94706,21202,96838,11187,75355,68194,68903,66975,15262,59195,76188,28494,99779,78044,29904,40045,24055,96352,17715,39985,48644,89113,93511,60039,59030,84176,18500,98314,75049,37919,66462,19430,40516,42117,78712,68625,88970,49273,22074,16973,31892,43616,24394,86333,66505,34828,42485,59784,30936,38242,42288,34384,99875,83083,68862,15165,49557,72711,11284,18028,68452,50646,84892,69843,37957,15553,78366,77293,31913,65654,24876,63818,80469,48860,31939,19526,97068,18264,34472,87704,19424,47950,61155,23565,55571,11265,91525,14675,72539,37000,17564,84673,19976,53619,60514,60123,40384,56386,76193,97397,70707,79740,76346,46302,55354,48600,10672,16644,55917,68889,76087,95310,52841,61494,57872,47847,49725,97443,90547,59574,30077,11592,41647,71455,63610,62638,52175,99056,74863,43733,40733,15229,26683,66316,67096,29489,58666,95445,79771,59165,60012,12007,64071,55427,86479,76011,17535,20799,66093,80173,54838,26427,16761,24377,48512,87011,36206,97768,29068,51425,41605,31325,80437,28294,40766,37918,66753,38675,63814,34940,48367,89619,28020,97050,74673,32453,64309,95076,17678,26284,68875,71887,46774,53095,69355,60713,45634,47826,40838,71014,91451,91572,96349,77116,93750,72552,93732,50489,68568,22809,93384,79227,27189,35946,17869,72042,87824,30397,44928,41557,33775,44532,80524,42945,90867,26521,56380,70887,44806,36604,19539,22472,19792,93942,94459,50198,55622,38352,44737,59646,46447,61201,85166,23351,48064,29990,86034,96148,59424,35430,75598,50312,20872,97930,87272,58349,64184,57698,74595,36833,39354,24739,56933,31078,10938,77017,67932,21856,45583,21835,37163,80813,16305,68910,50239,88490,46941,32535,23073,93599,83240,29801,87500,19954,57774,83616,14552,66751,96308,48416,30154,85982,32593,25644,10342,52136,90364,31765,93799,57310,36540,72056,63845,39248,41984,93250,13026,55562,91626,56864,32038,77790,45163,44807,62799,81785,43769,35652,94182,79246,82256,37015,72689,11538,68848,89480,51563,49129,25663,76925,37981,17595,55765,39167,69156,26099,62536,70157,90477,46013,45145,46718,25605,22851,28316,66977,84660,12669,45891,22091,39193,65660,14210,93784,47479,48534,23567,75311,26086,98203,55083,27852,96816,21883,10947,46249,41145,15787,23204,87166,27001,77354,75356,88763,79432,40091,51638,80782,22576,38726,97631,34393,27233,15007,23586,75895,96894,56650,31669,74372,16894,28267,77778,38157,13585,63554,10739,70505,76095,34366,31003,88864,55941,70879,81918,78357,74001,74745,78720,80093,27361,69982,61824,11769,71466,50447,84152,24175,38373,59307,97935,24442,13121,12379,67252,41383,37866,57569,50837,33225,26654,39496,80244,65465,61240,43814,67059,37200,15040,16024,86540,29539,23087,74335,85190,55879,97841,77273,40013,19777,13843,38493,74478,99796,92244,69041,12981,77854,62481,64723,44591,74337,16000,38353,33033,19950,17693,97157,81214,58138,64557,19050,32065,25800,54418,20905,62297,90942,52520,62022,66502,42407,14986,94966,12952,96639,17221,76747,49670,22101,81158,64491,65301,58736,83932,81721,28075,20400,43137,36618,15377,43559,47786,23912,56972,84990,25164,65868,28010,97389,78020,21539,22765,21411,46111,79902,84717,69904,88976,83651,66910,51781,84955,63089,71166,53919,29620,31662,72135,37444,29470,24726,68816,62497,11778,62427,48600,13229,53375,55182,22780,55580,42509,72762,35259,42113,61384,95451,80608,25349,69692,69929,85794,89940,16810,14572,65797,73943,13067,38111,35006,58659,89719,12880,23232,89999,64482,13440,77173,73794,53009,92810,49107,14557,29632,27935,89723,51905,56093,43414,67381,44326,17807,52590,20994,79157,28644,71053,45317,69368,64650,59247,80489,89064,16065,13944,26631,71599,66678,75767,50536,48911,12612,88946,14720,70625,73673,59229,47404,46946,47113,68809,85014,56875,44551,70658,29550,66061,63714,31586,53514,81740,50575,22007,73245,32871,49306,92734,41234,96965,12524,96145,88196,10347,53042,77179,50782,76202,49681,84431,15510,18404,54996,91149,99793,80572,19687,64259,44648,75243,74143,81595,12590,91950,35978,76323,54825,45265,55708,87453,73077,14412,42941,31988,34182,34792,52838,38663,82276,20807,64814,12759,89281,43004,62134,35574,58643,79980,66958,57505,13306,56172,43279,38126,29267,56844,22023,54049,87190,78117,14371,37507,38499,50911,61965,24674,89946,89641,55062,88964,77583,57054,43574,56492,33859,47996,74430,53228,12179,64303,86850,95719,41342,92737,12104,23169,54348,79779,33474,15526,55469,94413,11571,55043,22668,84113,41650,58214,60443,58638,39070,59343,96874,73766,48721,29979,57920,72401,17163,48011,22906,40356,67498,28313,47116,35680,26379,10616,54336,42551,37918,65297,14351,16621,38802,47150,90942,89902,53784,50813,55527,31631,86847,21977,48496,18515,23393,50669,11969,76996,54399,60999,46861,43755,74231,86593,29958,79544,46694,21118,98630,36764,18544,76112,98293,92569,38547,46106,61269,79276,81072,38904,21678,26923,87502,42898,42105,73557,38382,95163,94735,94118,91524,96039,65363,54193,42107,41358,69165,39345,41807,95597,61827,40584,34191,50573,99798,19993,42855,77781,23427,65984,49128,35485,66937,79919,15780,94405,59826,65652,56753,58320,29023,67572,39129,39003,87781,51322,10373,84312,53631,29323,96920,97556,66135,20987,76898,57430,11824,98132,58793,78491,12438,41948,56790,70202,99802,70470,46843,73886,82212,85285,67896,75674,69689,11610,45334,34224,88462,64337,90030,32793,44461,60801,78932,41629,84819,87611,88905,39734,76882,24633,84249,99266,55200,12350,13348,35706,97075,22870,27724,37427,62014,33644,47039,55371,99218,47380,43917,63120,78489,36239,80132,57882,25091,16469,68367,98262,35719,10024,68833,35084,96846,39939,26279,30388,51568,21422,79459,88518,73021,85731,94917,31427,47137,97827,24471,78808,29384,87215,83195,78038,47566,37653,60853,43302,16264,58803,34063,12471,14996,95878,66048,16757,74197,51864,11547,21836,26645,58626,12962,10521,86139,26909,56788,39971,25508,12928,36858,65474,91331,28037,25438,23678,53285,41512,85401,14788,68023,53532,20562,26366,35051,11939,20748,51353,64900,47200,26297,96096,83977,61801,49737,48368,64538,56020,12856,15033,35352,29428,85741,33118,44892,22235,98657,79838,85124,36460,58087,24331,61202,84049,15352,15860,62153,31785,63890,59411,20310,58953,36332,15267,83412,92135,38844,37392,32400,36906,22955,72963,66949,54393,22264,79825,60104,31283,31613,61858,84606,72650,45124,14782,58645,61017,65512,54401,62465,97133,19211,35284,12382,20965,29618,90295,44947,47470,40603,19573,22266,41687,83568,15033,80521,76908,39658,49785,90713,66685,32337,37226,45157,30624,81039,82103,71788,80614,25972,60359,87441,58850,55240,16182,67251,28051,54157,50479,42264,17165,52526,18819,60415,90098,23680,54930,98499,16399,18587,89083,94358,45437,76172,71792,19336,87992,30596,40286,80896,38554,25256,85194,22824,53850,37938,60559,89088,25249,16779,85017,57632,18445,75819,55492,45357,57818,74727,10016,16633,94874,71092,97297,29300,80235,47605,79412,50219,21743,87112,23605,20949,93487,26018,57882,56474,88573,43219,54203,33606,98144,63806,12893,96349,73740,88899,60624,85322,54343,60817,63119,80375,73844,72082,71370,24926,59118,87502,55745,24114,19582,46642,58391,33855,26669,70678,76692,53444,72875,39294,13639,81399,17821,53711,55780,90118,79866,10602,27980,30978,91758,61324,57423,20139,66812,66231,90114,54148,41052,54611,12887,83240,70214,11542,11351,29218,58811,91882,80595,46437,21830,12434,21862,95026,14729,87253,59123,35550,62517,86697,96885,63337,47681,97481,50786,54039,97933,68421,86720,78673,35975,46316,10286,75793,83886,95946,81489,79673,63072,31427,75292,38366,23255,72765,29533,69779,31523,57381,36009,71928,64342,37203,26166,52861,89912,77126,84836,76053,31787,26344,52621,90928,22783,93655,65259,43086,91258,48636,62908,20698,90719,82603,79426,39107,28784,18212,12503,97674,39702,98742,80293,70333,88386,94225,50682,50154,36637,92424,10452,17911,92775,91461,29831,12752,36559,17181,75635,62404,94887,64677,83398,94811,37518,88612,40991,85910,78936,37552,33474,15941,72463,99960,72513,34343,76855,10274,59676,95213,67617,55631,38258,21851,22333,45387,59156,73883,65913,86876,45474,69043,22965,86714,84593,75789,57039,87186,64942,39027,34123,42454,90979,49493,36862,19416,49662,17502,26195,28797,51292,32490,53005,50555,88611,18196,32356,17960,40346,76812,23485,16961,53212,13995,74812,14487,84100,65060,19358,59762,98219,56967,16545,18422,85008,92197,78467,51211,28831,21477,45566,52201,98150,39552,45324,98748,84910,74071,48874,87142,49536,77539,51037,59402,16364,93207,85666,49380,42086,13337,70328,23324,57777,47149,93558,82917,52446,10985,83784,74842,69124,10716,36550,92022,61667,65293,83188,56686,90211,64202,47236,31190,77534,14504,57292,21978,31384,48890,85700,81039,94140,42589,21154,40226,80057,77334,54536,25190,62899,50675,47196,59067,67990,24122,97697,70330,86678,42379,16712,99226,43771,42348,72376,62071,29843,95096,24089,76428,69753,77110,39694,38596,58195,18504,18753,73968,60685,57767,73945,87543,87635,65970,24398,11191,97328,89657,52272,89863,74102,32973,42247,95243,97373,66829,84475,96654,60066,13914,65189,25762,68917,50595,44239,97493,95910,67990,61473,82048,25919,66756,14688,65879,84687,36347,10854,25170,65156,88020,66795,70971,78499,89429,48396,80455,81239,77829,10642,24626,15696,86690,89171,25187,80419,68788,59293,12305,84283,62515,29525,32090,22874,53907,48061,31672,15591,88659,84425,39099,46852,45377,72661,23825,68424,45404,80858,94995,29119,10141,76725,42857,22584,12826,18213,39523,21785,11805,61704,99200,51314,93755,86655,27482,48177,60964,94435,33840,97966,50197,69849,70045,68807,44176,27972,46500,55332,44105,54449,94723,25370,16313,64184,59285,55704,80120,25495,70067,96792,44131,12339,35496,29771,78462,93320,74294,84949,45027,34725,39235,26729,13426,90660,96369,46773,11194,29240,27781,72389,60913,81202,60646,34234,77161,96264,86460,39247,60840,55460,44279,16132,27081,63129,12742,89274,61760,65927,72034,56806,11793,30283,82985,12429,68979,16254,20272,17967,72275,81798,87162,97870,82694,16806,28360,70571,90670,85076,85157,98121,90972,50286,57016,95968,96726,42970,45291,23341,62060,53511,53921,46462,28323,57520,49439,27921,66574,85623,97597,12060,21917,94971,58094,76403,30065,10362,77159,34542,65361,91458,40394,49502,51882,88760,97140,14967,15581,93353,71885,21073,80933,34605,79497,35750,46269,48592,69200,38576,17508,89170,39458,73314,51433,74761,31333,47467,39180,87787,16837,20069,99545,52725,33376,87347,60618,96678,57432,15274,67795,89759,72840,96563,73523,21727,47559,62297,62403,12600,94053,67676,79861,99491,73196,93655,91038,19491,85434,87576,25713,15518,37338,72213,59719,95855,33493,13635,23448,18992,12572,25269,40440,60381,19668,72627,94699,27696,11592,14955,35803,22424,74035,20674,16188,38268,68740,77337,41402,76881,61143,24185,46255,48934,50133,89841,89528,58277,27796,84530,94956,21052,75068,90607,87503,60340,28459,98448,31171,86769,27008,54583,14378,52061,77536,35572,82974,85612,99766,22846,12555,53708,93142,17421,57335,54020,53357,95736,37023,53262,91490,56613,83501,23923,83883,18307,39157,35188,54093,45825,82210,74316,68008,15600,57112,48011,23681,50189,74746,76111,17385,98021,68883,77776,90346,89493,38956,20532,21723,84491,22752,60067,37746,59344,34886,32449,94629,35076,15354,23993,46980,30887,70786,75392,73594,84768,21820,52572,45654,71702,56546,60652,75470,92755,69569,10951,86751,42898,91042,86780,48460,29289,32259,96408,87277,50494,95637,33394,59591,42378,28272,15335,74447,42944,76028,37556,38852,12208,28594,51014,80916,65105,42449,12538,18620,65840,33036,26477,32342,34304,54146,92627,15362,61514,72514,51468,48567,94077,39245,48665,51462,15424,62840,18733,68011,68729,72551,62686,46185,59493,95138,24249,51286,12741,30320,82027,56581,90664,12203,59644,93941,32091,84374,72867,88804,41764,71088,30223,20786,87147,97565,87896,77643,81140,91743,17304,38191,63489,52700,46842,95549,38175,64526,73837,14286,90413,35429,62663,93409,71783,44022,26939,39675,29536,38079,11829,52189,88683,69236,71540,69929,57257,86391,91560,74227,20266,33546,92156,61817,31619,44817,64444,93401,46807,95133,15864,61214,92773,90611,16740,43064,26945,57274,18070,18250,11808,84902,80902,12047,83973,26858,83020,13086,22226,77856,15762,50294,15922,65244,97414,63441,37551,17670,23221,89605,26055,79807,50921,32622,16997,68435,38152,21835,71713,23126,14702,54768,26682,25220,45630,25222,58609,19630,92913,28213,52738,24333,50336,38872,66364,54033,82907,35967,40590,22410,77157,55771,22338,36787,80361,95452,97536,59199,88004,52607,69893,56225,88071,45936,34905,73111,88485,24821,73380,11297,82723,49733,55203,54908,58177,57576,14850,80534,57743,65590,66655,57567,66681,45647,91743,86418,15568,11877,18822,18939,63163,82987,57139,81852,60383,36959,99105,49725,21035,30780,77364,74764,51252,64978,95576,89580,99802,41040,35696,12271,48789,91612,23778,82778,95836,51428,18165,24370,39108,35154,98236,57681,25036,66895,77564,45562,28424,32253,38375,34835,39122,55877,93025,82467,20114,55938,58961,59012,48105,25122,42802,99580,21518,84919,95547,12414,65402,10720,93916,92186,74819,73355,76209,63512,16818,58979,96062,36631,83554,63501,51939,58045,96499,80313,39910,87414,74543,81448,22554,48464,68870,88181,75528,81328,18979,62641,81446,94423,10501,48309,95391,14685,16046,20914,79014,39484,60716,41359,40281,25408,54819,55949,10111,21569,13444,77003,46355,47525,45858,37129,21858,29267,61800,70517,52801,95530,99765,27017,41802,56007,49666,70569,46674,94734,67405,13815,44504,35313,15250,26004,25784,19558,69462,26550,93251,25230,85472,31254,71586,83006,70528,24951,56933,51117,93488,47664,57252,87569,97445,50388,19644,47449,23885,99512,64615,45612,62566,22241,49624,89100,20583,68466,79627,63710,80525,74981,15832,67245,23659,57340,52417,83696,99213,57830,14038,73250,61249,17182,62912,88146,14592,53623,97902,90576,57533,90530,39820,63896,30452,53263,73762,23674,88773,78533,51040,69040,63240,67205,10418,46694,99143,24355,49937,45120,96181,23074,99155,35527,11572,12396,19493,42422,71127,53883,54890,99822,79843,24145,78513,66113,45964,78836,13524,27969,14554,23504,32879,66105,29581,67474,47588,65531,14848,26927,44102,47819,68573,76917,17570,52566,29101,26674,86619,12716,31562,28964,92284,89245,51292,84606,58757,11885,95818,12811,25563,66674,57480,64227,78675,13099,62341,51070,32533,67856,81750,33156,26158,44564,92291,16341,32417,60000,55566,64610,26244,91020,50817,62022,28336,50443,15013,55309,32064,58307,78471,50659,75243,42276,37262,15333,43044,36669,58549,62503,70668,40856,82124,49610,44312,71171,82899,77925,53578,40436,65076,38453,11829,42768,16791,52826,96001,14954,95121,18633,74922,86143,23401,62298,76157,77839,80555,15160,81428,78794,93250,59482,24950,22261,43394,48965,26688,93187,79139,99241,73998,38906,20307,27314,87632,70069,98845,42158,36740,72698,63431,15843,22298,46179,15616,85165,31996,26271,31346,35145,69282,84435,65969,95266,16593,80602,10860,20740,14124,22551,48453,47211,53220,91996,24046,60470,31351,99186,96881,31147,39305,39841,79943,81281,49641,69123,73254,38525,93750,23743,72812,22550,59506,78716,63291,43444,48959,27561,36987,24605,22325,98485,65024,99584,93177,24869,33422,66323,98381,27107,64178,57656,18043,54327,76853,78923,97300,55143,86686,38435,30510,90145,12345,57499,83011,65956,22624,44484,22059,77029,96380,46240,47304,29590,95170,84512,72452,46390,53479,82587,50347,18327,69189,22333,18880,96239,61206,94605,80579,35369,38298,59265,35562,64159,16921,53685,38807,80786,52600,16423,10389,83253,41989,73097,26665,10317,68659,58985,88505,95101,10544,53288,95626,94589,44811,92484,92097,22731,85734,57137,23736,22541,83425,30126,46945,64985,64152,19907,67231,74809,47866,17327,66408,80929,69486,29461,19188,96078,76375,87662,98990,57975,34589,41541,26407,54501,44723,55832,91232,84213,72271,23600,51725,74425,48108,70215,20423,82080,94076,33705,32793,87017,41602,86112,24556,86152,90702,39830,47055,30754,98362,21829,24984,65589,95063,48646,20858,64678,58155,97670,88890,66180,45748,75433,21595,88521,72298,79743,62704,57825,52421,78550,12019,18392,58261,91785,73829,53000,91182,34961,69276,21007,14079,35869,42652,95170,38504,26185,45203,82590,89974,46064,69326,14807,31012,56935,93235,68153,91848,32763,64774,41465,92204,52285,88259,85676,84413,18707,41884,79607,50571,76928,33393,64629,84183,90712,18294,83472,31328,30227,63368,12800,81139,39364,51686,44912,82013,22932,64521,51300,83875,36630,33618,57292,96540,58644,41706,81703,94616,65552,38858,75160,28458,82700,88717,45711,91548,34806,32004,28895,76834,90873,18576,78788,13882,61554,74641,67135,65074,31105,35173,43989,44295,20026,66458,44199,34580,44940,73451,57989,20581,19532,27222,15370,61871,71640,24543,83475,10688,42311,38338,74415,73294,97262,41030,32135,19729,71865,99858,29905,14882,62299,22624,83477,50932,26764,25878,86317,25813,37416,47039,32447,83243,87496,77589,50847,49965,50610,59164,11957,72140,28909,68331,21855,73554,81930,46282,24019,91278,62274,96830,89181,99568,33365,92357,76452,11617,84106,96297,91605,42868,94338,21857,49939,75526,90341,83823,12122,80093,49685,38196,98453,20725,32423,21224,95775,95590,63486,37383,87678,31612,47891,89172,38965,30200,60949,82011,68048,72011,79802,90619,13574,93961,38931,69896,23510,27028,11662,76872,67352,97825,16208,41875,70301,93426,86631,54088,81087,67289,83590,67759,49353,18398,97933,89808,94951,94603,65154,10552,30802,49258,15503,25922,38263,41642,71203,86614,63549,24324,64279,22763,45428,29482,46647,98658,23765,77698,55948,63359,47515,80849,67822,30829,56561,97349,16944,26280,61548,75348,82059,91328,33970,57072,24782,29244,21797,83405,99354,37703,95929,70332,44976,97602,47508,28690,30467,47535,23603,92878,35594,99290,47361,38322,16040,64700,74415,36479,83076,56250,23704,68574,51809,59850,82923,29152,93818,41393,43944,57691,76736,74171,17682,42917,60997,75132,79634,15254,51823,71195,34860,51775,59229,66659,65417,49808,70905,95374,70299,87316,73249,95789,33452,59001,52301,87001,49196,68272,33372,31016,88916,88045,77195,34304,66625,94198,60171,45912,68166,78556,94253,90760,18801,76819,83423,26810,33762,93940,38459,85618,91311,36160,87741,21078,83091,21489,65729,50148,79258,90073,62249,13909,14827,40320,81366,29827,89131,30064,11033,56880,42085,88161,74587,33065,67017,52495,89701,69515,82142,73825,64869,47797,45162,34218,36190,18948,48729,28034,82544,33520,99574,98386,94834,98339,38599,69932,15547,24844,50341,60130,87293,80262,33745,32769,86459,83394,51392,23227,48958,23019,57956,45946,10023,15014,14080,17932,10986,79381,78296,31253,21387,50724,12521,99878,74627,83327,46315,28799,14897,14028,83639,90526,25365,63937,31495,49593,35664,45980,79969,74125,55414,66192,43526,80353,87078,47352,29422,94689,98063,87210,20659,69714,91817,36731,28708,32358,53500,85415,27375,46709,96415,24347,52059,95156,46152,39795,41899,83472,94889,89977,40231,28062,68103,77697,50650,67839,88563,74903,86909,29785,73216,69305,97102,19808,69481,50234,15468,54842,57068,70602,46600,12775,25930,88503,87155,16149,19502,31897,20566,87438,18734,65000,68930,83493,38108,35109,70851,38006,63955,92660,59331,67594,32533,93003,36025,74732,51961,87556,96367,33133,92169,70623,49611,21511,92877,21296,99976,25912,31569,83060,69152,12107,13750,58171,82113,97189,43942,43531,42481,65321,97305,74638,46051,45119,27257,79024,68125,25692,46552,29366,58991,19123,55990,74922,82325,21100,62793,68547,31058,46350,96703,77362,61589,89678,79192,86359,79796,22486,81966,15878,42298,62761,90052,30381,97563,87797,42017,34394,72548,73824,30059,40323,20987,74533,62696,50438,35926,36821,50555,43108,43898,74210,88299,93904,99966,92347,79964,89294,68127,60858,40794,62872,97703,54347,85943,48836,15211,16108,34012,76607,98822,31428,16179,31780,90626,80579,47855,97178,92347,16589,55041,55826,56735,54585,88488,70900,18538,57223,54202,35881,61192,50262,87778,10158,70474,73151,82284,62448,62362,21475,57023,90104,39405,34445,72800,81844,85815,41670,65426,30216,57707,30521,34754,86319,74940,57109,78149,98337,61182,94367,40544,11857,42454,74642,40886,80429,21862,61589,87385,55543,69619,45346,73124,69985,84566,59224,57975,97607,75594,81689,38341,98612,79064,92753,90690,91804,63288,62426,99195,89670,56493,42646,81401,19513,36643,96346,11034,80938,25958,32722,43954,90210,37086,44723,17390,21471,29169,41563,29618,54841,63554,84672,75255,27110,29389,12709,21687,42385,39156,29936,40460,25216,20377,44908,24009,12031,91686,80617,87098,55962,81880,74403,54621,99413,58471,31970,48358,12970,54093,80731,69054,77656,26356,57761,75768,38602,91152,69118,18144,76182,38412,98601,56842,19609,50726,43251,85619,63066,30869,20280,90478,43128,44952,52824,70539,31381,32959,34977,39165,65595,40443,48389,92285,90221,18687,27366,68991,47718,51157,99042,42601,58746,41787,49386,56609,30412,90933,49114,22611,48606,98102,73756,44652,59766,14218,83639,61820,76058,50887,21054,97104,35691,91964,33891,41368,32973,66300,24279,31915,57071,97302,68932,79873,29161,96134,30286,80820,59125,79111,68851,96598,59349,74912,92614,87217,94801,23095,29331,18163,40093,72895,82298,73050,68614,74193,72188,69102,89068,21542,87654,52136,93864,82904,98161,64707,90630,99440,55853,53545,84687,82520,64593,95623,77501,93757,43438,61222,81245,71519,23213,17896,13343,57580,60678,68422,26238,21318,71658,70491,24245,42111,44426,62665,23915,57304,56896,17360,33285,94884,32897,28218,31908,36589,29838,46485,50026,48801,34468,24065,61806,57231,98983,75641,16641,94557,57867,77581,13972,63372,69818,71782,52021,17827,17967,36947,24952,48074,40830,17318,10979,27613,47473,72100,33078,70736,16224,47096,17154,10647,39047,95897,66184,59892,31302,47043,71322,14128,16943,27249,97330,22758,21087,68135,35833,71600,76037,75153,19031,54045,20461,54796,57808,61227,12289,12000,87290,79129,55657,91327,75165,41160,12282,39830,94794,74263,26152,73659,14133,24709,57416,73798,98978,33926,28394,60288,84123,78812,55782,98357,39598,64179,33469,63435,68494,72388,34629,73135,99311,22402,29872,74595,80982,72927,47001,53254,93441,61036,87162,96594,69697,93020,93652,40248,72586,60296,39325,90286,70198,35763,53579,99015,90962,28526,32215,32730,49557,45636,31247,44620,88528,27561,74835,17434,51455,64349,85815,97381,83407,69491,93207,47516,15249,48724,11156,67062,31648,40243,81890,98504,14385,53717,56578,61122,90775,91613,20897,31616,98103,72942,94903,35155,25457,53507,79723,89577,97096,76462,11818,39448,52781,92059,95470,36560,10648,44412,67085,89227,28493,91604,92142,18908,29995,43266,21100,70642,86958,97632,46383,20495,31582,47866,36819,33546,95497,84861,93860,71273,88606,20398,46845,59330,96302,95851,62044,25984,41167,69715,18185,92417,19676,38262,66359,71618,11560,11553,39262,13698,61578,95240,18780,21150,26555,29788,24786,56729,43930,40515,46315,91102,52731,46210,15301,78469,70173,28348,80611,39080,14802,25862,96548,16853,62868,73185,42789,96033,35397,71042,94391,71879,25041,75255,29288,75197,61271,81142,80089,89222,11406,49173,95629,97528,58895,80711,13818,84195,21014,91306,26283,87838,39146,72560,15748,34198,53377,78770,35549,15834,72542,43853,44113,35569,76436,86310,60025,95897,43691,75325,81491,98167,72773,10464,90655,67161,77635,99083,88720,53963,10903,71103,23001,24841,62680,65038,17841,17834,87279,66751,76188,69848,11585,61598,35671,53080,86477,99916,42399,68992,91077,51974,27225,68628,41638,67337,49102,86728,39400,86582,30756,91079,10292,88140,76205,45307,90763,83246,55072,27334,80235,88456,38433,59674,20080,47165,28435,75156,25460,51432,76956,90496,35454,59994,94437,40442,78955,77532,38001,91407,25628,70441,47628,20374,68266,61989,66181,61343,88882,87462,60610,37815,46374,94821,25052,19481,56119,81948,43166,97873,66131,61389,75640,30300,35497,41743,73153,54665,12936,45296,37211,60816,42451,36149,37177,73594,47493,31680,34714,36927,18915,25706,96028,73564,78044,56754,94208,48891,33555,27758,98184,70952,69888,71513,67616,83910,43511,40808,55902,35100,49318,20986,67697,65398,10001,17894,82384,31547,35823,94637,19455,25770,22127,21914,96520,72891,90344,15895,63703,29228,44365,25803,26364,66978,68832,65299,48844,42600,42007,17238,48921,66677,30036,20246,74878,45856,39768,92306,99811,84487,91626,47784,42042,63128,17934,17155,13211,13147,29212,28934,16380,69491,56904,20637,40172,63222,17067,91613,80310,36445,83213,12417,85437,38693,32329,32838,74077,57711,80478,41689,62686,34576,53016,39336,14862,66405,11933,34254,92719,60946,13897,71309,58439,51638,43703,22066,30425,20835,75672,97645,30309,62728,68423,82201,35451,70862,23414,72660,75869,36295,50678,99360,36271,13135,81878,59420,80945,57095,83417,71813,74073,54677,13499,11007,82966,83637,46515,14329,65152,49513,21158,73526,22942,94314,78030,29492,45884,76545,35972,95767,71812,33616,89946,46961,42693,78964,12008,80775,23154,74562,67187,84951,28727,17414,30404,29650,78933,82188,60764,63569,75892,35113,63342,23720,43422,99151,87557,53099,89590,19257,22168,22910,33214,33508,14783,12000,60261,95019,95378,14348,55735,13032,18940,35620,87705,29609,80437,94692,14718,98476,75303,53937,41094,81183,92166,62802,93183,71360,69490,67266,94171,12731,22542,37087,35695,18284,98458,21253,55894,87865,36388,73435,36976,76141,31694,92077,89316,36958,49590,17221,15375,26655,38827,43866,26600,56322,48654,56613,15136,24408,66935,12340,85133,35513,37014,86005,67333,74590,64228,64109,92684,99568,67229,96381,12275,36085,11226,77051,67029,74008,38813,81122,52418,32322,41718,35308,90288,29339,86767,31911,38491,84540,49247,34698,86210,25680,27888,53985,97624,99461,11806,27226,99675,57206,32334,81451,21454,21757,32824,19762,62637,58133,94218,53859,33358,26588,65516,80555,85815,65036,27200,43598,69905,90682,54502,41123,92485,35762,32557,44861,13922,66726,10683,70941,25054,68358,42960,39686,66578,97329,28388,40718,23023,85917,93697,49361,79947,56933,38185,58904,51317,44171,16835,41372,47092,36793,93346,46224,83167,82817,80890,92367,87616,36411,84201,84881,29608,34494,46124,81870,96516,56217,98422,10892,81523,15838,78491,60194,86015,13402,24951,61803,67963,33233,42969,49602,35313,81800,12342,87485,36851,82951,35453,23382,80648,62673,14649,92922,60638,58604,67669,90596,45486,49507,49287,95076,81608,64765,12855,19869,34010,15301,40931,34332,84067,94543,70370,17690,30648,25647,19190,25487,15418,15594,59808,76669,55981,46898,56799,68731,50342,29207,52959,77925,46669,75991,38814,65201,48212,54339,22679,20148,57762,53373,30992,69963,14527,20886,57414,93360,71906,29986,82942,86892,89984,83609,14379,16209,56090,37112,11913,16699,10475,70143,84132,58719,22890,62831,12245,84044,43535,41959,95039,18866,32303,90167,79293,27916,56613,33597,53234,67105,99814,92036,28903,55910,64050,76810,35814,50464,80591,80200,32535,42551,93536,71770,17119,33366,93562,12259,61089,22470,61790,94714,99838,33129,63736,98339,36113,14222,26433,42630,95825,13211,81222,78030,72924,94381,73200,41492,30949,27577,97065,21162,45103,17498,76924,25912,80194,77178,34827,73883,73625,75844,38020,68877,35407,57742,52705,32283,96848,18491,67188,37389,51262,33627,31917,12206,12394,40790,48902,85503,72497,38520,53141,77738,85506,16940,26338,55289,74741,60139,69902,49142,47034,90716,43608,64251,14146,80217,73404,72548,21230,23277,12010,70503,92833,40573,15038,29089,51185,86298,36064,68897,79002,99840,83342,56298,58908,88424,59168,68187,35734,95645,87141,22750,68252,97271,12668,35885,98940,90863,89251,10798,25457,34469,35420,78484,34149,61723,66172,86761,63650,32334,43433,17067,36531,46039,16394,82647,80672,89601,28417,16021,36452,97896,71507,34445,19264,17391,79061,24809,51583,38170,82949,46038,98362,91518,35301,95844,50476,10811,77123,53835,92018,80262,57032,98423,22553,74948,76968,76147,13810,15275,99095,21865,27488,37908,13646,47419,31973,51868,62267,93617,34067,91652,31164,33506,99641,80976,48508,13722,21464,37171,87404,74905,76892,91760,59536,82527,36484,55019,33377,52846,83519,18012,97822,65055,45747,24101,80392,91749,98632,54086,30674,29827,72840,62485,71152,69838,52094,32062,42601,26687,97446,88875,43709,99018,69262,59428,26558,32062,81742,89957,83441,43459,55597,14452,23995,36030,34695,58417,11421,23634,47416,16918,39061,25583,22255,32814,26273,68745,30946,57076,66938,44379,93497,52071,55169,91596,10306,31554,87679,45802,55684,41763,28096,67087,41980,47845,28354,84368,57256,18455,58349,49809,70228,45134,11953,81921,85673,52463,51828,86975,68701,71331,49207,29860,21945,82550,34738,49202,97560,48200,31845,67623,21540,27823,20268,74186,97975,99822,81104,25422,21185,90486,10182,43415,97296,64956,74459,24832,42074,41302,69230,65675,40386,41912,76600,74165,56067,19124,94217,98468,30450,84654,39714,90762,85422,30232,72536,39640,62191,69452,20464,15219,44611,89681,37660,56719,54635,37577,99977,64215,56779,54842,38733,36617,64485,67704,38900,43506,79115,29496,59819,38687,61108,48673,42621,23931,98985,13118,95528,71994,41437,97282,24601,97103,80397,70224,21509,46608,49356,57586,87033,84166,23800,93802,24682,78024,75310,72738,94865,38975,16396,22373,73346,45794,45629,25467,45202,58597,56270,21609,85546,51821,12579,28577,40496,23873,27838,52547,56138,77364,53726,93227,18827,20333,12910,28536,36778,58914,94758,28979,61902,75526,29769,24466,56368,81855,95607,30243,50677,18579,96362,32171,22885,79711,62135,74128,72115,17995,76157,50424,83171,26395,57256,88656,77809,80359,32546,25367,87115,22685,23611,71900,21204,58197,21138,47710,76362,82856,95907,16890,38268,64759,40760,79715,41717,76119,36743,67045,63489,18519,46415,42224,82326,32648,79716,42569,90995,42184,96614,79528,61809,56655,33938,83752,75105,47384,18004,99949,11044,96100,41901,25938,23538,55356,76913,27550,74009,25824,35233,20013,81720,11551,98650,80921,74467,97141,28776,80075,36723,28512,13290,33347,14385,72730,10826,84491,35788,12562,16559,38653,40967,36083,55279,99035,28054,21650,90709,73798,43643,57549,31191,84081,59671,98495,39165,34069,78835,54287,21731,20705,82219,93151,37212,25077,92218,56676,49605,89912,60772,72661,76392,85124,15650,86684,28832,43708,22856,43862,12412,95312,15958,22316,70925,22150,53779,28159,48345,30383,67168,27515,26180,94807,94787,58635,76807,11427,27569,65119,45349,83361,90973,80899,96673,37505,67359,55119,35028,96746,26636,39823,24959,82686,71435,40145,47494,78345,42092,93104,35739,34756,44885,69586,85708,98680,23699,17428,19592,13715,92318,63131,48159,81431,68626,36159,50774,95466,20933,62850,88267,59881,33450,90257,83450,27132,22422,17946,79952,46309,35420,50315,39548,38623,70424,39023,67111,68253,93149,75278,79163,21748,63082,80682,24075,26246,96893,32699,36295,82659,37220,75948,77551,18920,51764,58272,46227,93627,93308,51451,75777,78096,92166,80121,20148,80613,80460,77000,14565,85533,44006,32168,13271,53656,19053,79726,29842,20340,76393,25480,27457,22759,99039,65975,15815,30058,94635,52779,86264,95365,95624,83700,36493,18613,58714,10294,21958,64827,20457,70476,40668,48897,78748,70044,10085,98111,17776,47108,93961,77943,29407,87996,44324,75797,38855,42305,25002,31988,53362,22276,29049,57321,42757,44858,66813,17196,21154,55248,14124,39734,73624,72374,93478,49967,86279,82492,35436,80721,41806,51133,33391,75906,24338,39123,99836,82407,97685,39473,18484,65925,18314,90681,51760,55369,51403,86584,14983,51624,47565,56228,94211,38805,35731,63753,78836,98227,18105,79953,18762,90942,36561,89978,36922,65244,11056,14301,33458,84166,69300,24445,25357,95020,23054,61811,81413,21494,54057,85018,64856,37339,49159,97444,68728,46943,38595,78641,57886,49288,87516,48577,32500,92197,74911,33581,85542,59909,54549,80299,62784,64714,48964,81591,99266,50518,75428,64153,61951,58868,29537,90922,98290,65041,29138,24931,14561,57865,37408,38687,54305,29584,28514,97286,11074,42972,55287,21642,15522,54946,30194,27100,48045,83624,36100,34714,40771,98154,72198,77557,13174,71604,56928,63124,98091,51258,91394,77270,52584,17377,24255,43153,93093,49630,72793,44934,34663,44434,53211,27515,91040,89629,70527,72164,64390,80870,54626,97650,40495,19065,75175,34235,13820,26221,64909,94027,57006,39642,38284,59055,95965,70666,65101,25979,37734,56140,44097,44594,19407,49878,40896,47812,93312,65972,13135,94088,92712,78251,20144,59936,94893,55334,67323,82495,84052,86670,64776,57028,65216,21289,57960,43318,64630,30777,73688,71907,92415,92133,87017,28329,31216,67789,53933,57885,41230,49581,32322,92033,95460,83425,78690,77337,18973,20015,70026,36991,88276,82641,97493,66917,38544,85870,69594,56089,52419,34026,72625,75040,61933,29626,43586,13368,15694,83366,10324,79233,65059,83667,86112,89052,17850,35508,77030,81039,14998,40781,31729,92671,29643,54645,38911,58683,23744,70157,82058,31187,93823,83788,35316,29536,49362,73115,76308,99490,88263,99783,57160,27166,48008,26113,10847,23153,33701,55607,97547,79224,31405,38902,41449,88854,70672,89876,18311,20801,43350,65960,24222,51162,10273,63238,73047,14363,10434,58202,75662,24131,93738,24487,39685,15049,60603,30835,63135,12356,17592,32985,11454,35117,84670,47566,21540,19205,12411,14598,14414,20027,78122,80938,30844,95830,51598,81812,33434,57491,36525,37962,57918,82548,28604,62407,90629,86768,31265,60485,35843,36212,14894,58294,62201,33212,27284,76162,89239,34484,31353,94379,54389,23980,94502,71400,83679,23985,38172,60373,85293,48475,62102,89927,30487,48402,37430,38501,12086,82047,30114,43623,49629,45488,17515,20433,44485,68404,21384,64238,28912,32227,42620,29463,20239,24715,48341,31589,71256,13263,55666,59369,94376,95837,70122,95025,43347,10488,52798,92167,71573,53775,49431,70058,39648,17141,10847,16345,61140,66836,23187,74848,29896,45445,95732,29659,31982,66660,80823,67679,91220,14214,17336,41178,77662,68653,65816,39783,57480,22186,23495,68848,49106,68565,59073,90027,87435,16735,72645,12204,48375,57551,11351,68553,87643,82221,51658,90138,65960,23275,45652,93300,91369,90654,35235,79383,99796,85241,88878,92182,48783,99882,89717,46293,54273,91532,37680,31287,48021,48235,11133,26710,29903,39809,38582,33346,38747,21372,79228,99329,67740,40112,15169,63689,36391,20366,83802,95540,37339,82518,63972,33045,41521,15965,32100,65070,59496,76064,93898,43688,84449,52654,51845,54186,57819,31436,64574,59784,86637,11746,45487,63938,70682,28568,38041,66079,16295,20773,56065,81356,69047,89146,37402,91656,16997,94069,81030,64349,99860,68051,27557,90286,81297,42604,19154,42930,14975,18015,86836,24476,68847,36836,75873,11912,10422,33484,45091,12332,67740,26038,21079,89522,30223,64851,50414,40919,40398,13386,79446,92042,19684,26676,85084,11154,20485,13469,32235,50070,22971,29007,64744,39104,29421,20714,87961,12649,54779,93891,33212,62735,56080,53049,66840,82311,81447,81301,83302,19713,90533,96070,34698,81847,91133,29331,66850,55575,57070,74277,98605,14546,61327,14021,91585,72744,99930,93570,59524,13456,27697,20314,45545,82022,65173,40386,24183,39931,61499,22028,63730,17849,94978,79043,79987,48755,20468,42365,41226,37177,63676,31475,50006,79760,54245,88233,51393,56222,49566,61696,38025,22573,58381,84924,23958,54598,80824,59853,45885,25783,48495,13750,50767,79235,47651,38786,53423,14149,51414,22049,34601,54308,60367,76231,35690,59891,82848,58089,68050,44746,85867,46978,75798,61733,75339,79911,47626,86290,10892,31560,85732,82757,50676,43964,12157,34447,69314,35326,46486,97081,90143,51099,32121,71778,70295,68963,77515,36675,25959,40227,88704,59642,41704,57603,93460,57818,46658,85693,54145,71609,40022,94152,65449,28454,75458,83339,59771,67147,76316,23611,31260,95747,10370,86640,77579,13416,84459,52413,15575,49830,86449,51207,56158,30193,40624,37887,76483,85586,55230,25209,35970,15740,99772,15733,43178,29160,82864,70113,87523,36794,47249,97296,14291,84533,45443,28993,14937,83686,52050,18051,81560,60757,45999,30819,96489,74652,94802,78851,18352,60925,51506,56629,69495,48659,39779,85837,38025,17433,13442,39215,85617,25764,12914,66718,87375,28352,93698,36751,25157,19448,23123,41112,65032,61083,11095,81144,75625,61268,86374,91260,18888,18069,82904,50314,84327,21160,80773,45197,53803,28136,35280,65605,84275,94243,28167,83929,94402,86084,64673,59773,93630,80993,33232,12711,99164,41955,73824,68013,87286,54990,18031,62759,68773,13865,96879,71982,25967,53237,40094,88526,78349,87247,97283,59733,74889,55220,38095,73773,49529,60996,85216,59053,15982,65453,95109,96295,98684,39843,30091,16027,86687,87365,72073,52322,89226,75196,68457,60673,73372,41941,99459,84476,99288,87834,26142,47285,73974,13563,58935,97562,96182,61375,31707,61024,52111,87060,42619,78867,15712,91708,81525,29331,52747,93106,11675,26705,22010,84578,23317,18859,66279,21066,30996,79810,69166,82920,90472,18969,52932,80679,68904,10467,42797,64131,99359,24883,65999,39501,75408,74326,30469,43510,53523,86311,93588,32182,70232,95638,46335,73923,55757,56042,74178,53658,21707,80691,92515,79627,82982,81391,70892,60590,88910,41676,24220,93595,74140,54729,64220,62545,78070,65748,84814,34263,45327,69629,79084,94698,99267,74966,94142,88203,30418,61407,79437,77268,13836,25816,97725,63684,76748,95924,17819,72624,23238,55053,66762,96338,57805,38507,26917,21373,38288,56394,73191,77161,60468,34431,22601,12322,76666,93351,63684,22690,40321,47838,61233,56631,91557,72981,61654,52527,98050,66585,87321,63725,34440,34503,35540,91784,80881,89485,50660,27600,37146,28021,64551,72415,32239,87771,62236,42137,61298,76436,71201,90090,61930,39541,65879,10915,12697,90791,21428,54941,80238,71530,96402,26104,10757,24610,59517,75170,71436,45143,84624,29653,26686,26128,55328,34165,16341,21770,66814,66355,87349,66135,40096,72623,47469,65356,29961,21266,84228,52959,46490,58821,79130,67981,33152,40935,23770,29244,75672,55334,37777,24583,70250,48448,91172,53972,11465,11462,41307,91632,28529,14771,70709,23228,41249,10881,30243,96614,84642,16931,22296,81043,95992,82300,20604,91723,40528,65327,83263,98593,36448,48541,71697,10283,26819,43176,75345,93004,47369,64323,62391,72513,39866,31260,17026,79598,53864,40685,75036,51251,50399,60806,87803,58146,21625,24491,17844,17952,37044,95176,66037,37733,77427,67593,57166,77979,34929,79110,16257,52502,76047,20312,19268,49148,21628,52419,73215,24055,91011,90096,19516,67926,41579,37056,56838,98966,69915,39231,73950,40677,63123,26529,31745,87305,10262,62906,29303,43457,10990,94745,44143,71875,55879,29778,37763,50242,35526,11229,36980,59867,62943,52509,56055,46632,93481,58629,78672,30847,69784,63510,62804,48901,76339,49496,91723,85040,47613,67391,70258,29959,25270,24548,46005,97260,18028,72533,75399,46551,52170,34355,45746,69293,93206,35185,44132,69603,83906,32877,15399,32730,27452,67684,42866,25164,29495,16706,94184,75292,87595,97497,31237,16475,23778,48622,85479,40314,86470,67845,39826,11823,22877,84531,96483,27041,22450,98635,39271,16956,83987,91021,94662,98913,93859,73358,28124,78813,55453,59101,92318,92249,44204,95755,29155,39256,18999,44793,18810,51992,68963,29447,22197,13434,48724,76539,18660,66387,33995,20933,24445,69647,94944,37947,37436,94299,41050,83116,88660,97811,40400,21115,82292,45470,21272,26700,90407,62124,73710,10989,16847,98040,23491,85091,51512,44289,94639,90611,99540,19514,64980,78874,47236,83025,11223,64017,58416,11711,14443,57770,77499,99566,35763,64850,76342,60769,45626,54785,29144,48894,52253,87992,78281,58158,21731,13082,86793,20697,63654,53964,43796,67410,41824,11927,92010,84649,90173,90556,81267,74512,38423,73443,33114,17977,42262,63830,24011,84150,33001,78892,63314,71104,36463,30390,29461,68626,62403,78086,78132,41574,92473,54165,89695,83600,97184,66793,63556,49477,36033,14311,54644,79714,42286,62701,92280,44148,67562,86174,64483,74954,84967,81036,66168,65966,64565,43979,40169,34905,89676,42436,78703,60044,72756,42369,74799,47438,96498,74867,44856,55752,57491,53771,36575,94184,51969,57829,49404,17352,31951,68736,35998,99716,85185,36275,48748,51984,26720,29010,39974,42817,17272,95474,42550,12015,39715,93450,98168,73959,19041,21232,78326,20972,32993,55866,38894,34938,80300,91801,31537,46945,72370,84280,70618,64181,71480,41775,70604,92138,37413,39074,38315,92150,15299,79358,15835,18056,11763,90975,38218,34807,99324,35479,74674,43945,98270,12961,29913,23192,93852,22179,47810,77470,49450,25875,24626,74833,34654,78347,67752,49796,13635,20842,99094,76534,65999,40020,21256,72006,22724,94675,96664,88881,28885,64394,15721,10337,92242,81224,61093,91204,79026,73971,82355,75495,44476,63823,12164,38703,20714,48569,94051,44029,18436,65278,29601,27551,40489,73731,75042,96037,72221,76133,15948,57934,52209,71049,90135,10387,79349,60977,77838,98924,40983,67691,57087,68378,86735,42316,69493,38965,11458,46267,44805,50430,56462,11603,51025,79418,31521,77338,93269,88426,69556,56569,19908,57227,76116,22609,55825,73895,34326,17995,85757,70370,32909,69903,39379,82827,95573,37313,94015,75553,54544,64516,21060,70640,11327,96543,76348,20676,11268,59822,88314,45994,80716,17942,68468,17030,69753,61451,68882,17877,86350,86415,81091,54898,85826,76122,30376,66466,11158,71643,15701,21857,94234,70464,40378,16752,33061,41979,62865,36882,33107,22924,15352,90526,96169,45729,15082,56993,91918,79968,52366,80888,38031,94507,22073,18716,43213,34740,72422,69619,54401,18293,49801,20607,39990,21622,31794,51069,73812,22176,33466,80570,13901,22052,62247,93675,15867,38360,71203,30521,71945,29086,76541,94961,44361,68983,51114,70805,39133,52205,22771,46911,92686,67165,12205,73560,92321,30610,95533,88737,92475,56486,62133,42134,81590,68540,75418,29310,96538,86859,10952,63216,93768,65984,27060,42846,83339,55016,74927,29133,98339,68004,77296,65009,16869,71596,71412,25444,48252,49811,21486,98146,46446,91714,15246,64193,59377,48374,47331,39347,69838,93346,56965,77382,46824,86646,19916,94597,59639,49024,68989,75352,13724,80407,46008,46874,29647,65712,21129,58933,44980,60021,53815,79912,30773,39622,77408,61116,36030,99031,88730,38778,20862,70880,78401,87194,90900,42035,99275,84624,18294,25382,22796,58428,24394,79683,52406,81447,22275,54857,48544,79216,20437,64250,56447,20407,80139,49316,26847,80176,73036,69790,36255,75202,25413,75830,35789,63589,17936,27636,38776,38061,67499,25284,69454,29185,72364,10876,73708,58629,77669,42389,41421,62303,83332,43897,57356,49939,50134,92200,45232,29012,25775,25729,83720,88612,25087,45779,28334,49690,85334,77240,52521,26188,88391,62828,95504,65948,15377,64463,75273,54623,62740,13565,29030,73613,65933,46388,93962,75020,29724,89251,46700,70496,72913,45677,48021,78573,49730,77540,78854,57357,53995,20205,90701,51191,67818,25221,96381,66962,40478,77704,23959,12013,17413,32624,16720,83260,72006,48155,93243,95619,60663,22078,99855,73540,70733,80472,85541,32349,43071,82372,86146,16899,16975,21888,25455,20949,79648,17493,36030,48518,80972,13558,34883,68898,91213,76360,17236,38746,88537,15502,92970,38113,13633,85201,94576,15221,65292,96943,17826,27789,17661,99202,61973,12235,51819,82316,87081,67013,13935,47346,85064,69450,67280,14596,52329,51548,65667,63634,94483,58632,76208,98690,46662,17203,80464,15166,38263,48958,39557,53379,50841,31389,10912,80664,87529,31021,82703,90966,40077,17675,61632,60391,83492,65860,18629,46081,82076,56812,71256,47715,83959,45337,50478,69021,20086,28531,98277,53731,18413,63226,59579,60620,17000,56000,88690,83008,70206,37525,58141,21807,75657,30842,11702,90050,19889,93633,10517,75387,50322,53989,76560,30773,30767,50860,12673,14841,37783,49599,45166,17708,18017,92481,34844,26388,90164,12619,86592,17814,32237,40782,59048,81009,40541,30719,57017,99273,81715,25841,70374,40852,37512,31280,55114,29470,84907,56206,61121,17563,28913,43532,92450,47148,24759,72264,94475,53359,53245,56967,35636,58304,95907,94264,23205,34689,47155,79684,56063,53353,73230,82888,14577,37204,54301,54708,90473,37452,64534,87025,73445,14289,33314,70098,57426,87103,29857,82104,12801,52794,30137,62353,38810,79410,48346,78762,69170,14155,36837,73101,67113,74293,48501,52078,30091,87091,37157,52758,25992,46194,15410,33477,25920,92041,38510,25005,96244,61687,46063,56985,47071,37035,32258,46000,78199,81651,48424,93883,49745,73663,63068,31726,39473,83004,58939,72516,85004,47122,29837,70887,57825,93727,79948,82788,38286,11609,76689,57689,17195,99962,29580,46306,85786,89484,56307,56805,96181,25463,45446,43041,44622,66737,64880,21038,26422,88345,67683,60087,40483,22740,28051,72780,13393,99534,28109,70832,69377,50057,76442,86501,34772,29365,27583,59452,47623,23539,50463,58931,83464,10744,79351,22298,93522,96838,34526,90750,39770,71659,58343,14301,37824,70037,47631,44737,80241,98989,45683,88199,11376,74400,20168,21616,62562,83059,43696,58898,99954,59945,46304,12658,27324,80036,21826,81948,89261,53785,16172,94161,32393,25184,12804,31934,96426,79464,99111,28053,79624,94914,72079,61358,83436,85753,14626,66585,56032,23879,68532,36446,86785,53439,18615,51532,37911,81013,57115,11887,39620,79430,20367,92857,85071,19366,97805,68130,82504,82181,18046,27296,26802,45148,18846,42649,40900,81001,87454,96225,86293,86292,47989,10685,65831,90459,32191,17770,46231,45166,90530,52937,26634,96056,45695,89181,11151,79546,98021,83074,78593,81545,91418,95633,68962,27551,69494,64201,38695,14323,46739,43704,26805,45255,97465,60636,64683,90680,41157,82930,70702,26451,56166,56148,61133,44697,83826,89408,15851,29984,53522,88065,44185,84889,10933,89281,63536,48055,92133,16925,89303,85633,35694,95365,58689,95254,53356,96767,79942,64926,31312,83919,96322,99964,20857,43117,40968,50578,21449,42360,98020,98073,66731,81812,60805,54306,33183,52341,31813,38387,27383,37944,78331,67957,91319,17103,21160,39509,26044,83783,55479,49649,46705,87294,19934,21764,20977,77831,23903,41367,58119,49778,49181,10682,20955,29812,80503,35306,94732,37310,45822,52454,19064,43337,29692,23428,31235,49679,95871,69469,74249,66054,17144,95114,69014,93175,16762,39401,38431,32890,78060,67844,29196,97403,48193,71627,40802,64326,57076,36114,17601,79541,42639,33728,94373,73721,61869,56540,71137,50992,63586,93316,52497,79119,68940,34424,75594,28954,73863,17134,96666,86810,61998,73606,73331,90995,66561,30536,93537,11527,72426,48204,78315,23546,34177,75403,81570,20404,15867,66790,79137,81048,96833,41542,81412,29737,16394,66156,21288,12144,98337,66438,37571,71358,11340,54046,61334,14748,88608,49026,33745,32029,41941,66879,46293,93205,93520,34275,51166,33878,36735,58556,23089,80809,87355,67427,37875,65389,21424,39415,29027,76500,57324,38836,72601,10129,90980,32869,30916,50348,60700,25047,27051,90574,28711,76548,90851,48117,74778,41863,85712,15421,63438,33674,61013,20428,66731,84868,47711,25308,39929,68962,89363,30945,92202,29273,82012,98658,89656,12029,37224,12535,26657,12649,12777,70455,87847,63840,37900,84517,23118,71555,16698,32986,77264,24951,83266,96742,55832,97696,82322,28217,56204,40795,11446,69152,98529,64249,78957,76987,67317,59429,29082,88687,85542,76281,89460,52609,17164,22312,85462,85546,90889,46194,30759,75489,43883,46558,78381,63706,94722,27722,62054,75376,27060,31725,11444,70728,63542,66317,28755,61779,84097,15859,24188,43278,22959,75554,23859,73418,52640,68870,72903,24951,98428,48645,19061,94639,47434,54904,41265,63501,14424,69300,50308,54727,82095,11346,24771,81321,87637,16821,29187,41921,58113,88238,89817,48002,22313,88398,71906,40784,88854,86532,11784,51721,16184,57216,50126,38357,76195,43333,91111,21913,64625,76157,67575,84111,84669,79562,56817,93397,49184,92909,60535,67488,24837,60145,19920,51827,84339,45107,16061,62642,18858,81642,59019,80551,68171,68901,65291,24125,57990,97637,26890,72346,95502,53346,89233,51688,10981,72142,45335,70668,93738,58959,91070,28113,12380,80889,65057,18117,62727,40040,88634,56248,44782,41615,11445,81748,68844,31644,79909,83093,47557,85483,72442,91819,83296,16380,33426,15442,18427,77759,70331,11550,14412,11219,37438,90569,76104,92322,64917,27407,53283,38057,95214,47512,62640,12276,12656,18441,51071,57209,26417,54945,84152,41788,31872,77586,56924,63113,34187,94705,22409,49183,51837,13804,56331,74787,94908,56982,96334,99473,10600,94769,45102,92851,73061,25573,58176,37502,60486,76707,53413,18580,87875,67788,13227,80703,11504,92328,69726,35045,94986,73395,27349,95636,24030,65087,87467,77012,32395,76973,12935,53215,50336,24407,40089,30263,42820,58252,33264,28188,18679,68543,59384,35276,55081,63193,89294,76401,22149,83657,34664,87118,26586,13530,89256,85689,86905,56599,86415,87292,54684,54344,53979,64552,72224,11247,39846,83129,48893,72540,22979,67166,20625,70994,58560,49579,10117,81215,98195,57921,12131,95374,40226,21031,84191,13999,73272,35134,59046,51457,36127,38357,21346,78435,95219,26831,61694,89288,65589,47015,74992,82932,53753,16803,22348,60671,75456,63073,54802,82129,40072,14875,56053,28964,45113,69447,28319,45326,60822,11275,20114,34736,64917,20539,42381,22790,17516,97404,96657,96675,11793,79416,44444,21799,63228,23593,40143,24473,90778,62841,41223,48231,89578,72669,57295,12460,70955,35987,74499,40892,56922,33108,35819,53037,81937,85230,75606,31260,47679,71160,41404,98248,49141,69417,85526,88154,29092,87447,51193,82521,26510,32981,51765,13320,57579,65327,55535,12035,19038,38796,57735,95259,84229,82751,41073,81419,72013,33280,50485,66959,22509,94487,83504,43368,80555,60556,91934,22052,97286,30498,13954,54238,55397,56732,25960,96510,83004,62812,92991,78859,43756,31979,42308,93511,11246,91598,62839,74141,32644,39661,85631,65765,19041,60869,20589,20898,32705,43796,81909,80265,55141,86963,79865,45193,52498,16258,67895,52126,38906,78772,55510,50569,92308,41670,49355,25310,34908,69102,28525,85517,45782,94109,66251,92106,25788,48498,50973,58169,35872,20924,88742,76928,65481,21586,38846,27330,58750,80022,28696,34663,18573,83356,37482,61888,53719,20364,55714,49360,92694,83996,21756,95891,49558,47703,77967,31880,92160,11096,62401,74710,25015,66647,97789,79633,61030,11556,19190,58131,41867,13171,98535,20080,42021,74993,37300,12234,82332,33996,91144,89245,91674,83832,31511,59280,77313,67957,65361,43378,31186,80059,43688,73394,80330,35016,94074,87987,37254,47680,49265,93849,35969,66833,56084,77546,75432,39376,43056,60516,84030,29869,26775,66027,82203,13292,85675,43377,54203,16242,30358,64447,42380,61921,82846,77596,78449,43546,67526,68368,16767,92687,76310,83071,28244,61330,41129,24059,54719,92764,74246,53863,28003,37566,48580,15729,42645,89204,34890,19665,35759,10001,57308,32934,73613,38535,54636,37758,93085,51170,14153,74441,25578,33302,39984,49486,93434,96089,18042,57355,98246,19093,31794,64789,22686,13289,69004,32783,10184,80567,34005,21138,30145,60702,54876,86785,53363,79761,14703,85100,52406,81894,75112,64341,99843,43954,51245,27772,64198,26646,82348,17643,40977,65791,50293,71717,13499,62192,30900,43648,39004,80452,84957,32197,58444,65871,48038,36552,17435,35784,54866,64324,59987,27762,30517,82815,99353,70561,88688,29119,60132,67845,45179,59222,97745,95717,43817,68282,93127,70981,48953,96697,27603,63797,45654,77988,39072,45412,59494,26664,64415,84047,50284,18666,89386,75841,25333,62830,93782,13796,11387,69316,77566,85172,30697,39788,51268,20913,80326,64916,89552,19823,77967,56875,49469,31291,96068,35224,20635,14525,78049,94458,17781,16153,41690,20760,26855,29969,58511,20629,54274,50932,57378,58091,12868,28490,34749,23855,76371,98093,72931,47554,68253,63542,41999,66156,98016,19110,10444,71625,36866,40122,65525,34037,62661,82918,88586,32986,83737,98300,18278,28706,43817,21153,30140,36438,53945,19858,23458,67355,25991,89572,28694,65674,15315,26221,42504,46526,98876,26779,93785,52350,46958,40193,13729,21774,49701,60945,48279,82111,53966,75419,13153,18283,25388,83899,13853,54089,70239,54024,12403,41299,26705,49848,22570,83080,39480,81003,31381,69422,77931,11717,39852,34811,33440,63207,13267,20548,32807,59775,20786,66669,48972,20277,80885,59452,16158,34211,54193,49227,45855,10247,74062,17777,75490,15575,55140,49683,27997,92007,60586,33279,88979,17546,65154,28404,58286,90000,17226,12280,82266,74104,71465,41730,31661,23330,12471,52327,78744,53861,55579,60423,35615,36833,20692,90195,42700,48343,82898,97055,90890,86123,85172,48300,63778,66693,72916,32642,42889,98602,56577,37713,23989,39292,18155,12970,48445,83418,30799,33185,20041,97580,21146,92491,84613,37262,53036,89097,67759,66734,89960,32312,97335,12783,20514,13253,71999,49932,56855,81109,79628,61522,44291,65142,43416,95950,32508,27615,25285,13472,82174,79551,60194,92205,14006,64921,86923,84619,26461,71291,20889,78557,40853,42383,79319,86373,59026,40345,34274,68190,23619,15455,78602,21823,83975,83780,52429,95510,50485,20285,69376,71345,30042,81484,83210,36125,56713,20490,42208,20587,83968,96954,89591,16016,36255,57959,50828,58707,54786,36855,87717,31231,47138,45673,34511,29136,60389,70815,67589,99809,94268,24469,96744,86768,85733,61235,44391,93795,59642,81112,40424,20323,13261,21881,73987,31259,44784,11357,19692,80921,22091,63375,97198,42828,21427,44411,78090,32374,44809,79209,27458,71725,77629,19877,46255,90853,90619,29070,30723,80106,59538,75412,62947,76544,27493,29954,15663,71763,53373,33948,52543,49668,89420,44031,81022,45785,75194,79782,72023,41079,22532,99716,25776,21014,69198,77284,93803,12830,41406,12285,65651,31108,95781,13895,10377,73035,31950,98946,41967,94132,75484,16485,59182,33303,87988,74793,97774,15870,96239,59088,10653,38443,54495,40591,82413,12034,16033,54855,49298,99208,74561,52228,22465,91290,73348,47053,77809,99394,31347,15959,64891,77550,34779,75972,84227,31335,46623,33814,69764,25471,69678,59998,60714,60529,62530,33988,99000,84303,61108,69050,18429,74751,58564,18579,82090,12688,36010,49890,81852,98054,12563,18401,11166,24203,98720,17369,30226,49423,41854,18804,74575,27834,88630,32580,79157,54581,97294,52694,95992,91732,64165,36995,20871,58041,62745,25661,97647,38964,27002,19571,45681,86251,28019,44464,28034,64267,67474,85866,18316,53389,50390,35750,43317,72247,33307,28213,70127,33411,73662,65640,30687,26648,91843,51591,16947,56009,67820,45052,79531,30968,40633,42951,64830,32284,93318,24575,33825,76085,45459,60720,90149,45689,48084,74985,96221,65411,83819,87490,33842,96783,96982,97056,82470,47144,35460,62960,27541,46332,95765,58396,58007,19823,19468,88049,57130,94065,26789,49796,40980,52658,13450,75612,54967,99477,72202,56617,20322,19044,48712,75076,42029,13501,77991,66138,45761,74196,87610,61622,34759,22315,53406,27632,12959,10167,83645,43191,53062,88979,17838,22525,84160,30677,81255,66438,31754,96754,34684,58449,83106,62151,86911,34467,49940,99075,86122,41620,13396,12228,72126,27828,50579,71644,89835,46959,34334,64743,62816,47095,53078,57005,39683,36738,59461,62642,83412,47883,13117,99951,38871,96706,76357,64958,84138,42318,39550,57820,79118,31872,78580,25695,51526,91516,50385,59266,12907,70624,35085,38192,97658,77714,83267,84220,86897,66792,16010,29319,80708,39885,13050,70757,15291,72793,52537,40181,16646,13011,97630,63087,12937,37293,10842,86314,93549,76742,23392,59065,33098,53353,41931,53628,81470,48913,25009,76732,65708,72487,75953,16680,15038,52617,79179,24397,44652,28520,87656,49143,93241,36434,17473,94250,60431,68014,98442,94013,41961,63724,69129,41855,40491,67487,85700,39092,49384,55431,93394,87099,70762,21451,49291,50435,36923,31514,86251,95775,46372,15540,53210,61852,26330,77505,75709,80204,80841,19704,69271,59075,47313,40734,43409,66941,67165,88411,57511,45213,56894,21685,19056,46220,17118,50157,36464,10393,99319,80666,51956,70795,37761,29753,31967,19047,74184,55567,72263,17273,91297,84492,43068,63852,51968,90800,57719,31781,76979,27944,99607,44926,22830,37570,43647,25301,98953,49775,56767,11132,34275,54081,78969,45220,85006,95986,39084,71482,27336,92748,13818,96260,55501,18296,19700,14781,65676,12156,54367,18670,23314,79105,13231,15264,92636,31636,65452,11444,19155,54777,24069,82175,23415,80951,88190,99756,38869,24899,43194,45194,55493,57507,65732,93864,34006,57504,69466,58349,67594,33302,35632,36019,54503,61905,33553,50257,75878,54269,20239,12814,49157,31951,54135,93362,42230,12826,74786,33264,55784,76336,30918,81109,12370,27028,62047,90496,94322,47660,99468,67062,45363,94514,28348,63892,64951,62090,76907,61658,93799,75584,35299,92634,32387,48095,92379,22487,27793,23368,51948,20077,18411,26903,18544,22020,81426,11759,92581,10072,75976,14808,90391,22106,41565,80572,52971,90936,65132,24331,44655,17045,35226,43613,78551,75389,15956,83593,25522,16661,65697,59270,42960,17731,36448,81311,93395,94043,61559,91571,74380,52980,27292,38594,39247,13287,12242,60498,11774,20967,11997,40473,67118,12551,85217,74966,78753,35952,14284,47235,49958,49259,31777,21097,94325,77172,86901,96585,53372,14966,32200,12371,51960,16083,13787,49561,47524,45517,83314,20539,89015,86973,97402,51226,74752,93533,43477,89547,82046,10303,29796,21999,95465,66725,76945,86106,62821,83239,21069,88744,46026,84445,19330,26603,24766,49612,83075,58092,98496,60772,66607,64512,73162,29876,42638,24199,42932,54935,19182,87637,61445,89726,57595,52900,55417,40897,56311,45925,63451,77681,90311,25761,20337,59551,57791,87795,38968,62591,89513,34487,89822,98553,96557,98282,29512,70985,89361,57533,52687,47601,13746,90026,87455,57922,46415,56990,60544,93593,18625,23327,86314,60333,23517,77447,92163,54288,44074,48068,36348,51158,92039,22553,40934,32957,42937,25207,42993,35781,12213,30120,37989,23646,23670,41606,90860,13037,29638,70804,52420,51991,87747,82393,32207,54266,16527,49245,51718,52937,98556,99049,12729,63747,88775,86849,59434,99134,25314,65302,69043,15840,80238,54203,13365,24378,70366,59741,92477,50241,76032,72371,25151,90670,38666,57253,62396,44579,89653,60439,70078,73525,12988,56163,49216,30033,67825,70814,39792,44381,13268,23769,98211,90472,49515,83740,14171,95786,20266,92786,91186,57666,31338,67878,64032,14565,22190,52237,60744,90112,61211,45531,10135,16475,94188,54768,92962,25918,18013,12519,41319,82585,90009,99735,90758,77412,74129,29420,81260,82972,53106,83323,20601,75822,42291,23038,69908,99952,77383,35903,35867,72347,79144,12028,12428,48210,17443,12420,20985,44939,27192,81474,88922,22471,91368,59714,26189,13699,55059,25116,63651,16587,52050,94349,12769,49776,45909,26285,18874,50414,28429,23928,49483,42764,65604,44732,25966,33202,27025,40202,77887,71261,53904,56176,41476,39227,42119,31854,46617,63097,11972,68114,83900,94873,49756,72094,92451,95395,76743,10507,80561,95604,71876,38496,73582,53633,67309,71538,83882,39247,97587,48974,93607,70118,76991,37725,97769,96447,64859,21441,18860,85527,17589,52423,81221,83869,32381,38290,81761,87748,95160,26605,21681,31133,61086,63697,62680,32791,68298,73870,91339,52784,43841,29393,74307,94270,81881,12293,74478,16203,93100,34512,36028,38921,15123,97726,32360,15041,74029,53508,65336,91896,45328,64666,87229,41810,37085,16165,57812,66769,10845,38956,60820,39512,61074,70430,39810,90007,18992,65254,27042,20694,39083,25248,86104,21916,74654,89483,73734,71218,81489,47164,36714,18694,86954,41305,60485,43249,10396,26051,29278,67218,63619,71375,32034,32230,57204,94192,68868,70641,65073,99381,74510,79342,31933,37603,99038,51679,35748,76512,17347,28441,34889,63703,62131,42988,50142,42540,87098,16795,56293,77870,49974,53199,47629,71314,32964,47870,79451,76302,20644,88348,96699,80783,67736,62855,66826,54608,20598,62464,17054,65629,59502,60157,19068,34546,46720,32032,39044,81677,98151,10857,53412,39616,77421,45336,93618,64811,23979,24829,76084,80736,46917,64814,90585,43617,35953,10843,98048,90196,59958,26798,55548,35130,74898,58954,40362,90301,39981,58974,12989,43659,11803,67616,91764,21677,16977,43828,45231,11600,19919,53705,12962,57717,92777,39887,65684,75557,49763,90039,63443,70577,19587,29090,43697,61965,89051,73053,30211,26217,25178,79693,59285,27974,55270,89521,11182,97842,44888,14494,34223,97328,75653,74553,13106,83541,18668,17789,54168,22067,59245,75174,52704,80344,59953,58305,39484,21131,85750,13530,38389,68183,75016,81134,67091,33457,62697,31123,74230,69753,40372,71405,38794,32309,94981,21149,53170,35670,26134,12044,59361,68484,79641,53869,54780,18334,28782,13094,15997,17952,50766,91990,55946,83512,21927,45883,81369,51986,55637,22742,54319,52571,24042,11749,37699,15446,31451,11201,25169,80155,67980,47393,26188,35319,94711,60312,23525,83949,23006,59309,70414,82905,94340,36933,66833,50251,64031,40799,48664,91912,76467,27426,98509,53532,76878,79269,58215,34353,97744,50686,79295,37474,53050,17298,38155,64778,69057,86369,67930,92741,80486,89129,77127,24140,27494,94976,65186,96024,35581,51356,22448,16356,39442,76598,60922,33783,40233,89396,30926,86593,70711,48465,88336,86691,91085,42127,83517,80279,16898,74090,78911,73358,69599,41882,42185,81970,68963,48937,33753,55930,39930,54272,52051,99831,31507,45176,97718,26989,45379,66710,53271,77701,58042,55307,53378,54336,68900,55140,26182,92617,98202,18976,92539,44427,20883,92359,71017,44030,64504,35700,33233,38572,70616,36750,43802,26496,49742,31649,94937,87799,21208,75936,14927,86575,63093,24426,20729,24260,79531,51051,88272,18092,36824,56623,34720,55724,31395,99642,13892,10500,48912,90759,56949,67600,78750,50760,52157,71497,98828,68060,32523,24712,38149,79553,28232,42141,49602,41837,21540,46434,76418,81506,53258,85252,10086,33853,54438,53922,74079,29529,49708,88324,79410,16857,22265,96598,90272,51027,47032,17839,95192,10169,73316,85259,55624,51784,63107,17968,12934,93675,84103,86506,63671,17470,31664,20267,85637,96159,40431,92001,40191,35650,30890,96960,79496,64915,25913,19338,78053,38354,50698,49990,82059,69901,64888,78131,68335,93727,39883,39047,68623,27348,48647,69350,95139,42729,28481,10897,96132,67102,99689,34945,39530,63293,53446,98919,28455,73714,96661,84272,99183,26769,33268,45956,91109,72878,65654,41516,88937,90176,23471,94376,82635,35776,41854,10587,21147,39299,39458,91846,97321,38533,75153,35543,15513,58422,70418,92249,37802,13467,63820,59479,48447,47857,26669,47388,22165,40756,19895,98192,41017,36384,65107,86513,72832,71155,50505,79217,71938,15875,27504,64256,23896,36840,45199,90130,19166,87765,47830,12568,54417,54370,64657,49944,60316,39363,19568,50889,82786,45365,97116,22106,89469,18570,79523,62837,16546,52598,43390,39716,45885,48972,51321,57288,78066,79271,77467,31830,45998,79039,71748,32102,11317,30710,90896,12563,93956,46094,87196,24098,86117,60530,91048,51628,38841,92794,80054,16837,45278,70150,27018,81445,29421,72853,96690,40699,98962,14891,49394,46837,46626,86416,70723,99037,99746,81561,21671,21060,64795,21473,48850,40988,54490,66768,33235,99779,60214,97237,16971,82285,80770,33250,70641,65660,76916,62577,49324,33059,72522,83152,30902,61104,37891,47841,41246,71741,50957,30492,66310,30413,33935,31176,87172,54465,51991,47168,35410,36729,19183,10543,73031,51554,24436,25648,52205,79042,44664,32226,78531,53570,68985,37678,40847,80255,57259,13395,22441,50633,52324,73787,81190,14976,64717,60702,15062,54461,71170,22653,42368,17286,52057,88011,46708,64436,51625,16064,14752,64653,89352,11627,74813,39493,33557,33066,35654,10067,37486,38501,56161,66164,55097,62471,80515,83500,25337,72085,64534,37595,13907,56909,32077,14228,45371,34912,48417,31738,18685,89433,59376,85948,58088,78422,50650,78143,91784,85789,73670,20184,29499,26758,80177,52312,20294,82119,33166,21986,63690,95681,45221,76954,18021,39322,57278,99867,15627,90278,59173,89625,99048,95502,39181,36719,88613,78938,13549,95393,38833,45842,70093,77396,82216,16816,30896,55793,52241,67753,86942,93024,85245,85165,87078,62994,12107,91316,54001,65215,42553,14995,53765,96655,28415,64505,40448,23367,98833,44694,95803,62374,92665,39797,73807,29266,81054,79472,28411,66035,78623,56489,13494,47842,90844,62604,48200,18197,54790,74379,65273,67986,88482,59650,39639,30680,83037,86313,38700,47783,76881,20427,45921,88548,90329,10224,77853,60250,48127,45906,71650,96460,46526,61933,67167,72065,64858,51116,70293,75995,12359,89994,50460,74440,98822,49542,49072,32848,45559,11654,17175,18598,19098,45168,62238,15724,14763,29736,23329,50094,66286,13103,16051,65647,64114,55091,80831,74062,77041,44524,17526,82272,34146,67494,21489,19004,11812,92999,60877,62191,50832,13966,89854,93580,74447,59153,84880,11552,56784,77663,21869,75217,27369,60157,88505,89316,37797,90819,11273,68684,48909,78076,32239,68374,11047,29004,24985,38133,72286,77619,30554,26699,91736,60870,37247,51049,40921,42559,76172,55376,39573,58581,71375,79009,10321,13796,56489,65807,53886,20530,80202,43542,36800,82892,83778,87495,86724,76568,51829,18582,37273,33281,73276,36054,21025,13141,16915,64825,68204,57240,76169,60644,41132,39648,99935,66237,31556,81145,60615,70797,42182,94374,65502,90648,93774,13080,94468,89885,49087,12627,97990,67946,50111,30904,53445,22268,38515,28914,50762,79624,76140,98127,11024,73450,97960,95323,95832,53400,36440,44211,22707,74490,67854,63054,16411,70077,92671,90600,53306,95475,31166,16637,10037,77865,64316,43409,44843,49638,94762,39014,93574,90646,65677,79259,28497,75826,61705,23397,15988,72742,96050,95401,34887,67857,77324,72676,69615,31296,35032,48470,25138,72121,23333,80068,12550,88212,62166,52088,93233,75371,58154,29915,87444,32083,63921,37952,31295,26052,49898,16582,61672,84070,18574,38847,24693,14420,91608,14728,12525,81583,67741,11104,65673,55949,73556,52200,54403,83865,62795,61787,44054,93015,48898,97446,13696,89940,33411,60778,22168,78990,44976,16151,28872,98620,77055,47952,50088,97886,68343,21567,56427,64125,64256,25515,65345,11040,63092,79027,65621,85203,50404,52776,63160,25561,20989,58282,17015,61326,20311,57478,75759,59737,50157,51076,17839,59205,50355,73931,43983,31751,54964,45373,44796,50713,35188,83190,37202,60763,74563,91169,10795,67681,71117,74220,67380,19867,52289,77898,35934,63942,95492,94607,49249,46009,82456,24496,72017,83909,47999,59956,59773,53965,47780,45701,84888,38646,96676,21620,54971,43531,83519,55716,51414,81010,21923,21197,82509,69471,57549,96876,61228,70375,21121,80107,61043,29899,75388,32469,14397,27451,25176,73065,65544,90524,81426,34931,89395,35820,31498,82400,37106,24598,44700,23345,21514,26559,56035,43258,54194,30264,46552,25443,25142,42688,93296,54009,48072,32154,99711,31949,26599,91362,39462,77483,99499,64365,27108,51380,85610,48037,37791,76480,37378,59906,30072,36624,39167,90926,45382,99320,42832,90305,75565,60804,81245,68556,81898,68778,35651,17019,56273,71482,15459,38425,77988,22054,83812,16521,47993,36942,46929,99938,86715,37292,11073,72096,74199,27889,89081,77395,49502,89457,59358,35462,28243,77171,28060,67843,98182,40081,98024,34835,47868,62958,85040,95068,32154,61078,50482,92860,60924,93707,75697,84459,14659,85896,54928,47030,81835,69761,93112,35477,83046,33700,64342,89360,56032,44705,63332,41044,80060,29743,19763,51970,48002,34370,73701,46998,51952,45711,18772,12275,46854,58114,21620,98057,77009,55834,99555,47116,73981,98912,19512,47038,78357,91639,95958,88024,48814,69150,22476,38172,33228,33058,56869,75238,70666,75018,13280,29217,39948,28231,21546,76483,60645,54905,36786,95898,30539,40075,52164,65299,60250,18174,17667,58092,59136,62559,38218,11626,14338,31329,87051,33896,29324,47427,44587,77688,22704,82569,40447,96105,87221,91482,63061,10831,88664,26107,82351,41662,97099,90044,52749,30296,74687,19096,20140,40737,77310,75275,91053,72793,90177,28542,31654,95975,96511,82736,89954,12318,88134,26548,45335,75384,37127,75771,31589,92551,73122,30870,39792,39582,15494,20928,26282,67061,34275,23295,58406,66722,52296,29018,28724,44611,20974,65097,60685,56022,66505,85622,63474,80473,63219,52369,58281,13693,19189,16117,90232,93183,82860,87556,35962,72428,39210,47955,63045,17119,83977,73709,50347,44527,76855,59286,34615,25269,40469,51105,70708,57988,12791,48433,95888,12457,42631,65421,35564,35008,26884,74473,49396,50939,17120,41263,91690,11905,29437,52514,77097,98987,20233,58313,78371,64213,19173,28171,24362,24906,77992,86393,68147,20654,74328,79765,42504,90602,99954,82849,72458,79936,43999,85955,87004,87460,30678,97203,17162,19528,34323,45485,46690,94036,10810,46633,95860,24415,72545,95371,51770,92621,95275,34014,59031,36539,26943,72495,46728,18992,92163,56984,12162,43325,45463,11201,16794,98238,45937,36404,48670,91300,62131,38560,94960,66611,74280,18433,68860,82787,54342,61756,66601,95885,60390,34176,95832,57194,27660,92143,80333,30617,85912,72238,69024,26152,34539,71228,73955,98964,80461,30278,54151,81017,64476,64109,97502,53656,45044,60601,15692,24619,76874,32690,89779,40310,47415,33742,31893,61940,15291,99454,59991,12924,60252,91658,39881,70525,19181,12731,69041,93629,48552,82526,88993,47524,49577,86641,84303,61046,17808,61234,72127,33942,83000,61107,41908,23742,40099,22894,29573,28237,22499,63940,80545,96406,65516,67101,50718,99476,74903,22915,80726,99280,52974,77056,94081,16914,20321,89509,41660,34823,85175,50055,30962,61282,61392,51324,55240,28948,58804,63165,56374,45863,98344,39037,36684,92348,48279,17526,16958,64742,82551,71005,58990,94247,14196,57020,87139,69716,90527,32876,72805,81705,12685,32486,98045,64784,90323,38010,68476,11143,71919,71880,37924,69059,65449,83046,23745,66153,74059,13789,59571,93668,91923,93592,89704,55557,90019,70176,91676,55496,13661,12368,95300,92484,55914,80816,51908,51115,17748,79754,53513,99359,84594,60804,62381,16567,55266,10356,99484,44187,96860,89589,18460,58306,56519,28196,92094,58002,86738,83694,94901,93755,25489,35820,20093,91242,45111,43126,70264,34694,68260,74027,25417,19635,35530,85294,40854,71764,38627,60184,41595,61075,65564,76086,21328,64763,63575,67901,20962,14522,36528,86519,88131,46479,86205,71438,70615,65983,88030,60781,67629,54278,26397,93125,15897,43846,33955,12289,80959,59323,97166,75660,43358,44318,56560,96344,19540,57961,17704,11945,64071,84945,19783,14787,86452,82335,51480,43563,86618,41552,77270,74824,33999,75708,34050,61973,70480,26106,13458,61722,50380,26521,12508,15202,27227,81711,48155,90183,50460,75953,92484,82144,82796,85314,79279,71594,32195,73555,36921,35281,50033,30645,26467,46316,19180,99258,15443,66481,86167,44647,35511,96131,59517,50379,34242,28476,29993,11661,60010,39071,69987,82812,84038,19585,67489,26793,58052,68033,59535,53704,12590,53906,57929,73202,84729,81034,96243,29625,13741,19725,57441,22247,29892,43823,21033,49135,99436,86713,67298,48528,24586,23764,90537,59992,34640,94557,98721,35903,64443,23605,59349,40426,59833,72404,46054,31986,52936,52791,60188,59668,58538,83505,84344,27916,93706,15175,28516,84673,22934,33162,49089,56769,76384,18991,90163,23776,34239,24693,78857,36872,55355,72204,83329,97081,53750,24310,45003,92870,37159,75226,61466,94861,45203,55253,13273,46870,84551,31748,48362,89932,16041,40544,80668,89183,70389,83819,32040,59799,86250,69284,74705,88687,68876,41368,42094,37027,13166,14727,46101,33221,76583,43686,74265,86911,36386,79836,37721,53025,99704,77009,69535,69953,85734,18435,37993,50346,11819,61120,31127,50462,45342,11048,28849,42523,29302,18675,94517,84387,60896,32389,48832,14988,64408,78498,95724,77048,89418,73775,13372,87256,61060,24970,50402,66032,64362,10877,20581,45086,29749,96566,75214,72012,80729,12289,78909,55909,46786,67531,64507,43871,85726,16097,71393,88964,99781,72692,27334,49918,27775,97953,48610,81853,46350,16016,89115,96940,31226,12980,30230,81492,24671,32912,36241,75076,43886,50166,99573,55477,21880,81892,72073,66915,52923,21174,17841,90160,24816,25386,36004,70150,44949,29072,28560,70111,77315,28750,79770,48495,87331,35482,77342,99172,48775,83461,25368,54101,76945,54051,90268,76312,21311,42874,86957,58786,47658,16904,61952,83718,13665,57240,83437,62169,23095,50048,66300,21042,31374,33249,71617,85571,31249,84595,57961,51966,59330,73102,43113,78485,90798,60811,66220,39310,52315,11878,86695,65466,88777,65482,57680,89629,86325,55946,60914,81219,36888,30364,41335,78092,90697,55218,61704,87692,41780,47013,10526,46391,87228,18764,82654,20772,63577,16934,75412,37984,75408,23438,58047,13218,71923,12701,33639,60655,46533,10158,43649,37420,36899,89059,22253,17595,88326,80749,92778,21188,84638,84817,93562,96786,56119,84813,48561,83539,55297,93816,69089,77624,68967,16948,74089,21199,51163,73830,52445,51343,75480,26925,80216,54657,70831,83773,29845,24647,49855,55724,66728,28705,42418,42964,89160,21091,12321,38001,75445,63417,58413,26442,21274,52281,45235,42912,83557,49784,13907,51022,23912,91003,89899,12030,42486,97551,20165,72814,36239,69017,28689,96913,45389,17797,48301,20710,81560,40493,84568,19372,73296,94669,95855,83649,65592,31350,95284,15663,88304,43562,77592,71407,32436,71811,16684,61111,58681,97149,27709,97999,59226,58971,67578,18980,99036,36713,51836,99330,47559,73535,15368,81317,19825,75337,57095,70438,42387,84182,98194,24064,19350,98347,96405,69072,29019,90224,67327,10529,40111,33674,13902,24586,29227,35200,17978,86675,19681,82646,88816,75820,44588,28293,43460,86282,85136,92865,62931,44084,74765,51268,68636,31229,27139,57893,82832,94060,15792,22989,37842,20805,47595,75415,32718,59937,39713,18748,60290,16411,15838,39645,27231,88561,88852,59121,79188,62437,96628,70629,79510,72790,96513,80990,41932,78979,56488,62121,74448,44409,51584,14860,59496,51960,68639,39191,76169,50215,32100,10764,85178,48840,13849,70609,51922,11269,52647,90920,84915,59333,92124,77595,86532,18604,63340,58185,65944,65633,91232,35856,54051,95285,68388,43898,53906,27187,69520,16122,40903,60898,15936,70435,85324,85000,73168,57536,31107,63431,65707,33612,22215,92279,17313,96613,15409,63584,64335,86660,26759,41753,20778,49875,21890,23711,99537,89571,82942,19999,10128,25929,29160,16061,33507,87531,85220,20966,14150,52158,62592,51658,26269,54082,29853,18609,55580,11491,36116,49650,69097,52489,33986,34052,87517,19952,71417,66999,83880,23609,16501,36886,32021,87875,23641,52850,32654,95206,28048,88977,42029,18017,90225,43321,97188,55129,55209,56223,31031,20919,65667,49777,87058,48325,45209,75575,63612,30582,79477,40924,26254,43738,31489,45933,78126,13054,30641,24163,51302,14244,73789,46204,84752,43883,98529,16891,72340,88894,98812,16986,55364,67593,41234,98757,99129,21691,82373,90762,80536,79068,35070,24385,54192,86254,44941,88643,84382,27302,83094,93292,47663,82005,95821,79288,22968,22508,63069,88248,62782,26821,47185,60603,40896,84261,85160,80313,80368,62121,69325,99176,27762,73742,16059,57904,91778,82806,89950,95608,88070,61911,56529,22721,74434,96779,50792,76444,73684,74720,60472,94103,61738,72229,65865,72370,45622,90046,78344,65446,60711,76102,86850,39576,55271,50827,26364,84779,23753,99598,14654,81871,18228,24420,79274,33226,80006,96922,19659,68458,49822,54136,67802,82383,10730,63225,44571,12853,20147,88399,72549,26213,52936,60010,97846,11951,57038,64461,38112,45225,15725,46967,52900,24533,75885,95430,55097,47247,32995,48675,95213,65737,18453,15686,74267,11184,88576,28350,37258,39999,61621,50357,72069,49141,24557,74014,94607,32144,62630,47542,70287,77653,87758,61723,31461,49557,87457,42243,20278,63067,81247,61887,66202,10866,42517,77413,53403,45078,86956,59025,80274,69840,34627,68476,33679,71706,19716,81184,81451,95106,34164,93614,77738,28890,26623,56834,78469,15725,23331,74117,89741,94223,25875,21496,47704,23681,35060,75239,27857,18550,62460,79629,82897,70399,67349,73989,32397,20377,92777,78671,22652,63226,63406,41590,32164,23416,98002,28807,62494,90586,16851,27275,40195,86739,54300,33762,65071,92098,58539,60772,94667,87676,23281,36622,75716,81158,23155,37788,19171,35408,78488,85934,18475,97840,99805,89214,49286,83865,39767,20330,61214,13671,78860,60557,65542,64056,29868,15307,16138,84608,41547,55659,49028,29340,44033,13177,59077,44678,76659,13397,60276,58112,59575,95552,85476,41349,90962,18033,87120,23941,86053,46624,33971,93977,69398,58291,11721,86131,98281,37806,75347,24701,41792,21286,75109,22102,34530,44129,45075,52298,70097,85101,38822,16653,49460,22043,86579,60764,45140,83960,10176,93153,47900,22169,31500,56493,91816,89367,84884,46657,28231,88949,79147,46061,45548,35888,21683,97544,77052,31509,73518,49166,21214,78649,15639,20947,76555,27529,58503,93741,48661,92881,41320,80508,41116,59203,75630,78677,69956,95635,14542,20632,90284,89305,37807,21186,61738,68061,74558,28897,73352,19726,40832,87790,58114,46557,43000,59441,47891,10613,98520,12075,88192,73491,82330,54010,21988,92814,81240,89158,69063,33519,89946,82331,29506,26996,49111,55653,37486,43729,40464,14847,98975,68419,55881,48415,38899,30805,82294,14735,52323,86243,84086,60622,45246,45984,71025,46991,40215,55715,36326,59712,58016,20703,19900,60037,11502,70803,93363,90230,62753,88564,94347,20259,95282,93908,99282,98302,76923,72367,36629,57713,16613,87103,66904,20713,15600,95660,46877,83694,56702,56620,50219,54723,50875,15237,18606,16592,89971,17235,25236,59734,19538,65947,46143,24149,85222,58310,42473,34345,43411,53607,63384,56010,99878,43086,98733,59174,24080,65561,28111,52332,49301,84090,49971,13352,34175,45861,56225,97740,87040,54851,19670,97851,53090,22750,26733,44315,10452,37435,10384,95510,25034,15740,39391,33716,18587,89562,70047,99485,97343,57926,91552,83279,86497,36609,64867,42917,99876,55726,56992,94438,90597,57599,28362,41158,43858,43129,88540,70508,65189,90265,16099,65915,79770,53623,13727,73728,75911,66759,80052,92289,45656,96642,40636,79065,59379,86034,79526,77066,66839,81471,53498,45035,42946,38410,49710,18977,29261,28037,65097,27892,80702,36329,78106,10310,51499,76288,58252,14488,40809,61514,84601,13543,58013,11379,92148,85476,67398,49067,32806,82389,76028,60206,48483,76690,61645,40654,78819,81776,13088,42535,42491,25546,47796,74896,79273,12035,25822,95306,20792,40419,38275,90759,23272,62074,16883,10795,80877,14690,93066,15813,14763,57683,50128,55785,85882,46063,50646,51570,68737,38416,90658,25737,14491,45644,92992,37911,87298,58196,97429,72612,36352,62120,48586,11191,84571,49852,82209,25052,28646,62410,71654,53960,39458,81498,13485,45019,77737,99694,25880,68998,87387,88340,55313,15781,10271,76269,60675,56372,11444,15692,42559,14116,62917,31769,40210,23138,32430,90149,30348,45723,35795,39036,67287,14462,86128,31944,11703,31961,62223,90473,61147,95812,71089,51146,88296,22139,94734,59302,48159,47448,16047,21455,87273,53308,83168,58626,56235,37368,93688,63058,14811,86704,30425,94930,20674,12514,49424,28161,70274,43047,30576,45602,69811,68167,75339,39346,62593,73857,85530,13039,93646,27236,19633,36933,87548,31989,93954,98390,73167,21858,67231,19789,10310,15979,62407,63267,21440,32774,53905,92609,86275,89834,17395,92607,93453,92545,21309,33820,34498,67078,98934,18653,39822,11277,32653,11662,86142,58343,45123,51199,27171,41736,43569,30645,51687,71137,32589,96580,78396,47516,38559,98091,23185,77714,21953,66207,54112,34985,56650,14394,83448,35354,26844,47864,63556,38680,15466,92692,73439,21597,95267,28293,23050,54139,74827,97070,85217,80100,15792,76695,22457,55993,39095,69806,28206,36036,85681,64212,25310,75383,73620,67838,38065,36609,14164,95708,27519,68347,30520,40907,14898,27752,89402,93172,76720,29460,81864,29816,52404,97291,73786,96789,77634,82931,54044,60625,82871,37273,87764,56273,22286,87151,32789,99483,94803,69743,42998,18391,74711,36870,98153,62212,31700,63105,59862,13705,78059,27804,17861,12007,36629,50660,27477,31176,27027,81381,53904,81148,76629,92473,16050,77672,63719,64913,63228,14826,46042,41593,24663,63218,91033,50567,23736,14595,70848,73129,22291,17639,77058,87598,52083,75122,54132,45476,60855,26472,83099,12042,69532,75939,79479,68521,32621,14539,32933,69703,74847,27200,42616,70795,63715,96979,85269,37759,71006,15614,58840,34899,46546,17575,79409,29598,52685,24886,41529,78791,78499,59571,78396,34558,16433,60189,34981,25845,67966,71000,59594,55651,54943,60854,74871,42244,18131,27415,74779,92114,35676,64429,54604,95544,45806,54270,62574,30084,23687,20472,52810,21844,72136,10420,59315,57976,59394,37804,49014,11035,57257,85697,89293,94309,15459,53887,43986,53932,32911,21150,74324,16352,11058,20668,60880,35324,50061,26535,30720,65102,34851,80369,83886,12579,66981,42737,85099,86067,26245,98327,52233,57459,67320,42611,78808,12955,51167,72421,40425,52006,97987,89436,93423,38369,60825,29621,48204,95178,97870,90598,68203,13479,25552,84038,13169,74066,15095,90301,26611,62844,15063,27109,12894,44672,13159,50159,47853,14904,62698,11454,54709,31954,21450,49094,53631,75514,85818,19984,91057,10624,63226,76244,40732,60257,67865,86519,74828,30904,75373,65258,11952,24795,79924,70382,28967,91563,34534,69545,99025,49853,75533,46668,52187,80113,78364,27137,26505,62991,10416,49298,12581,69694,20446,73138,45256,40617,77657,31803,38015,43651,47731,41331,70672,54927,56241,79613,53928,37134,40618,96750,49366,19035,74671,75635,38579,91461,43060,14108,43377,13051,88935,96466,58298,13174,10332,71694,47077,34418,81039,97319,62328,77725,88639,65689,45818,33786,25034,84981,80481,46274,33964,24624,44649,42680,80022,50393,49518,72837,92741,56665,62106,62013,67003,43945,31475,87743,18936,44235,61062,44149,38173,27708,42492,54927,72828,83011,26439,91975,57862,34484,45685,29442,12970,54965,60703,68851,26816,70211,37223,97738,48183,58837,29726,59463,35682,28338,68367,17664,42219,57712,48512,11238,76329,50545,87938,21358,63133,48602,70867,73454,31021,84317,62846,73147,95664,47464,45101,71518,29709,67016,64617,49391,24229,10291,82175,98976,13625,64700,48823,60101,57483,37527,26746,85797,23080,63692,64533,90988,82141,45581,11688,30145,35277,15674,90047,37589,46306,64631,14817,16015,35669,42526,78023,62316,53589,62552,30983,91422,66319,77641,90576,86247,69793,98591,51906,47054,86188,31685,77302,18963,83968,42855,76069,41150,20758,60446,73247,91669,59478,95294,22839,60624,68986,56388,49899,51780,40015,56460,61757,79326,65792,21142,27487,19037,40633,50966,59009,45564,79340,16679,66470,23666,54382,71358,85076,41198,41613,18942,30200,29482,46584,12312,70983,16883,14078,92455,57559,33548,52083,59112,46445,85177,62514,47211,40208,52604,89509,96072,34486,89871,37991,82803,36614,71196,56753,30173,73307,44779,88413,32479,68798,52487,34398,92044,65211,18593,11329,80729,85333,10276,31106,83575,91155,10630,65362,91366,92183,29504,50790,76209,24146,60133,24758,13908,66928,99376,81516,30634,96294,83461,14887,52014,93586,16548,71616,13357,17729,23038,48436,37490,88042,83133,10144,75278,70568,38994,22933,20435,85419,97228,21679,63497,11909,54758,49479,56079,14058,14669,56262,44084,46754,83942,82907,48513,24514,23849,55420,48677,72098,73293,30166,19137,53084,24842,69879,65582,80128,63060,34486,17458,26864,15133,30245,33976,18782,16719,48378,95548,45157,27717,17788,49946,62082,91684,54684,58015,58061,45652,15840,70230,88843,15592,49131,19644,72283,18887,95628,19777,29800,16987,30592,91998,37596,57639,62005,70541,15396,61604,36262,71537,75439,68383,10601,16220,51317,53821,62241,74264,86505,98026,84610,17355,29867,82373,58235,98681,72403,66479,39593,94942,82116,94591,47488,45546,12494,78685,57932,77828,81118,88525,77527,94656,12296,80069,80533,61052,38442,37344,46950,91633,58023,42595,49323,99985,15041,26119,28482,71018,16056,67902,51799,13671,60053,50729,91259,80918,72979,22700,41637,52184,98761,34657,64561,90684,31091,93084,60119,41607,39488,25394,88637,39554,42476,17912,69304,83563,13110,60109,41725,76635,67933,86067,76999,54638,98640,84751,32762,20454,53239,78311,21023,82768,49248,97804,45685,63103,35997,71784,54521,78028,18507,18182,90682,32207,14606,11901,86240,52875,80026,10390,88824,86600,64740,21699,65921,70641,62207,35179,77686,36864,60030,92457,99805,32250,12533,10916,35918,95997,95800,44018,99392,95690,16663,56035,39708,65318,88215,74517,67866,78245,34548,37505,36076,43697,56646,22779,22054,62874,59248,70579,21989,51671,31419,66304,22693,50722,28000,23294,90338,98126,71940,71769,44399,58508,11048,30363,43680,75799,85654,97271,87196,73468,60340,91100,72531,86007,80101,44002,37893,82070,63226,92329,81018,91538,31248,61442,90227,71213,40514,70081,83433,63914,82193,22052,33659,82694,29527,93740,39881,16936,80665,96025,75350,26916,64178,82542,77046,67661,71342,95195,29122,63206,55297,81595,28510,48972,48807,32633,95863,88138,30555,43859,10549,76421,71142,67298,80526,88035,12612,93242,61888,20124,90984,63571,43108,26511,94246,29208,58638,19910,41333,54657,74365,61428,82641,93142,97301,27160,22749,71524,16113,49224,72992,46458,78941,65792,48700,15736,78847,43669,77262,87393,81439,80348,92071,39156,38678,68487,51719,27819,30404,80423,37767,25147,79400,15348,63356,35953,69875,12111,64024,15315,41172,30537,86272,67683,57163,76690,31756,66700,85456,45564,60036,50849,44326,74568,99094,18082,93566,71507,49962,83714,34139,66841,62027,67144,43181,82529,75253,26482,29977,71663,11922,27654,32839,45667,71967,54558,52369,65925,20090,37206,29044,77909,22925,76603,31845,54742,16430,38690,99421,41097,79162,62612,51024,69000,93319,88159,39343,51462,10245,92991,33169,74190,53492,43755,75383,96078,32488,40891,25509,49540,46736,89011,66086,15756,64484,90407,73564,11459,69948,83878,45440,72350,86622,23894,43756,40785,21359,93193,23350,53521,89192,19855,32229,54073,47060,53013,36632,14597,15289,71784,10722,28192,42151,89830,51656,50776,15284,99394,83703,19793,36641,95458,67372,86590,57651,38824,30214,26566,90990,74673,95671,98320,48667,72929,16542,22250,73009,62782,56953,78473,48852,87088,12069,80561,85228,90007,93093,93777,34903,24782,21380,29405,87779,83171,83188,52021,69412,80166,48082,86868,33970,15041,42377,84386,69336,72508,87009,97625,10888,41638,35177,21797,96323,40966,51244,72524,80679,52485,16452,51990,27619,42816,39495,65854,86205,64844,31217,71446,64305,15999,65136,67229,48460,17771,93981,74626,65696,72530,29336,50087,14766,97670,22307,31682,28137,65760,16675,51062,51965,55804,92550,41133,90892,47706,79218,66394,68510,69725,97688,89987,76070,73762,14004,42547,77715,74100,31849,80417,44752,14651,19461,49800,56137,57555,72965,50463,43302,13472,48595,77257,11749,63713,34055,34758,12690,95796,80076,96863,42239,17459,72218,39546,31642,70832,68995,98113,32927,18135,50285,56369,43078,56959,44718,68660,48295,96125,86961,65379,93705,30149,23223,32041,17843,26538,30360,42006,44432,44136,45508,47476,10639,39232,71848,35338,89321,94206,59957,95280,24842,35116,90904,18377,29218,52251,94047,64531,19192,29212,35953,35535,79252,25126,70401,74416,78827,18882,56353,27710,23263,88265,14413,83818,64642,69871,10498,30183,44292,79419,75340,62894,29096,16768,35355,87709,12845,64998,10864,55020,33268,27360,57219,43162,70731,84676,67580,99205,13778,24961,88498,42665,40759,28126,65224,81211,42483,61685,44389,58880,52042,79594,54096,13650,68290,41458,36308,99042,91896,44613,69429,55895,84604,77285,12221,94827,65707,52889,32656,49277,34889,72767,29744,49663,82859,67820,48802,94968,89009,61941,44143,33692,82450,93264,84201,62085,85521,20762,45901,81531,75684,89714,50881,36772,43335,13672,68749,90071,23754,47031,33552,40822,42308,33080,75790,69062,75671,82245,61350,34566,38510,36050,86110,11104,67335,11326,13773,55608,58592,82806,93229,32614,86991,26234,93984,78418,39969,42882,87105,76327,52131,58196,47600,75941,98140,82683,29320,51804,60977,86287,86817,94916,69647,98277,71552,29597,15939,81831,33217,77980,15773,72715,70591,12089,89097,35749,84662,42799,44995,34460,80871,92362,94435,65190,42312,30074,61997,51394,54048,67107,55860,55852,82154,88984,13658,50052,43112,95519,93585,52009,24377,98185,48924,28224,88306,75672,66737,49765,37675,30911,43660,47495,67414,75612,41740,14537,74357,71558,74378,26033,31691,83028,52577,51899,43088,13412,61068,13924,99740,12777,10823,78337,18710,37253,20042,20064,96725,80344,56979,55843,33653,83223,68858,94310,79245,52954,89791,88681,17018,94331,93089,34161,96609,31131,75597,56166,35091,51089,90972,65532,47905,26318,70007,56896,70664,41978,42299,51890,93902,60689,95336,43028,87188,50166,99537,97100,75755,57896,50045,96678,15198,42614,81852,37745,72158,39447,69153,91985,86754,44163,75154,26364,89578,11637,30842,50191,28677,53573,52482,64636,16220,13559,67997,41931,41703,94256,90090,35357,24254,85765,33610,98075,52693,15446,58043,15801,30249,64824,41040,70504,62489,51989,34438,61739,73607,52058,72282,14186,85735,44220,63681,63445,42062,16085,24980,43410,76867,82926,24517,38482,39402,91749,81430,25286,48664,62286,90679,77756,16652,58576,94640,97487,87784,55075,75958,40491,12680,45895,72216,12984,48813,38673,40990,56029,81125,54995,66412,41134,31521,16360,22821,85851,32864,31515,41646,34349,98890,23791,26947,27802,48004,79212,85922,41326,67950,13075,24770,81289,81075,83915,20470,43010,48253,78120,42542,80759,96130,69956,38958,17589,16856,19023,58152,23522,11657,55755,72883,40231,72760,67986,12426,40130,80758,48045,13159,63335,48712,17482,78632,26361,27163,89691,73376,69638,78238,65619,66578,16882,84900,96979,99105,89266,20070,55175,81456,27602,33588,26829,89894,70152,40344,98836,26070,38441,94984,69887,85121,70181,15970,88533,83292,64886,67896,67891,77639,65467,27336,73661,98030,57284,88077,77006,31307,35402,22896,94371,43192,53614,63864,64177,37007,49963,28023,53546,23316,84981,61284,26800,44516,58695,67382,60967,67645,95070,32135,91825,91225,34263,63941,94018,40622,71345,39028,79840,40785,32436,40757,58252,54761,89803,39354,17352,85503,57163,69492,64780,48171,94121,81905,81924,51317,56863,60069,12451,11897,72981,53953,87607,57501,70275,50025,26217,48141,90658,42962,26053,18932,54872,35389,51206,75427,79006,42735,72475,58563,39214,99830,66901,14096,52940,85226,57140,14396,30658,20641,24299,74873,82434,78486,16132,73956,94373,83634,52644,36152,89703,31065,26955,87629,74159,46785,19144,66115,62951,36484,53398,50766,70503,86693,81244,90925,20427,38380,31224,73262,59508,46451,64163,95836,81087,35951,85849,73480,99599,67836,46801,12469,93334,91862,97372,53375,50095,66378,77973,50417,11098,67298,90025,29586,53550,70038,86214,70640,10737,70253,48893,61832,67208,92172,29336,70692,50543,93520,40600,87593,65006,86965,39794,75825,98988,18464,36297,94267,58726,99238,41201,95017,40359,79817,12818,27717,78278,18799,70634,89871,19547,24197,19642,47996,59996,50698,19221,74170,13627,24485,83039,76574,49520,55517,35883,70788,41729,25355,96593,18113,94314,71081,24630,99232,95281,96619,70491,49342,50261,27679,18247,73471,44839,67485,94608,12783,40040,27364,74383,26607,21365,99531,64302,41942,46928,84464,53977,88940,78816,48061,74379,27299,83269,13716,56425,78101,56843,16695,75068,43630,11875,56456,58128,50353,70985,24513,14443,78815,92885,94617,38964,69232,90454,50519,47221,54456,18176,97200,78224,29153,95915,76980,38910,40491,48400,87889,19302,36011,78529,32983,87589,30959,10173,96454,57523,76169,20301,54029,70608,15895,42162,73370,96000,93886,67053,89598,59531,19068,44890,32584,92887,76389,25378,10002,43966,40103,25913,81329,12223,27967,21246,81772,22782,37948,65895,99608,57224,30143,13452,39515,79369,55792,26820,12795,15244,58963,78280,83405,71732,97894,81677,52346,74923,43690,78836,56190,20347,18845,69457,71855,48503,22419,71561,77812,13644,87168,94177,57924,57099,49666,30111,68484,21969,12760,49215,59594,91231,21562,71741,59852,83825,26522,57208,21494,99006,62287,92409,53409,44692,88957,88434,80645,46293,35944,19291,29574,38111,26106,32138,37773,32563,65305,82618,49225,45191,45130,37963,54279,38034,29219,21596,40981,48420,67477,87346,77457,50198,27357,73063,63722,21327,30582,25104,29372,98763,90433,14899,12865,26219,84441,22558,74246,77410,15412,82593,23595,40484,39737,58133,43531,44491,83167,17886,77339,93515,57377,79190,48049,21723,81098,47307,22732,12082,41046,71659,84459,79717,82579,52201,97508,30393,54478,30663,19001,48683,45275,31799,71222,97089,84039,64163,46103,15500,43156,31066,38114,72077,48138,29319,70623,59340,53903,83919,26509,17760,93142,66380,72546,10616,67728,67723,50352,15899,95837,56572,10482,57736,50422,78818,22024,29449,35646,71149,47379,33296,29752,59521,51665,85637,62527,75569,74696,48830,37446,10706,32276,23030,30525,93816,99853,35374,72403,60685,99134,18287,70147,74283,37300,77721,90581,86803,40859,51783,22030,11665,56788,50464,77177,22106,41382,94815,89099,25311,37435,55268,24875,88531,65077,24241,41385,84593,77932,65246,13744,87054,51854,62488,61080,28823,86873,74710,15177,12834,62969,36933,79350,11100,79070,80799,92203,32884,70579,33102,31323,73742,55085,29990,51229,15463,38687,36085,55483,37693,25482,63602,99129,28241,36155,67415,48666,27484,54718,89261,28339,47500,77177,96376,69134,42220,49283,52991,66836,75852,39181,65415,11375,52519,62523,88388,99993,95553,30514,85479,46843,79342,83879,23615,47801,74290,93539,12069,76439,99631,87166,82090,54152,91884,49346,53338,10046,69713,45053,48872,67937,61870,24787,88103,84019,23794,17606,66909,53832,81012,13997,86476,95290,43008,77614,96041,16470,33794,94123,69540,88859,51326,71766,36095,30803,27126,67285,49091,28415,14926,14343,34645,98975,65214,83776,31454,48464,86798,92521,85582,29256,41367,85153,33451,45218,89943,97221,49859,53624,53375,69470,62106,60320,22114,30728,54480,58493,74931,76550,87835,75607,34810,48544,77441,29684,15101,20473,47994,22566,57991,31711,64935,32483,92068,24885,16118,83569,27100,43664,40506,10717,51860,30724,25829,24436,12399,79871,97587,79099,64277,30144,47806,27224,28879,25804,13756,91973,54778,50604,87971,15908,59131,37202,39684,59823,32525,88349,65526,51341,23191,23497,76045,84875,74249,65039,47053,56483,75057,67886,50566,69145,63737,34330,40388,39263,59350,47023,65648,83993,26842,21912,35755,28575,86962,97403,15404,62599,54315,59973,23190,38678,37859,27048,69316,55190,28395,41513,79041,47728,56736,74590,82240,79428,98839,53299,98913,55811,19192,53271,84823,11504,63650,23012,70955,61076,55125,67170,88513,77109,34142,83995,43350,40385,60007,36327,97645,38305,82901,52932,64508,40552,73435,70697,54433,98233,12382,83152,42388,84654,63789,36195,38856,66079,47864,49337,22523,89233,40461,20848,16043,26820,40353,52433,31674,82554,68929,48249,19345,61407,92492,54521,57118,34101,93096,32948,49488,52519,66219,63950,25359,23975,16518,56589,34871,17940,88342,22287,55903,75454,34530,36781,43014,32182,86436,22113,69826,21924,10610,21711,96137,69569,16691,44881,94917,79289,96348,41701,96592,69575,97944,21895,46452,82299,90368,20880,50922,16759,47905,83745,86149,13127,19330,55129,44248,84732,20952,68522,52663,29369,87755,97174,18334,83689,45506,39554,16367,71618,41229,54977,22897,30816,62291,50726,64487,66087,18297,17800,80344,60736,96868,32173,17527,20036,22221,86189,80838,23313,32543,94948,22663,40587,78113,41865,53243,43905,26331,85681,88245,17955,78088,61151,66730,62358,46189,39549,24270,98704,36237,20682,23843,26233,21202,72419,65516,48570,12732,36163,19198,48191,55910,35340,83227,34140,29616,79306,76094,41019,30676,49532,12648,10020,48230,76121,73662,63302,59377,62040,37802,17933,98533,11275,11232,68724,59181,53603,50147,54021,18517,36870,18608,16022,67649,61238,69008,15571,37531,36150,66294,66768,26944,10100,47271,66939,80654,96522,50312,24749,23594,42959,84838,35999,63758,17823,51062,84738,30364,91506,71756,32421,70493,16442,45156,57178,46767,70477,22614,52230,75070,78345,48293,16104,75533,14259,45725,15345,96511,42943,90895,38797,54051,36132,65647,81499,20272,68010,76428,63702,40533,41805,78501,89565,85030,86403,47555,51896,26046,95672,99470,26988,97523,37679,49172,29366,70288,87619,76854,33761,67712,82483,28554,45709,30976,43093,10064,59874,10003,21265,94109,75574,58580,66972,41054,63343,84043,15390,61241,17596,67570,25456,79876,25044,91856,18290,77479,61995,28195,40265,11347,44831,51445,68903,31312,51560,16995,80611,47667,70939,93622,44679,38794,54996,75367,75061,10312,41723,69717,89998,51573,23701,73735,89741,98909,59339,53444,16681,77309,52284,14953,33640,89434,56687,83438,49140,43582,14347,13328,27564,97690,53046,54411,90515,95390,52822,79362,65801,94228,77307,32515,82857,57206,63313,54647,69906,41373,69278,23995,71308,40745,74612,90047,41537,15563,78852,85336,77587,36854,35197,86807,17226,43069,95778,29942,74132,23115,76233,48345,66261,37480,69828,48447,70673,51841,38656,67875,46280,77585,70659,18366,48539,83866,80440,80845,26526,46974,68644,44397,80209,45147,74041,64040,49335,69638,89504,18577,89591,39269,56359,27114,13253,89263,74130,86633,68067,18302,47631,96703,48603,37556,58039,72585,24879,42230,27015,34958,86186,51559,63185,28633,86119,81621,72928,38277,61289,79115,38661,93759,80543,90105,76428,77923,91869,74818,64050,45375,12964,40324,59672,67584,56916,82957,57863,76870,48408,18842,26340,93330,24810,62844,70195,65791,64471,59411,70927,77768,14529,65516,34548,54367,87640,22592,21618,29024,79678,25544,69496,56173,61803,85284,24061,69457,78465,36063,20040,82925,13100,27231,86050,70184,63733,11288,37151,75780,47662,18992,12932,58885,93095,18820,48530,51984,84731,65995,52584,83814,95004,89929,87636,66510,81898,34367,94323,15287,85335,74657,90438,99125,57503,12039,20310,47194,56482,65548,92218,24763,58251,60390,76495,92045,80433,20080,90974,58373,67389,65279,55218,64904,97510,97123,72482,70454,68468,62958,16988,33979,91549,70463,97295,63403,32965,59706,77117,72567,82106,53565,74845,19115,62066,44911,43477,42070,30799,81516,45542,31690,38788,67237,64767,85552,79195,18158,59708,75225,84025,61884,97342,63179,18349,86403,56558,81834,71519,81793,23972,99722,79689,42220,18488,85618,42820,92799,40740,49366,11603,71691,88570,68480,31023,66769,72347,72719,77608,83266,45482,44356,61190,63570,31994,86913,83095,69932,15203,63184,14090,40125,93959,13050,16120,72546,18420,29525,80172,88294,65284,52141,83857,90265,80789,66889,24186,47389,45796,83912,45921,33449,13120,90378,57168,52774,35867,94152,84429,65337,25156,65860,20301,75654,61928,39294,38523,98159,73794,97537,23480,35726,56380,18564,22109,70399,80493,20302,95731,83584,63902,29939,69292,76737,88977,51326,78850,16051,58430,33859,28577,39190,73819,85844,62769,78808,93488,97825,47807,12630,89579,90099,66463,85945,95220,86818,23361,81355,80908,11583,22714,32809,63699,41748,86357,78906,69085,49166,35208,91791,65801,59509,98246,17017,31040,26141,74264,54517,54592,39223,15804,12600,77773,58685,48947,11281,25857,25843,80297,62071,96521,85715,16787,10637,69047,46157,18260,40058,86425,23867,78389,32238,31533,89473,42668,42428,34167,20261,46865,12480,20451,87768,35287,11325,84714,33932,56300,28619,96625,53666,67035,46782,44534,55313,30123,56422,41174,17147,70977,86686,76533,91508,88386,59264,76137,94345,58872,34909,72829,26955,84657,91989,16249,36577,71146,90161,55605,43771,29447,69946,74401,87918,44334,63785,41597,66907,35564,51955,45495,96466,23493,69478,23222,31909,53944,12280,97939,73450,31322,57683,83370,25635,66488,70663,74305,69862,65826,74004,71417,16928,88239,47800,20656,36674,76907,22686,15044,56991,35267,48905,65175,52822,36701,92554,72291,92800,72952,58175,95692,82961,15189,43963,73441,17508,72303,26796,83556,30201,23419,18924,75730,93790,66774,66493,68207,28997,18582,28905,16171,33813,27094,25978,26887,52114,88965,60014,53268,62736,54631,54173,97053,71739,91367,54204,90903,84809,10591,93925,14232,46923,40749,97699,26348,60985,71691,52705,53651,21108,18192,94637,95462,85387,73680,60480,30906,10909,56919,16725,42573,75012,69052,64599,85621,17643,58840,51172,52769,30020,89742,69599,39606,77939,88491,45420,66695,60336,48103,39171,45695,95931,25777,92575,49465,90876,40998,17576,53374,42455,39181,23383,52648,73190,77324,42577,65374,43269,49997,82612,80373,35906,16318,43706,50744,50634,97164,50649,99710,98301,90196,63487,88831,36128,48987,83700,60706,26439,77268,11809,65472,86191,55434,91062,98559,75552,57428,69519,59674,23031,14856,56680,97954,39664,79554,93797,43333,36759,87622,76064,72418,68334,44335,69700,14871,43553,22743,68486,38558,99991,48674,34969,26997,57287,18956,46654,95368,16427,72082,15887,91663,85598,53072,58072,47419,49819,52842,41538,29300,16861,45692,98813,43903,18045,69958,97774,80254,85475,88106,58054,68798,42840,15089,48717,26095,68953,24486,20745,54997,42104,94919,54673,71381,54522,30822,91804,99260,27680,67497,89608,41779,97073,92507,13215,29590,46049,32410,39913,87424,63137,32165,26333,64890,35898,33534,45838,10065,39779,66618,95747,19353,63860,49602,76357,90090,61923,68689,52230,35820,80331,33305,92436,98996,83758,33163,88543,56653,63955,88638,98572,73973,28364,98109,15055,67647,20880,32359,86426,14994,47956,63176,18921,24098,71673,60103,10167,18135,57567,45626,70441,46016,57833,73404,25732,65125,40649,20638,48828,78366,46503,47423,56186,86511,17579,25973,82734,45434,56847,86591,95370,48710,79273,10538,57517,13159,43292,18991,68916,51692,69102,82702,81490,44324,22900,56217,18055,80875,37945,21649,66981,44584,72570,41808,95203,29793,90987,53585,84613,33536,88064,92049,36657,57133,23176,35289,56066,71040,41229,64942,76070,79087,13429,21495,76562,57184,71347,38465,25089,28554,46262,12111,16896,17746,32083,16112,40564,73060,13896,88945,67844,62438,83868,94229,81480,24357,99237,27699,93928,73421,18206,71824,78196,71434,98420,97541,61391,18568,10372,38557,90637,89861,76930,14041,87988,83101,59979,59928,27349,98624,29842,84544,96850,14473,99197,11212,83964,75047,46836,63594,41917,70147,32001,41845,50150,70604,69465,45998,16678,43275,79835,42968,55385,64243,71871,10835,21985,93992,31600,88820,70063,95488,69053,36585,67063,71863,20373,29488,16519,80318,79697,61734,14801,49390,77049,87629,19096,79824,19443,21321,77139,10282,68971,80222,31517,90305,70435,99044,87055,82827,42070,23764,53254,57576,84531,11573,68908,55192,64278,35296,88531,50731,17668,86319,44262,87121,86426,40717,20841,17139,57358,41755,28935,90672,67938,93266,39242,96715,25613,41120,65393,33401,47867,72445,83280,98987,41991,21358,59432,87926,93328,88235,78870,49793,67289,51874,73530,90506,36767,85433,17625,39177,27323,15069,71301,85060,85599,30448,60751,34198,74273,61886,10632,58140,38542,42703,32416,22654,51157,89024,40279,63545,97909,35872,37862,86359,79801,37348,22484,14170,59676,85196,35254,32742,81787,34412,66249,95563,44891,23864,69284,27534,72087,94046,75291,57585,12426,28865,34965,28780,56757,43670,77064,70793,52279,33840,60273,50239,53729,31575,32697,79328,68279,96295,66339,13662,87729,68463,58225,55348,77359,12968,85620,57500,18724,61190,26526,91333,48125,74446,98389,33050,63521,19548,92481,81455,95929,36148,82113,71269,19907,85700,17306,67823,42207,84485,40930,20555,75444,75758,37533,91717,88276,33505,91573,12449,85374,36261,55155,25055,33903,90351,56986,28246,85327,88226,89202,10030,12661,69999,33680,72338,99887,82484,41243,53869,30423,98748,84196,66568,79806,35387,94396,87658,84415,12781,99839,73147,41027,98221,26930,11444,29840,20770,47654,44727,67420,27871,30786,83323,49415,19180,43437,76651,36913,82892,86190,79642,15743,71468,96828,43004,96440,64712,18064,77365,86934,54226,74966,36058,79965,90954,62590,51438,26567,97913,67570,58386,44439,43039,42248,12109,90624,12694,20880,69092,65522,22489,31303,33373,48068,69537,58316,69199,70942,15338,82640,27650,24015,46917,57258,63058,63785,26379,36575,33556,24842,15490,60872,73249,76227,82944,97821,36147,95407,55295,63195,36738,63979,75886,74605,77568,41722,47313,89804,72156,35607,40455,90027,19317,46967,76790,24733,97881,39877,30916,79232,49066,60617,10674,86606,81899,75340,61092,10035,31328,57128,42079,91319,33338,98247,80660,38387,71360,29811,29516,94254,91155,49413,14043,76191,67562,87547,29726,65061,32037,26854,93096,81729,36087,34085,35848,42573,94766,53236,69927,70751,92348,85442,39803,36778,72532,46058,54368,80182,19093,26001,69188,87171,63547,14120,88836,92317,75937,35553,53649,92420,63989,70804,12246,10492,11277,91900,21581,80433,39984,34005,55687,61869,68616,99019,72683,52274,46899,97963,36780,45468,37379,61120,84158,49298,98406,72907,15658,32635,46878,98377,60241,35034,79876,54602,56141,81389,98581,50767,20227,48891,25543,37918,39042,43279,58973,79848,40920,58607,82139,60518,82738,42600,45199,43975,19265,95275,34526,10476,30799,32092,22946,55189,12554,26276,22744,25390,49827,86925,23790,68647,96682,58717,53696,38173,59588,68815,71353,84350,39011,13333,31752,96837,60733,97834,80619,67705,72394,67620,91122,65155,24424,91127,60862,33163,32707,27140,86213,27472,47580,12044,59278,97872,76816,24819,18095,82471,45356,23117,24910,62101,70691,23803,73932,46448,11399,39845,50262,13833,97930,34462,98784,60590,67063,64047,64620,89741,72583,73941,11391,15018,41063,38398,20569,58162,56741,70707,83815,13894,45141,87801,44893,13326,58608,57956,79425,29660,44766,39854,60306,32717,77369,51371,23205,94372,72098,52749,38889,57240,97311,28974,92684,86991,55431,56572,36034,46361,32028,86757,27860,62335,15639,79208,53206,59052,65747,95624,98243,37238,51529,36924,36318,11421,16319,10839,97707,71279,87028,63119,14707,71920,61151,30165,14438,29787,96965,48519,75601,10068,14884,85917,10471,61959,59939,50105,87819,41280,60085,72511,93344,72056,23261,84212,97328,79800,27695,88542,92258,55458,84066,95977,84025,40088,62415,37970,75516,41516,85334,96128,74707,92251,18210,68127,18333,48436,93520,88654,58366,42920,18962,88635,89055,17036,92241,81812,68572,51765,77887,74526,21583,26760,74160,49804,68035,70553,25023,33845,89661,96999,72776,58521,36725,52604,85205,43125,41121,52675,91726,57349,26343,82597,39709,71390,43621,18087,19498,62866,42109,67131,92719,65181,32820,84098,80530,46955,80027,87451,84445,65672,32393,20968,54326,72812,30543,25017,10384,48819,36245,85531,61975,99815,72706,73076,58101,46646,70597,81132,39496,95771,85363,45842,66058,77782,25505,54998,63181,52162,99986,20112,57288,59362,53469,45209,12410,79921,56924,68692,99932,72441,41256,67458,38802,28776,51921,97610,99245,28803,62914,78005,72981,48163,20095,84954,61485,70344,61121,40663,53785,92578,57288,19857,50318,49736,75750,50928,98567,23885,33403,48094,58944,47951,80655,11269,86654,50078,88190,56203,17694,79608,89081,56276,88839,84115,57772,58480,66882,31246,18531,39084,99093,88943,82793,52228,71641,72785,39716,17733,33668,88087,36459,61817,92563,63979,93884,65702,43697,84882,34542,89909,25265,81559,86471,88690,54536,64830,79811,40484,26945,67436,61643,34257,54650,32995,63785,99857,73322,83138,73734,27126,11862,74218,23778,45493,18993,15228,39499,14210,78151,58237,35688,70736,53664,54507,59815,94427,12631,91737,63229,75196,70734,48476,75985,49449,43308,65016,52616,88998,46956,84227,79522,41958,68554,34992,20054,26498,48411,36357,28258,83954,56290,77666,37449,82411,24083,45662,72475,44747,93184,16099,14061,20943,89507,43288,43406,40903,43238,61969,38276,76994,10162,15348,48258,19698,78107,46030,85882,51847,32821,80545,27278,91854,69401,10528,33230,61986,17188,63408,73841,22297,95256,18682,64584,47877,23955,95757,39571,83333,89379,16860,31022,91681,83622,82727,91970,51905,77620,96284,69344,30489,33510,91050,57006,51477,56308,39049,61421,49309,42209,74449,94816,96913,14510,75076,47414,95878,56213,63318,91531,90132,86087,56772,77613,99910,96142,60384,93735,44214,42029,50421,24799,38917,85476,53191,23314,21815,97255,28405,32508,93326,87447,88854,41286,98161,56185,43683,79516,97024,59489,91944,46893,44136,62330,61175,27164,55126,39802,31473,24146,87672,99761,92294,95903,76382,78522,92953,53911,21402,72222,80031,35445,36584,76516,59595,33664,93022,50944,18453,16504,12649,52363,88009,81831,87528,44285,67613,26999,15071,88844,89469,99660,32983,75889,45595,25449,55584,90687,14488,40281,11781,63654,20036,80565,56214,42273,84500,62855,42169,37254,91787,40789,27363,61642,54961,94663,91250,37709,99480,93931,46355,92897,38429,28220,29777,63254,50931,19156,16987,22962,88659,44498,93963,46082,85612,16185,33849,10883,36477,62048,19252,58019,31414,43270,51555,83917,78902,51373,28481,78603,26240,60745,62928,20574,93185,38728,83785,86311,88143,87990,56012,13587,74248,69946,74654,74137,18206,33725,43612,26025,93333,50113,21427,77667,21387,96441,57137,81022,59723,23651,74088,66975,98624,66747,86264,34816,31812,86967,22868,73222,13336,20914,70725,58982,68951,94177,48149,77941,73414,21754,15852,49301,66638,46850,33511,69936,36031,42691,33675,75364,23661,38311,12340,35846,30961,99974,81499,59318,43856,25868,67016,26692,61738,37873,92210,95618,21314,72611,93281,71866,65997,29116,88389,50207,26108,63182,73339,25309,25671,79596,97842,33669,10390,63471,13893,12599,58301,23154,62722,32859,68483,65903,33239,18901,87401,24430,42834,88986,68442,20157,65525,80298,32080,81366,43278,22001,51337,20987,75697,12386,45860,48758,15268,18445,44417,22393,58475,44458,97805,61967,43448,24972,25287,63025,80177,31399,87417,10633,68946,84679,69840,22211,85166,61288,42921,81323,28359,13249,84692,32108,85651,32370,54552,84832,65949,66452,61329,49951,48774,40465,53839,99927,59086,16938,85102,29559,23701,91637,53661,65259,27024,63832,16044,65271,93082,95788,33295,74835,82236,59499,10593,61267,79290,46066,85283,82672,70481,78957,68703,31857,23387,49579,10337,12539,41717,52681,34413,87989,98934,91163,21145,82682,29706,74314,79144,14275,58724,86967,14794,22907,15962,28798,98535,47741,49810,82594,11416,61013,20706,16926,78457,15095,76056,71215,88277,14355,13602,18980,58428,14254,90954,58071,92846,95279,70657,18936,43972,51813,67352,21003,47770,25633,98198,91452,19752,22580,37379,30080,72418,23168,54660,87183,57647,69598,39302,25910,92042,48810,42523,57006,65123,34109,49634,83626,12458,58016,32421,42377,55761,45014,93962,52677,62596,77389,57598,91736,22872,51375,52514,81852,15477,82509,33590,18014,19270,14393,36596,91638,54395,77060,34045,49575,38513,52002,35432,54344,43065,70862,71930,86871,51342,20544,88626,20730,89262,48190,25038,77812,57994,44126,87869,32832,28821,36638,90618,86602,64140,25623,43052,84061,34401,69627,40809,17632,90983,23788,49756,62992,41398,36780,44264,95122,68035,23260,96745,17661,33149,75056,89462,16086,97599,64202,14437,17369,59322,41918,11798,48263,22118,97399,12635,67667,50661,44949,40696,25137,26095,76158,52593,77172,91916,94289,93774,94078,66911,19402,51917,70977,57178,15333,78369,80175,37593,22311,62533,49316,46937,73681,53292,13144,90677,18385,79519,14210,48838,75248,84345,44919,62102,42920,22648,79237,16607,30326,21548,30967,47992,28041,86046,66216,42537,40091,72082,58379,80717,85373,35956,67567,54536,22838,52346,90300,14672,91285,32546,72168,40585,88317,80423,28388,30153,87039,45690,91241,50129,50713,13547,43167,51933,93497,54531,10004,84641,17853,89395,29621,20394,79807,68742,26279,71335,33789,60269,79568,31705,93900,99280,14714,33995,60647,82079,58975,71548,97996,73643,80507,57429,49574,52804,74081,59765,98520,79880,92823,63339,28058,26350,27042,50954,88944,56516,92897,87397,67752,64221,93320,73659,72990,61367,69101,45545,33081,31319,29285,68950,37150,89796,71728,43082,81399,97222,91114,97853,46434,93226,80832,65417,11792,46301,63122,76341,84744,94096,86969,28726,90682,77934,81331,77901,28943,74316,27298,47001,47645,27775,27892,80808,57411,71747,82572,44306,23534,84261,58016,79988,82511,62455,76770,53991,87846,33669,46762,84900,60842,85564,35352,78776,78928,27649,63209,14726,20355,70850,53042,95965,78663,81563,80139,64619,13097,27592,88880,79194,68865,75023,67246,74869,10437,65698,81039,54120,44966,26186,52787,56992,25231,35047,91225,14196,95165,11807,84466,86652,86735,94435,53469,58714,33332,39317,76424,87109,14807,16966,58292,19675,77645,43122,34276,89234,16393,32370,55383,20290,89465,28441,37701,74126,24887,26441,18338,37545,50654,41304,97663,13260,51364,40609,58185,85084,42885,66022,93966,92560,63973,11845,41016,42747,49558,39383,94922,63532,48829,79203,19458,80417,71861,67815,17175,79460,68922,28384,71234,92920,64657,76181,57854,88917,42213,28491,50733,46324,15354,99054,93398,84946,28087,52397,79734,90773,61387,69769,10673,81941,16452,52088,96568,67134,71492,23407,88686,99404,28594,41375,91439,97180,88600,39524,16836,43635,43576,71727,12098,72447,82532,47649,68646,13335,57622,38078,88937,65897,54455,35024,84203,83598,97954,42990,57596,44996,17921,94905,49022,78203,33832,91814,83255,25543,21476,59069,38352,89210,65561,78693,73531,52815,36282,47796,69838,42856,39541,52977,85837,73545,97569,35695,22234,29888,98530,73443,62805,62951,68315,78921,75019,34078,23421,21367,26028,13853,36530,55173,52292,38150,32106,10815,47550,62169,89835,81305,36412,23907,97851,95607,41360,91177,64160,87259,26342,48177,58709,97495,37227,91957,73497,70335,92731,31378,28359,35003,98053,90008,58941,29384,68606,16904,33065,84437,14031,73113,71410,30979,59785,20356,14008,11791,98612,63632,29610,77088,25874,27231,64337,96776,75691,47155,70929,37986,63653,39674,35526,37261,54009,47120,94465,37623,54732,83577,33446,86359,18528,44378,45518,92580,84942,53655,45952,85175,23284,23213,24145,39982,35909,28496,45892,93985,59249,90913,85954,16511,36167,42912,68112,88307,26427,21782,24394,28414,97612,17869,90543,31925,58265,30185,91869,88252,84051,75378,21279,24183,11769,31370,64195,95388,87625,99600,39317,53788,29230,72540,18842,71411,74107,78121,28423,20229,67145,25729,48013,14632,74149,46799,13106,86189,36572,63515,21913,27461,23840,83291,49282,59589,92854,86926,40953,47981,46093,73403,11128,12615,82332,30593,77612,24211,69885,40888,58876,56237,30577,15395,60329,44782,83602,85261,62822,15891,68044,70725,60688,25011,94930,75802,73447,93591,75559,73232,16392,34102,31063,76162,68807,33741,23552,92440,52565,98947,84680,50641,68066,70752,30079,24078,71799,50684,51246,94272,16565,31907,83133,24027,33229,55086,10865,32501,76100,16899,82484,77042,60246,78020,32871,86747,27549,34573,79525,12621,12015,55555,45950,46459,34344,25111,44344,48396,92913,12016,42609,97185,86581,25996,48902,65268,42806,52097,65954,41034,68277,28352,48619,50162,28026,58225,91511,63281,23794,10725,88505,50536,79676,84607,47343,33520,46076,69105,30995,25579,96446,22898,74601,63469,92845,75736,97105,77746,87838,99462,70536,33223,65375,42139,27532,43886,61600,34326,84008,24568,58541,79984,61309,24038,59363,16980,13590,45752,25001,34925,44940,33637,57741,86931,99837,16180,55968,15487,39112,26232,21325,75044,12039,23758,42404,58873,62352,46112,99151,35667,55600,94128,48479,13388,81325,14747,91020,36413,21725,82220,34682,73120,30002,44226,55020,37012,96951,27560,65867,77504,58494,23260,39164,26065,35173,86568,99137,50515,36418,47982,17398,98279,22540,98752,10386,78499,38610,89160,94409,14529,79590,63313,11240,34778,77721,24248,53738,91617,35654,79009,31017,51151,32847,85925,77387,48158,36599,87395,60316,51187,48868,65776,44658,83583,71055,35069,60142,54437,10837,93077,91815,16096,98816,95021,50474,73278,44834,23828,26008,90859,25923,21257,25166,98081,29534,15261,51391,48151,75581,21014,33667,41650,81698,58586,36157,22588,23042,89440,47541,38977,70384,95365,31326,87179,55187,28027,23949,79980,16117,77293,97546,35836,29699,31494,64111,10540,42223,33911,89066,61633,93095,28720,76582,53070,55316,70656,66813,75443,56768,76757,70809,23616,13557,89855,50429,14169,13304,81992,99717,99303,72128,38404,69386,51485,36598,58026,19769,38769,48703,12907,44817,44287,69364,91920,46581,19119,27081,74360,80543,77647,40883,13147,38872,83345,67394,59834,51519,30197,22490,30394,68617,14241,76522,61796,99666,77178,66537,16108,62403,55151,66928,12130,77154,41715,30286,80439,71806,87246,91221,94465,64679,77392,43070,24735,58969,72103,12467,98183,35419,74340,66980,28266,25966,82108,49661,77443,74973,20242,93063,97769,51803,54220,54881,24042,68746,96892,72348,18786,65012,19511,68032,28145,12521,48477,41311,16203,51938,54953,24365,53093,37064,99011,43196,57732,28599,14924,12166,42842,18529,18428,10727,79174,45015,91765,34800,55019,40950,18465,31126,32359,88298,83134,29854,82614,85406,10728,70121,43437,79298,68995,10249,78807,47737,63455,64224,39705,21450,27024,25803,47796,78580,99011,91693,55011,48942,22312,83735,66635,90014,20837,63115,23733,45879,33011,62921,47752,25991,13657,22585,90671,39713,56818,32029,56999,84535,59971,84333,55323,63679,28148,92784,81284,32761,53850,56582,20440,84866,80674,45608,80231,29188,96370,48475,61114,36315,50700,83271,65593,81981,89042,24710,60855,22394,13287,37000,61919,21921,51644,14873,54208,36393,64876,36073,41107,41419,51041,66437,32388,26533,35673,64737,99685,44316,39401,85534,82202,30893,63343,58685,83726,49687,92013,85846,85946,22388,17448,57937,13137,56420,43202,79795,99192,92264,85767,48248,55638,46644,39548,76894,49216,81502,43552,31069,63694,60962,17215,30364,53459,33434,81152,28459,83929,75564,12130,92941,23574,26599,16353,21032,90900,56668,52801,64049,98838,85468,69420,99514,38061,52706,31176,60935,90700,51122,69608,95063,30956,28381,97269,91221,30955,21561,67732,71584,67842,77385,32523,66248,92000,83869,36395,19261,64877,14955,38261,47098,20149,33412,69641,61955,35897,45975,62859,33109,53352,24526,98928,74573,44646,10619,43704,19249,51313,22705,58116,26746,80401,42618,70540,10840,47388,53404,75241,57471,66842,34338,85478,12427,98253,84987,56896,66474,99729,80237,43234,71253,65338,45145,79247,53290,15159,51875,93764,62479,60234,87859,20771,48449,64346,40885,74219,42754,69386,51527,20974,33334,37905,15970,13908,54777,99228,70282,75179,31965,14529,79715,60406,89720,27420,13669,21884,43053,65624,85938,38546,87716,75122,99485,20012,70818,88108,46905,27696,61212,80905,67265,13813,99407,86987,29766,21546,19236,76808,39698,66581,98162,48481,21224,36658,66546,53677,16462,75198,10236,62186,21090,22120,86351,58712,29960,54843,18924,63528,11633,91177,95755,91917,46361,50014,87819,84856,81769,67161,86804,17367,83453,75894,89520,60416,48298,55271,47438,94980,50642,56199,62834,49216,54956,48164,58185,31598,60590,99545,18504,80516,20710,50728,91427,91747,88746,30608,80360,72646,30451,52330,57221,82317,46952,31491,37202,78787,65715,26575,73471,10574,49429,78017,52145,37655,87864,62411,29063,20577,55191,97526,94648,27550,35040,70073,16701,42465,42467,96866,29935,65216,51009,36637,13858,91288,78086,84587,91784,63536,48776,37590,18885,22079,76834,21346,58953,94136,50322,54718,72624,66749,36505,76154,83517,95390,76717,32865,36036,68698,71133,37581,52168,99124,49024,69840,52613,62775,48074,39564,84559,27528,77774,10384,33036,67872,35371,93555,33418,80367,45520,58322,60398,44014,58193,20024,90311,99296,13164,26236,49076,58988,12831,66193,46301,21774,85272,48400,48376,38552,34887,31409,52684,69740,26816,81031,89632,78561,11466,11950,81531,90122,89562,32774,11935,77177,85192,34028,60259,22160,74722,34286,32917,38306,74149,80641,46250,12131,77540,72627,30015,95249,96931,31570,13209,54588,82183,26493,21014,63526,89493,84464,57219,73093,37728,83897,59012,58541,89480,75297,66129,67277,49608,83543,92394,83613,98598,82400,90786,11517,22047,37619,82512,92310,55543,96254,91688,50393,54190,24462,26529,86046,57829,90193,19727,64422,58159,62923,98242,29566,87335,41408,53611,37852,46804,94302,36207,45086,80749,66498,36021,10871,71295,59708,74827,83436,73626,99002,98402,30870,11313,49171,15695,38628,83793,90362,16220,12935,77805,25922,75162,43257,69517,59175,12852,49017,48500,38945,16481,67710,29236,98935,17758,27795,58423,78002,16140,30548,45353,28413,32802,18176,17828,88324,13491,54590,13774,98881,25517,96716,55328,77168,52450,19854,11222,63308,21166,45672,63262,38374,34503,62797,67142,74285,98729,15598,99500,68514,48634,26432,30269,75891,58860,25152,24387,99397,66900,18229,32702,52880,77040,40203,74697,85411,80924,78073,50048,42987,40030,14500,72047,44450,47423,26866,54302,93148,31674,71658,21100,10669,94467,27030,64123,64583,85393,15146,25741,80838,92278,31172,30686,89109,54443,77392,52643,98173,88503,98435,84521,12150,44009,97649,13334,80426,43366,18086,34012,69548,30715,81309,74529,53761,70059,85600,69141,37383,89157,29491,67327,14419,14481,34657,59765,73221,50091,50312,22927,49274,30027,79680,90450,85934,34393,99644,74044,67090,75845,10315,10084,84946,89635,44335,90799,57926,18350,60829,33452,19716,26235,42598,36862,76872,80108,50769,31270,39014,36560,38760,44543,38727,57734,16726,62407,36600,89906,90848,24766,94222,53422,28449,79036,54420,32667,71591,25537,26207,80207,57664,93589,44360,93910,78504,42284,61160,40341,69047,61102,38046,58846,18882,67155,43827,54901,48723,65097,92693,35999,55909,10843,86280,81078,95038,12265,22443,61822,12552,36691,24182,44160,14596,11796,11716,70991,75021,53956,32029,96218,34887,33199,44846,15366,35240,16291,89392,89884,39251,32735,34419,97270,19253,86107,88639,65872,47519,44075,36235,45845,74134,54579,98538,46272,50771,25117,13414,34025,44556,85913,13083,13999,30466,29226,36690,99507,32765,48486,78081,99459,88436,85251,69139,34901,74528,67322,76290,85014,51467,59417,90951,33269,16555,38161,35666,96586,20159,36337,77273,85903,76095,32227,52916,99472,78310,10707,74504,76497,84963,75555,73170,29705,18303,86100,73848,76112,78309,98178,27298,20079,32047,40008,85957,42412,40071,22319,88063,87578,86534,21520,64029,17463,70360,78072,88831,98616,64226,17580,43232,32310,56286,67365,69708,88354,68101,60048,87110,83332,52775,97287,84227,78933,68362,37865,46463,23808,35063,82924,77032,43825,18753,84184,96771,86727,37167,63648,11368,31549,34176,50000,80411,19928,44605,57117,81494,78988,64740,58960,45018,68546,69682,27601,74109,53338,94729,65688,37949,65274,45506,18345,20173,58273,35019,54963,61471,51702,44406,29173,59777,84477,83916,39830,51747,10857,93378,69820,11787,77600,48701,12130,27472,11294,78956,47235,85083,42063,17224,93078,83686,74817,56290,14095,53343,51302,54735,75273,89888,85981,48761,59874,25722,32490,37679,78368,59469,67008,24760,59613,92088,28132,94568,35387,96944,30216,43299,25795,77786,67203,26955,75899,89024,61772,31093,68549,71273,16305,71714,79954,86998,35718,56956,34695,49779,37377,73141,30680,15992,72847,11765,11697,68042,73534,74307,64634,90999,47399,33813,93119,76960,32424,82695,80309,96025,32245,77626,80006,34306,60740,78420,39307,13024,33438,84409,36621,52192,44085,75129,93025,47113,97236,39892,75078,11490,32449,29018,93171,43848,22768,98360,77396,81953,39441,35141,57081,15812,61002,90057,53528,60879,92752,39702,96343,85952,73951,54343,52817,16841,29700,44690,67275,81749,51254,30728,96105,86068,37248,88481,73262,36934,33912,34869,72831,90001,96237,50707,56124,72128,78811,34828,30145,53930,92973,40462,81340,76328,24514,41044,91470,34638,83452,85125,43825,49674,57734,28732,62343,57224,20247,79943,49664,35901,42226,25155,41216,95153,77155,51986,80013,28802,61005,84781,54130,17579,33083,10445,57728,95630,17180,87009,37646,67157,23353,98343,32057,50740,72067,61542,64407,57600,95901,53063,69208,63861,78547,68766,68772,27909,75397,69734,57526,11264,81838,75495,18616,69373,88749,87440,46006,14747,44327,47293,51822,56658,23549,19710,76011,91746,54292,85326,79220,29476,34324,68377,76705,66328,28746,97713,20526,54418,96007,61883,46717,20890,15168,23242,67498,69864,79221,71693,43667,92021,79738,48486,98517,74738,49271,18657,38999,93362,83097,70474,33523,36276,12411,80204,58747,53681,40857,22137,98890,63116,44519,28096,81038,35276,23979,64338,18535,17765,90752,42870,53698,37673,34845,82289,71762,98430,44403,43002,30006,82914,57409,38383,58970,37169,66177,36186,21113,36476,63720,21347,78110,13102,97866,87140,23252,88252,63111,29130,46472,64457,73440,23398,96228,58791,45842,25451,56922,36808,88871,94453,58460,34877,42856,88488,62738,43855,33152,28728,39219,19306,83202,66724,63002,20317,76494,85446,17842,70459,35507,72252,73838,40832,18011,21574,33509,48134,57601,85611,82527,99592,41701,91152,77137,54244,59654,36737,93715,61786,96460,85788,23499,58201,68473,26885,54162,11901,97203,25005,83826,47637,72752,20896,95048,30821,63180,45612,60992,45016,89050,46942,46952,16742,89435,30129,52895,63108,84931,94312,81820,60645,53941,82415,41335,56941,22680,63666,81098,34324,34210,28284,47011,43870,23324,45764,68125,65256,15740,17469,96445,11874,10963,67300,24891,72004,40776,73495,35023,11889,85630,96162,95761,75034,61715,73122,47453,17974,32552,57635,62346,34472,16675,43392,14800,75487,72614,90098,66927,79022,96104,81599,20357,31432,19816,22929,59844,90076,88506,45975,18399,91218,70418,94398,32785,10606,43211,74522,21869,94692,95987,18670,73113,19831,70898,81392,30531,17783,64764,48838,66886,72118,44461,51451,59059,14530,58933,14853,59309,33332,59544,17735,75041,67332,71693,57111,24728,83710,65676,73260,66622,65203,96630,71040,62673,20941,26050,81938,96039,75680,23121,24162,57743,61535,61022,25663,14199,40995,62773,38979,70835,68543,57700,90316,62396,51155,42068,90974,97645,40371,13038,50847,57344,40389,75889,72048,54854,65411,45732,56314,16935,77357,11845,72321,18349,14645,51139,71186,15138,60953,44798,72972,74124,35548,69871,82572,43872,56608,98260,63926,96767,45288,83944,92097,86762,47718,20775,68959,12232,90604,16533,45208,34306,82408,63455,85268,82029,85432,36401,35973,12762,29002,22329,35482,47263,64439,27325,49486,62186,29812,85537,93009,13176,70269,28083,19149,74598,92572,83055,74890,40644,51191,83742,84118,90164,28964,68149,36074,60545,24680,74614,74983,30367,40175,97363,31554,57243,57108,30934,62428,89342,54350,45659,99164,11653,52615,57293,42728,74652,90662,84828,56645,75565,54179,46333,34655,26079,40840,49924,38220,42877,92261,54772,89571,67190,30846,62819,90231,85272,76494,34425,38552,55376,58085,80593,93123,56119,28719,54112,84187,58563,68647,99788,33374,87232,71314,86423,34232,71091,65760,52283,70876,59029,68190,65172,38031,79189,86212,66993,82832,44955,83660,17318,53400,10435,15453,61155,17987,63154,26694,49064,20181,33059,58860,86807,55852,28128,82950,36277,20656,53894,55563,47035,20159,58052,64578,53510,30447,18600,10783,25947,59467,92791,90978,27922,70470,45469,10532,45349,69736,30439,89504,63467,95413,49824,84840,87931,82022,31348,78187,25890,12260,64721,20658,56137,48831,25845,68907,12853,14275,43734,16402,85455,61622,59400,37072,58457,32980,30809,58947,59946,30215,38041,49256,99842,75192,93085,95614,52532,69634,97502,42812,91446,90943,12468,32752,76606,90384,86402,17861,20676,61733,92243,57153,43582,50635,35587,63723,57112,45878,26334,60650,38040,58143,88000,99992,88786,11242,74835,89077,99141,17857,51917,29625,47794,87819,92925,80758,57325,77688,98320,22249,17800,38175,24548,25336,33299,88962,20297,24577,61314,28421,33105,25672,52320,48885,82684,65611,31485,53966,69272,35986,39394,50936,43953,87867,35757,88724,90982,71480,19382,94683,20502,46378,83711,65366,13401,86138,59148,49786,30470,37225,20576,75829,50265,42214,23225,80612,62603,14235,63298,17518,93398,55218,84793,48208,45449,65358,62830,60321,78076,45703,30961,91495,20924,63420,68746,28823,60549,67596,87467,80567,76823,64833,66936,79893,10087,83208,12462,99865,70149,28355,38464,37722,41243,17528,45889,86720,99464,55484,50019,53437,21112,62934,65856,25828,37092,56360,17992,52520,27132,40907,84290,29186,28922,58365,61341,63989,87368,75282,22744,15829,28259,60707,92373,46440,88597,68457,90861,84900,36030,10202,61775,52564,73541,97580,82354,40035,38323,92350,33112,84484,22541,77068,95755,31652,35306,10258,86243,57135,92020,41163,29772,90852,41543,18546,31424,16947,89027,35490,65929,17695,33960,84677,75541,81667,50146,87335,51855,11793,85307,14579,37029,28775,68364,88337,79438,48712,87040,19186,66762,22566,95134,84662,24098,35461,91048,89541,83126,85651,78115,55646,34532,43484,77757,37141,52927,11109,21413,44331,51167,88998,62015,19594,75512,66468,23313,37781,13078,30715,76527,40250,28027,64949,68265,37906,62132,23870,91216,57964,72964,60209,28698,69622,68124,34405,80513,14041,30459,10899,81647,34960,42400,65514,20240,44077,94053,35345,81430,15769,91909,56435,75519,52120,79398,84182,23577,79976,65025,74755,32722,68559,89457,14766,75982,80388,60630,39904,71818,78141,66958,52127,40682,36470,88843,26298,85322,85046,32801,60259,96026,87719,67928,95202,87993,27955,68317,43750,56396,21802,73582,57581,19144,93578,58800,18645,68667,16306,64937,83710,24262,70614,44252,71405,24416,80359,28070,62839,51897,65577,13479,93773,26935,50961,32723,32006,45010,61351,17093,11306,21297,75844,32748,71869,19254,46960,99660,61297,95627,12677,87499,82151,76433,56173,90991,82343,43315,41938,85320,73100,37251,13348,52537,17512,61191,89860,28567,50765,64660,22323,11662,69528,41073,64449,53384,98488,13687,86183,53842,69696,16800,32670,37373,98570,80547,57835,34911,72390,18051,30239,82307,21438,95786,57833,58008,27792,49527,89468,75782,78461,87878,72655,96281,11517,33160,34616,10892,80257,31581,18068,19394,45966,39915,94680,45370,88866,63113,87356,39141,85400,51939,44247,29512,80348,47681,37234,17788,42652,77562,11035,32522,54328,94703,58855,40172,90008,69432,33945,52169,38967,10270,96484,45847,77102,15423,40873,52510,68514,63846,16051,41070,45441,46614,95124,33317,49157,14503,49910,92221,87330,48310,87330,55264,50319,97957,41600,70131,97233,63063,10306,28798,33418,18767,17370,45426,82001,92893,34441,21136,47633,76708,39750,34538,81637,52690,79767,26491,26836,19823,68696,20951,55043,50772,27679,94772,40975,21679,38013,95296,81109,15637,63663,53929,17100,13123,40211,78631,23521,58418,96193,14383,18081,21595,40541,13887,18644,21365,89950,92242,96791,35554,22249,79829,86112,89821,49822,32635,99040,54707,16742,58431,98593,93151,14754,72740,46960,87321,93539,53819,72783,20357,56867,65178,75705,35208,13385,27073,66961,15111,64568,37379,14316,80784,83089,24926,38349,98930,16044,17116,78153,54687,84794,30378,50971,48506,79638,66001,87681,18977,74440,12088,18018,67992,23844,84141,62426,71338,39129,15921,55203,25298,11003,65926,62472,56798,77526,43037,44812,44535,47292,45048,89243,66702,54408,19413,49270,59920,87141,71234,96457,72240,87444,42911,94062,11032,16599,77076,87608,28366,54239,50377,84399,72812,26539,17134,98980,58693,29255,44889,31510,65439,16601,98459,32423,91492,15372,22745,31588,44311,31945,64786,76173,86929,61524,80327,33033,30886,75064,56208,36377,78024,92104,58852,94822,77117,81581,33587,36746,44966,62199,99074,16830,74826,64056,36256,53375,63275,57436,54985,12789,68053,52758,60238,65751,25421,95410,28603,84309,57132,84692,54341,56304,48959,97010,14428,17104,31837,59739,53015,63245,17431,30729,19483,85688,23667,16002,47884,22172,28555,50488,13001,92631,66187,50816,11409,23701,45878,58877,70525,78087,54561,28780,13813,69032,56426,37472,22966,98381,36877,16502,56525,45972,53728,47755,88908,87361,19676,32532,21669,42945,28729,94379,65896,92931,84668,28784,32438,79095,49626,43678,88795,94547,39698,91428,61453,88776,68628,46165,79323,58348,24172,59804,39157,47643,29020,28290,16332,23320,29018,22773,56978,77205,19706,48339,84186,97080,26105,71630,39410,45841,72215,14845,56145,68488,84298,15788,59567,41159,74839,96063,30711,37748,30961,25667,92249,61556,72402,19879,10703,15210,33470,45626,34569,99330,74234,65475,28811,95110,88714,61784,16595,28757,96616,35800,80426,21523,25470,91302,97854,34125,86669,86679,33906,19316,71146,41886,71517,91426,74625,10695,69924,53576,92106,30385,81872,23827,72978,93474,32828,58536,77490,85825,87233,52801,16320,90847,59011,79605,50369,43552,39165,92508,79793,71291,15890,95307,83756,53545,35707,18249,26976,39596,54804,29324,13906,59579,85871,81977,77014,45538,23085,16275,88808,61577,69410,10684,59011,48417,25172,76152,34395,16704,31712,12030,93975,71196,36509,80238,99222,13414,29228,71814,84638,49735,88929,64299,99380,24908,79537,28539,83549,50652,63844,59158,11947,66143,37805,13197,26021,64928,94278,69360,53420,83147,47712,20057,79011,68128,35728,47229,46289,23498,79487,26723,60496,30317,54702,20696,90791,32818,57340,82476,76936,30195,32126,93978,46735,33339,17880,53487,59356,53537,87434,39879,27342,50960,83045,48818,97777,61194,93768,73954,86583,14132,38506,48831,36966,33235,57705,38174,45586,28918,60926,61649,68857,74395,95196,70606,10615,83677,32523,75214,27598,33441,85130,47645,86770,31297,90956,70857,45320,20953,45441,58428,13011,50121,20665,91806,18101,40165,45825,54998,25774,16774,62962,53053,69201,68381,82925,50269,64412,70666,89586,79132,59353,48847,22515,36472,92123,25094,84503,39161,95230,83743,53983,17733,14556,64967,60730,20721,59428,52372,55954,58506,36098,39365,56869,59554,44799,55986,91977,50865,69666,11890,91176,87760,59241,69840,49912,14571,48538,98944,63315,39001,46114,51264,25269,67439,74127,19568,64817,84882,93305,35878,95089,69206,72066,73536,35501,11430,70906,49066,81950,53787,55131,53211,23175,59674,80559,70936,43122,61876,60537,28446,71589,63727,89372,72605,48627,94982,78344,95146,51308,70290,50998,72558,42291,82985,46529,27030,95571,38305,38937,58183,76404,46829,24304,10744,33133,72538,14128,28569,53641,48254,36551,85952,32724,76281,34377,51002,24010,91648,52396,14207,29085,58958,67438,99383,88757,39882,59958,72057,50426,80077,10348,56906,42450,84725,52162,33345,66581,46401,22024,25140,70496,23486,44846,15320,33524,95168,53470,20018,18912,49314,83733,51931,55813,84043,40280,76906,72521,50117,56587,90753,74633,67202,72595,96405,85798,72981,24546,26264,54663,80428,72394,42240,70940,46220,31271,60456,43157,81144,98494,45582,94362,23810,88318,74611,24647,32907,43854,81171,18376,72320,42126,96865,26848,14308,61585,20895,43488,77557,46257,24779,39569,19032,18300,35289,45019,95583,83077,75842,52525,85223,17791,27088,12360,54320,75670,11830,57142,47434,98922,33696,63470,31544,18802,32725,21059,34035,42993,40685,59349,19839,75183,89611,11633,33898,15479,41676,84072,64927,59601,58818,72502,26138,93966,51133,67527,51761,45791,22344,32189,20381,33032,49178,90880,73911,49968,65444,36742,31286,17499,78556,47654,13996,10257,13887,60575,81041,47886,97802,38957,14559,97842,33754,12345,63252,73924,50510,34919,84885,65684,82333,94755,73986,70014,67168,71979,80294,76840,57343,33583,52055,54015,79903,18518,15244,50873,60010,74246,88551,93771,43480,52496,98813,44819,47570,61911,99735,85622,47237,42946,82423,92966,91338,58487,35980,13409,53958,15477,53949,99706,38637,85762,36730,93437,64576,68895,31135,33885,47950,40672,48878,77644,36805,12482,31637,27031,35480,34556,94823,26251,18395,61432,90278,42785,82738,22383,11475,48301,54351,31987,18162,43418,81344,35337,85193,96222,45948,47077,40622,78738,91798,89346,67338,59752,16250,58010,40524,19036,12761,35542,35395,34268,70288,86555,67332,98217,72265,46447,23010,58022,56770,40251,86331,31993,12401,30721,90662,32129,91579,73717,27041,25936,93190,19406,99030,63820,34381,90926,12509,71012,61068,88317,96031,67450,64177,19857,12543,87726,72282,86998,74726,71415,50153,45973,35791,55584,62461,36525,21068,63683,51460,74780,91987,93726,91223,89512,53597,33583,88270,68771,38338,62155,53912,89324,32653,68707,80488,83072,60122,26145,91192,50420,76123,33540,94988,38211,49293,44656,48161,36900,41119,23759,66352,76323,16413,30072,46705,22649,53137,58605,82734,85729,93422,37176,41955,75002,74840,34037,12286,62198,48251,47479,99407,25969,89373,35279,86717,90099,78553,71376,32283,34828,13305,31595,89687,44414,68031,59526,22012,36981,76739,42878,41610,93722,89437,80850,73221,83133,87086,47785,19597,56004,29929,79465,13535,47200,21810,74043,52342,91545,17226,84173,70650,83054,17343,92986,79212,41798,15593,34557,40316,90131,91218,80016,25851,36392,20577,63747,43777,25548,78212,61622,53050,46159,94532,89664,43034,76847,77022,26355,64867,94648,35257,39698,79864,47096,40800,50652,66141,27366,11698,86116,97260,12918,58878,10086,24582,77478,14225,78027,28477,96474,68019,76586,73503,74237,44572,75939,79755,12256,26263,29852,36896,53213,19203,40425,81374,81351,36570,99556,20371,52680,51135,69273,71383,34839,39990,56836,94031,23429,12562,58049,59068,33855,25576,54984,85459,33719,26737,62050,34286,31389,81180,28190,38488,32672,21310,82867,96813,66181,22219,94288,76288,53039,72153,60766,64855,96280,53805,81911,15215,73530,36517,33143,10339,55420,17521,64552,51000,62616,33486,93335,65758,33712,70010,40136,81394,64121,54346,97869,81721,61907,54526,45485,79815,52114,68204,53323,73322,67539,87924,81122,32775,47849,20829,57999,21400,16711,47963,26087,76373,34523,88256,98081,97337,34266,28487,39280,91808,12475,95352,45697,12822,32567,94053,57934,16425,20316,82164,41374,45676,18153,98217,29907,14608,72788,98987,23103,22235,81420,90431,70103,20082,76529,72791,42842,53619,79826,20051,80578,83197,98092,41804,55262,77043,96426,49586,37991,79574,60605,99708,55435,25050,75060,72193,26743,53936,16299,87025,12335,51585,77340,47576,12963,62640,97159,96081,89626,70135,42576,63156,42149,53607,41320,96534,77038,12056,76372,59177,83916,36931,40176,73907,27482,77570,35420,70245,65437,14325,81492,86680,10381,92007,17878,45711,55834,22441,22657,12129,31030,41324,77491,82639,33773,57923,29429,82463,96451,58021,62796,26633,28140,76550,50482,54978,74870,34001,99825,79159,56793,62967,43042,39442,93687,54827,42458,72750,15017,14659,78639,92959,74698,95358,48907,85884,95714,46202,67752,39089,83819,87363,45446,84335,15859,20076,56664,92565,75254,18652,12112,95985,11466,52571,46619,27531,76791,87460,59464,10159,64917,54131,34693,32750,41213,41735,91187,12252,61058,77626,83003,93641,56273,38115,40418,75188,90600,44669,80306,19224,57863,84908,68161,28192,88110,59171,37821,14138,97782,82384,29538,18498,69005,88090,52316,47734,65801,98540,42105,17599,62922,41256,81612,15879,80918,35972,35338,15824,44773,79103,14916,42210,92640,99614,21742,57695,20098,71572,29391,93386,58104,40529,26926,72877,57291,46178,75869,87738,56210,88650,20716,11421,76521,27890,73567,93806,45075,98179,10541,19198,28155,80260,90375,25335,49738,64936,36875,28136,28284,59551,30131,32305,17708,31093,93516,62319,42024,66407,68280,51342,27179,77745,81860,15434,89723,61828,19452,19210,30023,33874,59142,46019,79294,86024,69725,57634,78581,67095,54078,92236,88124,35233,87040,50923,43647,44822,51092,30143,25053,15892,77495,40626,65528,56850,47305,41438,15921,89274,46586,81212,47714,50171,70659,58137,97037,14675,96281,91911,12300,79010,63561,62871,86676,53195,98271,70375,35665,22978,81742,72113,45859,62722,84906,18344,33985,96157,46161,65709,77095,58069,63990,92323,41318,73855,90025,41498,19821,62603,89386,67014,56014,18301,90594,58269,82192,24213,46548,56369,38621,71539,81434,22088,51792,94930,42074,27319,60888,68307,54868,50453,43219,56673,46460,85000,76632,70200,65276,59827,19414,61061,48454,59424,88928,87387,95821,67170,36941,77380,71437,34481,51359,61142,78373,60525,54700,68558,15169,35803,43650,19778,11758,85232,57358,60370,21704,86034,61999,26248,31506,87195,59825,34532,89970,13356,15578,54719,25875,21137,35187,61399,19480,17558,13439,87847,80222,90676,55278,21344,95768,62517,88426,63890,15792,40205,61739,13379,27497,65088,67741,72039,95618,11158,98861,16285,51717,41300,73420,12089,33630,26023,47620,70116,32734,30495,84147,40779,82673,34679,95262,91576,87370,10923,82079,88429,27668,79852,15262,56177,40662,73208,15507,87048,47066,76285,14681,58504,57163,33818,73096,46619,37782,83199,77189,88319,44173,86577,43197,24771,77497,36819,64496,76541,24041,62871,14844,98911,11496,12716,18957,82046,40514,77548,62408,88480,41753,98540,51340,92069,19613,41234,65196,57923,31782,58064,80225,65983,79286,48485,83227,61996,39626,34516,98758,16277,76637,20888,94536,71124,80245,32997,41158,92019,91063,88010,29131,95105,28853,34789,99752,58940,15932,86897,85921,94229,51243,60914,65260,99824,32307,44588,55976,77550,77272,13676,24719,90725,88398,22996,36303,69169,30842,65115,66341,75952,90916,11600,90702,90773,82551,27211,15400,79442,52908,45969,28811,11115,91304,83190,44228,35257,69835,95212,64224,14357,20196,26954,73292,88575,86072,91210,29242,15283,99313,42193,22637,75213,85320,85639,73695,10684,53035,99179,39090,82411,58547,72025,72211,73536,28797,97397,37600,72300,40464,12746,42837,53425,33095,13877,77120,10980,74018,41986,42675,29785,17319,77867,61295,72959,62897,20421,26194,71458,80704,87492,22245,55699,72842,76147,18750,97686,33784,37186,39837,70916,88177,38042,17729,19647,23120,19410,72555,73351,63213,74648,80627,86308,30303,16273,70127,87028,53570,11225,65156,53673,15232,33882,46379,45578,86868,22332,54661,56409,65343,73071,59533,68548,27932,34959,66745,26146,73911,37930,77957,32764,53969,52668,90256,71262,50600,74297,53437,21750,20466,61730,33222,33659,52821,41430,94884,58943,23291,57316,85099,50517,47860,15456,98575,35492,80430,36555,79156,44604,86179,29237,19191,89942,99548,22764,25831,41512,23171,10164,98691,65798,17849,72326,17914,43925,44128,51737,87048,95906,91391,45212,45163,80766,68411,93996,21565,39645,95048,30099,23674,35268,23871,67818,37527,88095,68907,51168,89362,16070,89897,72660,93095,77121,22008,35107,73036,76237,88525,62604,29695,61909,58170,60476,22124,93978,19835,58626,59851,80599,46289,49521,88538,45063,95870,35385,21149,44377,87272,58913,68745,89211,71693,54891,80442,16335,54858,91369,72334,84406,23511,87031,43226,16393,83376,31653,11248,98671,71945,38061,36700,49999,69614,79384,33144,39885,54475,77975,61915,46607,94707,83068,81984,11329,87739,24040,47105,74696,86666,81928,97389,29844,38365,94255,71446,97341,31427,84133,18424,11866,32555,42744,32074,13045,43936,18541,80769,31908,48699,32987,23293,70834,19458,83971,96522,24136,14340,74160,69920,88651,21726,55225,43403,11601,57153,93568,10644,95812,52248,10682,60408,91979,81476,90209,29931,89402,57576,96669,30632,26471,45975,60140,86268,24314,41280,51017,38938,92183,17155,35819,82653,88306,26028,70561,86255,29293,81915,38806,97676,92659,28485,80862,92458,48556,43956,76599,86985,23930,70687,61869,67393,78222,65664,66116,52907,96031,65835,78170,80175,62589,89521,10229,47404,46247,91608,51374,24682,60036,55777,22693,73289,15894,59936,31675,44954,22786,96421,33456,18197,19409,35267,84728,88897,24161,84397,66956,82765,68526,33820,12045,32170,89558,55846,89303,70729,35602,27010,71102,95240,33576,48642,95372,97824,52719,65377,74289,86412,64543,76961,27520,41996,10943,51711,41581,42854,84558,95204,14215,48062,92166,19824,63851,51292,18118,33276,59358,54356,37574,67214,12971,66690,83437,77424,93817,29220,83979,86085,15293,65114,25008,79031,37955,15424,98569,93742,61873,31454,23337,54905,49837,84480,42229,47869,45363,94596,62090,95397,84028,43037,46104,88427,79031,34835,63647,24687,52858,76679,52443,81533,79811,32351,81289,72852,32695,35067,37713,75105,96853,40054,56297,30983,65120,59086,92827,58428,53500,68325,41068,82972,37344,15860,84382,53478,68653,88879,18472,73713,81133,79036,27878,14930,49489,10966,44770,91870,39124,91945,76361,48206,48757,11951,21360,27877,88810,10758,74995,86625,69657,21210,63253,43144,57387,78860,98762,64634,73519,13596,78235,58854,83260,76243,83402,87430,50989,60366,52656,91788,93119,38275,37910,84484,79673,30701,24709,40742,87906,95825,20863,74303,77697,75879,81406,96665,41584,88017,15682,97608,46748,22111,67458,32755,21722,10860,79575,61499,52180,98771,58216,76031,56175,89085,53643,24878,30729,16718,72726,46293,35676,28098,25677,14960,11877,70041,81510,54852,74674,20605,93202,59575,26177,22259,38037,96828,81797,83180,86590,94709,61227,43194,83634,72530,78386,59602,45377,80089,77642,60173,64656,22258,45097,95763,66166,99370,28039,64431,89536,68038,31041,56574,41660,11074,46093,45791,68357,13842,65317,84404,20108,52262,38321,96152,70989,59371,43875,55713,78987,11516,77852,96201,17796,35800,93662,50557,29135,38811,86900,90905,91071,33318,87420,57706,96752,63961,98519,40658,90443,82434,51698,66402,43236,53454,78065,72638,69804,78712,92785,45183,27927,21375,85111,48012,62230,69201,54078,11176,81485,48345,92867,38225,39000,93135,54996,62410,89994,25524,48054,83216,90871,56047,23178,49061,54158,50632,58213,57452,84488,89738,67583,98366,47657,81748,30757,37355,85035,77354,51660,25966,25453,71604,75165,29378,56919,16737,49963,79034,63222,17949,91530,72792,52787,75615,99644,92195,40798,15961,57175,23117,34231,33142,91926,70772,74727,90183,55315,89016,53075,27974,67639,20403,79939,17849,72399,35984,74620,10992,23131,70551,94268,74903,53268,65685,64735,20450,62571,16632,33154,24503,10719,29740,98948,96012,79566,75805,12240,37390,93093,25521,87335,60078,98355,86059,41507,91407,91728,92553,92708,73619,53493,41717,41326,77767,18499,97631,59291,80381,45448,29250,16964,15724,54106,50574,75607,38808,69662,85083,96791,60041,21373,30688,23874,61537,84661,51035,60807,72630,76257,61831,46615,79184,11551,12945,93285,13820,79704,68352,48670,62346,23256,60915,18476,94349,82790,90246,84068,52441,68806,49615,67231,27197,32798,92282,70437,74949,58532,53315,15026,50868,63518,76035,28819,78696,75774,93549,27316,40305,80299,86275,75219,76436,24448,76966,59141,23194,85784,44204,70266,43197,80746,49859,38443,34791,90226,22340,89950,41839,28982,43207,38898,60015,32193,70830,35601,69587,11767,95835,64087,68721,52639,61519,29784,98609,18066,57724,92701,18765,62916,61540,36803,86179,32929,95905,96430,53486,17962,95184,80414,58526,20761,22924,46649,73749,85218,35475,65579,67130,93895,64729,62116,51108,26231,98913,55237,47125,47487,61708,73002,74410,12441,56130,22462,19579,66783,91689,49599,15491,77694,98621,78733,73556,90537,28835,26092,66143,86439,94669,46893,22694,37374,46274,29477,26585,30605,25208,70423,51020,47806,15414,79983,85311,11438,48269,83954,31227,26669,88293,63408,95269,39186,26790,63897,84006,14455,22138,52776,42915,17902,63464,34262,65364,38693,43240,85194,49406,37824,80821,72975,45658,84990,81676,63546,24320,95848,26225,65893,58538,21161,63135,16005,88776,16026,16626,87046,32830,33881,81082,10098,47841,85276,88536,18081,26195,83064,33182,68658,11378,95955,21182,65539,65100,69160,81694,83364,68208,52047,69680,35791,31058,61925,70893,55412,95821,36454,62614,70566,74267,44529,28201,29198,46082,72382,31129,82163,20292,27935,39173,92900,48748,84512,12409,35301,60933,27729,13475,94725,36252,58284,12333,22824,25959,60653,21197,36689,96140,97683,38531,74322,82635,13187,48379,71107,35135,87517,20937,24015,40545,29976,72439,57540,64662,92258,36913,10352,28079,28122,21859,33759,54656,42709,46972,26950,30130,39716,27683,65387,81923,17616,65851,95322,14022,95834,84699,44454,20547,79594,57181,53635,35169,51921,89112,20563,19247,50443,20235,67941,39252,52032,88565,38511,43765,62151,76082,39473,66483,17065,93695,48716,52075,76473,94577,40089,30696,93885,11323,80412,36944,58889,78284,58541,70741,64185,60550,80077,29906,17291,81434,58653,45949,98422,26132,95840,39190,21596,24067,16792,89356,58300,13247,24097,61194,63818,17608,16073,13642,85987,70895,63592,44458,72174,87811,96080,18999,63630,51719,92460,56910,47277,63384,31760,52439,10445,34749,56667,95938,85251,56743,97022,43638,20585,13262,35157,20760,63437,87616,95667,89576,10475,40095,75237,41367,11394,61132,64032,20648,25137,43821,11088,70145,90015,98207,72818,78013,76283,32370,22051,51850,58548,83316,81334,23984,95638,17863,41798,39877,88905,20295,84678,96498,12229,94131,55106,87861,95176,43426,54236,83599,68868,14161,51925,82489,42698,97681,38767,99904,75904,40070,31773,59874,56533,58131,17603,94224,95507,61205,47751,70843,32918,86251,59136,20836,90156,42532,18345,58573,61013,63402,72947,72589,83027,66281,21326,50126,47873,29634,58054,33081,87369,15128,38361,96046,71685,67640,76817,39936,97618,57556,77525,30996,91007,92422,78482,46138,34289,20258,45413,88936,83804,64492,69334,22691,94262,64382,57107,97070,75519,50905,47098,82817,13210,49239,26307,60654,99787,92265,82933,52797,30449,70011,84269,94209,39807,12067,80692,73481,83237,23933,34070,57603,12238,40146,99715,66271,44559,19546,66820,88691,85123,49024,37152,82965,73759,12216,93302,73626,33147,71348,39360,90818,80112,18331,31839,48566,11222,36213,97639,24428,35436,86395,16906,91227,10597,48681,60497,57584,84676,56443,86765,79807,25010,23379,15278,28565,80386,13391,68597,18524,27302,21760,47305,36674,85250,78252,59956,57300,19043,50450,18532,80386,33742,60168,24329,94262,77660,68915,63258,99926,98078,74492,64647,86141,86292,31843,49285,96143,14931,36589,95461,32031,88994,95517,44954,70739,19728,37400,96700,65193,31256,97405,69833,82636,57126,13364,33275,69617,58772,44705,33610,10635,71621,76190,60144,95526,91733,14339,55794,90411,61681,49390,86064,58548,79644,63151,30252,35383,65934,82188,68731,62645,92568,72874,39691,71727,65329,52489,84616,35681,14874,72936,78941,52758,32196,87269,61256,19773,87187,47492,28275,33191,56721,13126,61094,84144,17186,38036,47341,10234,66734,31682,86982,74273,93525,25368,14879,14424,15396,70386,24432,70322,19518,79799,47374,18925,35331,10662,97117,91374,79759,54894,47394,47718,28264,73192,66745,39486,96699,98406,19231,46693,50002,65772,39994,32655,88945,92293,90534,79831,89062,55245,46992,77842,39789,77745,22348,50256,26382,20969,54944,23210,13480,47058,24487,90951,72534,87115,76833,57459,34173,37423,60184,72067,34037,89999,48868,96484,39165,96324,28344,28573,24748,16042,21692,22644,69270,83480,96534,18396,25382,98509,24270,81881,32998,66315,76978,36596,51090,57859,82074,22914,62503,88144,19118,98125,78566,96556,21679,15968,63096,53299,10557,77903,11059,72486,64599,27057,14902,67763,98744,13936,41297,33051,53574,68627,33686,52403,89314,13583,77113,64603,48670,87723,92589,67922,40423,79990,53517,55923,32666,55633,32738,83335,44979,46771,86503,71744,27217,38009,54229,30487,61455,96169,64713,66183,72107,73323,20111,70726,20620,38039,23645,98719,30716,42967,41782,68921,91081,82334,80997,82114,14586,28289,43348,78023,84758,61413,34185,40909,14152,82950,90189,72386,23223,94277,74349,93830,75276,10120,46564,99207,31537,85350,39568,38200,40330,10599,73835,38581,48697,66920,72557,62118,21628,84811,70418,23407,11210,55159,96243,96899,24675,90722,93430,35746,50737,44425,83216,75178,46720,65760,97553,56754,48603,56831,41456,82013,48152,76079,42000,72975,38362,32214,43919,12216,84411,55434,60753,19691,80819,71267,55303,56398,44360,70681,85102,13383,24987,95004,19776,97182,84657,88682,41935,46935,94161,27879,11759,53465,80295,75793,66704,44580,73220,55320,69118,35173,74471,72469,69782,13422,80810,14702,92249,10570,79165,80384,44199,41226,98190,76760,30124,31753,86786,16580,65810,10410,20225,85820,93031,79126,52071,40242,42604,44289,90219,15908,45048,77006,38867,71850,19444,20383,69907,31308,15840,99516,81952,53030,66513,93137,52023,67053,82810,23249,31879,64941,26053,20456,22185,60993,34762,30008,92023,68660,86265,52620,69777,76797,77861,24072,20468,56345,33402,59468,92042,75242,14225,27475,55873,79054,65033,50439,82505,95391,43642,13886,93625,46831,83160,32701,86733,33614,12594,20888,72324,11570,19389,22585,11978,29298,55871,73035,61335,81257,52366,79269,27578,75302,27364,69310,19720,66302,12825,22519,16343,83795,67944,39959,87931,38803,68118,75826,34743,97726,53645,21566,35320,83115,85017,45080,16657,95650,50905,72875,95189,25947,98754,65386,14184,68522,31450,74141,77841,81838,49921,93287,70145,40643,74781,80818,77289,15223,83697,14585,14628,74897,65177,63124,90186,97278,99526,35266,16161,77379,48283,21500,25086,93349,42464,71489,59785,17127,58142,21680,87325,55004,73190,61939,52036,25469,52355,30108,54669,70733,12519,19876,18302,82703,18848,95009,28638,78469,51368,99158,16571,58642,69228,78609,28617,98720,16618,13697,11578,78972,17455,80681,62668,60574,71812,69782,61270,97647,71104,63842,15956,96568,62774,84383,51854,58734,61425,32256,39773,39198,21177,18867,46690,89144,19360,58191,12566,56085,68641,54999,36335,60437,55314,68978,70756,10721,28959,76978,93116,49229,24325,96210,91812,30676,84876,80818,11723,58166,18769,91493,38998,82608,43620,33836,71253,53660,82025,34215,23817,95346,94669,73924,64661,81264,49307,22849,68549,57379,44588,32990,76373,51240,83139,46265,99069,53575,41493,77821,87359,90416,50529,53952,56706,30776,91318,19735,11283,41706,98696,35208,54913,44595,48404,94873,91728,43669,51931,75849,85532,89854,43483,88608,90489,51291,59156,77894,42637,85982,93262,55653,62197,30042,77579,14014,40168,65359,28894,91447,27530,44127,45411,66964,52721,90825,69574,40247,41348,53069,75402,23143,20773,39672,88205,50794,97492,12964,90529,36606,68229,86802,89322,69460,70649,45587,33063,57023,88444,14898,57624,21095,62187,17857,95652,17984,49688,59355,47879,73018,16961,68247,61981,21172,96870,33803,31935,54670,94179,76272,35424,79396,42479,79042,44875,42491,30027,33733,62647,10661,61220,41332,80306,13371,63075,78233,91658,48016,51409,35171,54603,82271,12874,92901,69481,35943,96673,73835,60272,85765,34954,60344,23830,79988,51905,41467,55700,85598,18486,54963,32866,55799,23795,74877,28518,80377,44451,94885,77440,29994,62983,58713,37430,26872,79384,35997,32830,36670,62644,69995,72645,17726,21226,70578,77145,89778,22973,44434,45381,85810,27888,39049,85938,68964,48120,96068,90891,76519,94425,89422,27954,92457,58436,18854,37202,46620,92102,90668,96979,79196,33624,53528,71032,85648,64332,81402,68359,44811,10975,84801,84706,11379,83074,98786,23563,71893,30853,88727,91109,84401,10038,23180,39770,71578,80317,94065,10028,53027,44675,17565,78900,60786,85203,63638,78588,22803,95610,14930,48275,21776,61635,33573,49998,89479,96921,72408,36196,83140,16756,56960,58946,84735,65341,98146,88896,42135,57134,95061,90157,63896,37667,98551,39659,97859,97188,10922,10621,95963,86941,17579,75503,42270,37224,10671,24082,53152,93114,95573,83244,99001,70750,53501,61468,56416,25439,45773,70795,92736,89389,51500,88682,42548,18730,50178,10407,57370,29510,27025,87420,97486,36549,76448,86196,98260,15191,23454,25717,78434,36697,81154,98270,39230,49439,38576,72061,45346,42853,91576,38752,33355,12313,44084,52639,45887,32340,33343,62305,35210,10110,76587,14822,73456,67664,53987,77639,67712,14631,65000,99149,25132,82905,12179,29695,53829,40432,95829,15729,25993,41608,71997,47400,51215,70649,92001,38755,99395,77364,53148,93510,37607,68856,82075,69920,40134,50516,84880,16524,50797,57142,81960,56959,63216,40578,68284,54288,28306,69862,73923,16915,10047,72024,75716,36305,95513,90195,80017,67974,81859,40604,28326,49642,59298,60725,69012,72918,49995,99480,45217,51488,68444,61758,91760,74116,53950,44674,64785,14542,54896,85889,43341,30158,67324,21608,72823,90280,61365,85694,10675,91191,68767,27868,93154,64875,91449,78213,88804,86845,19887,21723,71462,75088,19458,51284,76120,11546,54915,85842,41275,29422,62488,18451,83556,78066,54936,21905,83095,32593,11112,64344,34058,31366,74094,37710,12720,90926,41440,77768,80215,56811,40782,21336,24425,73674,38665,95994,34367,72302,30486,64184,39920,19213,42581,97468,13520,19585,64240,87484,51259,74275,52045,71550,90532,58772,24050,33121,13614,45788,34805,27312,96872,19174,39605,79327,38509,21628,81726,35128,72089,72963,78297,23692,68064,27928,97858,56020,65672,15633,38113,91473,55471,12373,59345,27888,26000,44423,15283,66223,65766,23105,30367,42528,98297,54617,64279,73535,47800,66809,26636,11105,29253,70182,43018,90219,84136,16587,79058,51301,14281,61680,80026,13483,85305,17338,12720,10592,86102,87858,30752,11052,63302,11160,24277,45952,70471,41362,88630,56360,78709,99133,69821,32036,20310,90909,89565,33443,94642,15823,88279,53034,23810,87108,79632,14929,20069,62399,60098,43024,82423,55992,69831,74454,81785,26384,40381,18857,19950,79640,25831,39370,77944,41071,50058,60065,99300,42399,74907,45000,84391,46487,71062,21258,22735,39275,19746,90739,83721,55259,85004,82195,87202,71624,64669,71301,23710,51748,45113,50492,33028,56144,85352,32227,10110,98760,14329,80088,60102,57199,73353,67974,34369,42209,31313,44913,31212,21968,18190,35805,40780,98385,37870,54296,41131,35170,18228,65245,66057,10425,57492,44989,84772,54588,25628,63691,85272,43220,27770,92060,34270,43254,85950,19480,20859,20797,80578,37742,50059,87686,85372,81658,97545,91268,34513,87827,50329,84940,85961,73744,63206,67253,36845,10526,32823,91632,27425,75247,61105,39045,33746,96176,41592,10220,28671,56467,38358,74860,78849,89349,45521,87736,89994,90186,67319,11136,75241,85212,70845,89638,95505,33356,84284,78421,58376,42607,23593,78520,30436,91931,57581,85742,62828,37951,15003,59027,78420,59379,51425,27063,92167,96530,53794,15207,91753,30976,48055,46766,71774,67905,20726,23455,84264,75668,57984,63633,88719,74734,41578,26393,53738,52204,69279,12241,99845,95998,73946,36892,88930,11960,59046,73132,64731,67810,18159,91537,60661,20655,33246,34067,13026,38340,11973,55163,94912,67462,26555,36078,29426,20846,89354,66699,55165,71076,14366,84891,37124,68779,22506,64429,45882,60764,54364,14103,56117,30011,62354,76859,76061,23658,89527,85644,60076,41895,10814,65998,76110,19637,63337,63024,12521,28875,89345,77893,87795,63508,16339,81797,46222,83659,49081,30336,14256,71475,80921,13354,35749,20938,32299,18275,77645,41865,68701,62148,57658,19940,90580,91196,45088,27735,47641,46307,53906,76480,80179,88510,73813,64406,90880,95578,65669,50355,92563,43320,61433,56429,82859,53250,34884,82995,21099,15896,59584,13119,77833,50419,32201,71559,99413,39898,27352,21105,44391,74895,69985,25639,59099,95377,66658,16416,12501,39054,13163,79453,37168,58595,83693,18333,82145,32609,47496,66285,19226,60801,64944,16981,93195,62741,79262,36720,22466,27366,66875,39901,34748,92049,93360,82410,19850,87031,96316,27219,90707,16904,83825,20986,96123,83581,91732,12453,91179,86440,55992,75058,10088,72107,16625,61410,30913,67303,94122,97374,53795,60091,71309,62823,43637,65021,16578,16556,66791,89569,22031,32799,11327,14221,27262,98854,61555,81203,45295,27242,38489,55550,35282,97356,52148,89186,44138,56209,31606,66665,98874,30379,72042,78539,77980,71058,19641,70322,53116,74411,14839,21708,71567,91888,46634,87428,47427,92803,36014,56737,18090,63933,97334,93046,64654,15021,60534,78289,98273,43530,51626,96178,46878,14183,59940,36849,74970,55499,44106,25622,99724,92627,16265,98000,25307,56363,68198,17654,31449,65864,28140,64772,66992,63812,62057,81324,57069,11394,16299,26800,56768,23778,61776,30413,69165,12943,51833,44389,21808,44447,91782,77828,81113,11396,37375,87973,44101,52308,52926,29103,56103,36494,12229,68044,44931,24799,81975,60029,72932,79726,72035,72278,23572,49879,34253,47993,35744,20413,23401,82258,22727,20343,74933,50349,42256,96135,77448,33436,16316,19681,54983,35649,37528,67974,99837,95989,51225,32492,37717,98589,88912,42015,29199,38885,98363,78457,41779,39383,64247,10913,17618,89117,63357,65282,97360,16665,37953,68562,67849,43046,36667,51404,95270,71133,40047,77766,42939,36681,86004,87087,92397,99828,93696,66332,82815,61810,47897,22219,79517,13297,86995,21578,18983,81921,37270,20319,31715,54782,84926,54507,89007,57943,98468,43968,35662,29657,33742,17877,54090,14966,67675,48427,98789,50866,82647,99785,55316,88326,97745,55562,40489,63565,86605,91290,87415,23044,60263,68546,82376,54663,58735,11560,71567,98384,25769,85368,27076,81077,27445,78818,79547,92604,92785,24933,54526,20169,76761,15736,71044,85650,20792,53231,10285,40115,59735,93606,46342,90595,80994,24539,74448,13122,20973,19174,41551,57586,85791,53030,63228,10424,49539,89367,59429,76236,58757,19746,82094,45289,20513,64896,11899,87931,62895,38348,42621,21537,21329,17645,23760,38879,74383,68872,49530,12771,57005,31107,63450,29166,58715,29019,56670,29627,53936,70150,54914,48952,35061,85209,28984,89372,10816,24054,23176,99952,65393,25627,26776,85110,17899,13585,83475,80474,98998,50420,75668,40386,10629,90205,47194,79337,66730,22445,67803,29522,14709,61640,84920,35786,48450,22729,82995,74546,74685,70403,54408,14364,82780,75883,66387,83357,39254,99085,51617,86486,25814,44187,55159,63799,35262,92282,53142,27911,80352,74463,32154,74962,11740,37912,21304,19406,39482,70047,98400,41981,25671,88077,76152,21524,66939,19237,77517,81476,45834,16443,95368,26157,79152,38015,46842,10276,73407,89928,45678,91095,55283,17947,66588,83602,55310,64629,81919,39847,70069,32136,69380,27022,32335,21651,79378,17952,95924,80232,77107,66550,62997,60916,29156,45015,25017,16958,26274,32851,37613,23989,47636,49026,23441,28723,67728,30599,40148,22145,59459,50837,72787,73836,66170,12522,76964,32156,55185,58626,88521,80807,88922,55127,34270,38270,11240,77773,63449,66063,50520,33206,37878,25642,28474,16008,39205,47108,77388,96663,18778,96690,50364,50360,25996,46090,73206,48146,76388,46727,86853,13183,55703,86380,63638,19174,62461,31093,83263,88952,66486,82320,41360,29080,80859,79081,19003,26362,44407,60336,16627,42970,42830,85814,62586,96144,63138,65762,79426,80270,37350,95603,30547,30408,88017,65926,51645,16783,10177,84233,18278,38247,35560,78956,68726,51850,20691,98180,48519,90462,42795,90439,59460,64917,46251,81989,12131,91410,89656,94918,41536,74591,89523,89202,60304,89944,35449,48579,57991,49051,22329,30937,39595,46743,72842,68241,69734,65596,31542,95600,57699,96662,20139,99916,76165,21244,57869,41998,61910,34367,90073,85380,99658,48936,57684,67425,26114,58151,75676,49651,86904,64061,27879,68762,95885,60874,69609,58687,81921,73191,88616,17849,11922,43631,72822,32787,52551,44640,74544,17661,97825,37113,64682,99763,20002,49877,61495,51014,62339,44450,76674,52143,40516,80259,97675,37264,60628,25080,42760,91393,41815,82083,75320,59968,66639,37294,28412,69527,34501,91282,56889,19169,43409,29999,83631,59877,40031,27625,69789,34135,77369,48609,77509,42215,88357,66222,49767,79721,55255,58480,90523,90417,18152,59209,41554,44691,14602,54458,31960,69397,16344,55232,50462,92392,61566,14027,24504,57860,33094,20666,70071,77785,69123,82300,40544,97822,76607,45530,62090,70663,15876,95318,38665,89789,90710,74153,52578,16832,65584,77272,45921,87535,81610,35747,42972,12830,68799,53163,58961,49393,22560,26604,65726,10885,45732,40985,22482,88960,57001,29111,80446,84748,17928,92389,68431,99457,51946,90512,55452,70983,55120,14802,32992,70597,77556,91893,38282,40903,43735,18607,97122,89813,65137,45905,18906,71793,80516,84976,83022,80031,83888,72821,93869,33402,90936,97730,39030,88616,26712,28658,45820,89134,93418,98133,30887,57848,96890,17901,80111,61190,54236,11819,68605,23261,34495,89754,21587,17689,47357,69603,80560,89267,41195,14147,61677,38144,25776,94389,93361,23292,11498,88628,99108,55753,34296,27101,21134,22191,11987,12731,81736,11189,12108,76589,86742,94263,97927,18555,78097,99856,73453,90029,45216,42052,71763,12788,74345,69011,44698,47111,55230,16357,57697,28110,28435,62605,33801,59709,30820,10989,82378,44448,14372,28755,92550,66464,45949,70205,69871,13958,68524,21331,39493,43246,61573,78304,10312,67156,20264,59011,79780,56323,56758,68735,95123,88267,13664,14549,44050,11856,64935,28366,20210,49332,27616,75487,81441,56193,92360,46607,19439,18837,94964,21809,29146,74225,95475,62037,22044,56524,34148,99916,84498,94046,38978,22711,40668,62289,14802,49860,75871,26571,71226,37154,36484,70710,55993,79376,48102,72824,60071,42962,57039,53559,50150,28278,76956,30456,51838,39397,59487,50364,65801,37276,24038,10635,70263,97865,66991,99765,45852,36505,85885,27941,46649,97566,73225,50235,83465,79290,52023,48963,45469,27295,86260,92232,47099,52294,63660,20036,82157,63018,45659,14395,18057,11144,28686,50472,13535,12860,74055,65635,32061,35823,75877,13426,28930,69925,35124,71211,79874,11099,16334,89683,74682,90890,73823,47417,62718,60496,40159,32469,28246,62774,79074,31310,11566,11423,90267,10682,95482,30627,33834,21198,47416,92962,12444,57727,48093,20402,17476,13532,98862,62101,59546,22947,97697,75602,14727,12460,42022,14879,99539,18670,26459,48755,50796,24936,91282,94448,76628,76332,56875,30461,24492,57857,76960,30840,93045,10041,91079,64761,59647,90865,97359,20154,95503,69698,62428,71240,83769,28080,79918,52176,25617,37397,33604,93615,55971,93341,21036,93774,42848,40566,21396,79652,99904,21682,43980,83396,72411,32943,32170,45603,64259,16417,19417,84666,36173,80676,40982,59442,22257,72591,86106,34703,65148,43553,87947,44273,10596,13216,25522,17518,44015,99314,64166,77583,19655,36722,71369,93180,76447,38053,58371,51576,87016,57366,93416,99793,21812,13305,50774,84658,81971,75058,72373,34155,58705,23802,30822,29267,62472,60301,78415,34033,97929,50136,56246,72207,32327,51069,11933,65464,70609,20598,40148,13688,49333,45856,72341,94570,77624,10591,18376,50284,61514,10566,38900,49778,75778,18610,98069,77995,56600,19383,20723,84038,39842,24846,68896,95478,69800,51991,36261,34015,51346,92723,16588,40730,34358,51017,73301,82215,16142,24742,66043,36695,86693,39149,99497,77868,31950,13304,35440,31113,16968,90910,47819,39632,96092,70522,12760,39594,23492,29599,51718,89085,64823,33009,16943,74109,92448,20882,27866,72042,15100,59488,80122,21600,20928,64839,55845,35968,32439,96562,31346,97775,29777,62999,30039,76509,28463,31294,26778,49923,97692,91358,87235,63576,98309,81313,23395,16272,40689,41201,46410,15601,48282,35240,33851,76814,61693,40324,71376,25498,78626,51465,78545,32415,47521,28141,94957,83990,22146,23442,67395,36327,77651,69476,22783,29300,22798,94968,80054,76004,50367,44608,75224,55413,18485,82941,39402,18929,24854,85404,38966,60902,91312,11141,14040,81718,98484,21578,48477,91673,10253,43825,64022,50837,28910,61277,81661,26368,41505,69577,77822,49648,82145,53379,82760,84112,61555,32906,74963,55320,41379,89092,61068,78582,38329,47443,95148,25023,19086,32212,77314,83724,57398,49507,39320,21025,65691,46115,61394,51910,97039,29222,83512,93230,96537,62476,24000,84717,66071,76638,63963,55980,15713,60756,24378,82663,53541,43489,85358,74965,92741,15954,67754,79594,42716,88815,57845,88718,83651,43481,41950,21313,14538,51355,15725,95593,47861,75510,22879,78420,54803,45041,88020,58497,70743,51737,81566,35142,17330,87478,94619,14475,40268,29665,18369,43736,70674,26887,32136,14875,72951,14389,67423,89289,21491,26022,29852,56447,50480,15951,65102,19909,31769,14390,73836,70540,69843,87474,25376,20015,94579,12413,93738,87576,63750,96724,98919,66955,52058,22384,38282,91313,39883,94318,44638,58256,60693,90343,39193,11157,12002,49304,50073,55275,12576,47352,22715,81382,60018,22176,22773,13819,75937,45782,46461,75345,41031,49438,45588,12060,36768,74015,23184,57580,73560,20405,90814,87136,60654,15833,18023,60424,57038,52738,22003,59846,17135,62369,35680,93383,73567,70686,67590,52884,19300,67698,73552,41298,65578,79772,85075,55214,98323,35323,69222,72874,95153,78727,76962,37102,35843,25830,93744,38015,74117,45835,59905,82836,28349,47284,80364,81125,67090,20091,64994,39241,30619,58291,25870,98493,46903,89573,51230,44365,33704,10868,54349,22027,56605,66866,48822,74143,23674,35767,46510,49809,56370,99734,62235,68893,50650,38020,73972,42905,86402,77371,78584,10549,22809,78315,32286,21282,76038,79423,35530,34960,32639,13938,88705,54842,34724,37487,93062,65267,30852,81666,17988,31185,52909,17805,23029,33992,88243,34667,54889,24460,13155,42232,97265,72365,84818,42243,92192,79954,76524,14178,57748,43243,27615,61456,71336,16050,68627,59188,72466,24474,82897,16576,73897,81669,67046,71768,66458,25471,45233,88553,41157,64818,76838,24925,15348,92871,49042,76198,81683,90757,16515,23343,48492,63747,97312,72529,40139,95808,58965,89105,99859,42712,99746,43704,76255,20987,19206,86016,73719,88777,75371,74012,78952,85180,61511,34656,13572,38080,90288,57146,62041,71268,47669,62360,18719,85844,31817,17128,26013,10179,15971,69201,86969,45588,59336,42579,83492,86505,51306,49300,20875,41843,80606,89845,11840,69236,46942,38454,83889,68505,89337,74043,40651,57716,25425,78515,50796,92551,73219,26618,38922,60711,80910,33079,21567,69861,75778,25124,88127,82743,61128,87524,26285,19478,58859,10696,34604,94492,19867,78470,17415,57771,28733,13643,65065,57373,98815,53414,18581,98483,21507,56014,26994,72740,89122,57650,91118,74415,75803,53938,42482,15013,86879,56529,68547,38241,57995,68936,24374,61590,72040,77355,10683,51172,16465,73396,59492,31597,17436,75341,69947,10295,91018,39334,14075,87326,13199,84050,62466,72265,61443,32434,43767,94521,74377,59186,33813,94167,53907,60021,46154,15338,24609,62204,57343,44655,23919,84954,81753,98374,12648,34494,96149,89333,45634,27231,77546,64398,72008,99220,29205,44121,74731,22714,50535,49197,52431,86472,46658,44317,66009,66491,94195,86825,75524,96169,60749,45663,53495,58414,70139,82293,42624,46094,34072,79793,36926,36499,22784,40710,56827,51156,50031,86341,25789,94602,38707,23115,56515,15969,47295,61053,55337,15919,89052,40778,59267,24543,70145,88596,29842,23946,40835,69136,44408,42990,67582,20404,16002,35140,10232,96806,52079,19102,47761,76955,25086,92448,83479,83785,73784,21939,40249,86620,56090,60448,23906,58876,14480,64793,91542,98814,27277,76921,98440,92869,67199,16055,12044,15392,60512,52136,50802,59453,84417,54290,63202,80297,47291,33959,51048,72219,92132,57863,83785,36057,74574,46084,54368,93341,33354,72234,75675,17852,54628,97518,81500,19713,64009,54880,33235,69212,82853,37896,48582,42766,96251,72675,79642,24823,21155,56592,60789,58270,77011,66506,49566,41369,33176,68890,50807,42437,19329,11434,39535,41800,29751,96198,69826,85463,19115,86080,18007,84484,61737,22137,19171,92278,37606,62512,54306,95097,20030,76309,37708,57179,12576,89371,92459,76884,32214,79527,10906,54253,27603,13663,98536,74046,35576,93941,74654,15071,11267,47349,60160,86190,20788,33317,37043,63529,41966,63577,68228,31855,73677,62406,51807,45303,77446,92936,82152,26040,12780,84558,55513,86337,42621,13701,66520,53921,67226,19970,91090,78951,15820,42564,46752,48280,54036,97702,67841,15803,67342,60562,67793,54778,50067,12665,24396,89533,75757,67232,68457,98258,60994,30024,54836,76373,19185,23395,11597,13329,42370,68720,18433,12947,76822,53444,72133,19827,47569,33822,86440,29102,82519,12303,33849,37887,53650,54496,80587,61273,34335,65516,18294,11825,30864,69851,85514,50279,90825,19565,51108,18713,26663,95405,34258,16771,43674,53104,33917,46251,30674,44135,23240,52240,91960,83730,71643,55146,67260,95442,23527,28479,85252,83204,65368,43841,18173,56609,63394,84150,32225,88405,30142,83715,38707,22513,43370,74134,24783,74957,44824,71494,63703,41472,86661,28414,22569,52735,10540,68376,20856,34572,36501,55634,54506,44147,81503,94251,65826,64463,90846,82342,80233,25266,76568,35598,19989,35188,19722,75447,25083,13667,89362,17967,74989,46973,62624,84078,57118,82156,78570,97395,75983,55575,14125,29883,98652,43845,18411,28464,42741,38693,11703,51327,87713,59064,96369,40966,58751,11002,25571,21762,72976,18338,48290,59285,69331,43781,31114,25726,38810,61242,50283,57252,30312,97836,45447,82403,87198,13898,15920,69994,52522,17770,56628,22092,30854,79347,60974,94962,59678,89425,66403,64562,61353,13965,17318,76810,88885,41490,58916,40667,86688,56326,86314,88235,25563,77662,92485,44576,79325,16639,74886,38281,71452,92285,35358,60960,58923,18732,88573,90488,22689,14753,60583,68926,97141,20204,46880,61063,67203,42101,95157,83926,53291,29861,32167,35600,57626,73122,50295,22698,64031,62545,22913,17138,14306,60989,29223,93665,71714,73237,72572,45995,82914,80629,21925,17654,44165,83831,28507,21336,32840,53605,36188,16463,27671,67150,58917,60041,10137,16576,78942,43201,73680,34856,79947,60516,81510,45908,18620,11598,35159,18136,97360,28388,84936,14386,15703,63189,44263,31926,35189,53286,52979,71520,47337,81978,60511,13674,91043,92483,30764,96448,15996,12802,68418,97024,56069,16709,15561,80011,34040,26978,86823,51873,20467,75609,28910,89567,67666,18179,76972,45565,16736,53916,88199,81573,84288,45360,96869,40273,28338,25957,84615,44590,13465,10580,74740,12532,11314,50117,29932,91139,49572,34454,87276,19250,35656,36067,32637,29855,99454,31547,12644,28779,33932,85745,70897,55327,58233,95729,13205,77971,23418,93696,21679,56685,17142,78397,65111,20387,64458,64036,69940,12520,93186,51905,70881,21002,78445,19492,14799,83417,73220,70544,99516,67503,39622,60743,29547,42956,37933,48562,30962,18419,57366,20543,77593,65345,84921,56474,49946,86799,81299,53961,92939,57143,44082,38782,40383,30711,63851,79336,73749,73515,87931,20175,38128,31124,50331,55863,42378,52486,22425,23212,68263,95678,73917,63684,10760,34635,35374,66447,27244,17853,46463,37213,99148,35842,65024,24786,72542,57159,46412,76571,48678,66924,29802,32741,59495,91492,87449,61937,23126,17043,30409,44222,66657,81040,10852,27929,88445,58479,93249,95739,19789,72271,94485,20543,92270,40045,14969,22706,66062,75743,33503,55794,17499,49854,55263,64125,28822,69092,42288,76291,57249,33242,39913,91234,81378,37389,96252,16898,32319,40077,86685,60020,64732,51426,34351,83660,26287,97314,85858,68871,51212,16370,53236,63916,65799,33928,34240,51038,56246,70338,62913,25334,47540,77840,82577,88725,13572,20555,92557,82463,42087,33071,20148,43466,33199,65045,52263,45245,73425,14894,72882,18588,84125,40962,31445,17815,58735,40567,26087,98342,29210,25618,15982,47400,41219,98644,18537,22025,41355,98239,13710,19209,35778,15786,23831,52234,42330,62875,62488,93411,34232,76854,61597,61067,92168,90809,45193,15031,27300,73079,39787,48224,89445,22338,85165,26574,40425,22068,69441,41744,77909,69769,48100,82284,74715,17404,75429,52190,78532,21535,46492,78363,10125,48030,82538,90946,58677,86519,33873,20411,93193,40547,73812,30326,58991,19989,58736,81165,43225,30511,69290,71180,11377,14277,60840,23892,65734,36627,30737,16253,57917,75021,43212,42299,78241,97341,33191,58240,80249,69400,15844,69765,23426,23547,73162,42078,24684,89953,19597,99822,55293,21266,57023,23630,17589,14529,73753,32843,40819,91762,29860,25175,29562,37182,90880,50715,37908,69995,77636,54594,70909,69734,14094,91839,96946,61751,52833,29877,58646,72462,59798,61831,84438,81768,32999,89689,22750,19264,60155,78853,30050,25160,50973,77891,98101,49752,60425,12722,57819,34526,30577,97356,33718,35645,95094,39266,66930,73778,68119,35708,14459,16374,26056,96270,54383,35555,86970,77790,65951,74380,90050,61017,25183,94630,24145,91233,26807,36890,47734,84600,47110,48040,57860,39388,53377,10579,29394,11783,90548,32003,87325,76276,83346,12275,34232,71933,75133,99474,23844,21366,63224,80257,24898,92548,81675,84107,38544,66522,33653,31948,82461,38271,82439,54422,10102,89504,16224,30762,74889,37401,25193,66378,82241,50519,75024,78493,60672,79528,91165,20176,30062,11615,40137,71290,68340,18408,69492,10416,46235,56756,66323,52162,54140,44576,76064,43016,17835,41543,96255,51474,25336,75145,82723,29084,44056,51642,41051,64908,68077,98886,22554,36797,56807,80619,44963,20976,33657,58899,83345,45896,69800,62651,24900,71774,50177,29929,35853,18521,71831,56962,38774,82055,26285,86697,72871,42608,68622,72468,21426,27046,20052,10741,80614,15596,99439,66641,29264,54697,22589,10697,13872,52769,68426,96843,49695,78016,50961,91953,33077,38418,20459,15076,59490,62307,61128,88400,35858,13477,54496,71574,37534,27295,14118,26444,34054,38569,12105,15863,93191,55699,35764,93015,32877,98630,90800,60142,86012,86879,52517,26773,27212,51738,14108,75514,86271,35480,86051,83519,19450,49882,46560,78131,82690,39366,13049,32864,22338,44964,46689,25117,30615,58527,23491,43435,20710,40440,73400,61127,24166,98626,97738,72972,74984,54464,94723,57410,63011,47608,12635,45529,76015,37722,35370,90944,14090,92715,58004,95208,49654,14132,51169,91773,99703,49143,58734,67262,52033,76119,48583,86994,58900,20408,94439,33814,44242,19749,24190,91818,71632,44427,44780,24648,62364,69274,59845,13855,63563,95360,33296,73976,22004,77331,97265,49333,23921,80790,44536,81887,81170,87510,55844,14265,62330,57797,63783,16634,73581,99289,18496,58606,43069,96198,33900,48142,50279,22449,68113,20492,13965,60045,85781,95994,78058,49629,80411,28299,98619,77180,68489,84221,42590,60438,81546,54263,61237,69105,90976,47864,10942,15998,80951,39665,63662,61504,78837,22077,59002,95574,97500,46828,70373,59846,60222,61752,46201,19222,64135,87751,39793,75772,49331,29204,94720,43264,16827,23105,17695,69002,24527,44006,13615,94978,21280,41796,15409,69401,50369,19201,51137,54469,28169,41358,97822,88929,99607,80073,49349,65318,97839,91888,87363,99815,68630,66775,10792,86570,73014,71049,30459,56346,39196,71957,59143,95251,24170,90225,12100,23689,71087,81646,96571,26493,33255,61193,66997,87567,42704,39741,67553,46635,64666,11714,71791,49396,15640,88488,58157,52950,20329,35828,73303,17460,16788,83115,60539,53582,71059,48151,23076,68850,81654,36340,86707,55450,85179,98593,33165,85797,27280,53362,35411,63580,49724,61724,90372,82378,72429,55737,55038,93153,64186,25938,64843,15070,24654,14479,22578,71208,30442,95405,16733,73341,68880,83061,90471,94574,29856,32473,69413,95090,73864,35468,82219,90353,29379,56246,93106,94094,40910,32743,25805,50603,45268,77100,44219,48144,26979,90955,73365,52491,83444,86841,84827,72684,15121,17396,39935,86377,80659,46368,29427,58224,29831,38796,61439,40725,34326,58518,19075,88635,14004,53327,71270,77526,36813,99474,40945,90920,24455,93899,85159,31508,87096,95729,55128,36096,85132,39306,84256,43420,44578,60969,67288,69909,80421,39909,13975,40110,93046,90591,98512,35493,96592,10289,73516,50122,14701,41580,77682,27531,39116,68825,62250,28154,25117,83570,44484,62577,98121,78235,85297,34383,42786,11700,68742,40846,74501,82235,49310,96707,71750,68748,24251,50344,21956,19966,44664,80692,39715,74084,10570,16685,52286,81220,72402,50529,92814,65330,52179,69086,23714,98344,61625,36572,81883,95811,81403,98699,89092,80308,67479,74094,41455,42162,50074,74178,75500,82842,67583,56525,16036,98132,19348,43995,43274,78429,26045,45551,37674,83408,58924,48059,16887,79095,16909,52929,43003,33491,62050,19522,68176,37330,63125,77940,72976,45102,11413,90677,92466,26860,53403,58561,46455,59561,52636,60845,21086,38172,19274,81391,18053,65256,14852,78780,58221,93226,75259,98037,10454,57542,14506,47566,93021,69777,75204,61742,37235,19923,99519,78749,48311,81144,40151,62850,16290,43053,27311,55381,73311,69119,37288,39447,76726,87067,68109,50450,74016,22227,48487,40305,53159,68586,74204,70895,77716,65452,59535,51182,36601,14270,16491,92568,13062,58629,90848,94922,82587,54043,52766,60380,93837,62910,99348,65257,80112,46694,78149,98963,72452,86929,96500,52981,96313,13564,76168,85188,64222,95545,52940,15699,93625,58059,85478,31265,50933,91691,51501,27540,98084,18976,31025,70014,79490,31163,16300,42211,89932,60362,31760,98913,37514,71498,45544,76171,16749,23069,11533,47131,72729,66374,78860,42925,64364,18251,84588,21373,66852,95126,99653,47441,37766,30614,40716,85020,86803,11237,18284,90121,79047,97670,80926,90780,77784,26541,21623,25187,24128,27048,40937,43176,68054,22698,14853,90574,15603,83540,98678,82247,51516,37433,76569,68732,93937,45631,87215,76922,73658,94668,90296,20348,64518,23620,54859,74710,88926,68250,20304,74502,89655,88861,39764,26907,73829,45328,40717,93106,89242,90413,19541,19957,64034,33844,79820,99317,43798,22047,37878,59950,67055,81428,53096,96666,22861,28560,91532,43530,25773,11801,20215,19651,62041,39423,77749,50349,65618,20950,71907,20223,73076,54260,92975,22760,50220,21669,83720,97868,17332,67834,12610,32700,34556,29601,84767,82841,29335,57217,33457,20281,86937,68371,11089,25758,30902,75494,41735,36326,18431,43362,38535,39277,52742,80771,62812,95728,42715,42040,85874,50274,63733,32303,79449,11028,92603,86016,36391,94058,67984,26147,22220,31693,70284,28034,36929,78445,49818,58159,32529,73088,52914,91831,76764,31193,56985,42803,43323,17626,52659,93341,13885,74540,18056,20160,36567,97099,53714,99228,62120,85254,14633,66571,31267,66582,17058,51175,18666,10630,68617,88297,43156,14937,85024,99690,36900,93267,52040,16765,37599,52582,54125,56491,27254,85228,26998,30104,85421,24814,77237,21789,28859,46648,62000,30509,63834,16998,77323,42109,50464,29701,77949,43675,84948,27051,90496,55768,59283,59573,41730,10732,32134,74894,33667,53200,54589,71248,45773,25021,96713,13166,66505,73945,14946,71313,28793,49627,71015,14178,17087,55656,52960,42959,89685,33397,62338,53227,22226,73977,17553,93761,24273,67699,53319,60536,26779,31545,64563,56840,20692,14668,93017,13875,53173,52787,59789,31992,46616,88148,61680,64044,28089,43805,16486,79272,11034,32323,50326,40925,49175,60899,68336,16898,51709,39303,53880,62443,91385,34336,55838,61734,82980,72486,20257,10294,38776,95587,16553,63114,63881,84913,51854,15034,67747,22920,29710,82771,85069,33095,31517,52193,34501,42598,82486,32124,93260,41302,80220,71147,44963,62177,56519,98517,89069,91002,60461,43288,27014,73458,77215,27190,78910,26365,86556,15661,87111,83746,39962,46661,84000,65580,28662,94030,81310,37533,35833,91869,90282,50212,45287,13275,70697,51966,83587,49927,90659,92517,61296,75306,76298,79747,74978,33879,65275,99110,93363,14217,60535,53914,17699,86444,23257,28552,11471,62140,67419,81782,15817,26253,57349,78153,76109,44028,59801,89568,73278,91412,43043,89810,84681,40893,75137,12550,98793,25928,41156,24201,76794,58760,95956,69252,97274,70435,19772,77938,22855,79289,68313,16077,57986,45500,91036,11933,82225,16770,60600,54922,46260,32155,38513,15427,33110,77454,99167,64330,49439,78290,59657,10647,51462,11615,74427,82934,59875,14166,78588,16062,91200,80763,43498,17832,83599,43942,16800,91220,31568,15176,97971,51618,88609,18895,96713,16305,81026,45984,38629,59152,19568,33318,46445,16762,59567,41188,31553,33875,38915,48351,39373,90595,48915,36403,39050,68437,12017,58373,36475,34036,92913,73297,57353,39370,52701,90874,46914,86488,69415,67363,40269,31975,43576,40120,52548,75700,42946,46227,67146,20206,48524,78958,50518,82797,14214,38414,26169,82159,30524,77118,98322,62704,62889,80432,15520,29401,97906,54317,90580,94429,22466,64447,94860,18090,52410,78093,33799,17284,27255,14563,35489,16468,28159,16651,82179,78930,20050,76327,59302,73372,12371,83704,39112,33776,37180,25484,74475,46770,63483,18993,25223,46644,13733,66353,91855,42882,44520,84545,51881,11029,56523,35565,51906,10020,61873,77365,44037,65578,98337,58818,81438,64918,57829,12211,68878,84060,65658,24971,86678,74614,44482,23105,95251,26195,85923,11940,67212,79985,46884,85944,99418,29484,63572,47715,25783,79167,69059,82439,55512,68481,62984,54791,37651,75984,41605,75283,66986,71896,21852,66263,73082,12335,37340,32035,37633,57543,97436,41920,40126,87152,81710,44446,43261,35526,35197,57909,93181,19112,10299,38570,46226,32596,58519,20380,36457,32586,94951,78631,49540,13161,22193,63100,10026,59677,42786,89561,66140,18728,96991,30607,78808,77031,73351,20951,61941,31637,21613,65588,71762,82277,72013,68295,23119,29486,98120,38796,54032,51799,50152,39083,12921,27370,62060,51226,83146,13191,81636,39644,30480,87377,45376,99437,72739,81948,74472,66539,46769,57602,80357,54941,19889,41718,38695,57636,80852,35295,32550,44230,28340,95282,75276,58793,47684,92088,18686,83829,15884,68420,87764,95507,67319,81755,46881,15369,38933,21310,50053,52885,26859,81706,32203,26291,80512,99369,47711,34091,33075,64168,75958,43754,48648,80348,76323,71482,19238,67729,91322,43124,90844,90590,15499,74285,74569,70427,30714,65911,15486,96421,65292,46505,23819,50953,31308,74840,87135,13138,26230,37251,82430,67540,27451,35537,36199,74613,22578,89036,32204,49149,22651,48158,14239,38932,38250,82120,28022,16976,25343,50139,39879,23490,38374,73641,70870,32705,65055,16845,61932,49220,13341,27518,25511,86188,84216,83136,74781,97409,30072,18519,45507,52754,90682,29140,59188,61771,79220,91016,56811,95106,27336,23969,48415,25478,26096,11979,17900,80681,19478,70173,31829,81054,53921,33250,76092,49852,92652,29342,22621,29661,47908,25747,77972,13046,15906,25374,35888,33204,55654,93613,70932,97685,17383,62639,73013,95621,16797,94487,96322,82440,37317,76656,26006,55111,13805,45976,28371,82374,94472,52982,16894,14011,52796,41400,19183,29882,12576,17336,89561,19291,10764,50309,48896,87521,11623,22952,23348,25433,88705,87639,86005,71430,68955,65222,42767,57510,92601,72393,85167,74186,23041,44122,16131,49202,53070,30837,23159,51384,81203,41857,76154,23259,73035,28616,83563,12289,26530,80023,25815,33773,29780,97069,89268,86962,22201,26663,73869,21627,93273,38679,28456,99438,46640,21774,62602,37903,95234,41067,82916,61768,38195,63711,33982,97204,13326,68871,39494,18977,80826,20924,87683,81765,89558,69064,31040,77564,27613,27606,86764,67610,74545,22854,86827,84046,77588,44142,54120,65780,11429,39655,94539,97595,39432,61350,80464,78006,12319,44388,23698,20350,22887,82899,10482,75052,49388,96027,37415,31691,94942,40920,89822,18520,89457,16251,67404,45930,20717,76611,81960,56885,47883,53965,27168,73613,24292,76593,91650,95192,23871,60730,81860,51251,50059,96550,55431,41909,23033,87480,52587,25992,59139,87344,10633,33371,16290,85437,65403,16536,97370,76798,28998,77951,24238,92143,34442,66120,84282,24576,29156,58810,71202,15779,44147,54568,51740,12721,50539,98396,51592,41447,37788,41960,67060,97556,56690,61176,55580,52739,49004,53650,23050,50502,95145,68084,22183,34937,38128,12444,53869,33997,62761,58459,60439,33807,49732,27022,60807,25623,10511,76836,89109,22246,37697,88510,99561,78532,68898,55502,30020,22456,64467,81579,13952,49654,71469,26862,43579,54720,38810,93881,57110,51295,61316,69637,33868,20892,35060,93368,76392,91191,93043,19684,95143,44008,17597,54233,76586,92697,28030,29038,78181,89224,51371,49619,82543,97446,83311,88996,19975,80201,81977,59754,81619,38518,38645,63910,76649,61819,40874,16827,39528,86224,92303,83300,92193,77928,70093,34646,21999,95645,95048,79179,19960,44087,22453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1683,94264,60694,39987,84694,90103,38274,66364,95787,46096,76799,39820,58375,17578,72163,99162,43546,18924,27313,53020,87457,39712,53287,46566,14516,87586,23149,26087,78958,79571,33871,52763,95752,63802,84859,94682,16295,57469,61920,24484,64530,46109,87994,47484,90970,61501,33352,92015,94923,38951,28453,72513,46729,46191,49238,55686,27188,82401,44429,69896,72270,93351,59228,81446,28901,38819,43712,26072,34896,24527,84180,34330,17271,25059,65951,43751,74390,30827,34838,48628,92096,89487,69058,84574,53446,19405,27100,72856,88923,86133,73635,37764,35783,42193,39712,54815,16933,50218,85219,51389,97084,28013,76422,61857,90073,32221,44215,57063,75065,71036,33410,22194,55402,54284,18989,45652,10997,24341,74089,96062,58539,59298,89472,15835,42718,28993,92258,96544,79413,94364,20739,91187,99063,10356,15086,83218,92415,61979,31819,93690,73604,26018,72982,21315,50122,55336,58497,28747,21845,39319,82771,49050,64251,87106,21991,88443,56510,69348,61821,79138,82031,59046,40005,44517,72077,51155,58038,59037,90011,83881,80500,52646,79158,89480,17973,76031,94514,49831,63234,85378,46572,86601,28000,31669,17150,60171,59577,74550,57801,79477,44892,18159,58285,86094,57988,59767,17663,58382,65025,16104,94159,41271,83826,36541,70638,31140,50586,38689,52378,34751,90438,71498,48977,97653,82257,67371,22556,52421,90588,53095,19592,63138,57144,66601,73879,68457,73967,37948,61955,41759,65082,90733,24263,24452,16938,31484,73366,25967,66869,90254,24772,92225,89882,52910,60791,33644,93977,58218,80564,49401,56620,52358,93436,75405,68356,40261,37280,76687,94970,86647,30438,12305,34895,63810,59733,89348,27099,44070,14802,65879,39942,51484,92069,45392,59037,13263,66743,32511,26383,94944,48248,99534,15639,79092,48730,93740,66959,11070,91228,35255,26777,16204,45822,11982,58166,18662,37686,51697,99645,57477,63551,21999,63404,43901,50180,15848,77050,78800,88376,42905,26728,15106,77008,94302,77257,32410,63891,29611,72588,53242,47595,13506,44648,74084,62045,11884,87509,48342,73444,50915,63231,36781,16529,63019,60710,16340,42103,79380,52269,83035,42968,24683,80260,44466,76453,89432,71198,17501,67932,66574,95554,87113,77785,33002,65195,49228,80445,84934,90012,82874,12590,10690,66169,53325,67224,15060,82318,77172,88338,92592,91763,69268,63771,78244,52771,37718,22498,63030,88317,82381,46809,23739,80788,14743,94493,97963,86742,18073,28703,93654,97993,21525,24282,66992,80274,38570,48556,58460,68993,86638,95888,85389,93817,32165,31884,90464,38456,24848,25298,27383,52550,22094,60209,88904,76403,45061,86794,12858,81194,79436,67263,56651,51082,23069,42019,84073,12551,42813,48605,30440,56359,32773,75477,81992,14605,60746,12623,96471,38418,42670,22616,24604,81814,43871,86770,45151,40625,67573,61096,64278,63725,20024,41125,81014,49106,69611,23316,81604,97014,62653,14208,77541,29143,32220,65461,92515,59391,68700,38959,93099,23850,24453,90670,34660,29727,88818,12871,94109,82633,18938,48333,23736,59455,47593,59718,73726,98873,40595,92386,51259,92946,30849,59461,20993,79000,28798,77062,39443,25358,52534,61294,57513,39657,81515,65569,87051,31139,45034,20178,91332,96739,71649,16952,64642,15633,95202,58471,78298,47186,39467,54372,65695,85983,19566,50259,29388,95095,77015,59465,94567,69787,59638,36481,27766,14559,59397,25889,11417,60073,58609,49990,37292,81921,85158,24157,59060,10473,96402,82497,65010,77434,25065,45570,18819,74885,86711,15839,63721,23708,44802,73275,76087,85293,88879,22532,44166,13702,75966,32563,83795,48514,98213,90402,35320,56533,88266,85104,30382,81691,84600,45712,77180,72178,30394,60456,22923,17083,39836,58310,51921,89942,12522,44994,76573,66873,28358,70754,16933,69627,25018,66192,63584,28325,99992,52242,15859,77895,48087,62188,17820,19584,87628,29676,67589,76294,49364,20706,78311,40130,44413,52664,40872,53610,43079,85095,61329,74937,29336,29093,78770,22457,44934,69375,22971,53149,45764,34817,27630,47136,53839,66718,95534,65923,51235,15650,35911,90620,40242,78418,65004,30841,61646,66726,84008,19907,68082,75436,93200,31799,21185,54885,43556,17705,67653,38749,28536,45787,52911,75100,49256,52560,34120,25777,87284,89623,60903,79616,91968,12805,92115,13202,69329,21516,52987,10495,36704,66270,15153,59633,45066,71007,17891,91374,23369,62896,56871,83466,65714,61745,42731,40951,63349,40074,89247,28807,38771,40749,40028,49590,63687,69882,94992,98135,65147,97837,80227,34783,19840,37751,25983,78914,87068,36845,26476,51732,25272,95915,13883,48465,52485,36160,79159,18612,41439,69949,81303,98311,72791,16978,29311,99154,40480,18141,98770,25054,94371,16759,81273,88757,72536,36647,95697,84161,80109,55954,91504,41238,72059,29862,20594,74251,90846,72067,79462,14089,49655,12848,78316,69335,21344,18886,40384,70750,28179,86038,65571,12285,85125,83612,77949,94454,75241,59654,20592,33509,84220,68199,41814,67688,82679,95807,87623,17298,72305,75370,44236,55199,12356,73148,98059,19872,81953,48196,59976,20674,78292,89159,33577,69191,80202,72071,47487,90997,42919,19550,66721,47265,22266,25862,25641,72720,19872,62600,86864,14451,53883,28764,35717,49016,34432,39765,18901,50870,93366,72966,28419,75292,28270,73609,76737,95979,74925,81017,79935,49688,33066,54746,38054,89515,27367,38535,25604,71293,18855,78495,18335,90641,43216,47699,80051,95106,38236,71330,63134,41689,31440,53908,81035,44817,78634,83609,97365,93584,96913,13431,71609,33271,82799,78564,13433,33852,45695,52948,85105,67383,70037,27549,45633,60186,44845,11687,72939,65472,85296,91984,51316,33603,81229,69112,62217,37813,17036,74451,45460,94269,71912,72578,71955,59388,85446,65172,52719,94654,39704,27796,30521,31112,57803,86204,79909,15013,59899,78762,59019,95776,13262,48293,10719,94135,53155,86883,12948,28568,56116,43766,42164,63124,29378,97206,88989,48544,50242,84737,99073,73108,97120,96330,63233,93785,43077,67066,46595,75230,42990,55658,81194,41751,97552,62276,75768,22328,24443,87868,11456,60907,40389,92805,38341,49280,80729,44403,93382,92063,20802,84110,94013,39882,59061,37088,48366,70886,63899,94576,38804,54552,75344,87206,63657,52805,88736,12549,35322,17765,23303,14119,10960,53750,12938,83493,49061,21274,67463,12884,33583,25363,35101,52401,42899,84118,15855,59012,31823,49103,12227,85534,66513,10783,62985,12749,27077,93680,57372,74254,96096,32705,44171,36369,91497,75075,48543,89378,44664,23969,60793,67413,14030,36358,58403,54114,73120,76407,79506,90550,21104,86887,72218,12998,82103,52269,96906,89127,44413,19801,10850,77120,19979,34023,86360,36141,55485,65364,69292,19698,82838,33304,75763,67682,42130,61521,40044,87524,91260,87136,42084,32622,26601,11997,86789,11992,15023,69492,45131,61442,24186,94309,90583,58405,12574,29848,68462,72310,76685,12395,59286,88249,70348,85302,22958,50440,61797,51724,40315,74806,15213,91202,85556,21261,97097,21217,80475,24803,90087,19576,19410,21691,44961,99356,21160,17454,72246,80750,61277,77888,93125,73942,89490,91489,95831,48625,85972,98458,24176,85324,79763,87728,21833,16440,70571,44298,86710,26850,89673,34011,16870,22330,43968,19281,63506,72708,58331,35200,48683,65061,17305,52298,83875,30592,96064,19016,78609,97159,77410,69894,26520,23663,93384,24273,15033,11358,72089,57746,61988,78992,39407,77147,28892,14215,84359,39059,12056,29805,76876,86938,53041,97656,35591,12997,13423,63588,81797,22547,80661,82730,93309,20710,62020,42261,68398,35332,93418,69111,71038,77439,34865,13590,51057,91493,78115,53599,41997,26776,53020,56489,96561,63718,67791,45373,72603,70723,42027,59574,87613,20747,31256,75607,11920,10608,44369,45974,80353,91641,79409,86186,40387,47206,19974,15196,68068,53306,10183,92151,39258,34506,26644,52760,24575,80860,74246,26905,84438,58000,34311,46465,59876,41673,66543,80565,86919,54324,30103,23100,36782,67196,38587,68057,30161,68300,61789,98995,18461,55364,41458,60786,19705,36525,63659,99342,97587,33542,97526,10468,87156,81956,13897,53797,96194,97499,27362,55136,99398,75236,99882,21987,93172,50454,10650,70269,69666,84358,90413,47782,23751,90328,42241,80787,70123,77442,80965,59522,77134,83745,69978,39593,92344,51172,37027,80541,77426,75393,34336,44104,42365,94676,33103,17598,92253,32409,89871,56741,36876,77911,24533,64797,27557,30730,73955,74473,77300,57687,71380,23182,21394,67920,62184,95184,88625,37836,42483,69611,51106,39505,13710,73514,11075,98180,61600,45477,11608,77353,50849,69536,14383,77580,26477,84527,84546,56221,45789,16888,67567,91406,13690,65941,89388,13561,43922,57245,96576,51308,73159,55907,67944,60428,71216,23035,41366,11237,97974,63243,99581,39769,34040,99645,68680,26478,89810,69367,14971,18561,14267,81963,18255,52934,45939,75053,73903,21899,10799,50255,81603,97587,33419,91557,79796,80997,33675,78052,97103,59660,86740,28824,52134,29074,77742,99181,13508,72264,74792,69037,91024,74542,44846,82945,67860,67466,17077,47583,93036,39819,33530,56323,26300,27834,96284,17114,85772,19210,42093,88565,67950,18817,51517,10698,31007,66483,73521,54956,45547,70430,41614,65111,54130,37519,18222,31632,44395,45475,70321,64984,83529,59112,23115,54921,10422,58982,52264,49083,98908,46038,20848,16861,18033,96464,35987,22993,55339,20511,79229,14168,80788,88707,18117,42763,77017,14119,16434,71355,42586,34727,27130,57690,12197,48163,49803,36490,12214,61635,61636,92013,82549,63497,57696,82599,82467,91453,11642,61135,16616,20045,86072,26414,66649,75761,36852,58812,62769,99757,95999,68466,73212,71614,92296,98564,79272,19942,64277,49866,41906,47840,12012,67842,46500,81323,94024,41837,43316,52548,10858,98457,73301,97337,67260,68530,87280,63166,86499,21576,26412,31828,78786,65101,81684,22551,11966,20131,49393,87087,19261,82033,66937,13179,85036,35629,94468,24539,62377,63221,41400,14763,25363,78553,80512,47538,36679,14553,41013,96867,63321,97307,28506,62484,19914,76522,20101,65743,31969,77354,19880,57100,93961,79594,38777,63316,52940,94512,77793,44588,57557,22323,77348,29329,24362,80877,88468,79218,82440,59274,58156,32012,63261,36842,49393,60025,39038,35575,86285,89579,69426,32256,35567,35453,60328,80952,79247,55382,99834,36732,68751,15616,54753,14303,71739,95880,12419,46095,27244,75074,68282,90113,54847,11815,92699,79204,59914,17623,43398,57798,56939,69295,95449,81993,90604,16265,65309,65626,61909,56159,46521,70121,97546,51491,70051,46627,73618,34836,94552,95727,43403,27486,22156,15931,99287,43206,69942,40510,69646,38998,49039,75382,44858,19515,17426,82867,56071,86879,75974,57468,63467,43452,55154,85309,50605,58459,38584,91034,29208,43780,77379,62921,24074,64292,19260,20790,12942,81645,52657,55632,62142,35571,46986,46726,53349,49560,97750,24315,49060,80987,62148,82022,34139,10443,87280,99105,73140,95114,34561,47903,57350,17466,74001,17379,73395,58607,54966,20304,40279,14684,26013,71624,44897,17173,18543,72688,11710,71811,29386,53972,99880,62552,99316,14926,61161,26915,61056,43296,67465,24214,36371,75210,73666,10774,53805,85873,69204,36233,28829,86008,97217,72757,44770,45682,19249,36221,58780,60768,94750,95059,17772,92921,83451,12590,22751,78932,30497,19519,10252,83375,35562,59731,42926,59115,51237,87221,45888,62324,41837,75231,83230,62824,71655,55562,58719,96635,11645,47379,36312,59413,90684,80912,53452,27966,22126,67501,63710,15796,76779,30565,64141,59330,60380,45325,34764,71305,29828,68468,60039,24811,33409,15703,31463,71571,91502,12674,96027,41673,68190,27194,70878,89692,97457,70231,77744,51932,16829,84043,45049,37982,46228,10482,34435,93168,69702,28045,43517,53741,76831,36844,89264,98216,31706,52041,72426,58109,10180,48797,60116,24173,74516,26262,56092,16828,18453,82859,68411,70590,45431,56105,66247,18217,53664,25247,34769,59771,63002,97385,71910,91627,98634,48440,44982,92294,27553,53119,97494,33585,63845,62372,65981,33018,57630,82313,64170,59080,43691,33354,71455,40949,75849,30888,28024,82958,60750,49510,22294,48515,85869,93643,29541,85170,33681,93977,76336,81511,51348,17312,70110,31078,22101,68501,66141,75830,41105,70461,82911,80363,34769,51713,95125,65261,21284,24607,59212,10496,28612,83071,79138,91549,70694,17763,64847,52974,82835,14262,49075,93243,11329,50124,58505,92319,77255,83254,79585,99094,20716,45053,61734,17214,67334,13786,46989,55824,45286,44918,16836,92316,24468,32779,69907,49268,75402,13363,41621,78178,18728,62190,80342,15646,40795,72790,81191,93751,75092,18154,67226,96962,30301,75395,28897,75569,23636,23763,44508,45074,63498,46569,82728,25617,58150,39247,96972,77566,57612,62013,91156,22184,86296,24408,52241,68128,94055,95245,22892,74589,83321,52304,59534,98858,62591,63229,44366,88497,11890,60811,56936,46331,95760,12745,27722,74875,64833,60673,31392,93068,26705,95669,74764,70104,31955,39254,41945,27511,24726,67746,81550,48087,12072,38887,49396,40758,60735,22951,25939,69124,74557,36045,28951,32304,40989,48528,78326,25221,31687,22327,26290,99353,21178,35020,89307,79204,93446,72401,30572,63219,75372,59549,57652,90080,35001,65095,55944,61228,41524,59623,50977,32515,76863,33023,70838,67951,76952,96766,67850,67361,89809,67274,70562,30845,10439,68125,56745,27288,79222,99286,14502,60389,52131,16572,30867,88076,17191,10214,66524,30395,28313,56118,51110,38989,79808,10715,40599,77949,50574,73000,86138,79486,48524,10458,89929,35842,96438,31959,62875,29539,82273,63831,89031,65037,74170,63733,88119,70224,20285,74467,98246,52682,44119,72643,69810,65395,14283,80460,23803,62296,20819,74508,46029,33552,83898,68900,36080,29615,44310,94823,93058,53024,55798,72696,51183,94655,74207,46207,41876,40791,33350,34484,66903,14333,86620,44105,45092,84361,92150,37823,31644,87570,60896,26974,18128,27837,35519,88574,48531,80829,49787,52590,21216,31587,64165,23661,11317,75632,39870,72881,41621,65507,31098,88428,90369,36327,62710,81743,93569,32889,67927,35541,78371,97706,23806,39148,75512,47899,66263,64626,69776,50686,91566,51149,52423,52956,69794,49393,23213,24106,22706,34855,52543,85415,28524,17030,35669,21947,90424,54383,96086,14025,46787,21073,16212,12190,55651,71131,62400,80390,71377,78100,52418,36275,15730,55936,43968,38380,34071,12004,71873,10727,24597,24626,23460,43239,15180,90904,85477,24679,17024,89383,29856,96279,77239,69811,47380,81840,51822,51519,86897,90692,83882,46092,26351,95293,33466,28529,96855,98008,46896,74503,74955,32084,65163,73193,21342,99247,18006,28021,57940,53417,92033,61097,93263,50050,37679,40391,28063,31808,85915,84911,40992,43422,20540,49299,70797,50347,83123,85821,77229,73003,86489,15527,72615,27952,37322,57051,41888,26140,10127,27153,96862,38069,92128,33697,91774,96026,95889,63103,15145,96678,57510,83849,59080,29561,91337,49289,53993,77661,37313,97901,41327,67825,80814,38161,82798,61657,55395,11174,52500,45699,73490,82193,14185,40516,31767,81021,51716,55169,22159,36053,51887,70584,13521,81210,24660,22146,13762,27579,89072,75927,60312,87044,89238,28738,32882,75790,64177,27423,16968,26529,46853,53387,88362,23216,34413,65176,56892,12277,38966,54384,35880,35105,90613,12583,88396,88844,23737,57954,51187,93384,21961,98232,47070,16386,46261,51433,50192,85824,20481,57046,24788,32017,47953,59644,11987,67795,82076,21377,72349,13955,80832,77282,25469,55983,44812,83570,67912,82154,53290,17995,91821,79562,20068,96423,75910,77453,57480,78830,47755,34375,90066,62651,76353,44719,34725,69863,85211,60371,89795,61112,98531,12754,96528,33855,43515,96666,38463,59375,78847,72337,40712,33989,55756,64653,87753,34243,20843,69284,14608,59075,79171,78957,42987,97843,79293,97351,73491,80691,37026,44825,42960,52162,26306,20750,28987,94234,57100,17369,12702,75031,83750,60066,26203,93031,23606,28414,27995,48048,90479,83196,90005,18250,12710,63202,85376,23351,41093,26511,35468,52286,93542,29751,62029,80476,19600,13266,57036,82444,68775,80498,37596,20464,35632,42127,49322,39009,92742,66415,99571,20675,48655,79889,34846,37899,19895,46072,75796,97420,41130,78010,11220,79471,67289,78786,28944,81364,49277,81203,66207,71193,37287,88586,75067,16383,60149,33319,38822,45756,94677,45289,58650,57869,38440,62592,82130,98776,71841,41791,32377,68978,60006,48168,81972,42079,20783,51489,73705,71072,33432,23355,67543,48780,84427,17835,17727,66510,68655,47261,13531,54852,31494,50423,17455,98913,83729,72218,68288,42433,10277,16310,71907,50805,98308,20539,40922,78019,86130,51172,92593,60281,89358,19050,52326,35916,54031,13523,92215,45404,50674,50555,24711,15532,80203,50194,99689,90296,97594,16659,38493,43808,36140,27979,69967,73329,55799,37082,24132,60168,88155,60105,49856,61409,83551,98010,52713,82640,86081,47080,82100,22624,28399,32636,73303,24550,49183,74560,72885,94480,84183,57689,36709,19319,38575,34468,32791,55829,70578,11476,58741,82176,43418,18731,68937,52726,78718,31744,90910,17159,69699,63207,21499,31587,16783,11122,53218,10291,25654,33621,92675,90963,96581,15084,67109,62761,13920,71576,29371,29683,22648,22786,74877,81921,50452,16464,69547,92974,57043,61970,45051,53377,18531,43743,30862,51590,23127,81832,62209,44586,38557,49969,47217,36085,51747,67461,22621,55718,18336,34072,47748,15942,94771,20149,94981,50188,79442,23441,64819,23860,70155,56960,22296,66213,88777,66849,32959,99078,53206,67181,82677,39042,33870,96900,75927,39041,20185,96229,74575,92643,38609,34987,75110,13225,89856,15934,58210,93381,80271,65648,25856,29469,93823,11883,86605,76205,39278,34396,89566,61265,60616,17667,62752,49667,42309,95744,11694,10155,25658,70373,35306,45407,63440,49056,22942,87273,66525,91706,76721,74567,61650,52170,76331,53929,82829,33157,45408,92330,50826,58942,50884,68691,98251,88908,78012,72853,56588,11423,62528,34810,43864,23290,67611,12200,47153,11987,94859,56051,89524,43262,61041,61898,13688,52655,11559,52356,35694,39589,43292,56325,40619,43650,29016,84907,43535,43711,37694,42196,76576,98189,32157,79390,70774,74671,63638,65367,67462,62181,49093,25893,69340,58162,61506,30361,24202,65958,17663,33142,76314,93481,41605,13737,85249,22911,74395,33826,83518,29637,57698,48331,82069,38635,65921,51531,87759,42019,39556,35213,27705,52936,34247,85317,82141,52591,89771,27231,33391,57656,42163,37863,94856,61759,42736,34014,24476,25837,34169,95395,72404,31168,87632,37886,11687,85178,14787,24348,42928,34009,13032,73289,68598,98803,53236,93102,63978,64947,71309,17293,46822,26255,29708,76446,32866,30418,42777,17773,18340,81962,55879,72385,37058,90037,23224,14752,64686,46209,55454,12688,71273,43416,84744,39161,25439,71858,69346,51565,93103,29795,61534,88637,31322,34843,64722,27291,70417,13090,76758,69964,21327,28485,50778,14412,35310,47972,15440,20145,71879,35476,51947,86867,61272,59031,93688,62493,97305,22592,71441,58426,53699,60748,73989,50833,43065,12684,90861,84668,81513,73745,50688,18249,78077,89751,93026,47250,73627,89379,61299,96104,33273,30117,82608,95116,90072,93103,97877,15588,45167,63520,71131,45755,51956,19880,93159,39350,45030,93177,88870,24550,74068,93136,86422,43211,89838,80505,68016,56876,29743,26960,85045,13648,37145,39869,72039,23470,72106,70811,83402,33512,74044,87910,84886,11321,24270,46791,54836,96748,60570,31432,85286,56524,13739,56815,37107,58747,31396,91788,57464,38017,77762,41863,76299,97495,61883,41312,83491,32598,65009,55324,86947,82067,72772,35431,81309,55382,77713,71732,79520,38646,69134,52057,50427,63923,17356,26476,50717,46333,99732,34652,82590,14902,54774,21976,69361,56653,77433,33603,83019,57288,65639,68480,56441,86084,20878,94806,85066,77711,25426,62396,91127,18255,24803,77894,18711,54214,21185,83851,67238,85478,28524,41104,10202,67960,67760,51282,88367,78631,24963,56852,56734,47922,75584,53056,95165,97157,70454,29880,33048,71881,27007,26357,41647,23549,53366,36173,66680,37953,82495,23868,68658,98751,39612,57312,15486,80172,29477,16459,20600,26189,29260,42325,48940,16126,81285,50566,19862,93336,99668,26596,94347,48501,26337,26801,61253,13542,32395,33709,87667,54315,48312,70468,55737,12151,71307,82448,90242,43827,24875,84167,65432,19686,50494,98393,73801,78444,99882,46168,53532,71140,99814,19197,77390,59089,99498,58003,46517,87119,31074,26884,49680,74835,39047,26397,25757,95553,27395,25019,27109,55564,47665,45400,67534,39256,90575,97454,60473,77777,50486,62445,84088,29183,26132,40945,65087,64244,46076,47607,48813,37523,15545,13767,37533,69547,10099,67286,23062,57796,44056,42425,24014,13399,58345,97188,91334,94202,24997,91671,51613,52482,47073,97301,75404,84235,71611,63681,58471,67910,57023,23696,83424,71310,98222,16637,40230,44907,52971,60527,93777,45619,13073,62877,62984,37344,80115,38108,98137,25574,51514,24067,16467,10593,22641,77291,36169,27749,41199,19808,45051,32819,30301,15548,22737,47559,28868,44304,31923,88499,45258,12242,22460,57154,49761,64006,93168,75836,91997,99313,40503,41133,93676,24009,31047,92568,18465,45681,54571,73094,55470,19701,10812,22039,92312,21306,63132,38864,38953,29735,93103,29318,51972,47956,63487,23756,58316,22236,51601,90740,42819,32096,88558,42819,69255,97900,32853,84813,25578,40889,41674,10188,51437,42674,59088,14546,27895,61855,39191,53900,56864,77185,22182,76133,63621,47595,39068,20090,84246,72625,23142,40333,27526,64520,75508,19654,92728,60360,47612,91742,79743,98652,42478,89979,35962,39104,57545,28177,87948,24561,67010,60605,85727,58935,50521,72733,64559,21801,93958,47741,91636,46050,61537,67701,56471,56450,99953,39636,72271,34800,59646,76692,84209,67443,20345,95124,76963,26850,90648,93458,99321,15625,18699,81618,90935,89395,91526,43064,57903,93449,46283,20018,66047,92804,20958,73510,60951,59688,25882,92190,40118,52826,65538,92979,46330,73861,49923,68583,31820,38398,12532,98911,51611,59685,10378,76222,50377,53146,12442,50044,15875,86102,59931,89346,38827,56756,60808,73503,33467,10394,42194,92204,15332,99559,73446,14030,76551,17502,86892,66017,19116,49330,78777,84168,15753,30845,76254,19048,12240,24006,56673,15979,73644,58823,58820,71041,98516,64334,65020,14070,76320,66237,38109,73538,72329,83663,20022,49641,78664,73827,34774,55538,16833,61730,84285,41465,26827,51427,16952,80515,24767,17513,73495,76122,50076,30118,23767,17278,43445,63689,96570,21994,85868,78420,57795,52985,94098,82875,89952,72785,55886,53459,54068,91588,25352,35326,14822,21277,64195,69431,82644,59267,65504,82186,11440,35094,31100,15419,86481,92665,13395,68022,99266,95916,57794,36780,89642,16497,45212,89412,54790,98264,13215,76597,28713,58742,36660,68790,71334,95248,41566,48249,43677,89577,51151,45977,24893,84897,20537,49763,14900,87288,89229,68442,97578,63648,20492,37865,16135,69299,12158,53526,74342,61558,79245,41296,64684,56275,68460,92648,75826,47141,98601,69069,86267,91177,86054,13198,46571,44973,70608,48540,15704,63331,45971,89525,66537,66226,83113,91352,83761,97624,74625,19020,75804,85835,31275,80872,46812,34829,43086,48494,84769,69873,41413,27976,85142,47440,69579,72603,48684,86094,51755,61784,28625,79213,34829,53203,71765,71933,61108,76618,27356,27287,43228,32709,26717,62383,68155,10707,14132,58643,70077,20790,77144,13325,91180,34803,90425,78856,52658,65036,44557,58085,50578,53863,46628,52450,94004,13430,52286,56533,98360,16831,71301,58090,64344,91413,76040,72129,23458,92243,84031,97799,63425,77727,39727,83273,40131,11785,62237,88615,61976,16117,56417,98068,63723,47248,39627,41886,69633,76876,36461,41977,46669,73168,41148,34609,64786,78837,15680,49279,52746,42594,80997,34705,73122,43233,78799,74632,26279,95971,69643,96071,37396,84852,90448,50224,65060,48446,69288,61822,25617,57383,20703,30909,95451,51733,28122,51435,76672,99330,27601,98450,34004,37174,50869,59478,58944,80644,73949,31161,78938,15132,78610,15260,27823,80556,10742,80409,74026,52136,57491,29476,36842,66264,26605,16026,27309,40930,11291,36491,13873,47476,39627,27745,86510,93236,73550,11197,86247,47873,87375,56301,70171,60859,76670,50490,67264,54906,84164,45812,34574,73048,71571,92442,55203,77706,57926,68148,27033,31814,72157,26439,62618,21350,74661,60490,80706,31062,14229,27241,80187,87641,78510,95626,88789,51507,41861,55224,87512,19168,27951,67245,86139,79202,17167,85113,66447,37303,62585,46042,85679,70358,86127,12027,37596,81005,20868,37706,83761,90176,17497,70801,60578,74009,38476,21733,84870,33329,19266,93320,87232,91867,70035,40660,70140,10181,67094,85528,82625,87529,78944,78079,67482,65882,59528,84968,13862,93294,33015,46985,30483,63523,42788,85293,18605,44627,95488,98740,27936,23216,90233,67611,10025,74482,38010,30490,39055,79981,45072,39807,36679,52634,60639,38423,36676,97075,33737,63981,29286,53701,72907,94575,69127,89320,97769,93287,99188,77437,49704,28780,78068,13678,33169,21055,71285,76086,34203,86697,69041,85532,20845,93520,56988,46213,73143,65329,75922,70484,62176,35308,11751,42654,91058,95065,39747,48757,80070,46649,42053,72820,91420,67677,96891,85174,14133,52829,55727,28543,48282,12566,77323,35753,57725,84554,79277,46614,84318,36969,96589,66205,20161,86119,97388,29405,63952,93767,59893,64113,58774,56986,13634,13174,89467,84421,35737,18109,15434,40594,36873,50064,29954,59137,34426,19454,97742,56489,70574,63418,68219,12339,39823,39466,71021,96519,32785,55825,74200,24731,85314,94627,67321,80426,44159,16948,28673,98908,71383,50813,40183,77365,98146,95281,47199,21228,83369,61756,65190,76359,15577,75771,80152,48653,92016,95970,78642,74559,21475,75048,50646,18611,85625,51651,66997,63367,12026,15661,85886,59301,87459,55126,17562,23967,37716,26584,48860,47063,25267,31065,86903,30234,63252,67050,66771,55706,32326,79467,41423,93207,21547,61176,63886,72549,53189,68744,33644,52961,34490,71083,69004,63094,56738,68107,15187,86780,82928,41510,40696,75907,23509,11977,22302,70101,77920,24085,48473,12068,98054,40499,77855,71685,67725,39699,16196,26720,65332,23177,50154,19130,13410,77802,46136,97081,23871,33343,65618,83459,87448,73231,89105,19945,42659,47713,92486,71687,55021,62661,69753,70230,79829,86449,61396,69234,77959,48320,50663,33917,92119,61421,48683,98901,45462,89774,17257,10279,66244,27699,82967,10105,51224,24046,81870,61995,25136,67879,19206,75155,77742,48038,63204,51796,16320,58649,21369,64991,41354,32681,16443,24964,20899,72396,60636,33672,90540,88943,91889,86307,82290,84196,23406,53830,24714,34187,96693,42714,74528,90114,55705,30601,75738,20332,65101,43221,13725,91449,17631,96307,88790,72184,75706,59039,48881,13688,96117,94513,22621,89169,75428,53004,70347,18816,62354,31614,81351,19292,91351,58016,35259,67196,38733,87687,47836,92969,23807,67896,54289,67731,28348,63711,71263,17025,35598,72403,55939,26535,39178,97480,60313,75717,90380,80285,40658,30759,58678,83592,61056,11985,14690,68001,75848,28852,13457,59529,84899,59303,50795,41099,66975,34172,98552,87411,23953,74370,62315,26715,78592,18517,80661,82825,27102,36034,70820,41538,13863,23058,31065,73110,39782,22338,42742,31327,77210,75711,70089,82197,73836,87607,27919,67975,12653,22045,73866,85869,95987,70379,65431,46088,13816,97702,53435,36677,12918,14675,31926,36868,66588,64780,59286,84119,52937,50346,90306,68297,28994,54656,43062,38974,62589,50370,52785,78232,49867,60998,63141,56153,73375,85208,58739,21088,31558,62716,33319,84848,11379,40000,32545,38939,79362,19257,95497,59805,88028,53491,41663,95182,62949,59656,73354,42593,29962,81562,85882,73185,28627,58832,79897,50140,33434,62661,30574,63871,22841,44784,45393,97590,22086,20348,20140,10706,68822,41262,25384,36959,28030,75243,86608,51440,24737,94876,19619,97633,57460,11257,85612,11790,29037,42575,83783,81139,10033,52326,68840,35785,81562,93995,49443,73709,48048,40990,69053,86594,19120,94156,57178,12088,69293,17477,33480,43090,26436,21262,28976,78354,42084,19743,36125,57862,80307,38237,77240,16356,62190,80622,38522,93780,73499,20448,92179,26557,62607,47312,85036,25695,15734,76242,97202,67633,63295,35131,32729,52519,68414,27280,76017,54702,58262,52129,76188,36985,92122,42023,14876,35113,13441,23407,20451,27475,38000,48967,96803,17115,26215,94298,50670,65233,10446,40636,63902,17865,48284,55099,18427,21167,19330,78517,76255,80402,53258,59293,39366,74573,46260,10970,18898,28015,19950,37547,44729,28860,49942,98552,56520,42185,22043,35138,38412,77843,21424,84380,41810,46042,33992,73305,88951,60673,42745,50462,53901,84697,26343,53280,29503,24972,64403,85642,17817,53220,69591,10719,91569,63299,31964,36493,65192,47393,56826,18984,41824,70171,76030,37362,71276,64217,23296,93947,63912,45294,49750,72039,41068,17363,27974,36967,62156,37333,67165,63087,60466,70206,52345,33294,47654,28706,42234,84951,96007,27759,90861,56776,98934,33640,98720,89681,78723,95211,79892,45875,64300,46402,86119,50877,80077,90281,65336,29117,91330,67708,89446,17513,23511,78097,85631,86284,62308,53127,39282,30402,55000,72799,27009,43075,64626,71479,93190,10275,89195,90028,20759,19152,39373,40385,61164,27043,89197,40833,46982,25225,31288,30814,55085,91409,14491,89637,76388,61454,39229,40832,57819,83122,46175,67621,15449,90511,92231,35052,92705,33487,75478,32989,47104,67882,63105,44001,70342,63530,47727,74891,11292,19829,62450,78575,65682,34439,72975,73767,92728,42499,78364,17110,53695,12033,20005,73267,99482,89266,31765,89037,27888,29411,57084,53638,70542,97656,63336,92178,45027,35803,38703,40825,21519,73612,41296,31637,12098,29865,25762,86937,25607,22303,42521,28373,52379,94740,15724,28316,63391,79864,63532,25754,63195,50642,76068,68927,23376,91633,38353,21609,29594,49986,87330,86519,53476,20776,37694,99532,51520,87021,35187,97701,42465,96285,74862,16909,17137,72614,90134,69685,57927,15356,45530,78533,26207,55945,13455,80702,96655,29350,78227,28927,36174,45728,69237,52407,38237,46856,30345,89210,40459,77383,38031,78958,88318,48933,73998,59363,16319,14254,98487,28294,98938,31666,64245,84159,10871,56578,44375,55134,11340,64612,84150,22049,11438,83676,80323,93301,39582,37356,46249,39268,14792,65911,70073,27367,38051,53166,12548,97207,87652,53926,99857,34566,81828,36350,44581,20062,65930,38413,39952,56810,33168,50364,55157,10935,63437,35828,98177,40778,27424,32049,45328,31278,17840,73950,87317,61812,46931,25698,25118,52819,19811,29853,55443,48120,51434,34056,77767,16612,85304,62245,39416,71163,51643,36420,44907,97672,58128,47018,45937,72517,47906,84692,66602,40046,22519,68568,52715,15063,39741,29486,29073,48217,89825,72898,82216,34015,78419,91417,46883,45165,45021,85409,53547,93536,37196,54003,53130,72087,28663,56451,31700,49534,96182,42791,49194,73469,96072,59313,73416,14051,95561,68904,92857,88953,99475,64113,35488,69041,49484,30132,76189,85893,75349,76825,67742,86913,28588,89022,47660,76518,67006,96170,95334,44714,93597,70085,16655,24804,50450,28641,27502,72909,10101,14468,34295,50651,21482,36052,27379,67710,27755,70179,72641,72180,63472,68995,28782,23019,59904,51210,91936,72020,20432,67128,15690,70123,65607,96520,48559,29441,29064,82603,53961,34797,50283,43362,48383,12450,64971,43132,55359,26117,48040,48173,20165,11257,60606,99913,76891,36421,88016,42324,79100,25758,96681,61310,17897,80662,52211,43305,85433,25483,21399,13842,79284,49372,41550,44111,23490,48851,31926,24244,41123,93170,88334,89164,89394,93645,93202,94633,46539,92585,45531,37178,81445,99851,22304,76584,72162,98571,16278,54084,27501,39732,29119,61557,26247,98101,79671,49723,65695,40372,50182,50027,63462,84162,23159,75946,42058,45498,72493,28584,82268,96148,33425,95045,46132,43944,42369,62001,73542,14478,59245,48232,15034,93814,44526,46711,19062,12946,32678,15701,69883,89321,75951,63042,23870,41389,32007,20716,98742,52730,30204,31320,22365,23130,53306,33863,76069,76515,59752,43228,32552,76538,53223,93950,16378,15476,30778,13565,52310,66732,26134,53608,84881,11717,68488,16842,14224,53976,71132,85630,75652,57730,47887,23252,15761,92680,57833,31216,88870,70280,54366,13595,72775,37151,92005,81591,24011,74080,47547,26770,72816,53812,23162,15768,55512,77411,21692,55763,21447,42805,63456,57541,42904,64596,86515,67080,80972,28267,31825,16038,92346,66127,20076,51192,24534,53554,29461,42969,17141,88439,43108,79526,47273,28423,59152,57668,40670,45657,40434,47208,15080,98385,23131,23707,49024,84937,76496,64875,58815,58361,28204,67377,10058,34675,58428,89287,98734,74596,95983,77184,19259,90561,47721,54287,70713,58293,49528,59087,99976,14250,94701,62239,34726,58308,51889,98151,92610,99658,17359,58272,80835,31359,59189,19168,16684,13126,43343,76226,59043,31641,39212,20622,64870,73718,92837,82221,96366,61698,44550,25920,52860,97881,24551,27086,82091,70892,21866,42246,65118,34200,55458,39376,75521,79915,20651,33354,39409,87100,89774,94061,21712,90603,65694,56136,27441,90086,43965,59052,21798,63147,46600,69260,73776,77310,37021,39188,96265,94246,15444,98123,16826,36440,34556,30326,12463,35458,58743,22969,70315,98180,39583,40716,45413,28513,25694,65369,28287,75479,31140,94978,22243,93879,27233,90418,53276,12860,30849,58075,26491,39668,93651,20080,81196,81364,60207,25579,61945,41081,88637,53055,23826,22616,32945,21278,16929,67581,35270,77030,29300,72433,37716,73105,80074,51527,85511,36044,69024,21266,87920,42328,77608,58148,67612,19894,36036,61537,96333,98570,86498,88160,90703,75167,42510,76444,89166,68087,87394,61741,66930,58922,40713,21136,89554,50537,58965,90388,20864,34304,33151,77913,42743,10155,78073,31983,16423,57279,71755,70237,57660,45600,49474,58124,89413,18308,33620,77004,34373,16283,88654,20772,73021,90145,64099,75691,34298,36510,67500,64957,34029,92927,53131,89831,29340,16461,42976,87664,96117,65503,27230,36765,21925,50601,38803,28538,31225,85353,57239,39329,16355,31710,62260,69720,85945,31282,69063,65286,90524,90457,35742,81647,49569,48785,79732,40632,49797,80843,97232,98273,99609,92603,60146,77818,94141,41073,69981,38541,22623,99855,60981,45681,25794,63377,42874,25051,17891,80189,64424,87801,15807,97707,47927,63758,32408,50655,47948,37225,56476,12605,84108,43936,13116,78639,11355,15579,80540,68043,92660,80678,16626,68336,66158,90266,77026,95088,68724,43372,97963,76899,94867,25126,69431,91744,90196,93302,75586,42215,64240,86805,35444,54656,85759,89481,88120,30096,48468,22871,88744,74112,32939,90055,40879,77150,45424,26785,60286,61514,45376,26639,52793,68153,68781,65223,58291,42302,30871,28096,37722,77400,56049,15825,61577,35535,62706,95933,43772,82987,41643,32125,31992,93661,32520,86962,80719,53991,15307,39671,70062,99709,73178,39247,23236,36797,32444,36953,39619,13965,59762,23969,37871,46361,21066,84949,84686,94031,30842,64833,69373,14023,35223,64985,69570,54893,90167,89846,94926,33038,83543,54097,41585,31713,87262,25142,15730,50080,35993,51936,99409,23677,64658,83136,25487,82987,91788,97515,72776,42576,66208,33158,44679,15012,36655,59716,92840,76833,11247,31651,54498,49204,31113,42421,27719,58791,61362,32270,57775,50266,10568,68379,51274,18184,77910,88418,49810,85766,67374,65484,80034,58700,65252,22336,77860,58446,98704,81747,87918,16874,96311,98232,25505,88504,74524,14861,17040,34117,10170,44668,29134,81546,91419,77501,53323,23106,55658,61364,78538,59517,33177,39925,81912,31427,83461,11797,27552,12692,44465,39898,38213,22931,18328,24884,11318,83873,94009,55609,59228,26072,38330,55275,43514,84090,58490,38968,62425,97132,20664,12291,84956,74213,49367,60252,42858,68384,19120,84029,51789,64133,20730,26102,84811,23607,50449,20283,68043,43423,45086,74530,84142,57950,60700,70982,30905,81642,45388,13962,30412,18974,26246,42240,33764,29131,70349,48629,43356,71655,10862,99865,25502,75171,16062,54483,12665,19312,96358,22024,77943,11949,98953,25377,54135,95274,74502,85780,90703,98065,85849,59895,80764,69853,21975,64621,42103,85616,41637,56357,57335,21233,25214,29726,22207,26586,45137,69846,23786,75915,49141,58459,70595,78265,85285,11672,92371,56668,67104,97873,65204,64067,24070,32548,50472,16152,43441,81414,42437,57770,83640,81895,74415,27739,95404,88761,80675,66554,23456,26496,93924,15559,32863,40776,44239,86974,27628,75477,86167,86553,69713,48848,69181,22930,27907,13128,44409,89053,18049,41822,87005,97398,45123,90681,56342,97072,98370,85555,17913,32969,66264,25137,11456,39077,80887,29564,11031,90057,25890,99043,85186,26998,67409,78585,43076,71515,71218,30818,85032,10777,50848,74774,64752,66102,30965,60828,33374,94623,81555,51649,44039,65206,41767,64727,80296,61973,95843,89823,76546,82430,89259,73874,35616,61069,27266,74060,12570,74955,28090,57602,33763,26828,43946,61777,42206,48343,86376,37149,50287,59094,54936,71483,20632,24975,76694,29281,45815,25210,94611,81123,21669,96004,59265,31343,55748,59019,48305,42215,23996,60739,47569,55492,68724,77841,35097,10688,43803,27781,97054,45838,19441,89263,34423,29629,48149,39433,52308,28565,35711,28126,83872,50555,64162,87706,54048,10540,66096,59673,48886,67554,27750,30234,70945,38566,60184,35794,72176,31954,39986,92812,96471,96550,77708,38299,47828,28360,96705,77494,47196,90731,18681,40007,21298,50336,83486,14239,18998,22526,93757,37654,13026,62083,19520,33447,87988,29023,46521,39618,56264,54596,42511,56527,61484,86254,39981,75199,97543,44442,46270,62010,11907,54853,57641,55394,82486,34328,91441,56155,53007,95784,24174,72198,79517,72348,70738,80261,57406,80309,98456,30245,65798,62741,43646,99539,55353,27042,47070,79106,48119,52317,88431,32175,76889,88581,98992,61810,35223,64783,55562,99481,91569,30097,57244,22357,49244,80093,72643,68604,70514,58352,46583,79698,91223,29280,71139,11639,72220,67338,16152,13452,30038,78839,67565,47191,36491,68514,38623,67525,95900,44704,58677,85951,59506,57961,99780,59941,18689,20272,23369,65483,29228,60551,84446,57286,16681,87698,88886,45589,53731,47724,40245,99091,74468,46974,88819,61974,38166,17895,78074,57239,41915,10268,72808,71228,34540,75801,34060,33625,45391,16823,53190,25831,51605,94492,73721,95692,21357,59846,37434,67536,16927,23087,19978,53891,33383,82011,79172,88712,88388,19334,27170,77376,33048,11358,15663,19955,36324,87573,69158,12909,49896,94022,52397,48470,62173,83056,62435,31699,22241,44057,10812,54711,66485,63830,94538,68190,14509,92884,97013,13905,92574,63798,74451,42959,47194,69017,77761,59695,97538,58989,79737,44491,58751,47449,74507,46397,27147,99021,32603,99468,43760,60519,92940,43410,99286,35809,37670,27243,44838,60676,97081,44652,92357,54724,83479,55610,15583,89908,62050,17492,42929,73721,78340,40086,59903,16453,30398,53410,41232,97906,97346,45662,79219,21286,94358,61403,70395,80009,96266,40169,90204,26301,30172,76141,83670,98434,94693,14345,23676,16446,52495,42078,65355,62504,24970,31442,83965,78758,29136,51594,23736,47204,14520,74693,95090,33319,28264,24521,78249,21368,13325,36478,68406,44989,20752,78288,38542,70880,82619,65020,38456,41713,94667,43176,54114,83954,57018,47624,55411,37020,12471,46725,83400,54303,71146,72803,35949,45291,43081,58527,52910,70515,44600,99756,53976,18553,63017,70744,34560,72709,89506,20809,73393,37989,61166,31986,73527,57285,85165,65525,43870,40499,16719,15408,67656,34091,62493,80904,59172,54893,95648,61325,48778,83923,47337,69990,64579,16699,37079,38060,31330,24505,16868,83902,28455,45251,19534,43069,81218,48921,14688,29266,63632,68072,67901,87032,91670,60138,90948,49650,35930,49717,87600,78714,78033,83562,25449,35125,45377,97490,49910,10776,70492,29675,94573,39872,81343,83944,11144,53814,25888,71011,57820,34026,46265,38175,92436,64063,72260,29249,26142,17073,29175,83225,75602,39402,26619,53702,55583,18721,78256,23011,22693,89771,68078,47440,79823,82401,30274,58842,36337,49616,64538,53337,57129,24625,28968,27195,78562,38528,94649,32870,86027,95458,90384,96741,67669,82710,32317,89026,21225,40178,49559,37900,50741,55635,21068,39229,67909,50278,75248,27056,65213,73844,31250,83900,42658,91770,70044,48349,36872,31021,67846,17032,79406,13024,66627,60749,78416,88363,47964,84932,52188,29117,47279,43679,67620,53730,67181,75809,21795,93034,63714,68936,80135,91159,30413,79807,69917,11033,30350,43124,60612,47358,25197,94046,11624,95725,47979,83060,12289,78884,31128,48331,17269,57275,84774,49314,36854,53776,63761,29513,49289,91092,39763,43936,14235,40856,61725,51242,80543,47254,68775,20145,43048,66388,45347,29475,23287,98386,46345,59768,84360,65258,62283,14073,65697,25013,71285,39626,24525,31012,57926,95132,31178,89210,64168,50273,53869,62637,41895,67958,40132,90482,53945,27597,26135,53592,48508,66746,20800,13916,29607,41450,54682,31604,75497,77213,13666,46129,17930,49204,37421,16027,49514,23556,29211,68883,29495,71992,91984,80069,68343,14739,19246,50831,42886,25075,82492,96574,58297,97907,49456,61896,20862,62518,33870,86222,27249,98570,31283,43237,39191,28088,90260,23359,72095,32261,84346,32122,10926,54404,18369,57562,68319,25554,94117,93497,20895,50395,13890,21409,82348,36527,37641,44554,68613,23429,23259,12736,24477,43183,91008,33504,68134,36087,15193,72145,50339,18370,73197,47008,87436,37260,86673,18631,21082,35812,87154,87201,49918,55418,85070,38544,32331,31962,10136,46276,48217,63565,50372,56738,90263,27919,12327,49515,61062,10795,98465,94959,92256,35729,15549,16912,43032,78459,28214,16346,14746,30195,55245,32978,76443,50847,41075,31907,14329,19865,43456,54323,59169,71420,51654,68245,59948,41201,83399,65039,75464,51672,51217,33393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43,29875,50930,76606,88806,35221,40282,50391,86816,93008,18523,55923,79748,20889,82341,96271,55411,92897,24604,72073,93303,11072,32452,75847,56485,30129,28519,19140,30643,32846,56963,55052,81228,14846,72629,33447,87775,41283,73008,44995,51433,62744,49430,28613,76479,49043,20256,22392,39562,54323,79567,32590,38983,85296,33256,98967,19090,74631,75470,59644,38102,82690,11658,64746,89485,62649,42707,25942,63344,58712,58783,93356,54435,98047,25239,72206,39615,59699,94529,50943,60885,76581,56965,52026,62198,94563,63658,76456,44097,40762,45856,91314,24648,54106,75545,28142,35683,10760,13106,90041,99461,59780,29974,73030,34683,13252,94764,93750,60243,69650,55924,11791,44581,98362,20207,80117,99434,58650,55846,12229,75061,83632,27604,18395,27754,98407,80709,24344,56301,47068,62123,30952,79884,15396,75945,27997,55113,61809,75603,17999,59833,48817,99612,13074,56765,24786,23310,13641,94346,17468,84263,16619,65226,16947,43047,52962,22521,45072,54841,41415,44747,47263,12607,28835,22259,30997,20727,42609,98750,89159,12309,62711,34661,17793,30845,73348,26725,79104,27077,31065,19398,66815,36808,97485,85803,97487,97072,24491,79319,36279,78379,86268,13280,43034,19084,45563,89164,91246,14596,71418,42679,84023,12081,59115,89516,78802,85034,30181,23797,57986,32861,92724,45595,43352,96070,76585,41237,14470,88563,80903,72357,82910,96719,47653,95117,72877,10592,98970,27815,63741,51798,56158,71585,89393,79071,49192,34031,27505,35713,85120,90231,83781,67258,17277,22686,73879,53171,79999,60025,94644,61571,30491,54008,15836,73527,87311,39757,81684,90799,20668,34261,55967,10590,76354,79048,83418,85247,22099,40582,80811,92895,19833,33952,48066,91874,93174,34085,34220,93078,27084,35749,45840,30947,84006,97467,39135,20779,44076,98612,38796,44792,35746,50961,89683,50213,40728,79339,72935,36146,64889,90022,31850,47046,59706,73283,84450,98596,46247,54433,59725,59514,72991,51424,96001,50177,57109,41239,25789,62521,79321,38141,12260,35325,52681,49005,42970,51127,35876,57049,43581,91940,27409,25699,86571,87929,99396,65050,89078,42009,93335,43071,90074,55213,13121,91546,94185,18527,97437,48615,47507,47654,36400,76661,93554,93958,48688,79841,76539,63200,81924,18433,16273,39695,13278,95912,13358,58858,50890,65059,32136,43032,84040,20638,28139,81038,54017,12069,58131,32454,12442,73103,89849,17691,57738,57656,28142,78463,67289,36632,77615,10114,99211,76623,88180,96722,75353,19698,35672,91836,53360,89640,36218,99868,61642,13805,22107,77770,73776,40552,72172,30021,30640,28639,44389,49274,55616,64756,58096,40709,91310,16348,40385,65575,38133,82363,56359,67733,89802,64978,51122,10771,17572,99258,32251,33479,87654,74944,17989,40426,49025,31684,61865,41529,78025,12353,79167,70522,66035,75352,72962,66831,48777,53019,29111,27025,53671,67134,64498,74556,68049,63688,90930,10749,66940,88173,17749,96889,38670,43257,74841,66925,29054,46744,34222,26914,77041,66347,94531,82081,24331,94913,41214,26840,14655,40683,67471,82331,34434,85615,76473,77974,59440,36958,23997,79710,79702,65647,55017,73301,49957,45453,89408,95839,89264,56533,81935,85270,71732,98938,97212,47335,89811,59344,54790,32155,26448,35488,90837,99332,28456,44824,44711,92574,98174,37563,44572,15475,94332,67756,59153,82027,80295,79908,95953,68852,34902,97106,92769,18856,95543,88886,32639,55256,31751,76444,95440,84463,64687,57615,40495,73751,44687,56554,44148,42845,27326,79236,77578,54687,61576,36955,33552,23974,40840,46418,37044,56648,71550,86087,25328,75929,80119,52587,76814,78911,64336,88051,46211,54645,33779,75662,84814,81509,53001,20375,95089,84900,25883,31552,16891,61523,80543,41756,57381,49296,48393,11328,59216,55032,74010,55897,42542,31710,88265,55513,90054,25839,40827,52830,11278,52517,19210,28051,16848,54924,86900,74605,13812,37809,84927,78853,45675,40459,18322,36398,75903,99608,68304,26593,73230,74775,71828,83717,86182,28032,37465,37561,63187,94084,44293,93127,26488,87968,49275,31756,64560,25475,11943,25303,38417,91141,26176,12015,70395,31184,37966,33589,29181,37991,68355,21993,46189,71890,87261,76991,30040,43603,94747,35491,81903,38018,64512,60608,14226,11648,48364,30962,30430,70805,46226,33443,27699,67539,29076,95725,96005,30136,58623,58561,13153,61562,28249,55854,66314,26747,18118,23078,37868,23721,20776,53620,74565,99885,59989,97359,19281,36001,24880,77214,61179,62765,12703,35452,50293,51243,73412,78372,98442,17534,36688,74633,25335,76233,35348,55459,50241,43286,99050,56938,25575,67524,28355,64144,63795,35353,62989,22558,63043,80340,17377,11564,61896,23129,64651,49674,18294,61005,88488,58933,50557,74085,55124,67313,53143,15627,73954,23095,54378,36835,70300,40742,57813,67869,78126,29754,52727,24600,35694,66587,33129,94393,42280,78479,80909,58479,38650,88445,54445,36692,97252,36781,33644,23239,16293,49463,14782,92953,38132,31838,75175,79292,15268,30155,17287,24498,90047,70017,82585,36227,11583,28611,38165,45156,34282,29871,97257,65743,46970,64982,12481,26060,29674,80995,96660,64951,73886,94252,14553,89956,20767,47484,12000,55420,47871,76703,22681,19773,51917,66878,73791,27695,28778,11662,40783,88460,38774,75591,94163,58209,75794,20371,32659,85461,25752,94726,93586,76099,16215,83710,80873,27381,35844,87951,19825,45530,38952,98795,46746,73491,29261,73186,79450,48966,38344,71697,34565,14077,34608,45654,78131,94309,30360,95540,38463,29746,24099,71215,81119,49763,38691,98614,71474,89097,13878,21877,17000,39674,38551,69208,38528,30862,85656,13355,34677,11735,37598,44912,19457,48695,26214,24154,18642,44599,23050,39511,90793,72243,86921,84610,27456,69768,85822,88902,96065,99569,46271,73586,55254,39066,89164,90443,25486,93248,83320,95447,67959,57322,28271,27672,32185,87131,82478,90718,97219,33719,25605,36403,39419,41466,64195,90688,71363,83705,78114,69666,55088,48625,38613,68282,14112,38888,73466,23302,36712,70845,14797,87613,80699,28594,82738,90350,53676,64085,54398,45936,53138,14139,94821,58195,78980,64285,10496,32320,31820,64275,35502,73208,84604,84709,93433,88712,50479,28682,90780,55316,88645,84996,11509,92764,81376,44349,55896,60515,54524,45740,64887,64460,76220,16928,79394,59301,88641,17325,57157,30720,76591,17639,39655,61976,15989,44571,63100,43529,56507,81823,25695,81630,98101,16586,31831,87518,88450,20310,74684,63996,67459,40031,14413,68898,41751,75940,63455,29373,32599,36848,89188,59176,51182,53955,70770,24492,40045,28816,17162,41322,42058,12408,85353,10695,40868,40982,30417,50124,67475,39034,83081,84060,60060,59742,30720,99616,88287,56540,96729,21377,28132,88574,38341,43910,90005,83551,92592,99417,68950,87533,62510,19777,41014,28734,96512,76036,80653,77557,61297,55268,79856,96425,36740,39593,51482,53236,52392,81325,95247,91526,91202,23184,74796,15891,72806,71926,60027,12672,44953,74637,46636,50151,27827,42827,56121,63457,28383,44877,89425,64819,70820,15205,17181,35158,14138,68029,81413,46007,10156,46432,54124,41037,35165,74073,31781,29813,68675,27270,31490,43434,27830,89173,26886,19945,85386,23827,70417,79607,32097,22789,33978,88361,63939,11415,52079,75715,62668,88014,79548,71943,78956,21723,43756,37257,54505,63289,86027,36480,41071,16993,46119,56158,63327,55664,50082,67205,70989,33865,95642,22606,34232,70442,66187,66409,30005,42805,77328,73805,16490,63317,56531,36236,33278,87811,43703,89375,48504,90015,70942,35966,84222,58018,59236,52842,94020,68003,56893,67999,58648,76902,19702,86073,78192,27791,19799,36429,95802,18814,81417,99461,50504,79116,21875,63834,61738,81164,59070,84885,58003,31568,74845,16638,21352,90896,60992,39314,39294,40135,46675,84741,33300,83713,23143,21440,67377,94790,10526,13170,34560,33109,22551,27096,58704,86049,65461,25545,70514,20013,18020,44370,99669,20707,76621,42055,54572,48877,15469,35124,69352,45810,73709,55692,62504,78549,79252,87347,88721,82061,94280,37628,66895,58093,55532,29773,89852,54290,32842,32260,16317,62039,87436,19914,79926,74899,48702,26870,51077,19888,33011,76669,48461,81252,57458,16962,37862,63298,53939,66660,38763,61355,17950,89909,58651,41745,83340,38178,55751,23740,27087,31294,99984,61421,67606,15715,55006,32663,80900,72620,68259,55634,65023,36181,95681,20769,59620,95629,17042,88475,10945,25433,12580,93402,94056,74955,67293,47847,99428,69950,60165,80047,25811,30972,55333,19400,68552,47596,18900,15945,51617,86809,57780,54378,91436,14910,16854,43188,27459,38280,71447,81346,72552,35400,30199,39714,23662,18524,32346,75464,36529,54316,44710,32269,95902,53356,61912,34879,26233,16359,91962,90168,27245,87424,64402,76121,98335,19545,35327,81907,93016,20069,79058,95077,77121,85368,96400,70187,63444,89450,88948,14166,20007,98948,59497,87400,95527,88441,29738,99727,62949,23435,53080,63396,16748,14692,21476,97108,83652,84298,96073,58090,35590,28506,27115,87887,23344,70730,19461,86244,42417,34755,24284,83723,60536,97474,26357,37216,35804,42891,70197,13337,26803,17946,43069,63666,29663,38610,37739,73757,58297,21908,20384,17618,52014,11361,65757,56394,28666,96246,46639,17119,51014,70232,41914,60979,61380,21008,78898,56611,49900,78944,53882,48733,24431,17758,85303,81921,88638,25923,29876,79104,97971,95289,31496,69599,97279,87422,34624,78898,56637,31046,71780,49398,69174,62831,72784,25846,33583,37658,78128,54302,53208,96149,94887,53742,30075,13228,55425,97131,93902,70492,64928,23501,65268,38766,65930,19275,59815,38392,82110,11698,68968,54987,33357,62546,49708,66721,27651,57129,28495,39784,81749,46087,75581,77376,99846,14144,12291,61095,86214,52652,16224,29715,19929,61164,57824,83921,86378,79083,78957,85840,21150,80474,45850,32576,21398,47133,50673,19550,54093,33724,16886,79602,32012,48731,99814,48134,27152,85909,86085,31563,73311,69712,20856,83541,12787,24843,46711,23405,20153,45014,73373,96224,70936,11429,82697,67974,34452,81759,93356,63058,37554,52888,55273,46134,85354,91526,41955,55799,67762,94279,86701,30665,12035,80328,76677,77327,24814,13026,33637,66524,79141,76256,14910,55347,24903,44997,81253,51180,65105,29537,24616,78433,47270,48836,94025,33448,42826,77360,54427,13570,55637,13625,54273,35822,59949,37356,68165,70186,91269,38335,55659,79601,57731,12149,31456,88948,94868,46470,64028,89019,43573,99308,71373,72332,58294,50471,55737,51666,68021,81603,67432,71578,47761,17373,50366,25148,34008,48515,83688,33326,19042,58879,50050,78760,37789,69550,93587,43645,97861,59918,39969,98960,24027,36581,19159,25244,94286,47367,49870,33617,85100,15878,26436,96864,91656,31416,88893,29505,61348,86075,95734,55166,92778,24813,60310,85219,33375,67162,25199,65323,19277,96047,65853,92803,98177,34299,65138,23047,21260,18465,53371,10191,68214,14994,24498,69074,54356,10419,67095,79755,75207,47461,73445,69136,85313,55651,94996,78907,52601,53182,20405,33696,64971,76271,79750,42730,16338,37225,97337,15635,74515,13817,32932,63901,98742,38344,99271,50913,37997,90379,96469,23831,28123,94004,48467,65248,19829,18775,65249,66391,16252,82345,30435,13521,26454,75232,18335,66225,33658,53286,65603,49820,95159,55102,98253,11482,89002,58589,40028,77164,58874,63486,91017,50932,96952,61003,86112,94015,88335,47128,35992,97428,32405,17684,23359,84834,97003,43031,19545,23527,56364,11997,81302,68327,80572,72413,44394,48658,81323,83750,72075,71754,41482,39822,21350,14297,64449,93205,87397,57869,93986,66624,23624,14916,61516,85286,79190,75823,66262,40514,78097,50074,97993,27059,98063,84603,15675,76560,14513,38631,76692,46136,98333,37412,78042,68252,93092,99056,12723,64764,91814,21440,71650,79177,31856,98062,89044,23712,48531,85537,61055,32786,85381,62988,88398,46269,60096,17716,58544,68684,49379,36121,93568,18195,23404,43381,11661,10337,77079,95338,37661,82270,90207,10259,43781,89887,17920,26533,97346,66956,14514,86786,14458,37654,15094,58609,45768,91042,46387,76404,23144,31329,25307,59120,96212,53149,27591,73351,12238,41975,78478,63936,75787,78303,14243,26120,52759,93690,37437,20217,95051,43924,44369,99202,82915,64552,22757,78377,26976,25166,82284,58656,48550,77357,35126,67476,22616,40161,52510,74241,82759,10187,20627,54738,95967,62379,69081,96604,30214,13110,10512,20682,53989,79650,77655,94415,99717,87127,91453,27358,77155,64582,83965,20407,13255,96571,70449,22398,64929,76267,15439,26065,97349,52023,60821,42379,94239,93096,99169,66292,63345,87390,29485,80928,85433,95737,27426,72453,37794,30815,25256,56319,94236,86582,26484,79261,15845,55626,60270,14616,43485,67629,93203,67196,16926,79332,42668,56689,71608,32584,99620,82325,76510,75046,48856,39287,12128,85639,15854,27658,80952,21926,76563,44645,68494,85175,47416,88360,93159,10402,51486,97090,31643,48293,77468,67882,69217,89690,33864,85485,83732,39314,49472,14639,83982,22209,33339,97834,94289,44718,11458,73523,97299,77324,43308,66485,66300,59866,64934,34420,37381,48562,34587,94046,46404,86379,22212,85340,37860,59113,27955,33849,96612,51169,71987,41158,15834,31866,94773,71289,84675,65846,98185,91035,60422,46460,76948,71496,60156,25940,37058,31388,28197,28146,60174,64380,13914,88963,38827,61861,71606,37671,83851,10706,61299,69966,34113,69438,37135,77853,42048,14055,43650,56492,38881,47499,41611,97897,65772,55030,49362,60594,10935,99706,25086,85461,13229,62427,56618,16539,28679,62110,35951,27559,33834,33885,94053,75929,12341,90656,72950,93068,72149,76025,86052,43524,93988,75585,33422,31472,57125,82561,71247,55096,37973,81788,41307,98934,79549,75397,45345,56446,47414,49330,65807,39629,68438,61891,25351,76505,96251,43020,13399,91841,61624,67461,68828,75689,15225,54456,76068,53288,17694,38246,56513,91827,43087,80460,82145,44713,59131,90681,19195,79679,77746,62104,59688,20536,80173,92601,31604,65414,97215,70581,39509,67376,19128,27131,79842,26293,34732,88075,26631,24954,75437,97180,14569,33519,24167,53771,31160,49084,63151,68325,21083,48565,73219,10834,47270,71142,43895,97135,49732,44554,38170,33460,12783,42984,88700,23440,75462,13366,30649,10045,45471,80078,11832,73121,13276,23255,83325,60544,43410,73840,53966,44446,55020,19111,46264,13781,40074,67786,70073,62091,13492,95290,25975,22776,63387,41143,97455,93877,19776,34897,94753,49326,12781,61496,23099,44505,34189,32954,66970,45215,42725,65670,44759,85434,98171,37791,94962,49203,20122,92635,20558,98949,80004,67468,87424,12884,63523,59034,57824,68700,95392,33546,89660,34992,40795,48102,95507,32873,87749,25726,52169,16029,91426,79801,35827,58979,78297,54799,51747,89740,83183,95191,53871,49453,20447,73580,40319,19589,81056,44160,38262,38712,81038,73114,31995,90795,56166,46547,40994,13724,87721,41532,88513,26644,17287,34384,38253,17999,57269,14986,55053,59527,48665,92521,10426,13551,83041,86527,26704,52046,60746,12154,47295,51170,85758,60248,82800,28250,95515,59641,60562,28022,56443,65726,79334,83348,34318,49555,78550,97188,93791,48397,70003,10832,93220,45017,27182,40967,87846,54523,15992,30780,63708,46319,29955,79698,25927,88234,98134,93776,19266,14760,67831,52977,67205,71434,72234,98628,48492,33483,98021,50159,30051,55405,97081,70158,87271,14136,12037,75516,57592,87256,55638,42779,94829,21580,67120,28228,87538,43626,40554,51543,48222,76215,98619,98304,46040,65646,61143,13832,21715,96591,26272,47067,78269,78712,53298,40370,34404,86836,97344,25758,31164,46795,44080,97827,63452,20457,46064,73848,99212,25207,10744,36047,91570,94075,53877,36097,54095,80480,40935,64724,41741,74848,82858,71326,26116,83846,52603,86716,43713,72906,76373,41194,39051,90183,65317,75043,44735,11493,17513,54293,93533,12514,17692,81462,66467,15900,35444,52879,44929,99301,88119,18536,25827,12472,11350,16098,20595,74240,46517,55556,40664,62226,30717,37992,37237,66147,42325,40540,36935,51509,84407,33803,46417,36134,59866,88033,14411,26445,15960,36265,59503,94442,69538,90334,11173,88867,88265,53762,64367,70435,84746,84796,26056,56375,64244,39002,96052,74277,95453,50765,29983,25004,51310,22152,13858,94349,10207,16208,90379,96440,27334,64477,38863,64391,87096,96740,93749,39673,94136,39723,15752,58698,95851,66110,20384,57013,52025,84730,85167,48421,42107,89960,31652,29774,10500,28892,19161,42636,54671,94904,69487,76268,85425,73116,56312,88634,95767,18300,17807,51662,14167,93621,31457,47199,56420,22968,14849,60818,84128,72426,59224,54783,38973,57369,30131,42561,69398,55292,14675,44430,36329,53913,55861,48580,25254,23912,36077,60625,63412,46308,74546,32702,10140,51856,77359,75772,27761,87096,79915,13327,61966,22629,90194,58388,45652,67697,32703,20888,18800,10597,61609,65975,93177,98765,34478,89604,69706,53395,78301,79156,91500,36539,12291,33890,71343,76477,17237,55787,55378,11367,42464,62772,66625,36295,19512,50269,18358,55407,62175,25967,36945,51984,72900,45130,53995,57220,47153,55101,13555,75425,12774,38977,10193,49247,32542,67831,23284,50156,75115,58437,76454,79138,65992,50476,77758,10510,77210,79460,77111,57871,44716,85680,44214,69627,70845,24869,55403,62992,62081,15952,85226,44787,96605,57182,17988,58357,19099,76082,95206,99877,48702,47635,23372,27122,36012,83387,89963,63944,44340,30009,28352,31582,27230,61777,57795,67130,15024,10474,39743,32292,27527,77050,51066,50432,10629,48063,87750,92912,67048,61317,54271,41211,95160,43313,62990,61622,65363,34469,12165,42337,11995,83095,16501,59639,52968,59133,99600,81463,97761,35322,70236,57887,41921,89851,46586,40405,65948,66949,92602,68130,27398,52862,90601,87666,10649,99380,89958,68861,85071,12139,47907,20208,44194,47596,74919,33691,19621,96673,11735,79788,33258,94436,41834,51028,47790,41981,12369,76272,73992,51473,20916,71347,70155,61884,72943,87211,37424,78732,96925,55019,95365,89742,25927,57280,84051,34841,22894,28082,24369,82584,13111,68962,98823,60374,27476,80513,28806,10150,68855,75812,40952,66638,74465,20774,17701,40070,70085,26246,24211,75981,24487,20829,74210,38786,69743,40006,73306,67151,35961,38510,45173,87124,34274,59665,91644,10852,24052,62709,71667,10300,33528,77692,85271,24611,59793,95659,43633,35702,66374,90614,44974,56564,52280,93099,12369,47734,17243,20619,45284,86498,58073,12632,81917,29583,16641,95189,40301,42818,18375,48254,40302,59105,50873,80091,11123,41799,46912,20752,51766,78383,36488,23366,31117,85569,46119,25687,49234,96241,58410,82171,88240,38891,76284,68192,57239,71789,94767,90040,64381,69588,20171,24348,40509,73398,55395,64090,17366,59662,21888,48675,98973,60201,74154,71569,64506,85690,64089,12124,93079,69408,19805,77225,81774,86423,85785,83433,59099,61085,14588,38488,50475,98206,18053,53971,98282,95765,96376,39477,86536,22609,10418,10539,27999,27946,30543,63134,16758,89475,45520,20885,74459,59484,29444,94066,37214,51793,10197,87151,79445,51518,41115,33669,93573,80373,50278,35779,44939,89529,28116,13434,57440,88395,46984,51344,19443,32578,56572,71209,52005,40946,42982,49937,41594,20053,54083,31767,86620,58704,92905,87040,25687,78573,91883,52470,55712,44000,73395,36970,92814,42271,87508,49194,98490,73451,98684,46557,22058,19532,84273,34263,63483,55131,84318,63233,37572,52902,84168,34674,96649,89739,31330,61275,48903,94251,31540,52298,36979,28397,97812,25469,64069,46761,80840,77502,78144,86700,33721,21283,94975,77183,42255,39554,74588,27657,26078,32856,28731,23840,15746,67283,85500,59201,78901,32193,96013,34261,75561,43134,64422,66181,81292,72494,69210,90743,35694,24241,22230,91301,91933,44649,12486,71303,45368,76521,31468,27833,38112,85965,64668,25131,44858,39980,73265,80980,39151,85031,17652,85467,75537,57024,65176,40926,23166,94262,76559,94997,77683,19200,67821,87855,15593,35043,92900,89867,16776,30485,31786,98898,56471,39016,85973,68603,31613,42296,13874,71218,22273,27268,14262,95802,94621,43915,78263,13404,38170,77272,36263,81151,57111,34159,89603,51348,96912,53795,54937,78557,52569,59561,60604,91827,79941,93888,46061,25531,48396,71595,45485,65162,10736,71293,60743,24842,42674,48981,15756,19521,73373,37591,86822,64895,19649,26020,98497,58090,53625,67903,28168,71586,35805,98074,96629,51588,57061,88570,25975,28506,97087,88374,32388,37036,32781,57833,65593,44732,78679,65343,45392,57177,91078,26784,62378,25880,37430,39724,57480,29560,11123,12124,96536,87829,54913,75772,19401,30147,10476,40094,53575,79036,20764,56542,95050,18894,86281,71367,91609,63272,26888,31495,91209,12606,97415,77769,27605,34499,33894,35846,52947,80114,46190,11383,50952,75042,18212,55983,96664,17986,34989,69952,92010,44354,70838,42531,92635,79449,42650,79637,55296,71380,69500,52603,34957,84289,76471,51367,62102,42679,38190,95772,93503,90154,73725,13700,47914,56708,14857,89114,75703,98348,62947,85683,59543,84883,11667,26151,11537,91874,23888,54953,27619,34667,93217,67241,20133,82660,45046,54431,58274,32789,44852,69632,77689,99360,93634,59591,17316,52304,59362,65975,81484,76144,66061,49134,44445,65049,83007,32265,36069,78385,65802,77982,26641,37218,44526,86294,74332,63724,70293,80225,28699,42951,42083,11793,20689,29875,36701,62348,67274,85652,20102,71324,57334,80556,25761,93242,25385,89099,15414,46344,37590,70183,10120,39313,29194,93558,50057,94642,88199,22377,14136,38169,43920,27028,84759,72103,93552,53572,49026,24987,87144,36530,77958,84423,12212,89978,74487,97743,68848,27754,16477,66407,20046,77935,79103,16969,98453,15763,86754,30963,49351,56260,10751,48604,11244,21379,13626,54763,92737,32067,88473,23807,66252,11941,21986,81744,49699,45942,65366,32064,51140,93515,41833,70523,71527,69769,40965,90612,95940,98393,37775,79065,40897,75458,89877,32847,41771,33139,18862,76110,46751,16478,66905,34062,77559,23480,97818,26942,15922,47289,47155,63385,73917,29936,86762,27945,21096,99256,25756,15858,39955,62501,44072,96007,51121,25344,74411,29481,32346,66914,93006,97402,30897,86641,75841,30766,41864,32108,15574,38312,80115,23327,53623,80540,62895,74361,77536,73747,14813,67960,28817,80628,60398,54261,58025,97067,55102,10738,83143,69689,32730,22228,59611,61724,11953,89577,10769,60833,18731,29532,72053,88077,11740,36748,73706,30323,85080,65879,21740,75279,38742,98439,45479,89193,80160,27235,27836,13238,81095,39508,22492,63940,98192,35760,49082,53540,53082,30270,39651,48274,77724,66878,55056,88120,26658,38815,58384,24447,43385,75999,37053,10608,98273,89824,20594,86927,41630,47110,68326,99991,16760,12710,93594,31600,34069,39572,53300,15367,16474,97174,97851,71700,23050,55538,17390,66930,81708,66400,18813,48771,38168,67726,27966,61588,48351,73612,21251,83503,46825,89423,71967,88628,70109,76045,66198,21400,35210,50520,49707,85407,28236,52259,60670,26179,54483,53557,21894,74350,71297,50634,22120,15668,81755,42137,68363,87809,74985,66411,55090,55145,69286,69940,42288,80032,63317,77993,41900,72557,50548,61486,38364,16424,64414,72166,34962,72956,16187,12988,88409,16463,48953,64311,12557,83383,91468,88385,25842,84871,12728,15006,81756,77142,51734,72769,73282,65858,97333,23006,14401,80738,35719,37473,25131,74796,13242,56784,85670,67703,18720,88471,35469,55880,51450,32096,56422,29145,85890,61779,25876,21535,29652,49774,86295,36951,35830,32504,42990,13018,88692,76288,27636,45867,57213,79684,66537,64162,71650,57606,40223,66218,75619,50967,84006,26354,22562,85512,70400,40851,83512,23980,23623,14204,13904,88118,77649,51587,45518,87391,50259,35900,66294,90995,42327,51934,53582,30403,13478,93688,80746,36003,53503,19477,65255,55310,56307,78707,86495,94121,41571,29474,56889,87144,65249,44248,36754,85335,65817,86309,43681,68730,90850,12934,60056,73963,87163,60816,13427,88721,56699,36617,26639,23630,69106,26216,51194,90389,43919,66348,51901,91212,94573,71985,64448,18766,19074,98903,96549,82248,45611,34900,38879,39671,81667,91089,65234,84771,29690,67000,79706,90482,29638,19793,51387,64586,66186,42780,91262,10117,86724,80506,62210,50816,56929,91688,39146,94567,46767,44116,77670,66054,96804,17675,15906,18598,93180,44248,25884,84444,52586,37040,37820,28657,49324,82414,93096,39428,12666,61921,42005,86149,75014,52253,40130,26211,79241,40550,34308,55600,37962,41320,14427,87157,80349,10687,86305,77921,42745,25089,19078,51404,19684,54922,82757,27420,62283,77956,24207,62438,99562,86974,87658,92936,78383,56375,50246,98142,69974,20312,70595,63899,50426,47910,11866,53652,40348,63373,72073,49509,55412,69487,92507,16566,16962,13940,10754,48403,85120,92615,36113,51170,12832,42737,24544,19957,14974,95276,36438,70485,99219,80471,19135,54188,67129,61079,67208,41889,47229,95540,49609,49030,27982,58083,74708,45871,75639,85722,92723,22438,24241,14248,85737,27156,44216,58604,67141,33487,63810,20211,58549,86774,95486,70657,85966,78689,88717,63714,29315,52911,35355,57936,37999,41683,59470,82986,20671,22800,99193,89271,66959,93573,99167,29711,55349,11096,81287,31759,44941,80215,10936,22752,45338,16343,77394,24416,48252,63501,98089,33378,71867,99175,70720,90758,18267,50192,72454,15029,34924,33173,36150,26921,37377,74729,78195,62486,89454,48516,24092,97191,20154,48660,48781,86667,97978,24685,48755,89048,31410,90050,38185,69965,34609,23490,39051,30396,92932,50186,45370,79788,49117,40761,28218,88990,31193,25740,23963,99335,30644,69776,19559,11541,81104,32487,63702,12529,43109,19354,34787,66918,84195,28937,53729,99740,97189,80340,69810,49483,98943,72654,62245,29009,44169,56247,19630,66298,51996,45548,74899,20263,89204,89365,44042,85348,17342,79504,25445,87261,82694,37317,68642,70094,66056,56710,36059,34982,23559,41412,94657,94004,88876,85300,74802,32250,94383,86931,91118,16187,24426,37261,60227,64301,97936,63396,94270,49925,58936,35651,41300,66108,35338,48367,81154,50344,12485,80089,23663,28936,96093,30064,74274,88846,56326,27478,13212,43538,33992,58563,24026,58287,97084,14417,33313,51101,95464,84835,58328,15364,88926,63676,89143,83613,45253,32252,69018,80098,39636,82924,28066,41107,47492,32504,38843,42575,62596,80241,51200,28065,46340,83052,47651,46368,13596,93371,77035,76063,77798,10924,57452,47033,64712,56070,58266,60172,77777,21406,85306,16538,42969,43578,10631,71833,87926,11001,97756,44615,60673,71774,54980,59690,82179,26872,23692,13602,86645,62566,55744,33230,40049,64365,85285,47414,95572,25622,91939,95574,51552,79415,66853,70111,37458,58535,36954,20814,13910,35121,56368,28793,95906,24146,86838,99628,13334,95312,32560,24489,33495,36173,63909,84816,50954,57026,45528,34384,69264,74103,72616,50917,68614,85766,17978,14105,34931,45356,95289,87414,71597,91692,32170,47021,90168,18167,29994,96851,90152,13292,91053,58520,64188,27851,19587,49090,87109,49968,66785,53614,10854,61024,37796,85352,29645,99439,33162,59164,46040,90335,28470,96014,27982,64363,20280,67254,69848,96303,59999,80898,49988,63338,50165,10397,76213,53053,60082,61364,56221,48099,34690,89535,44006,96153,95584,64360,60346,99700,98510,81068,43263,70655,41499,84894,46753,32023,72628,31810,11422,13155,77492,74084,52441,71726,88796,98320,45642,63512,47247,70762,63003,96056,76115,39741,45699,93139,46666,28068,24478,62400,73478,55444,34642,23447,90436,81441,40827,45725,19769,81914,27567,17812,32425,86661,52603,14244,98471,38095,98064,58831,69978,47197,35102,34784,22649,49226,45405,63200,91498,62016,36974,82778,46465,59135,22188,41143,17283,33515,18345,62996,61129,35038,38830,22443,59105,52380,17504,30490,95325,19945,63389,62355,98530,25052,20832,97637,76019,16575,14618,37148,52922,71399,98163,33408,33571,78259,61897,73395,58391,30825,75999,68313,48185,25640,35011,78622,50006,41824,43577,83343,84204,35872,53971,43364,40306,54954,69443,74561,13663,30447,43270,34478,50271,67969,77987,64335,80713,54621,67579,66103,67832,17888,23206,17421,97677,30446,80548,42868,51349,99659,36238,74843,20874,54020,15884,31549,94211,14189,88559,64365,12678,24913,40517,22112,27417,26917,28398,61686,76390,97411,61658,22321,71940,45196,40612,48321,25642,18599,82415,85560,12555,15472,71464,99022,46535,44312,71413,56638,72864,65206,52964,94342,97562,83918,21169,64261,17350,18858,79647,96627,64997,78396,72680,64227,59022,59102,42251,85996,19217,17476,12594,53406,35669,86784,83540,93507,98915,15486,34383,37015,24294,95874,59839,79804,44080,40977,60159,57351,81700,62163,49237,33629,10210,86270,13335,75667,58101,68491,28254,33511,12161,68317,48251,56054,32776,83924,83429,28398,49509,36145,91539,44401,76167,13267,26156,18668,14632,10774,90277,53418,98252,73279,63846,26281,99158,12437,65293,14300,11056,79902,35501,51593,55484,52620,62986,27077,32421,16223,55300,23934,23723,89388,25718,98380,48250,57857,10057,49782,98373,66529,17581,31368,45038,78594,43299,37268,90991,87316,86270,67618,35012,20625,92732,32257,62202,97223,32523,14906,14338,35503,78523,86365,69881,24573,52192,49685,39820,76177,78772,29731,95296,25927,89558,29209,14445,30574,10398,89680,52831,39427,13629,67538,37593,73123,17518,89193,10875,19610,96810,89258,58772,24606,33531,50729,94235,89737,41639,64465,21549,94480,76224,25839,14015,54436,69299,14646,46462,57981,99494,24380,88714,74540,80270,15851,12479,68355,16542,52402,16456,86834,63552,97757,71959,72619,28423,98211,11055,53131,75130,50523,52237,33255,92842,89199,26722,46456,83624,23121,24084,51996,89841,80062,23417,63787,13181,50897,37833,89640,28575,56543,29542,35812,35035,69474,23199,75727,16812,66596,52548,17927,84061,11242,76245,45485,27766,22840,83321,45902,74689,53869,19496,97694,64833,40885,40979,22631,99892,54115,53096,84653,57425,62096,33783,29944,36767,78609,83145,98807,35260,61086,56072,59021,68696,95650,10073,80288,67784,50477,65602,96213,25823,77424,66440,74793,94033,79156,48475,60503,11748,30936,65997,86645,87100,27684,90348,19669,94237,24908,37584,10483,70266,14314,26374,41292,60696,70352,84417,68412,74401,94049,48895,97614,27734,15725,26072,38403,46104,24308,45213,81779,58086,63722,19728,23696,62426,36347,45396,17982,56608,71345,56496,96863,55229,83457,35322,52999,71471,45479,30372,39812,51394,79137,92740,24138,92448,73104,79403,52516,47127,91738,21625,22219,12552,69762,91962,76136,23110,17743,56345,98507,41991,72539,96245,54249,90125,42477,21911,35428,20307,65876,38928,66415,17172,14449,13754,65044,51497,70395,34306,13728,35302,77704,85034,13249,27289,57932,66413,79019,72724,39778,26386,71053,69766,45172,66083,95727,39266,92959,34590,14779,18647,70384,61686,68657,39887,42776,69947,32760,61890,33794,80011,19396,38759,57986,30562,78739,88123,71010,19486,22576,92137,63628,19046,17025,72551,18616,10203,64712,85774,34822,75094,76753,43698,22874,31610,60091,53899,21331,15203,39269,22723,13595,67874,44045,27469,33006,14706,34665,88358,76733,35561,30585,89555,30438,40943,20851,61103,83792,10259,18839,89598,42305,68192,60671,97027,86249,59382,25208,29916,70979,71107,63503,84486,10817,21869,92214,49786,34524,63124,31972,71496,47311,40668,86091,43018,90189,77029,20329,99190,57526,59186,48700,94820,64931,69751,55163,25358,31139,12350,78051,17580,28192,87588,98768,10759,65540,58432,95933,12533,51168,87842,37148,66118,25128,49095,34914,98684,33836,40246,14913,81521,87934,50380,65705,79279,35857,41933,96405,58394,24529,74675,75310,62154,66518,73609,18385,25474,67380,76244,93033,28543,22074,47920,32464,79128,85452,81759,59500,72994,21184,14794,62910,16822,92102,66344,10267,14744,47507,14884,36829,25141,77660,15952,36947,42522,60593,40408,25355,86680,52289,50490,77034,50479,71072,22517,19246,82435,77246,59279,38327,96290,12183,71799,13977,97490,16158,92340,80606,13725,16929,91968,66762,64773,72954,34446,94503,43033,21331,77258,94235,15119,23236,94129,44941,16595,99936,93815,18166,59432,29505,91038,93618,62881,11303,60075,13104,76089,70482,24086,75951,17517,93758,82108,11737,68486,83834,65375,55582,76298,54573,36952,53397,27904,97802,46671,56559,98306,48895,24050,76049,15821,25690,34657,92052,35184,22905,60433,27304,85495,12343,27441,86239,25583,71057,52330,84600,28523,59010,18833,31166,73919,12215,41884,35969,92873,21283,65972,29623,26538,98005,21413,32968,31549,63548,31334,99667,45654,71988,38158,88032,92498,92709,19133,60299,12070,13960,67994,99845,89560,45817,86160,66463,57811,51151,57732,71869,99500,71552,39550,74761,42991,87715,13988,48690,80332,46271,16356,48757,78991,77107,81831,40455,82231,95128,94640,92921,19005,69266,75594,62929,34368,46536,18123,71738,53357,49992,50310,37210,30697,36763,15038,36444,63069,78210,46120,96224,78517,62870,69018,50501,58600,43360,59076,81336,67124,32017,86098,69186,87795,48393,74090,84915,55396,22356,47306,77638,84167,72176,87543,72339,88511,92431,46414,96603,80042,55323,52117,39400,87732,77853,20002,15091,68511,90067,21014,22211,22949,97725,38095,75990,87511,46559,97964,87157,56038,18375,61137,68199,31088,81833,73579,14601,28121,74955,59643,42420,72581,87583,19033,48917,18191,93443,73644,66312,76880,82604,45477,91640,20901,50405,71863,54125,15586,17653,93408,92743,84133,98965,51630,35031,80440,31046,82643,77009,88941,97276,97626,14295,32244,46504,57176,53036,12541,67540,13258,15922,95613,14192,36593,28520,96799,40931,47617,15074,75982,84119,68142,78291,44758,46586,76043,18282,32447,52300,61253,92518,24178,94482,63073,71201,15671,47876,75683,69997,28002,85806,47915,77850,88174,59156,93349,88235,30422,77909,94597,98082,50256,70883,89606,91608,27284,33571,29324,48021,94119,27294,66678,80072,98451,25773,32529,14376,73175,66253,70646,36263,77523,12590,26906,67408,65468,77025,13236,74704,41462,23674,59971,75372,78244,90663,72549,95963,60729,99842,87512,25233,12814,53046,78245,61560,53341,50785,86680,98261,84278,52725,19179,58420,59650,60722,45964,33518,81545,54145,24771,79004,25567,25174,59592,34854,21681,93813,54233,50352,86680,90084,65342,48336,79087,70582,20365,28384,12138,73721,64646,25535,62065,63309,91800,71250,18707,79923,97447,93102,34443,25294,98837,45354,75064,51979,78160,91530,21701,18423,82567,41641,93809,98525,47693,82114,91693,54687,73763,96512,64222,12131,19183,79819,54646,60980,78711,35856,37273,90697,84866,78264,23639,21339,79849,63849,68933,54991,52329,85929,69605,87610,98150,99964,61107,56955,51315,47212,85437,50491,42530,14794,73833,21803,81113,35863,61373,42545,11418,92879,26681,75870,81322,84056,81628,88055,26650,28779,79683,34920,68101,80506,40903,93154,95549,91015,66720,46566,52192,85470,10878,16123,16712,98478,74528,84120,29797,86586,58222,32851,68000,98206,83793,82058,59047,95922,80323,12858,78279,38382,62688,96308,45150,26754,41778,17069,42168,47230,20222,31166,78400,58464,79456,37939,82327,57788,22707,31951,39149,42891,88293,47871,47964,79074,25898,32776,11070,96538,48160,98126,72969,89604,22971,16228,27456,30095,44102,11333,73684,78943,36659,49588,78723,64136,80760,15077,48720,79081,27343,24566,45783,78720,64485,23065,40969,92869,87314,96475,12042,51080,61259,87921,63166,41252,39262,92024,46901,98702,72125,74731,10311,93627,48973,55787,28861,17294,15294,88437,22571,27661,35529,46678,14988,92618,96136,45684,86048,28414,45871,87978,88667,61206,58226,56570,30595,58031,27394,32396,57988,24269,82936,94043,13277,31554,37212,87161,74345,65951,98397,20288,69415,71728,48945,44045,13292,58975,88050,67353,79003,54101,52312,94715,41981,14673,52161,42552,16111,85640,28387,84518,80834,67999,41381,26488,87643,99377,45342,69517,93731,42428,73975,23621,17016,56523,22193,17618,93063,99327,20415,84438,31651,21472,84252,45418,28297,62120,96864,28345,29545,67094,22259,82073,25626,37457,47972,24883,23910,10111,53974,37969,81835,41264,44966,41500,75420,78523,71358,82055,31178,32936,80232,72826,85029,85948,18137,42278,12687,26312,41783,99744,69383,70823,60388,84566,80867,60683,13799,81291,43475,24142,49613,56919,23107,97543,32508,85391,34202,38778,84447,32902,85924,48849,53091,74703,52932,92871,34137,32806,12936,55422,49659,42656,51578,54322,83173,58700,19356,72100,32296,71504,27043,68679,61674,48615,56286,37261,36031,37119,77485,18948,71763,86543,19093,68186,39663,16320,63411,44041,10291,45251,51052,61204,82428,98142,23882,83117,68978,26585,50236,95479,13605,65096,51493,96760,66535,64567,27141,85959,96884,80577,99935,62454,35808,69542,21556,48107,66823,61847,84821,84375,59312,36622,37996,66697,27985,59489,73802,29097,34728,96286,54974,20037,25051,16623,95330,46465,40314,59666,90480,87507,63304,51575,96954,91898,34504,99909,51448,94329,98386,85006,52992,20534,51521,57539,58155,76863,82937,92235,22425,46833,46490,62975,76490,21004,49388,93486,94642,52916,22562,79447,72707,65528,88187,96582,63770,29740,65573,60102,27212,10598,13281,52505,60278,88189,79262,34534,29286,18079,59229,28792,55509,10690,57590,99242,36493,92319,56005,39575,67531,83499,32508,37522,26486,79078,56128,39224,13664,98168,85825,43990,98006,34699,14965,19964,87302,89299,48133,81026,91735,27690,44153,93882,57703,99028,54621,91319,37456,80437,22278,62124,94543,91107,32284,95546,40932,13654,99350,35094,31390,19530,92596,71009,51055,59041,55264,83986,32657,33406,61829,89039,35990,75531,58078,64647,36967,26881,60524,43725,60385,27362,51396,56968,35841,83266,68570,53608,27360,17974,52458,34333,81065,75970,77567,93043,89156,91540,81516,27315,38571,60931,14266,83725,19288,57372,27510,11870,52496,57857,89116,93000,83521,87578,26246,72826,73985,89757,28244,12515,60697,46115,18761,99371,12931,88534,28909,10228,60551,32571,99091,19449,15923,84972,43698,81141,62697,66900,63499,58141,83409,83021,29956,18038,12368,82716,21966,12906,57249,64992,67788,34516,35660,38191,22338,99214,36269,61395,60940,88986,71619,12556,31490,76777,13109,35280,58507,55086,41046,67253,73498,69863,13745,50884,93609,93029,22528,89478,38555,91218,60610,25622,73435,94920,98147,19153,71774,67520,65639,44151,25483,21361,82210,35113,95974,86763,81700,89781,97533,69844,73732,89767,63013,76811,14848,60225,46163,76933,50410,84113,74490,62544,69197,49319,92271,98987,53660,55714,46419,36370,22985,84706,73267,47242,97720,71392,51728,68672,90607,63229,72928,85638,94282,73961,13306,31315,37211,84493,34360,81335,54526,65072,45919,74526,20841,88084,45761,56896,19732,56100,40879,75697,79310,53257,63950,73782,57825,54111,81251,57091,25533,74417,56972,88246,55377,16427,19459,87146,74721,28354,86446,68203,66066,64323,80693,68040,98772,36842,41191,32926,33827,13004,12869,88828,52802,74972,78404,55876,83470,14067,27251,26606,58887,79661,18780,11357,17143,69837,30190,50233,21554,10528,41293,98803,61517,90422,13632,13534,67968,24416,31288,43908,82555,60271,24588,91671,95190,19921,69962,97157,19710,93656,27509,80501,64503,93539,54696,73374,87174,92317,24417,71076,14795,22519,47243,86925,61984,75071,75092,99730,63463,75722,18957,96765,88210,32958,71424,96742,76154,81902,26988,86962,75077,27400,43047,41556,88388,69787,60751,99161,43028,45024,92478,12368,70271,56912,77115,25232,20740,38879,47639,83211,33401,34594,32072,66190,29452,89603,56097,70962,80770,36305,50795,64710,43130,56949,69162,55429,52731,33314,26933,21222,66270,75364,56668,54765,33555,88529,34844,28931,13864,28898,60136,38351,79717,36566,62102,75563,33790,67355,84356,97612,26942,39291,79289,11824,74149,26176,50737,34860,90634,74417,55696,23094,76530,65199,50553,18094,16737,71000,59403,58890,31062,29404,69914,10354,66926,45756,22745,55543,48140,55762,76684,37004,44304,37581,97896,78635,46399,75294,55054,95697,54301,17955,42297,83890,24394,13055,17887,77748,44510,58625,33666,53939,85639,75210,96149,88546,15029,64563,63725,73684,85668,23691,24649,11553,75306,49342,92028,94191,88049,44680,40603,32152,79633,82623,95329,98854,74073,20337,42342,75672,43432,98117,26589,40908,32046,46102,99346,46890,31312,96371,50109,50189,47782,39864,85186,53258,71080,25693,11921,24390,20453,14481,18276,58501,38689,81124,44968,54652,99540,30202,50595,38796,30122,71929,32841,64716,90454,58783,99454,78965,95338,20620,81039,59967,95939,20785,36845,86622,25109,85924,94468,20793,17713,78975,28950,27660,29630,19103,26001,79884,33237,71784,58670,22481,66328,78153,88098,70859,19352,80031,79528,22560,36798,49574,56374,16476,51916,59677,51177,52380,48285,44254,38442,52264,55244,85209,59230,84258,89250,92616,75008,68780,48975,20521,31056,23618,48864,24436,20363,60415,50080,41762,30951,88439,73193,19820,22812,24016,11892,20908,46882,45085,51023,54194,61401,37232,30027,88498,90366,84219,31228,69796,93407,69700,32299,85067,94550,27888,84945,75392,57474,45049,95930,95846,49198,66793,74612,96619,28021,64600,21254,39832,17510,75241,47294,94690,69737,36072,76921,53165,64715,23506,26136,84882,67201,80788,51347,16530,55338,10312,23325,97601,55737,49532,57671,59263,76660,46339,74307,77764,54410,73361,94470,31534,82737,45968,18942,75694,90219,29284,21030,78135,49505,72166,79693,71833,56229,85846,77500,48457,57160,45353,27855,47316,22002,29820,32634,50365,15269,86625,91348,61775,62834,29020,19027,39796,42782,39826,99675,73100,21666,33010,96837,35948,73908,95243,96412,38278,52580,18635,66913,84373,48789,65193,38311,46137,55353,17500,56055,84940,97289,79712,38153,90309,45055,57854,54846,50668,47232,30362,50560,12558,16603,50928,44870,54321,28193,34463,96218,59754,53321,30008,92640,14969,19164,84726,87060,54582,16989,62006,42587,29609,90899,35309,71016,87912,22621,85317,97467,69583,91029,89390,69387,11273,94184,63865,23914,94802,44985,44180,49758,28624,15423,35886,64636,36364,20071,43268,90962,99687,8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13,23983,59086,59662,72148,69983,67732,95422,11037,38294,91109,27997,84908,91708,57936,23311,90928,94400,49403,95278,18659,33648,73643,92725,24450,83713,12055,38272,68233,13900,28009,12373,99820,79480,40737,19217,65706,76614,53920,15796,94601,25968,87315,46514,46276,13591,85298,95315,32224,54278,86632,30551,61754,56142,51929,14091,75274,21136,42573,17734,82255,56628,45409,65571,12848,42487,94378,29528,84658,68615,40985,58622,26723,11446,77779,95610,49056,68126,87322,72174,71508,72249,93617,32980,11955,94600,27786,62954,19660,54165,22674,22187,78336,80180,38506,89991,17075,24739,15070,28469,94542,11419,46725,79908,84012,22851,57984,88417,34017,21770,97103,14671,75072,53128,35599,29900,13142,98803,51709,66562,89258,89444,50503,12642,38586,38678,65054,37654,48815,84725,17008,48181,29215,60562,27288,14092,57425,47639,16331,36242,32260,83866,74156,17706,98028,45406,21152,50883,52628,95432,30128,36330,74183,70315,48187,47896,21779,50011,89764,97605,51406,42835,80490,66317,76138,71438,33430,25762,31161,63056,79861,84149,60637,49787,37241,14621,12409,61049,34319,70658,85591,97854,30766,56291,69878,29453,16850,26802,12221,87510,55307,58731,72257,20589,10859,31687,89978,98509,32390,83573,80893,68427,43753,17467,16368,70467,34107,44576,20697,45885,56012,46967,43835,48328,44381,32173,46185,96976,29760,89884,85344,97462,25089,34609,89850,20377,84371,82420,26443,19472,91671,80175,56427,71537,72835,37034,22914,44421,14897,83121,57393,15303,30630,96644,91871,18521,78034,45697,20803,63057,64893,85094,73639,98959,96756,98028,30287,30466,67606,39887,39743,59212,85389,20721,91258,32962,53387,73785,92605,81544,86110,42342,88171,60379,35479,69760,18297,27815,44049,78786,92481,48397,95276,78038,30395,97296,83340,86060,79133,15648,77758,64078,64013,14292,14602,31653,18343,33308,23575,25503,42873,44918,94561,70181,81282,61376,37553,69597,73032,88558,59073,70023,56794,92289,23009,84364,66955,66443,67140,40555,63525,72667,79621,40052,50017,42058,20930,53560,75704,48356,11781,95007,53239,29883,70948,60690,79448,68791,17565,17261,95439,43797,96946,81325,66793,86647,10500,97003,70895,86715,48191,11086,99872,25272,16141,82003,88700,75304,62614,65454,57965,48421,91075,28807,16780,52436,70820,50107,96141,27169,94312,19218,40355,29713,48386,91637,48908,98751,34710,59148,86898,96982,35112,70641,48012,85728,14589,65222,49195,46771,63930,83944,59620,12192,53945,76870,41413,17504,14772,37596,74339,64374,32911,27568,56620,72375,98629,64750,24073,79475,49210,99504,15646,77899,60963,55103,29208,82931,53746,79379,67121,84740,64222,88642,43324,49820,90632,19144,51147,13337,90143,50931,49070,52264,57610,87889,75787,79306,52372,34336,32686,27446,42850,67905,56045,46492,83644,77794,17133,70282,16837,24147,63625,92773,15799,93525,61457,87910,68569,41160,42875,11582,95263,78734,65526,62986,98364,71447,17380,82904,30329,91091,46440,45781,57892,90734,77648,42326,37035,62228,98714,91967,36404,47466,70764,58123,98822,74450,21057,63750,83909,89164,21791,65227,27092,15741,83609,60658,44802,93291,48381,26824,56256,37265,23191,89438,90757,89562,42256,50042,72052,26560,39021,37683,96915,56372,58436,65408,90080,81966,60787,27967,95043,11379,75662,91512,55161,71278,43247,33457,10666,20471,92205,89593,31118,22573,18567,96288,66112,61681,18781,11966,11852,20854,61173,98007,92004,24077,35148,74344,11858,31064,18775,54939,93840,52328,68943,84483,78749,42789,86562,38004,20296,74373,34995,96287,28304,29683,90460,15846,74439,54305,35397,48288,90391,62978,41853,64924,47826,88234,39924,58976,56134,17732,76458,22249,93696,86030,76217,60575,71842,92792,85401,55348,88075,93233,45270,73861,88268,88526,33612,10861,20043,73433,22026,33762,87549,62558,49360,50371,64356,84738,26670,20333,27681,55598,47265,43782,58303,90951,69375,56072,73727,76901,17339,45992,32737,54392,56557,89356,45644,88016,86503,90721,16851,23915,36670,32924,33855,35046,69338,53885,74510,39267,13602,27633,27934,43740,83239,61392,79922,52793,73249,55529,68961,41999,83879,38043,94815,53338,78986,13661,48456,27984,84618,58388,15207,51431,29337,39583,13717,53977,16483,56126,72147,66913,16953,67179,53017,46776,37224,71720,73029,39509,88257,49470,30890,18162,99364,97200,36866,24843,13714,42023,19725,56640,74412,29664,97552,55038,29494,64481,89698,72969,37555,13373,74722,63652,24847,31058,63411,69272,20014,24528,43728,28547,35366,10384,54221,54207,91710,35537,41753,32420,26847,86491,89355,24637,33537,21905,40438,96616,82585,60207,47823,20936,58648,29710,22732,54501,44408,39104,37739,40155,13094,65653,17530,93473,15470,65185,41453,16913,59446,13301,86630,62980,66726,18984,15743,39373,19993,64092,99822,30135,26092,83464,57896,17554,41500,51753,90964,56794,16542,70770,69154,20374,79913,26046,72138,46162,37263,10038,93696,64771,98121,94197,26557,50300,65325,82513,94820,37901,95335,74551,23523,88361,17770,59170,38605,30118,16890,72057,10225,55150,70695,10866,69873,88946,95341,58736,16821,14177,51872,87254,79168,42476,17403,96522,60802,70285,63913,23998,47809,25837,50018,16465,92085,48530,83492,52076,45895,69609,18087,84503,67949,76326,32956,71356,63225,58678,76558,55861,99682,60068,99686,67179,77217,63513,52475,11768,90023,72396,45395,13400,24297,68906,55320,43005,10560,45981,64470,72525,48543,82056,35408,76692,35961,91217,77140,33722,46554,53107,37580,31379,96768,31433,12750,99437,84962,16232,54919,72800,84560,35053,68387,69437,79065,81795,49723,29385,11975,68895,26407,59905,76712,94374,84933,57732,55773,84033,58292,93276,26548,91059,29583,79028,30459,90533,25059,86887,62069,51704,87898,53549,61663,33223,71746,92364,95189,18147,84324,58244,82789,29915,34766,56142,98544,49216,11805,16324,27633,98366,44595,27406,50735,83258,88394,17686,34488,22960,92634,98738,25158,36652,65895,55039,21788,56951,91886,64256,57467,73943,84426,86126,86110,19174,57387,47036,50216,77436,72085,75563,75458,75077,15658,37848,66476,87987,75459,19020,16053,32265,12860,18250,52337,91224,17273,20881,53747,24649,40162,59168,67426,64510,94826,68448,61619,26273,79149,42576,79488,51836,70422,92363,88706,91988,98774,78895,46601,91820,88358,12808,20644,65598,42985,41928,20000,49053,78197,39596,34634,37093,53785,97022,41418,96792,41466,97803,25558,40539,19013,14452,63374,88933,96622,31189,88624,27260,66037,35901,75469,52739,60292,47698,58752,48133,40446,48006,28621,35010,78514,52651,93241,31942,14364,93621,84370,94132,13819,88434,60931,39753,94788,26945,32203,54316,28354,35492,75718,35900,96323,44113,26579,98934,16214,38981,47451,20414,22970,96845,89187,58100,50953,66746,47765,91398,70389,53989,82268,91406,84481,59126,81365,33873,10424,30863,25268,53018,78983,70235,74926,52452,10490,36168,87668,54609,53898,99919,41159,83497,45044,22399,96625,63106,47332,62283,63268,96544,74848,69524,18334,25733,19091,39384,66946,16742,85636,68976,44419,92146,80468,39200,50506,35323,73541,21051,66726,32567,24319,95282,73428,72208,44722,30716,49746,63963,86629,45079,96763,40246,64850,87546,23899,77077,22501,91445,18739,50641,26355,36820,49283,82790,75032,26605,91152,95067,59214,70574,43106,70288,34771,62756,35738,61474,59495,17624,96651,26480,78470,15064,37461,50974,15526,19261,33403,75530,37786,94031,25118,25672,35410,23500,27596,76785,76953,90875,26479,33280,23445,66899,19807,97573,16607,72601,33366,65935,60119,62703,82970,12369,11569,64393,63862,92486,46779,79302,63125,64638,22460,71115,74876,34729,99450,40780,39372,91425,81774,98849,79694,81370,24541,10604,66058,35762,80981,22799,48194,82239,45681,15694,97937,19952,27695,10748,83578,32634,72686,61947,98747,38893,76933,21826,87793,89513,98878,78211,31427,82434,14029,69430,91514,83435,30339,71254,11578,37861,78998,51575,99918,12908,30905,83094,11513,37946,12680,42997,18601,48650,69468,64740,67647,92400,49322,34138,83147,26955,77085,17042,11231,87110,34124,28334,62788,96386,67553,93434,96398,23012,66260,63070,83046,82702,22580,28045,35760,24316,74942,44811,72825,46617,31149,91719,89346,66550,20353,81781,65704,60291,36342,62940,77852,19519,93852,88315,53771,94493,48518,65127,95239,43723,46716,31999,16441,86250,82917,89251,78901,47551,51065,81600,49859,95510,70157,68862,85795,18682,66674,60200,28422,19183,80625,25816,70034,80323,22192,59597,88253,78056,18740,30856,50096,14931,95702,81153,66883,39285,37474,38599,28047,69971,68463,73882,43189,62908,64181,56512,62039,31409,65937,32052,91950,66435,13981,31032,70339,54167,38513,23936,66126,93630,65321,74239,69162,68582,46743,78742,96374,86896,18330,95874,11414,45017,27785,94507,92795,78921,77359,95384,54328,93491,83200,96228,50966,42494,14052,59829,47860,62137,70821,13007,22855,27191,72554,18828,64804,72446,99815,89602,42197,37770,94494,44232,11348,54196,18891,62269,99097,50828,56410,84086,83361,67727,89469,43152,72000,96535,67452,71915,64096,52578,33273,82102,37860,66410,97421,48963,45033,35979,74912,87038,30246,38043,76412,55099,81080,63302,83001,84813,35955,94036,67860,76737,51854,41245,69226,74333,63947,49239,93468,10364,65262,68195,12337,35888,66527,26913,69462,44907,87487,29513,77860,89315,53063,75151,72437,49466,73630,22631,77261,40645,63382,98575,78485,85613,72971,52207,82174,68149,53586,21474,26835,92542,85927,52595,64069,24715,44737,12026,88284,74721,73494,40108,30407,38614,84948,19245,70259,11951,88289,89998,74185,37598,99540,98195,67419,33088,98791,75781,22925,48838,81186,17065,93504,53107,71727,82347,67090,48626,63133,44287,52012,95973,31052,51355,98164,21933,18178,93737,60359,12330,18001,57756,11510,75368,58823,84740,29990,21677,88152,79234,29136,67257,63630,87059,61509,10961,44374,81431,34058,23507,62802,63069,76224,22131,54977,52667,68990,19826,62981,75915,57649,55637,42874,68278,75821,62348,89657,64131,95675,94649,67998,90804,64739,70465,21353,57697,10589,18489,87843,97649,37716,40456,41051,38915,49013,83273,39248,94079,15906,39836,62455,48287,46736,44130,12990,18179,39223,84064,48883,24365,97486,21573,93807,78386,28922,97357,12849,90545,15677,65360,46894,19849,68630,63309,47780,53103,67146,98701,83279,11325,19862,95216,12605,58756,88345,53017,50864,33436,87906,51303,44345,95802,30780,44805,31595,12775,81481,64176,96450,34928,85114,48006,94047,94273,91779,37225,37954,91338,36196,67702,64403,18489,92297,67714,98954,15532,25199,21933,43073,33654,45878,85024,27779,42647,83807,37441,91044,16895,72766,77836,18152,84162,65147,24068,35555,27114,47235,77521,78895,57277,88986,65572,85594,22112,25991,53522,30422,18910,20359,82485,65210,79109,66932,49098,52036,81930,16957,87563,38013,32891,64752,44757,23911,66268,91554,31807,20482,66692,61538,47974,97713,55013,25344,45072,98733,28624,54905,73242,95660,17379,92973,41800,42599,86114,12600,67431,68849,59381,51696,84174,85335,78434,71392,52425,44143,55217,36953,47398,87872,95412,17409,29639,99355,61470,20615,20862,51651,68607,47181,94982,56084,50440,92661,94350,77871,98428,47539,24555,67405,83022,77286,79956,94020,96016,95466,71660,59292,59162,32919,60717,43052,84144,72738,91212,33613,75418,82883,71659,60806,38180,90577,88142,82613,91387,36208,81231,60741,50905,70067,43896,84491,57000,43183,62638,94752,50627,40266,13533,88325,88977,31782,73721,75721,64213,56742,27750,23355,97370,93400,55280,62404,55435,68869,37102,36412,93371,15924,48640,82275,77321,85509,76005,50082,31955,43983,11713,82842,10280,16235,77318,58846,48086,42281,73961,74013,83083,10232,48964,31943,93851,60900,56267,18959,83057,97103,79116,31288,38784,53581,14746,51634,79934,10249,13160,41014,56358,26681,97979,26357,13240,11041,87630,18828,30231,92596,83967,41671,61389,17569,60636,49843,39082,54504,59074,55671,76556,49908,97925,28326,78231,90430,66847,55310,96279,47468,86135,85565,53114,91575,22542,63622,11907,85125,52440,19193,99661,63744,82617,25677,18569,95660,64028,50070,75635,67315,11279,17175,35603,50390,75809,53174,39462,55869,14568,77215,49810,91929,69798,44854,28781,78338,24359,94426,15115,98318,77753,88826,98399,22088,20565,62365,67363,65379,36563,26545,44585,52971,12508,49096,51367,57523,44101,58132,71821,15712,96732,35635,95920,54850,41766,57096,66532,20938,31814,60006,68287,47416,55614,88114,79460,98725,73385,92038,37363,26071,65654,40090,59446,86512,80586,80291,70026,32099,25183,53581,60199,18237,70232,63027,63206,11759,52103,47436,90721,13495,22641,73789,49381,42870,41472,10705,70743,25768,29294,50330,78970,50245,56450,73077,20311,36720,57234,19140,90652,29488,32580,90596,63623,47095,55413,60669,63593,61947,39050,42815,47855,76435,16163,54722,95929,92957,11309,98330,56201,58289,94763,48067,86012,89904,33021,91237,37835,15379,21074,29613,96295,26864,87818,81397,65045,69115,29187,52517,21209,84565,22668,67508,72123,13672,40891,96056,45620,53483,28573,50836,46636,57218,40114,46538,78924,58700,64949,34364,79989,60547,94514,41427,17426,54425,80774,33521,61317,57046,70528,83299,25455,37219,65067,78287,62399,51472,20538,87503,93749,63062,23852,17286,30676,54010,89442,11339,95022,25860,75550,98390,39142,45162,82721,68150,55000,86697,13581,98690,93769,32619,27366,63903,24034,66486,93539,62998,13510,56620,71854,97418,32218,67837,65290,56894,67226,28413,95495,82622,65040,85539,89964,34845,25483,14405,44025,20346,45050,19687,35967,46402,97331,74878,14110,41094,23945,90020,36924,38757,16688,65859,96778,57538,33897,81999,70272,67749,86894,96031,21166,17223,20880,22833,79033,37815,21751,18396,76113,36835,37341,95060,47523,22494,70408,35148,76866,52447,89797,18312,23338,26255,87654,17107,50521,44276,67478,94836,49747,75628,33243,54385,61776,76443,48974,28207,14943,65586,36106,48210,97604,14594,76539,17518,77140,24801,48783,28940,97699,50082,93714,60397,34192,47664,34029,88288,89426,97031,91482,84518,43006,46783,43028,11897,20188,34283,21701,29846,28281,84793,36319,32625,19861,39539,47349,64706,29995,65872,84717,89142,87668,13878,49133,38405,60924,91420,60647,66584,19034,65603,21911,60665,48186,33349,28389,86019,66658,12475,25976,90879,99774,18967,67201,91388,29038,93115,71313,31283,62594,19819,81172,70346,93685,43500,87292,60496,40586,97021,26987,12957,36062,73220,29313,19799,54269,91061,29369,80470,55896,45127,62070,22095,33588,55318,24337,95514,32703,14502,43216,82225,62643,32672,46182,44966,56072,68280,49962,33627,93156,95036,52265,42965,15867,46961,66622,31498,18249,14525,84419,12984,92360,13418,69700,95484,18634,21671,63046,59200,19416,64348,98328,32301,61000,24045,32637,42587,80807,58636,43236,30623,99744,79087,98832,24023,48458,20025,11542,94765,41628,31425,17144,91414,78562,53578,50782,78968,28451,62280,24356,18632,54458,53833,89104,37512,17663,30098,26305,88183,38225,67750,72167,92924,85097,77899,61939,65925,71961,53084,26025,85415,37822,93392,79396,64100,64224,76284,99207,84237,85399,31391,18634,62762,15409,36202,27400,79656,62473,65462,48072,56947,12564,43305,35492,93850,94966,66825,99021,82972,72813,43023,72492,40238,38244,30550,73135,37447,89964,12700,61041,67336,38979,98318,94870,18328,88548,87718,86274,11292,19660,46493,82657,51115,17640,60209,64795,90723,92931,80407,21817,29420,14006,16051,64933,44456,20841,82817,95597,73694,88678,64371,11995,60700,97713,87050,16843,52209,22288,79661,37386,87419,23597,81069,19213,82592,68898,36699,65208,75198,66017,56753,23587,28405,49794,20205,24087,63011,95738,12895,60164,94817,44442,22671,10048,94865,62788,25508,27390,66361,55231,29016,39895,23413,77839,24535,68493,57364,31845,83790,37748,98991,24804,54278,97387,23507,13592,95750,50738,89500,97567,69472,96949,60730,30137,75428,29323,80059,29297,78170,43824,59725,10191,27351,78136,65660,75803,77419,99063,61048,45876,61119,79801,44507,87043,61928,26771,93955,74268,59197,97737,37447,55148,84942,18379,68117,23824,49666,39995,92121,70165,44738,45250,94954,50527,62440,15292,62192,23908,88187,19782,61669,57054,22419,99681,12274,86161,43420,18313,64025,70704,67621,67982,91685,89703,93331,25135,49767,81446,58555,40851,71919,93698,37393,18731,49552,44231,32212,22487,59595,60885,59376,41288,35307,80182,37518,55615,38829,38627,33463,56473,89537,60426,81697,67510,41897,91345,23067,38793,85026,31956,34213,39691,88239,84765,61228,94103,74203,88018,44281,76974,57678,21713,83963,91829,57225,25685,59576,20078,77007,54123,16838,56444,17126,15579,71440,35368,76741,83435,94225,66207,10123,19386,32890,67453,67340,25291,37822,35284,89517,51432,22166,65134,74748,62672,64787,67851,94259,22120,86784,95219,97007,70385,50476,17283,43633,28774,49229,21055,66684,85317,28226,15413,16394,45308,20899,11726,48875,33877,36679,63530,23461,67578,99319,74188,51717,12274,83706,91224,75855,22790,41894,82713,24933,92244,76757,11771,20999,73395,11380,45026,71045,47356,57069,76481,95760,30810,94256,87643,90539,24964,63695,77248,62120,79761,56186,26794,58696,56871,76767,82386,52570,68278,15537,26294,63317,27702,52468,18192,50259,66166,42112,51924,51765,98955,67464,50661,64291,29962,93623,72643,60769,93399,40832,27983,34198,40087,22233,81861,64123,97809,17138,97416,27500,53832,42202,87664,99922,43799,55198,27552,73907,59396,52772,21845,86542,98701,68042,28966,58947,91484,33774,29163,83459,96159,65867,17834,87782,21850,16858,54237,43066,83327,69985,44991,67083,78982,46175,58494,51432,33466,66074,62187,68328,64609,43925,25201,87950,48323,54708,94638,38846,50527,33116,71754,28753,20426,18825,91389,73491,85509,47109,87618,16385,12174,43766,72652,77969,50379,20648,78221,98530,64191,33352,86903,59230,87962,61769,95076,25091,11397,63137,76284,44230,52687,88199,70813,23408,31500,66982,36123,65019,82419,20372,46596,98828,12457,55431,26235,77389,33823,27417,92527,97592,74378,22333,63828,24698,31627,23976,57381,98159,85136,27786,93847,31079,59818,48929,54575,23979,84279,47124,73676,80201,11955,52376,68944,21145,50952,27829,96861,32856,74208,91612,69315,43889,15965,37965,60988,34487,97034,22981,77739,38227,60756,74729,24186,14639,50335,17247,88148,69918,81359,45138,67092,93054,99381,87325,45250,84823,66858,81921,48123,75749,70221,77687,11356,43732,97872,37953,35326,50934,92230,62703,31068,55601,29940,76506,66613,72791,98828,28673,17774,87716,60573,24170,40089,58540,62507,89291,37311,13244,54851,77028,94167,31345,50245,70011,68384,25331,55489,78655,22497,81543,65111,97760,62674,76419,62332,30110,21063,50013,76631,64645,70362,78485,13378,79746,39870,49754,37834,79216,60034,53555,91583,17852,17461,99704,95892,10092,62256,83218,81482,42330,84659,38240,63044,48421,59211,14191,94594,29398,41625,60788,25548,50431,76281,93830,91440,39403,24123,96104,52794,33328,15984,32880,87848,50795,27655,31548,87060,99536,10082,82554,41730,12883,83814,46384,12962,43345,33128,30597,37991,40182,79877,23754,85579,64694,16799,25840,47006,19088,53816,85809,77940,71397,28272,37891,12686,55365,47824,41469,18993,92532,11512,30127,99149,34993,41628,14854,38839,81469,44536,58134,54487,99269,16608,88964,22843,77964,40365,78524,85745,18539,72119,31455,21375,15150,33835,90919,14150,59625,61423,16137,60105,66555,95319,67334,39718,62430,90955,78083,19587,83119,24728,73873,80104,81792,34418,64738,29068,37568,37340,16115,50693,93039,30613,67775,32133,34466,86755,13060,53262,84756,57002,35565,80738,79459,85275,26431,67137,31547,34904,68223,57081,30599,16405,95244,50412,55390,23405,84731,42246,74523,70658,26516,62222,22803,68557,20929,22098,24108,33491,17413,10207,58387,90411,94552,72436,22787,34065,66294,15613,68062,37709,38136,51534,66727,86589,95881,63240,61743,46422,57588,35122,35912,19518,17908,12440,55799,97534,76332,44794,63141,46521,39339,85334,88617,46571,37258,81789,82304,11081,39716,27523,46124,41818,63713,98315,20264,83855,49657,90460,16764,51296,18716,50732,50733,44627,82702,18310,19213,12507,70907,99836,53969,68368,99801,42481,16615,92552,96425,40793,75090,62564,33703,70408,46603,87932,97911,47663,34573,55563,47033,70430,23850,96209,19567,34874,68538,87914,84417,68806,34073,16979,32810,24580,38060,45742,37425,29993,62704,17416,93122,56332,43011,68262,66557,64889,64171,11765,41999,97288,57153,79908,33603,68316,86521,14285,74457,79424,83453,76875,41622,71063,73436,12832,49258,93114,97189,27878,36053,82054,91377,57377,80475,88512,12061,39272,45886,11966,71501,89235,26908,91039,30503,25716,33565,66368,14509,55808,79127,15836,63543,82583,61844,71163,20129,19514,52216,10662,41353,73206,50418,44825,45735,60093,67399,31283,74901,14433,99092,32468,58130,72320,31806,55205,77384,34863,60156,34888,40121,27005,64248,60001,71661,87754,76030,92728,74823,86892,48461,73653,37636,96373,27481,11956,75144,70091,94771,55381,62101,70211,74505,47230,91939,31834,30897,28355,11950,22724,65184,53770,64192,47875,79389,57015,67020,49501,41202,77424,74911,74282,46943,51411,26814,82962,71318,86584,10805,96423,36404,61481,96016,58981,89425,78933,49615,74485,44557,52372,75151,72020,30261,31239,84162,97417,79786,23146,34601,78609,36391,69662,35039,14965,62418,69545,45271,83152,31133,63127,57494,58008,29780,34637,20005,68003,94925,36650,34388,67749,13279,65876,31423,22870,12506,30939,45835,53859,54842,50309,16937,60351,45929,69564,54211,47208,87631,96201,68524,28003,70282,88451,53819,50694,70185,12485,33227,89504,68260,62601,93469,32801,50794,94884,67909,95243,10641,65123,10808,90780,44155,70626,95322,85360,63058,69359,96553,93356,72641,70864,96018,28015,26765,62522,96205,13725,99536,84848,94373,26448,84033,52707,14107,86541,63197,87548,73451,21298,75349,22227,98487,64934,14700,80905,70437,75650,70010,30005,88081,93383,47408,66971,59528,82111,63487,91353,20366,51770,31034,38403,16747,41257,45126,48751,49043,53115,76807,64468,38513,92406,87001,17063,49882,79660,16561,48729,88096,49767,69871,24558,78838,59048,81470,49453,91079,76173,17428,15635,27953,42786,36827,18459,87332,49496,43090,96861,25872,61296,15354,52820,99092,35806,84711,48413,92073,75676,78630,54777,48772,60200,73309,31729,77623,77025,59888,92461,91415,34599,38688,60116,28675,34712,18318,86546,19893,97844,81500,57031,49347,16091,10344,59005,40292,93744,23678,85748,99726,40672,36310,67270,32289,20253,21049,24208,81927,46067,32968,17341,90221,88492,12735,84299,73495,11679,15836,86636,29474,73766,12474,44901,30961,70659,35680,37927,36629,24767,27447,43984,12026,26152,24746,83253,75926,54539,78961,27039,62032,47528,17517,85818,37488,49807,50870,25717,98305,20314,97967,41681,20493,74526,59917,82850,37900,61339,47251,83688,28741,31176,70107,30397,50882,54740,70696,87740,62409,41571,62526,98338,78171,84990,64759,68791,38350,86378,55377,12954,68778,82966,79026,62548,11284,36556,78299,75714,73664,60955,49351,80200,80525,83067,17275,79114,77823,16575,22945,92944,44336,26528,30139,69635,80856,33909,16911,64809,73585,45397,95621,46364,47050,10302,22331,96597,75197,76448,82276,20966,41066,28326,20738,44042,84580,62124,90788,88362,36393,90840,89724,90067,50272,35164,42079,55829,12796,65974,27134,13894,53494,95532,70634,32387,60297,96514,74240,91495,44922,35784,68650,80530,91168,34651,64110,44344,48854,13621,84141,43774,12273,40662,70032,13930,81177,40009,85290,54853,36212,62044,18069,80902,56911,21052,17923,83074,57055,92553,52825,62608,16033,49273,66012,36941,74258,80313,67895,69882,79803,20580,11571,73092,54162,12021,45965,77698,40769,46863,12775,55967,63288,62551,85206,88163,90102,76832,80403,59326,97930,42140,86697,84830,17224,85419,49741,59748,38631,68071,51256,24521,49006,45092,99480,64359,84341,89511,95821,90780,77471,65052,84571,67881,16052,97777,30507,74892,65252,80598,22636,69741,17355,48706,18958,55544,23123,27218,49382,94832,69320,93774,22373,74365,53495,29991,47037,68492,31737,22857,72372,53351,36395,47302,15357,60402,61830,24990,41327,29353,63062,90239,12993,98959,37021,64479,96883,44466,49193,42544,83377,16988,65709,46942,19980,36576,40653,48958,68767,51267,58284,66088,85659,61996,26462,52073,91113,71613,83901,31652,85387,50359,40464,80372,38574,55496,21079,49994,52899,43367,98237,25385,33307,32195,25568,64230,11279,30634,62823,87965,99723,33976,99513,12830,39881,12928,95635,40148,25133,38475,93488,53397,40692,89194,24107,88606,64699,52203,10968,37453,53214,29776,18215,59219,78688,28038,44344,51340,43936,10841,43236,67093,87510,95585,31434,79342,59085,36958,10123,24786,47564,40904,52315,40538,68697,59338,55930,30176,66028,62268,98506,42509,64286,45929,80533,58378,37963,77137,95001,73159,13834,86754,50345,47903,27342,17358,40159,28178,43992,13270,31353,11899,19081,33509,22853,34686,64114,39351,13258,35536,91726,32922,75580,41576,21198,11764,36124,28546,92661,23911,52982,34871,31877,70835,55826,72925,87284,60349,29665,48150,73400,93811,27400,36368,70864,29544,40006,18348,48149,80644,26342,21556,70563,36644,14986,12058,69759,19480,79732,48550,77601,12520,26251,53977,18018,70414,34454,10669,22996,81965,99007,26106,40429,66137,30132,38321,39154,62243,52046,25783,74563,31776,54459,71879,69559,35829,16635,44334,16907,41929,30987,57959,24208,23279,29612,33913,61441,79996,55191,90380,68175,94217,29587,10120,68949,92073,86240,67204,29095,81326,96399,10481,79377,47144,79741,77357,41357,49558,66307,20766,94603,95902,46943,23815,25218,91616,77342,59610,74957,59527,20992,41532,28376,40291,78389,34952,13502,69942,47079,46567,34952,89028,12613,15380,82921,98490,31583,44274,82164,88151,77800,78870,71681,82903,28927,38400,56730,43030,70799,45588,97742,91417,84393,50175,95640,12554,24748,44922,43243,77234,83551,80837,15293,82048,40480,25935,82291,72106,42494,41194,32044,29904,11065,55108,17870,25448,67732,29131,82361,36692,62510,84491,92538,23112,55229,81480,97117,87997,63222,23493,12233,78252,58274,46180,63680,37677,76724,11505,44343,81589,28569,80303,34998,96131,10539,97747,87484,82804,92641,15178,54154,44008,16632,50627,52384,72380,79312,24327,30380,73136,11849,56003,35352,51278,55101,67907,25394,20248,95790,19077,30537,34320,51371,43262,32300,81228,82921,30257,71558,86850,39445,38539,15691,44181,99183,29968,14844,94361,86218,24401,29952,71063,74012,48836,98660,14077,37235,22292,45215,19048,83308,93847,70265,18031,47949,95309,65554,48699,56937,49657,98695,66231,19339,42029,52991,34291,63828,56546,61916,61436,49756,49159,16723,39604,72406,19271,30868,21331,20295,24146,80757,78504,49438,36118,71216,62132,94092,38160,98724,10604,39684,60034,36264,74826,60492,60479,73054,65924,42838,25252,11757,91262,11595,95776,60425,57921,53763,41574,77336,76235,91150,57601,28583,78279,14050,93926,77329,25770,63876,28040,29193,16200,99539,90803,59062,97507,83639,46188,29993,51459,19310,34772,44916,46628,24853,45395,16953,33619,47961,54786,72797,22478,62217,25994,51330,15574,35527,42262,41252,93916,78937,19384,54156,45626,76214,72369,14066,71962,40676,80009,48619,48462,17572,28525,28687,10434,35731,81168,20750,63716,60539,71768,69478,15379,95102,61390,58412,54544,98371,46748,28367,83443,91899,95680,87931,19635,62399,87707,48573,67280,20144,83063,30172,38466,39142,96982,46071,72208,41244,66683,59826,82363,48809,23655,96756,26981,98215,82425,19352,86157,62165,11487,82731,10918,80820,74232,60576,25816,37558,56717,19070,91263,22859,20416,92077,12038,78469,87556,91833,56157,86405,87444,87317,62627,65197,13240,73312,43608,10513,42671,32776,80558,31882,56988,27990,99696,13083,43423,74570,68281,72572,44157,98385,41310,51231,73520,64109,80701,38825,53811,53673,93329,40400,90992,70357,69162,85080,91606,87716,47556,17153,20155,84774,28352,61111,80115,74704,84878,75501,58770,84359,48282,14791,20408,64335,29841,62936,17866,70627,62394,46669,20654,59216,36836,89784,13767,71842,31535,85310,25095,93488,12143,57930,68990,27442,61984,91232,45107,56791,30561,89059,95341,90847,42207,44932,95069,44668,25491,67908,63377,62480,38784,22567,59675,57871,45101,88190,59016,44854,63313,41461,34352,86994,31674,27542,39790,91213,37401,49284,91871,76574,29226,76738,13417,69444,70315,55948,43576,35395,34376,46840,89910,49851,65976,87765,24353,92987,13915,24860,61836,35623,34911,66531,31860,98212,48694,41740,48206,16422,58695,29738,58455,33967,98009,54157,77620,95372,68730,91492,94702,88400,60086,50295,29706,78828,63114,49428,81108,29695,47472,86674,54162,70431,66589,87002,14651,14418,39748,72406,24725,42631,54458,89363,76915,90350,26945,48798,64663,69369,27318,86978,93479,80892,43403,44179,96279,49466,33724,11380,88448,49586,66841,63358,45909,86070,39750,47767,49465,30156,56702,91126,33068,96165,81661,81860,94978,39757,84894,89769,30263,44265,63879,45296,15509,37030,50429,34082,36452,93676,86073,76633,76709,13546,34912,99560,88609,36479,69440,67301,10401,51163,15664,13793,26269,94693,67615,24929,64123,83554,41416,92555,93951,37042,36973,49287,81045,11019,15801,38391,47360,41271,60501,86335,52965,74445,30105,34551,86911,30750,16014,22696,13493,31450,42991,94572,50411,87215,95386,62719,26796,94988,94064,85239,36574,27684,54957,44201,91833,41404,53419,40703,31041,26112,10362,24869,84374,89623,28479,27640,94558,64236,49823,82890,40519,68942,62574,28621,98335,18397,69548,80470,88523,78595,77613,38460,12075,10768,64870,98004,93951,12579,29473,10975,61529,53167,45318,47449,86991,51252,55625,30738,90937,98429,14233,99659,12861,52757,28051,41622,69199,88580,94485,91269,41473,19202,61475,50480,68005,14228,27262,82390,50097,61093,23870,82773,89946,32155,34112,56917,29197,75233,38575,67325,90948,77173,39442,22030,58128,86541,16892,26767,93421,94186,78328,70305,78839,53440,48016,83144,64056,54854,20659,28809,39132,12330,18948,45317,65696,33086,71765,85008,95383,49204,95100,62062,93240,85218,54466,53597,88268,35210,58771,57082,51129,30164,30155,98936,53744,37747,75762,13434,64766,92125,11993,80006,52825,49857,50490,18666,75991,28440,98634,99539,10696,44971,56791,91105,10309,38033,81348,52509,26868,48276,70528,64257,61956,33958,78723,40421,91751,20695,60450,93701,74590,65858,63297,98528,83349,89836,14871,80428,84060,41100,38231,67598,91344,70604,62834,78835,15978,19037,56388,78195,52892,27669,58692,32507,11728,25044,52283,49115,76347,48694,36192,37649,66900,81351,99825,67779,75606,73048,49296,69649,59964,59304,45091,82824,49846,62758,14335,41589,62665,52842,29627,46708,77287,43972,97423,17028,43599,20148,43722,25230,33581,56799,31326,16069,39215,67186,91421,13063,27700,51415,67208,89359,96739,74552,42881,37423,35593,50011,93328,44923,27686,57266,96992,34465,73882,45236,56065,52600,29629,71128,19947,67430,46101,61918,23528,86336,87652,53648,56764,60232,16131,48022,30459,83750,34968,60618,83487,58357,94705,42255,22692,81478,19693,86217,40670,67585,23964,18906,10345,23139,98693,99988,39069,53581,84719,13403,13456,80594,88833,12417,94567,21572,66064,35295,23899,61912,51128,71342,73413,11617,52309,78946,40278,25978,19157,94739,74091,98798,44532,48127,39923,40830,57948,81730,93800,80731,80853,56453,75141,77232,10843,98825,85175,55108,81016,34731,64109,99835,86456,73945,90501,22770,23107,16157,44571,99992,30312,13860,96511,29584,64454,97995,25454,37391,78308,81699,38567,68343,81901,42955,48078,29687,91250,63879,48939,14397,36031,23189,32496,48400,84879,95177,85506,46129,19008,18498,95829,19813,14120,91901,83964,47454,23578,12880,75651,84386,69605,58493,61476,83718,24557,80520,70586,77391,98885,53092,70765,62706,51381,48048,49228,69173,71264,53468,37226,44728,21224,85507,63917,90250,70868,10907,93274,42250,96747,59068,46239,79029,95724,70567,40788,24316,21895,73304,10236,54060,65598,32636,54616,97924,75535,67118,80548,70126,73162,83602,15163,68868,14305,28775,82932,68498,92295,31294,43067,12629,48896,73608,89761,99618,97625,41998,84155,23061,60846,87677,42192,18337,87210,79561,46633,19760,66969,99895,98828,98431,82202,96216,32641,34982,15622,42684,32044,63634,41410,50040,21329,59654,65900,18879,46781,18695,43570,88034,50149,13771,70846,20081,69444,78465,70054,41131,47346,37592,17132,48375,15417,22352,32699,31295,96171,16372,79831,39032,96052,21007,14499,84587,87887,44218,70738,77104,46454,62613,54324,27655,14427,78274,90757,53601,40726,67196,51665,91915,88101,27050,99278,46343,94332,90416,38293,34155,39559,25798,43457,83598,43130,57154,26435,91922,57649,37400,57285,89994,94244,49946,53833,82866,18661,38098,71298,13780,92510,66694,52307,48504,57869,79295,27461,76680,18172,22639,70667,15283,89786,29454,14291,41749,59124,43067,61802,64187,78490,92795,75983,26863,45498,75259,26202,50082,40428,47109,37376,30123,33564,17234,90727,86836,77865,47195,59688,97679,30097,35704,11744,18032,95949,98949,88735,98447,15101,78330,18672,89365,95661,57380,95490,89683,73746,43133,16214,68511,69125,38218,43348,56791,53024,84953,96560,95524,27567,71549,77586,20714,96877,27680,81476,42449,96980,28460,13452,32152,43345,72256,60199,96566,59628,96797,69556,19467,70935,19950,97251,60735,20938,43227,90426,47381,74375,69453,76282,82993,86533,76585,68172,95031,40880,33268,83253,43653,31499,83918,49263,35644,44089,79849,48960,15939,18544,35636,15949,93781,24866,28055,78024,47925,39321,42420,56583,86681,15666,53564,73708,85546,72499,30687,39848,25119,25929,57797,87781,30864,80344,15285,37951,78443,76334,93766,54542,20429,69696,62496,76646,24756,21144,90039,49315,60994,81437,79562,18588,54568,62976,41171,33660,95274,75417,55108,32413,60993,10655,21282,45219,89878,17026,33808,45014,57078,84099,64917,13689,57881,13465,64290,64122,30138,99599,96262,64582,54063,51501,78021,40243,74270,59971,20806,75760,51830,91317,68291,66995,78984,12061,35851,25996,30608,24744,90554,27164,35268,65057,46791,39329,80097,54375,69946,97713,59226,30649,98593,72651,37765,47371,81072,78250,73006,79042,55494,24285,23537,33641,32237,24495,49428,86965,18505,51651,64193,98611,23043,68835,44844,78039,98028,71189,63739,20012,71999,27361,86825,70998,80644,47563,49213,70326,98378,79850,25631,82222,89066,78519,16727,32621,59404,60346,40683,62640,15435,71935,26881,89386,82109,83028,80621,79564,90892,17268,94134,14605,66385,40757,39879,52168,66265,59599,30419,39671,75888,46264,49722,33003,46631,63961,44768,75764,77450,71840,28642,45702,18284,24029,93513,15337,62842,35596,26187,54296,35339,63909,96110,90758,98312,67365,11503,64552,40690,23238,38583,70701,44711,28946,90590,84456,65169,92694,47158,81485,46641,73063,60079,75242,22838,96661,57100,83323,34407,85723,78655,61993,24153,58570,29156,57435,90425,72442,48626,83807,78217,75416,76015,92806,50788,17639,50458,59023,56027,17041,19555,62401,30773,78478,18058,97122,12591,71644,13221,67367,98488,68285,87954,22201,99600,19578,47163,30859,90296,80209,53456,27443,43449,29743,77829,88571,23709,82488,24574,19209,64021,86325,81925,15309,77829,50504,49426,92035,37212,88420,21822,84613,91535,23663,28548,92345,11575,61104,76868,72412,61204,82536,55585,25552,27115,64094,13881,73458,39640,81452,86477,21997,54828,87183,14388,17756,22679,62478,70577,36525,25004,46029,77979,44544,84039,36712,29287,35683,40431,76606,76592,39426,62573,37166,34870,37499,78516,15310,14241,36887,42143,24437,61955,71996,88212,20003,22308,98298,65236,96803,82227,32963,70395,50704,92754,92260,42372,41730,44366,13024,11331,51140,27122,65693,17788,14839,27700,71928,19580,51454,54970,94983,95522,88356,60340,76819,26035,94191,85822,60903,28851,49373,38923,95805,15024,20683,18162,28444,52290,77021,27995,26175,18059,38290,86795,74308,91542,32324,78685,64640,49814,89714,78581,69786,44075,74108,86048,80187,47983,60125,81975,95791,20379,34815,98685,84465,81933,47203,38109,85162,20496,23954,72266,59348,83161,66951,18897,38706,48063,34444,94062,44583,59865,68077,60375,37140,48756,40281,46012,47412,37670,81935,90368,74592,81789,45999,48468,18236,88845,36801,44627,27903,35813,69106,81835,99805,25395,18369,49853,75976,27253,68598,10578,70696,81906,54095,97341,26819,64823,86773,58765,47116,87313,39777,93010,12834,11913,20043,20205,54766,90272,34828,40354,32255,41826,50608,45473,36514,35306,36812,80813,94812,64204,15243,71216,69165,39746,97975,66212,63366,56345,88147,77652,52851,37564,82910,97921,72390,67664,75039,43179,81221,31292,79624,50344,52908,48516,25907,18234,99958,74261,42975,20926,13140,33305,51691,94426,99787,14705,93089,74638,93904,45916,27605,31873,68725,62476,57963,68494,97344,88898,88195,63267,52612,13660,35182,92422,31223,94725,80616,83362,23795,85611,93062,88634,44666,86445,85201,42331,92818,19335,98959,30573,64901,84322,24646,11319,53991,67876,10526,58158,36313,39295,89362,28694,65877,79176,26500,51713,48937,65937,68381,32472,25596,42508,96772,10341,43150,37065,42743,79088,71223,28192,78945,35725,55793,45344,43811,82822,70562,44436,51945,17924,83454,24772,59430,51206,80623,65913,87810,28978,88225,80146,96235,32829,27274,38397,52087,46326,54134,75168,89492,97066,61365,81509,38131,57934,65580,87632,25265,74216,25410,20176,34842,92522,91341,79659,45990,60067,62130,52123,97534,52911,24675,13600,15896,26736,22992,74852,45319,72207,42334,49799,96448,57582,97291,79173,89037,29377,82020,43674,90622,93363,57060,12536,21444,72411,96097,46782,60008,95990,45533,43222,22821,35510,11552,44236,73865,49374,84336,80250,25479,21854,90711,40848,87928,60969,78265,92673,28893,41465,77878,90162,45421,72768,55018,71488,25987,66191,16620,68958,21280,90439,38400,55277,85541,24154,18286,49893,27204,65510,64856,82028,18795,12564,14903,20312,28399,37082,23312,92080,14857,76027,27276,35083,68617,89514,30726,97936,68147,95439,98887,49953,25975,35779,68092,56455,27303,81678,52649,10533,83633,97043,67960,92849,80844,63894,80845,33957,32716,37566,38347,84365,29558,73638,82675,49081,38031,58096,20773,48737,72770,54455,29324,60531,61862,87404,41663,76741,19060,19987,24263,90648,69638,74093,72633,37494,63460,96430,93320,25570,69208,61000,77944,80858,25089,39870,11869,40786,93731,17294,94078,64107,29226,56580,37653,60378,12735,56296,47521,14806,16314,37986,22195,98576,83562,28541,20256,29368,92244,36072,41744,13336,91175,74441,34799,92871,54221,54003,90667,99560,16999,73974,24880,61287,54199,98369,23107,91518,24923,18039,34475,58742,27569,64294,47294,34412,36700,99356,89289,93647,58739,23149,67379,31000,38856,77447,68004,16905,37110,39038,99347,90692,68893,15674,85844,63115,25823,39411,11397,81325,76771,35073,32688,99715,90204,51513,93967,14160,90077,93442,24966,45200,63908,69734,24810,91621,66380,58267,78414,84913,19948,97145,61367,86533,51832,18978,98855,82080,81009,10988,45082,66062,71215,81367,34858,39307,77938,77422,20936,30128,60835,40642,64612,73642,21392,19018,41123,95571,72451,57599,10823,87002,84896,88039,58863,93799,43557,52524,95311,57834,34896,65635,67338,52481,24659,19518,87780,63079,63016,26277,66970,31820,75613,30471,90160,18356,26445,15649,43850,57454,84523,34576,35989,42469,86203,48738,42193,50785,38200,11858,43677,87122,47938,61785,87920,81170,89245,29720,71809,63684,36761,61967,58936,80784,90312,97823,41539,86950,49426,53456,11317,96938,55554,82299,27086,31867,45384,85741,98238,43811,96477,82807,31552,29689,80821,11522,30517,41882,61097,29130,22142,53743,80017,57317,12585,28131,79472,44476,17109,29072,81129,65941,75875,64988,92975,16640,51698,53110,22507,29691,56779,26694,40725,97299,54165,66174,65958,24664,42284,43692,81958,48593,72098,55165,64243,75403,55943,92165,39759,33317,82026,93996,88576,55492,37434,37637,79654,43449,20221,74245,15993,41583,40458,89980,29178,90105,18246,82698,40533,44500,55813,27726,48327,99962,18001,20901,36386,29099,68667,71086,43241,39612,31761,85825,67490,74357,44754,11766,99261,50336,41481,95985,32843,56107,40810,67467,21120,25642,29686,65189,19845,10973,98495,91275,51142,84491,33803,53360,80525,74364,70333,50392,38907,97496,41975,75377,17466,72231,71502,81522,21730,58900,61906,20831,15496,94311,19587,96754,97890,76364,14774,40314,56960,56353,97382,70323,30712,66859,71243,71466,60786,46321,33324,98513,68522,96875,19292,36238,86218,58311,45367,98079,15799,66124,57953,23451,77657,25897,27684,89928,96851,90418,80162,62218,86894,11382,25540,24365,42513,30201,55621,48457,99667,59851,42189,64581,63145,87620,38364,50235,38082,85141,14017,55701,37213,38905,92533,12055,74019,18829,93812,62889,39192,97092,76311,53440,15637,24533,23109,52634,31256,38359,29856,97174,61175,58984,43033,68953,26624,20913,39963,97686,93378,88657,58692,96171,50408,10733,45215,34319,11807,17033,86545,95019,41882,20125,12212,69260,55059,17244,61570,53800,35291,10560,81208,95586,61417,52873,95004,16413,64069,49682,15036,24978,81852,89098,37222,38917,30354,36857,54579,54572,83289,39211,69604,53138,50196,59230,34437,80755,69239,90484,94429,77317,98523,19174,66106,11434,87176,21232,35031,77510,56500,42567,41110,56859,54497,13599,10081,47879,58994,74819,89169,26395,74204,50099,40489,69930,13693,68255,88312,74195,19086,57317,93518,53748,29396,33872,23540,36801,53718,40863,33814,56899,74384,97058,54078,17347,20238,26425,48687,19118,74855,87240,54383,65443,77251,95339,82020,57392,96595,57390,34118,17308,61977,96673,59116,59931,28283,69019,31272,81120,19955,52418,99530,99036,81702,78250,87915,85420,26354,61383,43450,31167,61177,94862,56022,93154,64979,10486,92643,33309,30551,21508,35094,94943,86026,64095,30138,47556,53432,40911,22253,93997,89367,17189,11864,53146,48970,24973,80155,68236,68632,34089,61200,57607,95189,30152,29322,21101,32969,75029,25072,56262,81072,25826,52493,31382,27123,65068,37898,57939,51891,85245,66143,35078,58309,85078,54631,15281,58518,85811,11203,93630,20095,15582,66636,35581,76889,57484,52210,36250,60547,58766,98585,30948,11491,66060,94081,61377,60715,39952,98647,82116,46633,49318,26621,46498,65012,14868,55339,72770,44297,61235,21319,17881,63169,89036,30718,39557,62795,30478,24008,14795,80620,32885,78011,83226,92586,62655,51845,62104,73978,67882,84542,18440,92472,45406,45635,48351,93740,73912,17665,99366,12017,54708,60193,11285,74703,17425,33273,29164,29837,51085,47083,28818,70528,55532,15662,23707,79392,81541,13692,36456,66102,72392,28166,95241,88829,18166,10093,36632,48172,13095,71201,29482,55442,24017,61695,25601,37738,20760,88387,66719,41329,28231,66334,22898,64174,14990,46378,73631,17914,52068,13708,57960,80192,49313,10837,93505,27837,57341,86945,62044,44091,74569,33478,18499,26467,60482,90613,74165,67983,73867,91912,33417,74041,58185,69279,57850,54300,42806,92449,91239,16677,16200,11787,76035,89370,97044,11710,15988,52313,79568,21685,78218,88943,75051,49914,50524,54549,62748,87477,99716,87281,36582,73844,82414,56027,73623,17931,98245,36427,74054,34136,28035,27790,37305,59900,31758,94415,14536,47662,69155,97697,22120,82812,89220,85985,49414,51844,52657,52632,79652,12725,12661,34530,73461,28991,90443,43923,41468,53268,70221,44641,22071,27550,82670,24733,85682,64316,65801,99075,64647,95245,32833,11836,38469,68426,71617,57035,64455,63354,30864,23858,64670,39007,47809,28152,47066,72093,41846,97027,97357,83612,27913,75365,45734,45436,45278,64273,58464,68390,39163,72415,48746,44819,60873,34025,81928,85292,62287,61446,99308,62271,53981,49172,51887,78740,83128,41004,63330,14701,25257,21972,83935,82070,54338,38773,38093,67219,50514,56488,51790,10733,83554,35095,19385,48853,29637,29482,71725,65837,47870,12914,67597,41523,13529,45930,59033,48526,15057,66919,21811,26448,34585,69369,45889,51972,75189,30603,23002,21273,97991,12549,93533,74502,76976,43505,60255,93991,92768,13329,99063,43346,60335,72695,40497,89297,68951,53581,10521,60603,37285,58005,40307,43935,26501,81613,59995,46486,97162,40159,86015,36843,76027,14626,15741,33384,50801,15162,89246,70251,61059,94570,49092,51966,91291,26324,57302,75892,66966,39511,89426,75433,66926,57122,79069,41864,89651,40890,48716,72499,40380,86926,94145,38984,72675,23828,34019,80803,42218,61612,76825,83047,55723,89827,41343,90856,53283,57821,54330,90093,45404,23542,66252,59476,12166,70773,88728,88442,30603,37003,78806,89255,16631,22562,51625,47418,59667,88406,46137,61535,55034,98741,12778,54400,19285,93121,54384,19423,44609,16935,67813,82878,10478,66998,23691,42307,66210,88458,78364,74850,99530,90652,99252,40725,88991,52897,19394,63736,83466,67248,50786,16705,47165,48267,53394,46697,43998,40597,34920,73802,46545,97197,29464,11688,11953,83046,18638,82354,47789,43790,17662,79437,60140,92852,74498,76106,49876,35322,35253,95501,63540,69415,40369,49955,10479,86174,36586,80541,59848,93877,75089,46732,58348,60909,50725,94642,44767,76277,12597,83136,28643,52340,31539,34948,76709,16062,19267,20108,71207,21655,99140,43688,92678,25358,63414,35134,60817,55609,38913,21973,23976,53954,18311,30417,32028,23398,52160,87707,50978,23996,47811,61909,84214,15982,55128,98356,27001,22734,25069,33483,40221,22023,77131,83689,21171,73021,47604,43103,67626,39958,18992,20823,62617,85862,63998,64689,97674,57575,68331,60871,10483,28946,48486,43298,18592,78039,17665,30121,73986,37329,77893,88928,97343,48646,86030,56537,34136,40253,84840,80652,80599,84345,67273,52510,85255,10336,60503,85154,59772,74004,97567,83428,63506,40927,82344,57818,42612,88118,86850,43366,92051,56391,77722,51097,44323,85441,18468,50682,71399,47620,19590,33009,98751,85400,23003,82032,28533,53248,52147,23820,70079,21065,88200,60264,94411,57626,57687,23147,78672,35142,43248,45905,49889,73157,54041,57163,69733,28095,55415,66644,11006,97784,72077,49861,64499,55315,30640,59845,38927,20627,31787,39705,15921,15631,20620,72102,68697,47806,60219,54614,76779,31406,33444,51640,35881,79044,62319,16549,27889,81863,12686,28940,28597,52352,86691,10124,83370,31412,72932,65842,45968,30377,88524,45840,44649,42415,62810,21586,25324,59497,85702,47342,88697,93290,94794,19521,94195,40580,74582,15152,46851,91052,71304,67681,78860,66233,55691,94245,28593,66264,40474,60982,11940,46403,16613,69835,42533,81725,38874,29857,63224,82249,40066,10804,86391,25665,62332,86652,14558,21381,25439,41772,53528,52962,84813,34913,23896,45741,62387,43261,87092,83704,15502,88917,59266,45112,92046,29495,13257,45745,17381,34277,74962,13579,14804,12491,79704,13467,76223,53896,82521,99307,17955,71268,79006,11358,72643,18373,24792,28255,34058,46640,48244,81034,43464,43837,62564,59387,38350,98889,13130,97790,89514,26251,62897,30721,93852,54397,98788,30963,51795,79496,59445,28636,43717,67710,45048,77185,99404,85126,78487,93950,55556,22428,56934,49946,25314,34217,97049,72310,20594,87952,16323,85202,84494,62855,50516,37723,69682,76678,43258,43539,82411,94481,28629,81209,89491,94370,73657,18967,89129,74553,95482,89586,36852,25166,30353,24843,36440,26534,53933,53341,37860,74170,41713,74419,84830,91885,20416,31748,73816,20696,11592,57603,57825,58260,48138,29347,95198,82056,86937,96075,96715,17008,59429,12643,36204,40650,74151,91592,40275,90284,98681,55700,98604,20198,60244,78446,99408,59162,20394,29399,97465,98292,64648,20609,67007,84373,80406,90161,81734,93921,23368,99850,38016,25268,71859,33024,43295,20970,57480,26348,99961,84112,90031,19165,36933,78114,88479,41978,28380,57670,41727,72021,64994,53885,91970,27251,75082,29789,44765,47125,85681,53733,39289,77045,83851,70721,70391,43623,85858,42750,85256,46171,61117,22715,90578,24386,77718,17907,74411,78669,49247,13540,37879,89845,40623,65431,20290,55974,69764,97521,27924,92477,61630,79043,72577,34822,35246,38684,34908,38136,52670,94274,53841,99104,21335,75072,72145,12794,36365,56683,45641,78845,17776,68975,58326,91788,66603,16564,41033,10091,73565,68010,60876,89754,84948,18409,75368,62052,47907,69014,83285,67390,42559,56004,79013,11163,95655,42456,24818,79020,82074,68686,43744,16790,23099,68204,80937,61947,20313,41564,50751,39499,14981,16842,58762,58907,92978,17613,61114,40908,72563,11324,33326,13632,68478,38226,66355,62455,38896,89972,95917,87443,75928,93777,78556,67008,77241,80625,71933,70436,28755,69825,76861,48690,81081,98893,16960,67284,83495,41811,94300,39640,55761,73148,50047,85961,81464,85161,63814,86966,68624,76555,26143,82001,62023,11134,45337,95967,30784,21573,61211,78741,76282,44504,96421,36111,95094,92940,58599,83211,83932,32384,14146,35875,70847,37675,39792,39640,91308,94501,15829,53826,30384,83869,20343,56367,27545,18181,90943,72867,85673,51427,45745,49967,89834,45082,27768,74025,63342,85190,55504,80046,47626,52284,36706,38746,61842,12912,86568,70767,94545,34152,36703,40713,34010,82424,59748,11968,15477,91029,82074,54868,13180,55481,14218,17354,73570,20748,37851,90933,31810,36697,78732,31193,44771,35122,90531,54127,12543,26978,15872,98013,89323,59928,99223,53310,97843,90873,20700,47978,29169,77837,40631,99335,30002,98198,16740,38224,25552,99155,37916,62846,36950,47757,50010,43051,58467,12654,21838,69400,16559,32356,97262,80090,57494,47633,22484,23707,47106,33456,70102,51595,96204,14578,35557,34541,48351,68583,98124,22648,35056,84984,12223,18260,93814,69645,31304,31927,77147,31329,60485,85281,24307,25280,59875,29723,81550,12873,51597,89417,94751,98908,91996,54803,16502,37814,52128,32707,72909,95816,68980,97842,97346,22929,36881,23534,65950,15540,52037,74753,12471,17977,30824,27005,70330,13788,67891,84392,30147,70469,63732,95454,95328,60502,98139,71562,33243,57411,52698,19317,62214,85108,11039,21096,87455,72980,97136,16115,79811,44088,21277,38002,59116,58768,46155,46981,51430,91954,89539,79713,63182,46706,20650,44394,90355,36656,49974,59866,91035,23071,73316,11492,44911,69067,65207,93837,10888,32775,37212,49323,64604,98979,38795,77862,59734,89928,33886,32591,81487,22093,63361,11368,22682,38641,33055,18615,44356,33836,43583,99094,29704,94195,58703,73654,27786,70301,14942,44950,36654,91497,51550,79720,33129,79748,37321,35621,35461,36347,27119,86043,26771,46228,15261,90282,91928,65030,22951,25308,73578,41156,99690,67383,13882,62042,76611,93172,43463,45819,93967,88267,25251,99139,61297,11785,52335,74092,38567,54763,97328,19303,94609,99773,97991,23235,97096,69477,91038,28978,63519,67469,30017,62845,31153,56866,53248,87049,59965,33404,75264,19627,15784,79861,65045,75710,68110,27857,36122,10607,51474,84465,50570,99452,62866,63570,76184,72935,41128,83325,45419,49631,82936,35912,16676,74083,15529,19676,33250,31761,80697,10151,99121,27859,57440,35440,84090,61275,43692,50363,57378,31444,48842,63066,87442,36222,49361,29657,78854,78981,20704,96653,96162,77816,22438,41999,77499,74126,87285,16521,36874,80550,61072,51577,61360,72679,28462,18544,63408,67197,29199,27020,45019,81559,61655,12663,85734,13868,62536,15981,35057,47694,86496,48069,43050,66262,75390,11659,99878,23396,48490,82816,63030,25281,14235,67536,78093,66926,20520,65667,26237,23767,55569,35685,39482,60688,87297,60348,36956,52182,69558,25042,39450,69431,23425,32771,16455,44922,88463,74775,78323,65068,30602,20682,17897,38169,59442,72949,32580,47834,14323,69323,52382,84134,34382,34778,59067,39638,17209,28511,40369,91443,15720,99431,71182,24905,95847,42066,93951,17732,24044,37578,65700,75344,37987,72435,65561,49352,60140,62947,80117,16737,15961,65739,60363,94215,48472,73294,62867,35271,13103,56328,26520,27909,36985,36930,16066,83589,73696,59038,87165,15844,40011,36751,58057,51056,23106,57284,60439,14658,55261,30791,81970,80658,98762,45211,76627,43234,18683,56016,75333,37384,17244,49459,22532,35677,29209,53208,52945,47206,37469,30412,32648,85401,64714,92318,22313,51672,76518,95840,68039,49186,13238,66698,84267,79602,31732,83340,62025,18577,98745,20425,34429,55960,35244,64457,31956,10872,55292,72357,22857,32595,18544,51117,21485,49097,85571,43784,92807,13194,81216,97266,65576,21402,11738,53331,79955,41357,48083,95916,42326,77183,74812,91424,77681,96865,81466,61590,37553,22136,52318,17272,35143,28931,85833,34495,59216,99007,31873,11535,52456,56207,28067,76000,27329,94538,67657,88082,10051,13225,72939,19020,84842,45871,59364,92500,20325,94908,72008,41692,14107,94154,63238,57357,71509,97170,20103,51825,71104,64060,90885,82152,21216,62278,19107,77061,16293,45997,74477,43080,50007,26532,45220,81262,48248,88285,43363,92633,84813,82816,28153,27330,87159,14497,31009,41731,57423,99819,96353,51737,83979,42030,38084,43501,74148,15487,95150,27332,53226,13416,27520,23117,88388,36647,82820,49265,36744,36777,43481,64589,48113,96129,45443,20835,17147,94922,43588,84316,36099,89634,90315,10187,40836,58050,82705,67847,28880,83085,30486,67771,99069,11006,45333,17539,62040,59913,37772,66614,99552,96361,69187,35101,32049,43313,38095,24422,32313,57971,18659,65260,86272,81238,31793,26138,56595,23108,58808,53680,16746,49273,33046,80792,21018,33333,62705,30511,36223,58366,88238,76171,76896,84640,20241,94570,84038,50852,67376,41481,62812,27620,69511,33727,59068,66467,65800,83280,95166,36600,96807,36204,93392,42725,99470,74199,67252,95386,17623,72625,54784,75943,16804,22588,63159,15974,16563,73689,23583,24525,61567,60706,25346,26665,92327,73532,34144,87957,98766,53279,52424,47064,66886,87341,41322,10855,87685,42658,24801,24592,41614,62586,54075,13950,80078,38749,81811,90702,13878,14767,44591,88455,70103,94269,47358,18814,39837,61016,40031,77721,36831,35697,96050,28062,60084,23289,18513,88403,60743,12059,12041,74538,40657,81773,11940,90009,38705,20578,16382,12168,97261,58792,28386,11900,64889,37782,60839,72216,22069,64837,51266,46761,85418,11323,68268,52478,54762,42347,95035,35935,78862,71997,76472,37424,43625,92289,76453,47604,59732,67863,34123,21061,84583,26973,81648,77423,26022,89792,36929,11939,74278,82117,69407,48426,89899,22055,15748,17290,48416,40546,96193,64060,74094,22950,14261,82980,34362,99707,44537,31246,97702,39524,74637,20922,29741,83238,93893,85716,21737,93469,89745,83611,72687,44830,17407,22356,65356,10167,76726,64450,31426,82330,80270,61015,63896,12250,26659,73074,82728,99003,79405,47802,36710,81161,24470,32902,35553,17512,71637,60745,51764,52815,78008,76445,35635,52680,16080,12922,40746,31005,28686,60375,52522,58236,42818,34288,54319,75909,88670,47556,45508,40225,11597,37815,87371,84969,75486,87127,48661,18333,57425,59059,24022,33145,42638,20635,10162,73121,13635,39433,94882,80198,52416,99378,14065,59212,91083,81826,14530,37798,40424,52375,91815,19027,34400,89496,60279,69749,72711,14785,55705,49736,52967,65236,37456,19039,98665,70062,40069,46583,38663,30773,27561,82282,47054,60974,67289,17534,52716,41418,39149,95614,42937,50361,53868,77553,42293,34513,64121,51195,61837,14769,23457,17048,82119,54419,75938,30960,30992,31924,89653,99038,83736,17891,57135,92365,10642,60427,69146,58117,61865,22313,28126,33309,34227,51051,83267,78344,31704,19254,71786,97609,11242,82581,39378,43421,98483,10080,60599,64971,20145,73085,90384,50807,73339,71797,16221,33532,31398,64426,39402,23393,77561,11201,77086,31091,44556,86592,26978,61357,67395,99603,74072,27071,71562,73623,45895,57484,87445,59637,95326,52857,90565,45781,66041,76350,11765,93895,53170,18146,26035,41377,58403,43995,49802,52600,41578,16140,27762,52123,94450,71067,81490,81506,20388,93985,17800,98059,23180,12544,76112,81968,40143,41379,98292,27587,57697,54648,79182,36351,36311,27197,26734,34217,16573,77141,59194,36971,28483,94791,12360,28109,29690,68233,51682,48263,79794,77057,85931,64346,95483,66749,62366,42068,25628,90590,48254,78305,51664,85495,19101,81760,48980,56160,28879,82810,95784,31178,35120,56021,63683,50247,95548,88693,16632,48796,30695,27455,60857,96612,35714,47254,61862,99643,87314,54735,91639,98885,79183,32057,16022,47336,26232,17045,95766,33042,64605,31835,23603,33458,55770,90438,78692,25279,12690,93035,27973,29123,25451,83528,35316,78609,87452,10354,65149,52819,56231,79771,84699,74598,74995,88816,40728,95710,35603,30322,28230,62261,66817,69910,79552,27566,69271,13142,54156,95207,67036,22619,40147,72044,91565,30358,32299,69003,77832,36510,18779,74331,74039,48487,15753,92882,81903,65536,38022,66843,83824,92949,29015,56331,73309,57095,62075,71498,78869,13261,56485,56998,57697,40999,79873,58016,12624,45504,95762,79788,84410,86728,88899,71656,10496,65047,32978,56874,24330,90606,66424,34704,44397,48532,86936,60765,87309,72356,24371,42441,83769,34826,68649,45606,41026,10973,51056,50052,39828,86557,94332,33791,86841,26472,25301,51872,62469,19701,78427,23597,28546,43741,68207,81315,49270,29794,60832,81944,79791,30170,96319,13780,64097,51863,57073,69501,99561,38258,14179,57941,53820,29207,13047,23590,71384,63800,83138,78726,22287,13223,40916,82876,54030,26761,49921,32587,59388,96007,22349,79340,39552,56318,57538,69570,78578,43604,80338,75179,96028,45473,85786,57498,40751,32252,46080,55227,18265,69157,11544,14424,42061,57801,15963,26640,67871,77861,57466,49337,84734,70278,38566,74964,68852,76321,15377,14033,83732,26018,12781,71291,85582,77164,81437,36514,19663,14244,82790,57092,19496,77339,64277,39030,34756,16196,98856,41277,26704,72929,93582,53865,26251,35568,78130,24993,67829,74775,82621,31025,98460,35643,88081,15978,61915,21159,46536,30373,11682,33262,52312,59062,85010,70432,25469,91934,28680,50521,31151,73914,62521,97186,46157,23358,76605,46142,53064,14042,42189,65626,24716,34799,41695,49026,49213,20583,88532,85742,24826,93359,63025,65662,79938,82586,37056,81835,19107,83122,73480,60978,38181,92134,59153,35539,32999,96791,11666,18461,48215,47275,47555,62203,28927,50778,99330,15743,92304,93962,53901,42118,81317,46548,99054,35803,60832,60020,23781,63414,26293,61926,57090,23313,23992,48656,23065,40714,13287,52100,68268,13777,41372,22885,15525,13009,90032,64442,38596,99685,82244,26371,65259,51619,83475,36420,22246,22628,51357,45378,62012,74890,25145,30608,27239,22818,13348,62485,28702,72770,30172,72109,82125,20471,71434,47407,20348,25572,67372,38817,91305,75091,87852,60061,54418,22101,28977,23654,74561,65827,69215,10089,74309,20365,48872,26421,16531,28405,88468,17413,18055,30500,55727,99279,47137,62568,95719,15787,94264,92751,98870,28900,80706,43394,79134,36239,89648,38303,75777,62020,47835,37139,38596,65218,65398,75693,99371,35034,78009,53108,83481,76123,49326,68845,87689,18749,54259,67848,63766,73330,45610,26254,94057,80816,44538,87744,64124,33690,39173,52748,27522,47015,31782,71393,98877,45418,26504,12968,21720,44468,53433,79381,90999,71680,91703,70957,17399,41245,86767,89459,49517,99377,67670,19189,41656,53298,10929,76630,13013,42088,33113,22339,83691,58590,17791,72904,46335,56864,43436,38518,63440,44755,18132,68019,34855,19742,17637,29416,36349,18979,71267,94961,37409,26170,21695,15356,57981,23588,66884,52483,64446,33363,67105,45080,86509,77520,81174,54355,78168,61988,78603,85010,68660,76703,33883,41004,64585,60174,18773,39001,28408,36255,31919,64465,20254,99991,58345,33368,71586,61771,87214,77608,89759,37486,60603,37406,85580,11399,21548,96079,12137,67201,98246,57178,22677,76471,22286,48739,26537,40299,43696,29234,95556,98541,21079,65880,56303,69915,43181,31500,16334,94886,20738,31303,49420,27857,24427,16906,22918,91965,65142,72307,79916,55755,84056,50785,27121,80365,87999,40140,17420,76603,22883,29305,79237,10448,47222,38866,16482,78887,56779,54010,46046,17556,53118,65266,86577,73719,42043,19987,61718,14606,49317,11013,38643,97847,20681,91599,46652,20876,11823,44429,59043,94381,38647,31206,53978,39088,31060,28623,79077,66133,92620,49461,52474,36307,72899,88886,86394,47816,18853,21027,62124,79605,46807,38867,57002,89506,38146,53406,67264,49916,36718,42061,64402,96120,84252,43021,72088,27394,26165,36615,82122,28397,98410,64618,94123,92244,13362,67097,84767,56897,55240,35049,54656,67035,90102,87900,10784,92931,52023,42618,51235,67826,87989,23553,73659,88204,57646,99990,96113,74036,29567,32834,92820,33701,54382,28379,61356,52892,86409,60582,74773,65401,83509,75505,66257,87703,75236,73766,23374,15782,54989,98254,44524,81223,97375,22037,91100,90918,66733,37257,20929,31446,85119,18421,78155,38810,95742,69508,24988,34358,55321,17756,32902,93730,21553,37687,85493,81105,41517,37114,37759,43173,90656,73585,45485,93079,28524,46595,83413,82508,12847,31118,53910,28282,42431,56812,12953,75418,35335,69840,51351,33017,23087,88711,95643,70714,57895,96821,76411,35507,49264,14886,55466,18441,12770,64749,66599,75886,54556,76135,48340,69280,29261,51161,54335,72124,11766,21497,23089,42546,79611,59352,29493,67579,70471,33776,94244,51321,51043,79512,28991,55072,15411,39194,18973,45564,82606,47127,98736,99503,58773,31552,25096,47503,31387,80488,99018,49905,27929,23140,16518,48863,56505,49575,75101,26482,60494,66308,27014,53618,92084,65279,93917,49338,90524,87876,18440,59310,37606,45359,32762,44924,43637,79470,91163,59823,19028,49087,65838,22374,21342,12034,84650,79853,73779,66762,94034,93148,50279,23832,59601,37737,88947,39684,52689,83495,79792,72196,19482,20160,18958,40356,69784,46359,84313,42016,28866,84651,22575,17848,52156,71898,10913,80555,10702,74652,32845,93125,18234,66673,81906,65586,63387,26027,88682,23881,78060,83426,92017,32217,24241,44934,76788,17833,36675,40501,24317,57235,13167,49006,53008,35822,42097,51764,60083,28756,49095,99455,13349,95964,68416,57151,58413,71440,78036,96272,92443,56890,16534,40955,51197,79383,65446,35446,68464,64627,97307,54344,91622,90126,53868,82594,23603,17161,72073,64452,67692,53851,84733,31642,16971,76531,17465,61151,16338,71919,75350,38955,75280,99670,87428,38227,43583,38823,40076,78240,62557,32874,95129,17223,34747,16329,85832,38248,62292,64764,59698,71539,85659,88986,43872,19637,42186,41886,60277,57624,34073,21723,76622,90965,77676,76037,33712,51269,27129,43745,12036,51219,42809,34355,16012,28395,10642,61790,44000,56701,72427,77721,42661,29465,84816,46920,19072,92931,44758,22358,77928,44077,88219,12912,79443,15782,59539,23876,60999,24449,45637,41568,26543,94366,75802,38171,99708,24686,38300,92316,53134,84250,88786,22160,58788,10821,17369,17272,74253,28267,89226,96737,43008,83575,15475,75628,38616,64403,26669,60356,38919,36773,93296,68096,25333,69647,11906,46989,43681,44160,58389,37919,67985,32292,36178,68676,17069,83661,55191,71985,43903,16322,12211,19298,73288,91797,89843,23548,93933,49783,79144,39198,99164,53742,15599,68732,69545,50151,42674,45598,72638,17885,37622,54827,23492,32588,92318,28596,45274,59943,47113,62283,71011,56844,94110,62761,43666,82969,81072,81231,59713,64243,61921,78897,91144,86722,60995,13490,68586,76959,11991,42053,76922,95851,77527,50949,91860,84615,43646,44125,83484,31839,66275,54395,92075,43068,57750,14274,59973,28454,28325,68671,10833,46304,53295,86640,71878,32310,92156,24952,34498,64134,84701,20691,10335,37228,97383,80715,96963,70137,97578,42258,71688,79044,78791,17717,62075,90737,77556,85474,88568,67018,69517,49428,83628,38493,17943,74210,41803,61775,57853,30636,32431,25754,70541,62661,13237,55900,90788,66681,65654,72515,65751,32689,11802,61269,95834,77268,88535,30097,17337,69319,30749,47145,93618,18529,10502,49019,65533,67954,67843,75933,48450,25294,96717,80594,74054,81776,66713,13388,92815,51424,16384,79020,16898,20113,15793,35485,39663,97685,73195,77830,26472,24357,59140,84378,71216,93511,92015,71473,85805,91512,71349,94835,15399,35127,47565,70115,25465,75775,64091,35838,54702,57043,33779,22938,87695,10147,77620,64560,93677,27303,61427,93417,74151,17065,53796,24734,48322,36150,52097,84721,85270,31367,88454,37271,86192,76647,95887,20894,83536,80805,57781,66387,26045,10163,67983,20999,28620,44721,40968,26622,48141,25162,91622,76006,76200,19847,78663,45703,45768,14541,98382,64949,92180,14625,11875,99086,13582,91716,43880,22708,47544,61662,91727,86932,89542,18578,22612,16643,52658,21172,10801,90658,95585,10800,64264,76154,63913,85543,35985,10304,36175,45257,69763,72982,24631,14807,98617,99169,31284,89774,69922,38986,82727,52127,36653,64426,30927,41010,35276,79000,43152,72241,40747,21315,54654,36760,86945,45518,40901,40798,99473,35239,89279,57821,58567,76956,81814,20236,80807,50762,66668,55495,60589,51573,19615,32834,13866,22979,92182,94654,47407,97089,61731,18357,24434,50027,33505,71822,41457,58819,58619,23080,22112,98078,62113,62276,69897,66250,89534,34828,56607,46196,48329,51557,47129,12032,85111,40914,45041,18887,87459,58129,88342,91611,28042,33911,62983,36931,14686,23157,46225,16563,92054,56058,15269,46839,21364,24131,61423,53821,81778,61617,92887,65254,62532,22054,91528,99246,82283,43828,88900,75264,90730,57032,66921,46509,92004,41565,46274,69323,26011,85052,90216,56539,47564,10972,84626,77051,42413,21865,40609,33726,57851,15026,48723,54571,47678,34784,80094,54669,19879,61414,19235,50596,55790,40202,30941,12929,81164,39159,17480,68341,86613,63171,29033,20988,36955,73304,23107,98913,91377,46468,36944,66603,59794,43081,37045,65687,72733,68182,27559,52060,83982,10583,25824,62348,48161,41459,11478,89619,38785,50259,33861,11723,99434,36199,74037,14967,40268,47575,51172,97968,34027,49319,74877,15136,22517,33459,53017,81332,50523,38839,84635,57460,24521,62750,32998,43372,20574,51015,41293,25967,79430,20409,71939,37131,43551,97754,28252,37583,19738,78057,69139,86597,96566,83611,36210,48861,39358,81252,11160,23078,17487,91359,49283,23091,17997,49066,57919,17359,46777,27393,61217,50924,80857,26069,34837,32789,96054,96035,17975,60661,92920,93646,63004,26170,54169,72444,84446,42550,62381,83955,51691,87343,79950,34887,65474,41351,18653,81163,92435,40031,35397,68834,37643,44088,68080,46238,46046,13696,78429,41788,85342,80462,67498,99762,13885,54486,68821,14597,27217,95093,13872,31422,89704,54041,15166,77837,17799,85976,19402,21481,25922,64919,47300,51273,86471,47869,68498,91530,49320,30113,97484,76248,10652,40886,10709,25928,73407,10174,51438,87578,24742,84671,35455,87822,15187,82310,69081,71691,69408,44802,89342,44454,15351,71964,30860,48889,89231,88231,51583,80008,86555,70594,37769,50149,84255,61093,55621,19400,44672,80612,13858,91202,38818,46313,81374,41872,93245,49104,14080,34410,85089,16628,50373,13048,73763,17498,10573,88732,28284,94082,19525,54827,57414,20207,38320,41383,40682,41556,61857,80723,19537,11429,64704,62899,83194,33213,21259,78378,52623,99244,69139,41539,97053,32816,72304,81324,49099,29582,57110,42391,23287,99709,35285,91312,68090,31478,58099,46305,30981,30841,39735,58738,58719,75530,44516,14920,58643,78635,94170,81336,37383,19661,95357,60293,81823,31355,62838,23073,68391,44724,55734,76832,75767,16371,89107,60715,48358,66567,43626,58320,27298,38856,96934,91865,45831,41555,45839,10689,92515,79829,39802,97705,54041,22757,54176,89163,95798,72115,56721,74341,41578,35469,95278,27349,48932,57390,23933,62530,70196,77289,12355,72569,54075,69125,69652,58114,23446,53874,54201,93485,67518,26843,82914,89282,98895,91050,84235,94978,96937,42526,85875,77632,78570,96392,55291,99062,40145,23107,67184,96882,14340,81889,24801,96390,39650,47047,21673,71405,38560,18534,65904,99844,94709,76414,80226,99575,69184,90929,59296,39237,90592,52760,78046,14777,95657,12671,65255,42159,72616,29030,10737,16739,92193,68248,57214,43003,83938,61632,72833,99353,94534,83335,61840,95063,47026,21003,75892,33193,41584,19747,75411,82957,32993,28519,90641,27350,10713,39318,72197,15023,33400,61962,97426,41601,29998,68367,55433,41885,84629,55360,27488,33991,62359,88790,80564,27552,63775,31586,46487,41333,11530,35025,58550,49595,11737,71917,53675,37529,88034,39013,41114,17895,46793,48586,19227,13982,77233,95348,31607,11290,78346,34455,72971,34676,73801,52506,35548,54977,65157,81072,11125,60382,96213,51563,90740,66184,71962,48654,43940,84740,43935,12194,34058,77340,33648,71436,48587,40485,50605,32476,34602,72103,82200,35694,94217,13077,19424,19339,25620,23812,93630,77409,76150,89903,77811,71068,97630,94886,87177,42340,11926,31397,57694,15827,84455,94792,17987,41691,51580,10153,99413,14320,38229,49694,16270,89745,59217,70659,55583,35552,46465,69871,47162,38633,98900,71308,87212,74724,42175,63833,55452,98816,41705,88626,68082,38444,94180,17817,77286,83834,94499,55796,89968,68166,55301,14929,59839,59309,23033,17903,74829,15666,36189,63841,13426,73664,67314,48672,89565,60367,43455,18895,67092,11648,64334,96855,93581,19428,27785,61328,45348,14316,20968,41155,46229,37590,37600,68312,88682,65527,18814,42203,39585,44950,54527,14394,84241,33573,76455,83310,67103,43590,35039,68046,68265,75924,33476,70919,54673,70505,46367,57302,60712,43592,33126,51404,87267,55269,70404,33019,92678,19564,12448,99138,28637,21901,22766,87245,35625,78851,99754,56279,64873,61491,68744,65430,63744,43452,98723,74582,90139,23885,30909,77173,24005,20359,91783,79266,39984,36709,71866,55453,64466,66712,74125,13835,33955,51017,83282,33927,60565,55715,36375,95617,31195,75801,19688,37860,53108,21700,89441,84929,14815,67925,66961,22652,59695,31919,77576,60810,31811,44496,39973,48792,76468,37253,67091,22985,90636,90845,56892,33677,73461,74950,42019,10147,40219,61487,31078,86195,71762,44948,35650,41451,61732,31544,88964,66430,26202,60430,40951,40120,57436,73497,97442,20523,29753,21766,44408,23850,40557,93442,46353,73133,28348,76278,66117,86773,95833,76818,95244,20575,57975,72069,58148,37310,88677,45303,81124,68319,90411,24760,74836,77821,81599,10189,24488,97565,11665,15889,57783,66396,78840,44778,60641,15349,49269,82546,91989,24730,65951,34249,54753,70689,90069,10187,68762,70769,26686,54409,52333,98018,21363,61426,46822,77864,11473,84126,85638,48101,27338,80038,57206,16480,23002,18860,19442,79946,94138,26704,30031,59756,68774,42628,36578,94977,52417,48422,40687,26138,92222,20941,13866,73489,23069,98774,81935,21913,45801,16793,35454,79166,79021,75733,67537,86124,32707,30180,91787,49260,95526,29306,82281,71110,36147,51387,94811,14869,59705,99791,32381,66426,62639,94920,47819,41287,32109,34728,13408,16745,34403,29252,46897,91831,60527,44054,36767,80831,76429,31275,58930,71615,48039,93100,80812,11562,82871,89315,26472,69279,97890,37653,27225,65003,52047,12882,43530,11519,16883,46738,27808,20936,84527,48230,41060,53511,67455,43328,58601,50567,24618,48406,12098,89619,98550,91507,21505,70169,56086,21377,36774,98398,90175,15246,36131,82852,44446,49322,95492,98546,63741,27695,67195,87550,45433,26429,64919,59455,66921,75899,61965,65253,30632,64339,68210,66475,31637,21995,45886,33632,15603,63945,78207,18272,42490,10079,80754,53317,33563,80809,52782,43827,65867,27353,70696,15786,79115,54414,39382,32329,23769,36401,94107,46053,14320,78312,88054,70223,60441,63437,28399,50704,12924,60277,51714,80756,52367,77391,16436,34999,29623,39559,26289,79755,60696,93989,72350,15491,93335,11138,11037,70895,47612,56112,69090,97628,16099,66921,90581,41303,46743,79909,98479,81321,70583,73060,41405,93199,25850,77681,28641,72711,88598,34849,89177,25523,44308,75973,44227,81526,88997,98614,63603,67842,41531,71419,34686,60345,66811,91685,16329,65490,13662,54678,20031,55288,71149,47394,24295,14727,89360,50338,15481,45569,10340,50168,82056,87693,29397,36736,97087,45571,26700,68910,50446,56313,33821,15534,77009,50150,17001,98743,74503,59412,36372,90830,20515,81203,97471,14952,95712,96912,41571,82536,46217,75089,33868,66464,92796,24213,11876,32293,46143,39264,46144,92023,71347,91633,41615,30439,28177,28955,77116,93636,38481,58691,39804,41948,10911,88485,90028,12643,83376,76228,87968,32291,99803,86849,40167,84865,96333,42703,20887,47894,18206,36390,37235,11186,84584,44605,24823,81681,45266,36288,36116,41236,87260,30460,17809,59731,87355,77817,50139,98117,88389,76139,19146,97656,50262,88376,73396,39160,24695,41016,41421,89404,54171,23989,67270,36097,52633,57738,64471,91451,14066,51841,62447,30435,31692,56063,69451,77993,28687,15050,70394,26716,33160,94014,64157,35392,11385,29052,74459,21955,60783,30700,61319,68733,71328,34016,38076,77070,12580,67508,37254,51038,76240,30356,68942,80117,99807,86752,91311,17339,39259,72301,38347,71659,39936,52104,56612,62160,40760,28988,16392,36796,41129,97670,80970,57707,83779,31604,97857,68267,61994,82629,26539,90708,49715,67956,94018,61884,83206,28127,31044,89090,13827,96812,95846,33549,98561,87544,79501,73690,90407,38891,38429,65961,70938,41273,92645,88344,30840,19224,60825,76370,20598,63050,56351,94790,54707,10788,61096,96983,29660,74743,56992,39505,16178,50953,87022,31916,13535,81115,13015,8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34,97099,65534,41701,55946,58731,66720,65271,41006,15251,71360,33443,81438,78972,16903,18376,86083,55134,35303,99476,98613,74570,40117,97029,45882,74940,48461,31612,56002,54626,70557,18226,44134,82372,54824,87511,21512,62219,90190,15129,16481,23391,17114,48927,98167,11049,67318,76085,60786,50613,91456,77403,97823,15066,82739,45680,91764,87285,84942,19856,63182,93563,79072,27514,72733,30175,99304,33650,52885,69845,25856,11547,44253,58915,26500,88358,69001,68091,37104,49276,30735,27360,39916,93542,80231,94610,74749,51779,32788,58910,89559,38733,31452,63234,49325,88362,64915,93894,40029,84244,26310,16150,89642,56987,43359,15632,83636,36907,38475,83912,10346,75511,42349,93096,73150,63102,86837,81818,13992,15858,33094,73464,73265,82218,68658,57224,45936,96658,60754,25794,51234,54097,86155,86636,76435,99680,29509,91708,37529,43449,49476,28076,88053,94116,22443,95270,75900,42556,48332,43440,59500,25884,32317,22876,63839,11075,13390,12885,32478,49344,33158,58420,47705,92588,46826,45870,18663,87206,85913,85971,25373,88479,81354,66381,43216,31820,38914,28933,91591,87071,31257,86325,80567,99836,64511,52808,90127,36040,44867,82674,40819,29277,29662,68189,60306,10576,99692,43214,21005,72018,32413,39271,83799,71470,48015,90554,99123,97092,20634,69303,21480,47880,57575,55631,87990,34412,56955,73806,53569,69325,18147,19196,61358,25039,39750,16098,94688,36151,67316,40841,76006,56936,98693,60247,67705,25761,73995,17508,49278,37126,23072,86375,77514,70439,64938,14716,52103,43066,70536,47905,74537,56377,88602,21342,22784,81286,71414,56983,13146,57506,99193,80912,54435,70793,96711,44228,60883,21428,86899,81964,33782,99095,50297,63423,19847,85135,93969,67476,49684,68211,16448,22965,86954,16379,11157,43918,93630,59708,63240,98160,27740,85159,30613,92842,65037,16510,53770,87455,61155,80463,95706,34267,76445,62953,88039,28981,30056,80083,21865,80547,34928,47436,68448,57950,35168,13528,18076,59747,94693,30139,64585,72963,93313,35906,82829,15994,19610,15057,27241,65881,62013,20301,55797,93974,28579,24166,91781,17674,52635,98851,83494,73779,17048,62271,30863,12288,30973,66728,67762,98654,65428,88991,72220,25286,93454,65710,69708,73569,15691,11434,44283,17762,17130,13909,82423,81275,34661,37328,14654,93204,30782,39987,45895,36420,34435,17077,52778,45546,30922,77117,75430,29642,43267,72744,86012,29681,15596,16685,78468,79587,62537,15954,39708,17731,76880,82578,35396,43025,31791,46819,87085,31219,42785,20261,65624,72460,16232,17701,76721,71024,14039,75043,97913,22584,27634,73997,71601,17501,69203,39258,85991,26807,84383,98154,38581,71939,99901,32556,68912,79853,31296,29008,27706,42849,88087,72328,52799,68388,90776,40141,13581,12516,37652,41005,20154,11074,62644,97188,32721,11556,60167,57160,79615,78664,76953,87130,74641,92248,65484,89214,51609,21799,13053,43846,78078,46260,36124,14627,52939,37842,54603,23878,23578,22562,15693,54924,88630,74525,90231,42365,35726,43713,21031,68748,64680,15886,25346,41205,11800,71246,20316,67575,65372,23154,36072,59974,66482,90873,89562,76961,57811,17163,39597,86323,25458,24722,97350,61926,42742,42843,54828,84923,30198,19647,96300,69400,68061,84734,90738,26076,40083,31697,88055,48148,42765,62030,17749,18458,68892,21655,81090,40008,78078,42333,12426,38932,18551,88214,70748,59213,16157,29723,48974,95319,48177,17985,83311,42752,75292,98730,83001,26127,15932,71720,54391,49684,94413,19717,40058,28928,61200,61255,64139,50392,36108,45678,30697,29605,45545,43012,22936,46902,89500,32776,25903,93920,85745,49370,74758,48009,28186,79392,94762,22416,14062,82689,89787,64963,94338,88855,65204,36878,26693,56382,17189,19004,91507,40341,68187,90268,77629,93123,91524,66880,88092,80992,91377,72891,58264,64524,68978,87431,16665,80527,94135,23901,92630,66574,19374,84447,25057,21319,30229,64362,73892,95034,60724,41433,86942,62137,96228,15302,25637,19258,25370,81061,89161,48965,33226,87421,88169,11601,94967,86166,92157,29581,30472,92082,88172,43973,26239,35285,88497,29143,66569,83582,48328,64843,75655,49310,62559,52729,30780,26196,90212,84508,37539,63473,78249,52958,92099,59922,62064,55758,39091,48072,15214,30019,61405,16322,68749,22978,32280,94121,79634,77447,58236,22321,90727,35285,28254,39083,45754,68147,26408,58063,44031,89357,22505,79835,82585,76184,37491,66703,40789,10647,46343,23741,60853,59203,85961,38423,41249,46172,34280,29615,86758,82794,65757,15105,12919,30057,43949,26956,27596,63475,17622,33888,35193,46560,71821,56777,70657,32486,26824,86868,52933,92860,85983,28109,92210,44826,89674,32497,87721,44049,82589,28428,76966,14077,54767,92068,23763,12485,54461,43085,30346,99886,87019,19160,75451,52260,63404,22160,13092,29185,42181,43619,27566,74792,12575,90881,94308,71417,44071,25779,44330,87742,58278,21937,90580,54339,33415,93952,62760,26936,37937,14315,94812,43344,47173,57709,37612,53552,81714,64245,49775,99625,16503,72095,48368,23707,63641,44463,52149,86008,18168,56962,36245,97620,58883,38786,26103,83088,50678,46685,24688,20601,37229,67858,96051,32072,46059,99951,29445,73124,23497,10440,78506,86563,79556,26013,23854,25011,58883,92317,78839,66840,56742,54256,44740,73268,36508,28180,69534,99308,10821,54242,61439,79142,15596,34449,88261,90626,74102,39081,19602,26492,20038,98218,89906,99619,89924,34373,58280,90494,45531,54143,15258,58986,57790,24240,12554,72216,13813,99806,70336,87708,88162,11027,26096,33177,35909,23506,13217,97523,71280,29746,77810,81974,94579,91449,10541,49955,51252,69469,18903,41739,16483,40331,13253,63415,39752,38656,69689,32283,84833,69331,27117,18057,51481,64058,62204,13263,28297,88531,81025,80281,50076,22044,27723,65158,78206,95149,15106,66838,95266,45210,18401,82566,48653,16832,84600,46082,18679,71619,77086,58715,37429,18444,27112,22221,87124,70363,68275,12045,92976,52814,48280,32715,50510,82868,69186,68227,24251,23101,68553,63169,31412,77271,89292,90452,26417,23114,48239,76234,92295,36193,71479,30718,56974,33894,86360,45874,93677,55391,48242,13704,46350,22068,22441,71120,21353,81332,73838,75029,35711,87450,98588,55680,85990,34953,99681,74176,16675,73602,68303,90137,25781,23281,85052,28886,53720,42390,47218,19660,94649,97036,87211,35981,16672,39037,81257,58408,85758,98725,89200,89890,99036,23690,12184,98958,14023,84713,61496,51127,47072,12107,74724,54151,67616,55079,51174,15411,11194,12599,11621,80386,40951,37669,68564,15436,61696,70029,64514,42425,62523,80276,76692,42424,21956,31898,28066,45315,23210,29380,71175,17424,86272,12949,82699,75593,84956,29075,40550,37659,64675,84731,99090,12623,71634,67486,76278,47887,17748,43449,63399,68842,94183,60151,90564,46610,99686,72878,35096,64366,10274,86048,79177,92055,18435,50336,20735,76828,76589,88284,78024,26362,86330,66566,73214,57490,36711,96691,95759,92074,87181,49129,45924,66320,10009,66091,89090,88268,32085,63272,95556,98913,65000,36195,63629,80687,50123,92470,73230,43904,62306,54865,30379,96692,69312,36762,90281,84242,28919,90084,58997,27160,76646,90471,48647,74923,16244,48988,58131,99347,89050,51542,82773,64132,65390,78484,36423,41369,71199,69268,58657,79189,23070,83503,38481,97721,29495,33435,95066,93876,63008,90066,34000,69378,46720,40526,38229,22170,63179,39086,17660,23234,77364,96340,98527,56385,22554,72888,23884,47766,23575,78646,69259,72268,85007,11110,37128,58040,39860,92119,74324,25464,25497,81493,23912,96749,30636,99411,17945,29535,98978,31514,87474,83772,24503,94317,32213,87347,70647,71796,39770,64286,27435,22697,89729,37797,56487,83286,48429,81892,87578,82554,54792,62100,32634,52434,36398,20120,87451,73141,32653,86884,71736,66315,17857,55856,16531,76018,77678,23233,13709,60850,87454,78657,93875,30925,39783,91074,60957,75403,47257,87480,35667,29567,49512,88926,92258,28719,53528,30814,11978,56714,42625,66291,78993,95310,94725,75801,28991,75727,47150,69512,66207,86303,12666,16288,46971,85002,43478,33058,55059,30815,47378,45226,86191,41840,96536,59991,74314,78191,75795,30070,57813,13827,41328,83614,24258,71268,28103,14104,26474,58543,12939,27586,16918,97366,20952,60335,34531,55778,98439,72317,27178,12350,26188,59421,63764,58134,41683,16376,97179,37630,52720,80262,95837,80933,72812,93599,29289,43555,24963,35880,36967,95509,49664,72370,83346,70740,22897,61789,24851,49909,37060,46724,79006,95720,57644,82246,22542,97805,77687,65771,12531,23325,47462,81562,51522,70257,34636,39734,70823,60283,18862,58507,44158,90735,12659,98271,93424,29522,50529,98412,77865,63142,43997,82488,39495,17387,54827,35342,12649,20836,40693,33228,94054,20317,96157,15356,64394,48032,10179,85874,40819,78244,98080,83800,91263,57046,70082,44763,77057,62486,21071,29880,65617,63140,78331,86330,54541,26823,31342,43313,33030,86092,33033,57021,84693,93970,22873,95798,27912,55752,94148,14819,29727,49706,11540,73241,11935,97867,61062,80474,23916,71022,43319,60470,93490,54401,58366,74989,10403,91075,16747,92745,33593,92220,45068,37135,39636,39331,98459,65141,28500,31604,91002,18385,15270,56677,34330,40719,23323,12344,71865,81551,17558,76831,84716,72605,68201,86408,86377,82299,86396,34368,32141,17236,10715,37599,89292,56099,92434,31384,31070,92328,20838,55895,62532,85067,92981,19204,58757,47868,92241,94790,22681,58030,45436,54994,44929,70381,41458,79238,83693,67669,24612,66973,13268,78546,39909,62566,49424,41992,35987,32446,70228,82642,62813,88670,32318,65772,48294,66987,39913,85999,42724,49008,36947,18381,85779,81266,19342,20247,47843,46409,44360,35887,96800,64286,21270,32458,98728,18390,46871,42112,37674,22533,75733,52156,11468,92355,85423,27677,85241,74787,23529,78375,52698,96681,57099,32441,12435,33865,71875,59264,81008,88817,94116,29232,45792,94928,45368,82027,76122,89300,32887,33725,73370,13668,24235,26973,36062,43601,86803,96315,49894,86146,38130,39860,14878,70280,72864,28891,83129,20224,32645,19124,52539,86997,30570,40479,31742,20929,81248,55576,94003,92741,91228,32557,98089,79109,20095,77308,83673,71376,45144,67590,82092,49356,66184,30103,32249,70714,50343,23176,93038,59928,33524,78206,62617,66530,14193,25809,87213,13687,51995,18071,73367,89681,96137,95882,58010,68938,32668,10460,79088,26034,27307,77304,27421,74246,62837,44252,97847,10578,63773,80434,99083,41446,85805,85001,16926,57498,72214,87408,52813,19850,32551,74378,16744,30867,57143,48317,37656,22782,13710,42122,41325,33482,62815,27619,88923,92165,73273,89419,58801,25335,21652,41745,22986,11171,85909,87013,51891,75124,46350,84907,84406,23842,22894,32262,14210,44587,97418,72403,41206,53410,14543,98501,88824,19162,46638,78713,35956,25579,36369,39908,34876,64155,94366,29578,85628,63271,55641,94376,49709,36967,50530,25463,22169,98093,70365,88094,89251,58849,56811,40929,57387,27098,48909,31915,89306,97601,99679,70621,35824,89404,12039,34140,60159,63994,87886,88590,77030,83954,18227,78409,96918,73532,29117,20511,91256,36067,32859,84820,66744,95392,57959,20856,49673,65465,35190,26852,94546,48967,15612,19813,92579,70772,26849,15788,55732,46144,79003,79792,85250,64157,50726,68698,28916,25053,96316,22191,93764,63026,95741,67821,89203,51454,81865,86156,21650,96498,60339,26436,50997,49532,85095,82740,37009,74074,75911,75046,29012,11843,68155,29162,80382,64603,45514,55476,91418,98853,34256,80005,87988,36824,87837,36987,25310,43424,44516,53651,76192,21783,45780,77283,93916,82951,10713,50951,23405,28741,59045,26515,87999,14536,35420,88010,74012,95754,76904,47334,14689,75246,26202,65738,39861,34591,56142,71497,51872,92810,54892,72119,92650,35514,18685,59849,49673,15960,84295,46762,25469,78470,52011,33033,84669,93233,96482,27456,44489,95593,58184,48341,65966,24223,73549,45849,38228,29445,33754,95130,41058,88375,39405,40245,21384,31313,52844,51267,97991,80679,38217,22306,91694,99201,72053,46933,64315,90565,80570,86126,36746,72309,82755,25828,25998,65925,55836,45049,14580,39485,36694,42096,38791,55013,84069,98536,17275,10287,63517,90900,71884,22745,55914,45251,61884,69640,75533,35105,68634,86077,35855,66370,34814,22785,99565,23184,36099,79934,38604,61239,70316,90801,44604,29406,12808,81509,44731,69088,28746,13222,87272,38337,63749,45190,52908,33717,72227,73423,45724,41035,65005,78531,46680,21219,51465,28829,41434,45036,83224,57922,83427,16550,55345,39662,44130,10073,29753,38843,28253,19108,98212,82750,60133,29671,73611,27120,85480,96693,33921,63028,38431,47146,23974,58955,59183,22051,51105,25827,35425,37771,21572,81341,88373,88942,35653,94070,83670,96680,80207,27752,43731,57911,81440,41442,19227,91481,68507,14389,82684,42594,58281,33000,58841,27317,68096,74567,60104,19817,43302,90638,10079,70739,95170,16621,69860,44729,47900,82341,89133,46633,67401,11008,87971,52922,32474,59424,82924,89161,11737,90111,91595,75470,58760,61772,30386,46349,74014,22438,33965,64444,11623,22010,49307,82549,35974,84280,16251,26208,47288,90958,34371,31395,11740,75761,62026,34991,24525,42199,47260,33109,86451,70843,67203,59451,14591,11413,55279,67593,55529,81074,66105,36863,24983,52305,13489,77325,94668,48067,61057,81241,46592,85240,46990,87097,56692,67485,75425,92501,83615,83336,35769,96970,71586,45303,28147,33575,66654,80921,79487,55029,80439,17635,31317,53368,62111,40705,94491,25238,59711,22196,97198,26812,46237,53187,90980,55733,34440,32832,74096,48450,80349,56879,75552,38452,89253,88407,53961,53438,73512,65710,12906,44592,93415,97663,59952,40765,25535,41144,44554,97292,25504,98125,84025,98536,61266,14214,53664,54167,42252,10747,10010,76008,23445,79117,96363,57359,71295,12726,17083,27059,71782,42297,58973,94940,25778,96421,68480,77743,70195,24951,28545,87758,62753,11537,35207,46277,20129,80294,11232,90943,78684,19219,71728,91220,41502,85287,32535,93129,93341,17108,92901,15007,82298,87930,20766,87013,30457,37719,89124,14140,11492,36725,23138,15345,34313,19058,72865,17743,59294,83947,65391,30272,50965,55737,75875,42589,34547,59568,69388,78699,86244,46904,90101,19260,84198,14569,15473,94892,90836,81314,75968,14825,49456,54221,64633,36010,14161,48132,36277,65738,27894,12670,94306,20489,22424,11569,98352,24651,58619,39215,65266,94167,16346,60259,55851,59301,48363,33821,49587,18726,72441,51354,80402,67507,68049,20845,85508,76489,58109,66986,61571,57034,80852,21462,38858,69309,61627,78206,10097,23367,25426,46922,33766,60548,30040,12831,28805,55571,11925,87243,14345,61502,48912,48847,97785,41112,49835,13636,61210,91033,59478,19833,52040,94715,21307,73537,70577,78339,21249,21891,38172,10613,62610,89604,32353,59177,73709,90525,65725,84190,90498,19646,18943,43230,41856,84316,77704,58543,79447,21398,80676,50392,43467,19489,40130,10735,72319,51700,33004,93630,15761,48722,61671,76024,31679,58309,44019,13302,57426,82617,36185,91669,33112,49292,62152,12804,55078,50766,64921,89999,76660,58282,53382,85221,46245,67440,32463,15838,23545,17621,38128,95815,14588,66260,79938,87327,30504,78988,78351,95175,57942,85497,86990,22522,97789,51687,95734,78314,49415,21287,44871,64165,97623,40088,23624,12592,30326,95311,76317,74469,25051,90568,63150,70576,70135,50911,41280,44344,45435,90761,47438,74278,38645,95636,22500,26686,18581,13694,21198,96791,38425,23547,98359,85094,41157,96802,22633,17387,70125,30583,24011,98472,43571,39824,45925,14653,15783,29966,11930,17454,97622,61292,28579,43241,43317,30682,73548,21383,30727,80634,60019,97363,88909,50508,22451,32605,53270,19153,53051,62169,47808,12720,86778,72702,27764,56431,80038,83803,70066,28339,21181,65232,75851,25678,46124,55435,93359,41481,79230,33829,88357,70366,61318,40909,80837,59058,41857,78560,69372,77852,60573,35398,89278,11324,53000,13711,61421,76383,30528,67873,75019,87081,23588,35316,22203,39625,78240,21187,17582,40300,68947,93105,28894,44490,21472,54404,82490,93132,21299,38475,74878,77013,74421,77370,65259,75467,78557,35193,98910,10673,69334,90506,45971,82256,18167,63143,10976,99000,91857,34361,90922,10593,70879,51266,46797,38320,59219,42438,52387,72605,69578,64058,13769,98738,93229,16081,48374,86357,70595,24471,33401,86679,59371,40588,70208,65601,55253,11572,97999,19458,83229,35533,58309,66205,49984,84055,54447,98424,98556,27283,35983,14416,87611,40605,53466,31969,14057,24124,35595,53161,27367,59310,84637,85320,99204,75756,80969,71738,47468,99639,40629,56561,68676,67607,23688,21751,86088,38842,21753,53359,10670,62392,29077,84303,20743,56825,57361,24768,25576,27606,35367,80442,25003,83179,42252,24596,13044,55330,53728,43304,81823,69913,80433,18186,73458,40053,63979,60425,92739,38301,60746,68645,78197,33609,44046,73035,20908,39976,79495,98017,79097,19776,41177,34027,40345,39521,21051,95348,12782,78235,89240,19774,50089,93101,84451,62929,12865,44643,28508,18451,40551,91482,30403,37929,33284,77133,54727,27604,64975,84716,48629,49262,97749,13370,71930,16141,92908,79280,45588,55084,71886,59989,26262,29145,16033,17599,11177,63123,80712,40984,35551,47570,68292,94591,13385,41157,41710,38765,20733,80997,78277,69181,81285,12214,67249,33429,65737,92758,41062,32471,22840,79441,64241,91083,56986,14421,23058,57117,43356,90842,99640,83164,88007,17174,87622,64139,76695,22472,82909,97495,91740,46146,14682,69981,49319,18746,31669,99558,97153,86325,83058,24579,67926,83133,38553,19751,40395,96994,26145,54722,86963,61950,92135,69384,21921,32348,20341,78792,77543,84182,71401,49352,20096,69855,42557,71529,91237,52200,57314,49489,79853,48450,29830,43257,85145,77946,37983,56592,10086,39060,64653,28855,82798,21838,76402,52932,77470,73609,21831,75141,94144,64465,42928,50899,16310,50259,30974,50207,87025,53955,55818,60516,86538,56762,73454,13272,93451,84238,57588,27660,90139,67165,61840,99151,38409,96069,93085,63392,98998,97587,83086,87741,33616,45178,38592,36518,27021,45978,69743,21748,51695,39288,23965,67958,91723,41766,58471,74994,35529,37215,57827,46934,48632,47508,76848,51713,30612,41649,14316,12520,24042,68539,79377,32812,84949,93591,64089,56900,79912,87122,74144,60666,64619,81331,81499,76037,86409,25285,32069,50569,23965,66923,62949,82991,35764,60902,57115,35446,61755,80687,72358,93566,87229,39173,34175,47001,52749,49391,16718,65654,41459,68558,55165,49936,45304,98031,98351,37668,93031,39468,74392,60565,11745,48751,54663,78994,25715,78241,74177,27932,87273,26374,94602,23925,79124,80517,88485,33573,72527,22150,97172,63244,49697,45116,56522,53566,46924,70758,73736,50610,80370,66334,56779,39594,35594,91728,44754,37669,91346,95999,21830,73417,29884,30826,67560,71807,30674,21916,75233,63548,89176,14189,35490,42769,22314,50908,86199,82848,33680,21047,45337,24452,56654,99089,47275,40207,79468,15387,80558,44386,26361,95803,22303,12479,50551,56240,73697,23183,35307,38663,41260,92935,60682,51963,54656,39069,41747,13222,76986,44789,98825,45610,84368,85884,73761,54792,16991,32519,29970,75598,18176,31848,19290,56429,68555,23712,76700,76985,68845,99044,67857,17740,65823,37814,41602,86226,67227,43449,12381,97511,44468,80094,28438,94952,99686,18819,30563,81403,73616,10849,85059,52050,96457,44308,92190,18106,59890,56175,41233,77864,56291,26352,42210,40955,39724,25837,13445,52668,87494,38527,20579,19141,65772,54878,54962,50110,73697,84789,25355,13809,13206,57530,51397,73627,47964,45237,70195,74563,17728,76210,29901,18041,24839,62962,96645,32296,35073,48182,73857,16086,60675,16289,66314,93305,72584,73594,19379,68229,96656,98608,16013,11956,76527,25318,82478,47357,95834,61226,21745,82647,15559,39637,80695,95613,87010,72768,97057,49580,38360,67865,10047,29733,26709,62715,78382,73821,99135,71959,57280,56299,95364,57644,40389,96597,59441,65307,38789,52717,50514,75705,77337,80351,18357,88714,98404,31226,17732,64907,41308,80773,32345,16155,82098,17103,11362,28158,42858,74597,27078,29722,69591,18694,84434,33697,61333,61808,10919,14344,52089,46439,18188,17400,41860,91394,90297,16872,69259,12358,94392,97962,68057,71428,76746,78229,93173,76326,97919,76524,95761,74579,21796,33026,80043,46134,99064,85568,38852,13208,87014,78120,40968,53792,85984,55212,85813,53932,60612,83530,93400,65464,32655,23301,15506,84439,46761,28931,68115,56027,32055,49227,89471,67091,49665,37265,57139,91054,45075,73910,85700,26647,51865,71065,34367,86626,14335,39846,35432,75422,93955,23225,18900,99738,25382,96754,61798,11041,90242,73082,65382,41656,45877,63682,45834,11286,78087,54363,63966,11974,55179,96304,97117,75804,48651,83360,14852,22040,90432,49342,13773,56425,61048,45178,15017,12404,69871,39143,17049,58420,25522,91495,79831,51592,47002,64182,53494,87024,44739,76389,57534,81030,44504,48536,11352,35008,44593,85857,97306,99591,82665,15195,67720,55010,94886,71701,47442,48668,96012,51037,38848,30799,24937,10890,10033,82680,63134,22020,73030,70233,64345,19923,55498,65219,85541,88573,71262,14594,44516,39352,51209,56809,57260,38384,72599,87151,48614,57154,48206,27951,38320,36217,82393,44716,85496,67560,15187,34012,12656,45528,27741,32396,98945,28125,50103,78616,82880,57396,62237,46413,40421,22000,72159,60740,90498,43178,67444,79516,64748,82849,20046,16013,86711,30441,69783,16230,46450,89674,61643,56180,39938,55811,45997,77363,71086,68852,94582,59170,80945,37805,42756,33620,83395,49386,55856,33253,34869,89388,12279,61547,52286,63813,69202,57256,74005,28815,21396,32832,14913,22583,40373,99725,83993,25681,59361,12039,52408,48334,65714,94450,62295,88760,10564,77758,57330,83061,43543,30765,89883,21528,35073,13672,21704,48834,82781,92520,19694,70197,26260,72633,35418,38027,16978,55090,32811,67915,67458,30256,60592,67311,10434,29352,10477,21780,94887,90349,77449,35040,87657,97497,37234,25612,11224,97907,42832,69200,33353,19614,53853,34422,28670,45282,32071,53516,85274,89099,36004,19428,34611,65327,14883,11441,96137,14949,70055,33073,42692,23549,28147,97569,97403,16654,60727,81764,10773,79422,16190,65455,63091,90891,76001,49499,83673,99998,10905,15464,90404,92326,37461,39725,37595,62897,30069,37945,82234,63405,16625,75040,79894,78607,13171,89990,12678,40605,37669,34454,76549,11414,73731,46029,59323,35052,13931,60776,44469,93628,87973,12646,42647,16750,41054,25819,28386,43824,67702,48712,16441,47416,11570,41757,43811,79924,15418,50304,12144,62821,10565,36743,10818,73430,83521,38968,77076,88780,67383,45593,29847,90555,35695,69114,10102,67619,67874,55632,88324,61446,66045,11494,97414,64823,97082,88935,98262,93358,76095,86138,51946,43739,39271,17069,49816,23439,98335,75425,10161,71665,96866,90601,93796,93760,81325,93461,23655,61910,29231,68429,44555,33898,25712,65942,28207,49359,33933,14180,17310,68526,24198,10905,76955,84642,76351,94717,24527,26207,54063,13899,12546,44211,40694,45735,68826,81767,16771,28054,31077,59116,12635,92909,11457,12347,11168,35605,71314,89463,59775,27080,37862,49565,51055,83560,79019,19938,99104,52846,62763,72183,64092,63599,70795,53154,30724,95829,44813,73742,99286,81204,19890,71893,35665,72113,40552,74515,19244,78008,53061,14712,76770,63890,25935,10701,90368,36069,29229,84530,20773,51210,23163,31661,41411,94146,49682,31123,30441,24868,30465,34310,42049,91313,20140,71820,38391,37755,81967,79052,71485,44213,48105,31468,23749,27516,14270,48976,22074,23293,34393,21934,36353,95852,90011,23821,43221,37292,15170,44515,82565,41682,93111,79635,42955,44603,58007,76907,97717,46446,67695,84545,40153,48039,49551,75161,62099,69594,72004,29688,51318,63587,16766,71566,65130,30801,95147,53566,36375,83555,41241,91470,19645,76764,76938,44484,20359,91098,15632,87910,76109,91504,22197,22449,82268,12678,21020,82271,50739,32833,15963,52608,38140,34224,42033,14708,10349,86124,44147,64704,45814,52062,94730,49095,46765,68528,97720,77802,70964,87267,29746,77301,57134,98308,18455,81267,26653,51586,83558,38965,68314,68637,82828,12736,83712,51362,18067,57598,22993,11904,55872,14323,17584,70015,55967,85866,91644,37818,47456,63252,88476,22616,69747,67299,36151,38206,53770,78932,76534,85951,96349,83431,41496,20009,19177,61905,78554,74053,25796,44906,12837,92623,89283,35302,14709,55098,73621,82509,66377,93332,88129,96426,46195,87490,65869,97693,45625,54893,99612,80067,73097,88307,95461,60207,62451,54385,67528,45881,90657,72609,32138,74462,61575,86403,78049,43889,62577,35763,49184,28638,82305,91348,81975,54696,67543,63460,98460,10080,79316,24602,68102,10473,97937,94106,29397,74475,94850,77513,87054,41663,43483,97653,47815,29716,94583,64122,60314,64357,33599,77384,18684,86643,48646,76881,74293,72592,83456,51438,55909,26788,36530,65126,31862,59928,88361,78719,59230,92996,41814,19074,24811,48790,28544,23431,26203,73923,27729,44303,22576,51757,95458,66371,90503,30557,52197,41749,49268,24279,32687,94510,25617,39716,58953,69022,92741,97015,11190,20451,78004,29985,41243,41226,57193,79026,52108,58876,17155,58117,10928,60211,26236,40915,88305,12337,83995,49981,92327,61470,51239,98255,78292,47783,29060,95023,18554,73705,80906,57952,64979,88953,82631,88391,68017,35404,93186,31843,12070,92109,11201,62491,44692,28578,62180,17667,82331,62816,26422,48907,57603,22757,81303,97218,95696,75926,26185,31104,60980,27134,28825,38073,47994,69568,11329,52202,15918,83066,63595,23077,67677,13312,23126,58679,44791,86963,76484,26371,13711,31859,13633,54519,29582,74860,28687,11595,44741,54476,22399,88265,14101,58891,43827,96449,89109,52903,69128,47839,11632,29983,31326,55322,19479,82849,15445,12031,28695,88971,95904,52024,44764,11195,15268,31110,33314,73339,76775,12022,96155,61217,69717,22029,83347,83099,46254,88780,69853,34246,78216,12557,78123,71425,37170,19386,61646,41671,53886,75907,46614,21697,41074,25254,10856,61872,41266,29232,38329,91638,55992,44057,90240,77579,12487,22976,74433,69037,56829,22700,59010,61025,88611,11363,54349,54295,37882,71041,13768,51005,21032,92217,82546,86282,89954,82712,30809,67978,14289,95827,78082,19742,52207,19719,16450,94264,17262,10567,32242,22582,85441,87431,42910,74042,80205,41203,21365,93041,58446,95607,65427,96083,54543,35421,42341,35843,57256,38235,47350,19170,52759,24210,89089,31880,32053,23697,87278,97928,41750,18781,57342,31509,50383,61260,12154,10336,69301,92059,72573,78072,53957,43571,11392,60467,79964,42835,47051,99355,14779,94993,62483,93088,15596,19202,88023,28020,63130,15214,92745,19360,51998,23769,61285,58364,39140,49293,80699,28513,63865,47426,23633,96377,67546,62209,34877,32431,44493,65436,51015,47190,65308,61045,67773,47096,38955,83277,20389,99285,83353,80359,95960,75148,59242,91506,18016,16729,51808,10470,41819,75601,18301,18228,77072,11619,77203,54747,76233,44919,28310,73360,42073,58607,67794,92705,26907,63433,60417,81998,38757,88597,81144,43661,64050,46737,38392,41721,97612,10096,73520,58227,19223,19036,95906,70743,10327,16316,76879,19198,99021,12045,96648,52059,25560,87633,10912,20580,43847,78084,11902,78067,13412,65739,77890,58108,98659,67816,48344,58692,12193,13563,39627,33873,19079,37587,74032,85730,25622,56271,57882,97106,90529,56185,59570,80837,28944,69278,67656,47654,77256,85282,70859,73788,77757,75775,32170,32596,18898,36773,49899,26953,38665,99857,58608,56598,97267,49257,99918,76972,75899,70170,37716,46242,52177,47881,14524,35165,37915,59608,50494,83960,51112,39030,29139,13421,91871,12833,42936,19143,66196,84778,89733,41511,70262,64466,78833,72349,25493,73268,78696,58896,54054,38073,18556,49854,60335,93674,13759,23852,25286,58648,51058,76249,42803,69404,41081,19422,24628,80046,94862,39868,56339,13898,70297,20315,20186,77572,68684,58930,68819,23758,97889,95071,98401,80278,90544,38796,57789,47569,41026,20822,67017,41066,25529,35511,53182,27810,93142,69902,34236,56878,81728,73619,31859,74264,16029,50559,93326,46077,88610,49828,70559,44894,44757,29408,32434,98380,98709,58947,76823,65528,45235,19881,48868,59346,29547,16894,67344,42526,87387,11828,41994,54797,70684,77416,91111,36431,77637,34698,96051,33714,43188,83749,19308,44140,55074,41534,52596,43662,45365,88976,18432,39304,56985,53504,37015,71289,60921,30800,93146,51604,27437,55690,75060,70937,25101,51644,66683,41118,10911,77650,46220,97164,90196,77740,59783,44408,41199,76820,60461,16366,24700,63763,57710,15247,80724,32187,81747,93138,89771,32552,82161,46396,66725,11267,37229,15943,44138,25768,43514,96285,12867,13829,88186,87729,96815,55782,46992,87209,57640,43091,69330,68970,55030,91127,43847,95270,10834,43182,80499,47114,57171,76818,46042,38696,73103,27838,88388,79323,87545,49055,97772,26908,73354,34744,75856,48698,94825,11438,96553,36838,21624,17364,10131,99285,19383,86321,20931,97904,59755,25745,69320,63157,79358,99351,40680,15207,49215,45843,41169,59104,65325,69670,51080,18571,90327,67439,88777,23619,29970,16581,88194,90082,77102,25927,54267,56433,63157,27168,30478,83195,41319,45048,90440,59504,90395,55623,50624,37198,38072,85553,82681,69394,87894,11495,86235,49046,86778,57105,43497,48379,39761,53059,34895,71541,78780,86931,14456,65855,10668,74202,62720,60713,89977,87421,20199,61247,77033,15921,66049,74147,32105,85562,26969,75652,80156,43930,84116,15865,70696,13979,23893,35124,35878,99693,57465,76203,18880,66233,70648,13730,26176,67334,67145,29706,99679,12477,82670,89409,45461,29352,70401,26039,26820,63284,71825,63090,99614,64644,69693,55440,38371,34629,93795,28893,69853,51639,91013,79064,44662,53064,74440,51937,79883,89984,44745,99767,98557,89975,76840,33448,28308,95453,17213,52632,10286,51169,29931,77750,69564,18012,93271,70613,43900,86282,40904,86948,24858,94424,22669,22502,50456,40386,92689,99857,17375,69984,35981,67358,69837,96396,52708,82965,41122,39802,57562,42509,33611,21059,86861,22161,51617,49377,18616,12804,68662,18231,23905,67048,85439,64267,27953,77204,47557,19827,25010,25082,78717,51217,35566,37556,22457,82998,85404,76093,44319,83601,54524,72237,12988,76534,45004,53643,63186,27981,28198,20821,71546,86740,32250,94119,59470,36325,62531,71579,18604,54158,55605,34802,50352,25840,96255,31826,66027,15473,84278,22132,94260,11682,80294,85188,65543,36552,15209,10703,32166,78318,63660,32098,45082,88840,14997,24904,16747,72663,33351,37037,41028,72826,91737,29768,96729,42772,25696,31031,45561,53423,53649,40732,83745,97753,22600,77912,35330,85622,85037,66932,96053,92482,37040,56887,97266,68213,45486,48773,41166,30864,17998,43974,34627,54737,74473,55583,70066,68810,56684,29090,17254,71455,82757,20887,96983,52904,62542,31492,47408,32367,17371,28724,43859,63288,59101,19381,85012,22988,95656,71767,88543,37521,38458,90508,56353,40334,40019,14097,71466,38686,79694,65290,73585,70869,54883,53081,42474,78177,42238,26121,73229,71614,47784,53213,71744,61528,82985,97384,26554,53768,79696,22071,20968,17331,70660,17452,14660,87342,28567,37352,30722,33992,48203,22694,33651,57626,33512,77118,65419,78232,65283,68988,83161,78238,80328,51655,28592,50942,29363,10378,23640,64184,36489,64185,89438,56432,13482,68678,31893,90655,28426,35224,71881,56067,78611,55194,16044,69683,57224,38617,29888,20987,30341,30023,87703,19291,11649,40064,14105,72799,92251,10190,36406,83990,52279,44384,76950,94659,64314,50970,82709,59827,79425,73954,55013,99674,68446,95884,23738,55827,51774,96588,49222,64533,48661,91617,94167,79660,44112,31878,81696,47672,80392,90348,94259,41247,35796,47881,27725,59351,15180,18739,14447,17639,42848,49030,94275,56827,55796,76535,60410,16483,93791,22518,46597,80462,64145,99847,27821,11644,61671,88231,32660,94465,80767,67202,44793,79364,37272,52603,73780,18039,18412,69184,71026,74643,65727,78361,70763,98052,69199,18763,63584,17830,49722,18855,49239,94604,71798,60249,82119,92160,28613,32565,17317,84323,78026,88506,82066,93302,10860,69636,13609,35140,47679,68776,70405,79965,14892,70953,31172,96386,32013,69712,28904,72867,80186,36187,79370,82841,41566,93846,14880,87162,71830,43653,79598,35975,30688,33685,10196,30833,22395,39026,81089,72820,42827,73808,92806,21865,88193,27554,53116,21364,12442,99588,94719,66251,97660,31093,25398,63339,70623,72589,50908,32587,85207,62129,61227,64385,67514,93162,81143,31775,70178,11389,67142,72317,78617,56007,38203,70602,29829,18998,73864,91650,85158,90176,90486,18889,50421,89963,93195,31154,13173,62064,99303,46364,18246,92504,13937,90528,70278,67760,53340,85999,33617,29993,55665,51658,22918,77093,81090,29190,73427,52377,60332,24910,94200,68645,78036,47550,38194,27495,80406,64351,87857,20195,30225,39420,21049,54578,69689,88418,28709,35505,48819,46546,73636,67368,97536,44268,87149,93554,74168,16431,97214,54469,63456,39980,63602,97192,79419,53223,19941,69536,97052,48292,26917,94667,42714,23474,25609,26224,15424,67506,82663,59773,28857,26900,37973,76165,53126,94235,25647,92513,58754,10138,28745,78156,96874,37441,86683,92471,53207,23494,92747,27928,61171,19434,10176,52481,81460,21589,45396,83547,19986,70213,97285,34741,93889,52372,26144,45421,33606,63954,88984,94885,53564,49853,85391,97428,94032,30831,14540,45530,63006,71256,72520,81601,61807,84132,39034,48957,23759,94513,98434,42809,65468,49550,52766,66399,41286,80545,53270,86421,57016,60946,14331,42464,77868,16129,16620,71614,96974,18958,20954,18866,37521,60190,47358,81200,54714,30526,59125,81406,77574,18004,23656,45135,61976,69456,12616,43568,75327,36904,82429,37034,96710,18044,92207,53759,13144,47080,21258,85336,43001,87166,23744,18950,74692,84352,43685,29856,58664,36770,33594,61605,63211,51299,67295,87131,32242,68672,86351,10272,99001,23554,94073,36224,71829,27437,38552,38667,83523,50880,98680,28873,82710,49454,86021,11344,45665,57494,55602,48688,25575,71464,65392,84446,40179,73993,79008,31330,48144,54096,68915,22993,95268,38714,43876,25405,90235,90021,57904,59154,69482,45561,12137,53615,60301,23298,33840,19618,99040,20222,16560,74003,42268,89666,78720,58840,78495,49659,21952,24306,34824,38105,83357,75885,78725,56522,53981,10881,44889,17785,98271,55063,50908,84235,25253,42185,16206,67097,58703,98543,39925,57028,68020,64856,91012,77238,59242,32420,49381,63739,53456,62356,75091,52973,12126,58644,55232,40098,10676,22102,56426,13214,61383,93558,83885,29327,99712,95229,73791,90582,12093,69228,11022,40185,34499,20289,39294,12726,57205,44685,85481,80971,40629,62649,94964,13730,30022,64241,13761,43278,87812,14803,74891,78058,29358,55301,21689,44340,64045,99682,92804,10341,32780,63789,61129,22661,44282,14558,42201,16350,84464,77926,54211,63379,78833,53818,27374,41657,49268,25536,79685,79272,19497,16781,89314,24266,49553,47382,81061,23121,85491,57801,91176,93072,85513,95635,20901,47186,54747,99440,65695,33737,28888,77555,50155,43712,33790,68499,26857,81844,76950,51553,34759,89055,40714,32306,61490,33138,55587,38702,72422,54412,98030,67215,71322,97424,75550,32021,74355,53430,45257,44542,97464,45528,61271,83567,92083,58055,70633,35731,79063,47090,68295,86731,28976,32325,38526,20535,10454,27007,99300,42541,13353,72093,68408,21650,95062,84252,28157,15607,30268,31184,31083,10490,43475,14927,94312,72078,67014,74437,60740,58794,10345,52687,38967,63522,79958,79574,49283,46111,81481,27459,86792,13075,12186,84838,57944,51230,18764,26363,47714,25573,46741,65918,61014,94912,42386,28074,72765,10994,61219,94756,22972,99381,51220,76243,98350,45314,74263,80756,45377,56326,14927,83696,66491,97215,71685,68674,13372,23089,10215,41749,40859,41427,62750,65332,57486,38187,21058,59994,30376,47963,59023,28944,16896,67120,88102,66176,65759,38096,25419,61413,49772,84029,88611,95503,75561,90079,40509,33230,81996,45216,68301,26231,32949,83343,10797,55570,72877,43253,10347,83569,88569,90348,57513,47162,87931,12432,98186,74421,17332,81103,37481,44819,28703,66656,20436,79612,71460,89760,22950,85517,24287,10303,85774,56559,97968,38298,59079,46752,88318,35616,94303,92026,88717,47886,13335,40242,74729,85688,81481,83122,25246,71840,60126,83427,66852,43393,50571,23230,77125,65749,22445,90334,66915,42049,15542,37987,95262,90337,60045,73574,15426,65791,69173,81201,37509,75567,62100,69750,28872,75589,48433,17257,36857,66598,10588,28632,74618,20517,17520,75585,64924,35658,34614,28913,34820,65448,37211,11158,49320,77679,32659,21577,41237,98805,11603,32295,97979,31813,69911,33699,15246,86709,14179,47003,75798,11491,31617,85081,55284,32074,77575,90165,97481,18481,44111,83465,46455,67177,55291,19454,55136,48800,93565,22171,30049,83026,43115,90875,45595,51158,22472,26629,12112,56819,26125,94712,90563,86112,13809,17085,76857,79349,70388,83901,23813,18091,31774,23008,20082,82915,16795,76049,24794,78039,54339,27529,71344,48712,54013,28636,88680,48478,87498,53214,28216,76615,37030,88483,32674,91748,28723,17446,59741,71780,27001,52218,32237,77803,36828,42642,92332,50840,66371,43948,37026,69101,96757,50283,48088,50606,98821,61643,71703,64984,30096,22359,16748,46066,86159,58311,66480,44098,15564,54209,58397,44209,14091,92783,71682,95338,20489,37354,97430,53230,13728,46899,58221,25571,31929,60450,92235,15521,28148,69431,15566,53639,34884,43382,57960,10154,86060,16092,21315,49789,70259,73767,33005,84191,32423,97777,25058,89399,17866,80768,50598,69473,11792,49847,19853,60286,72739,36186,93245,33422,94969,83616,57227,42444,60159,10977,25401,67579,41941,55867,85685,10962,80613,99503,26034,29260,28796,82774,68843,45731,46190,22533,44417,23750,57195,92198,17545,61328,22505,55288,22177,63935,40292,79594,17490,23504,22501,27598,43611,83056,14235,47569,78906,88234,64872,57309,78824,93856,30897,18105,85344,62439,78253,83921,93069,23301,30792,46173,76978,43347,35378,34686,33332,58635,42093,23372,74728,56123,18907,89528,31262,18763,19945,88023,91766,42774,13399,23912,87768,52268,56251,18055,56358,86303,17500,77022,96718,18996,43018,39696,37568,57325,70776,12678,87423,97629,62368,93316,63460,73438,86927,65533,98257,68048,43029,23060,65479,89598,62466,33462,66210,19156,73762,71487,33334,35012,68520,77539,11453,21346,82791,73538,21127,55774,59009,91636,29534,33824,23045,32442,18789,11323,84965,67271,74702,88587,48784,12015,10077,99604,81967,87001,98652,65852,22808,86190,97046,21425,41052,57401,74272,17615,98621,16924,60524,13357,28846,40988,47167,36105,23132,58216,93519,89604,25386,66408,69484,55406,88307,55461,87002,45282,19824,91454,63482,29559,31978,44431,80952,99549,91950,31827,33299,17195,52036,56877,18075,30775,65282,40796,55384,72325,15570,55617,13701,58712,44207,45518,15930,55609,68393,54342,49771,39016,65411,49505,98957,40943,91999,56541,12476,10809,38988,87234,63508,49202,78364,36268,39532,46930,65536,49767,75063,55742,32181,41117,74334,40415,21630,52220,56233,28068,92766,79396,70435,20108,44513,70751,38139,63240,51923,45559,68809,32394,53382,44746,17225,78361,36148,60922,46370,82370,85791,48245,48925,70478,73853,15800,25215,79802,48965,79031,66543,88662,17123,87800,90008,41770,79256,77026,84704,10230,92265,84125,62445,35043,16986,33188,74395,73951,72299,33061,87652,29925,60995,77729,93031,24578,99681,71541,12511,63585,38134,44586,12378,47878,22101,49670,20529,75812,58357,31969,64286,12711,36408,21639,66865,77725,22079,55578,81846,53012,57782,32843,59794,76083,81863,57115,39905,24115,27913,92583,63741,59067,78946,64206,20087,22613,27709,27866,60461,92687,80232,71102,18952,44054,19764,95921,84051,27432,74649,13210,43505,69070,85930,31911,20087,73162,28494,87072,45666,50716,36957,99159,55702,18161,29618,25162,26131,48434,39774,29278,33629,36302,47012,99771,86258,11945,57703,32204,56744,60084,80259,16665,52906,89319,85161,72479,32436,85825,63045,52942,43165,32836,68662,44433,60138,36707,33684,39871,63831,56046,60711,52716,46223,27597,97754,18335,52823,28984,41063,50955,58624,24546,40308,72690,12695,20358,79230,54350,58732,60016,59574,88645,86355,87488,82373,61170,57656,41219,33810,31782,14712,85550,38269,32562,62006,19158,41980,38498,11461,60457,63377,82292,50430,53363,68126,77542,71275,23236,98936,95707,94368,64100,21856,75139,58663,67318,31039,30914,72482,42734,82328,92935,36396,82735,66566,87930,55635,93383,64597,45633,64926,35275,44946,89738,40819,77038,91691,18911,16943,38695,64879,86204,17415,44761,36518,64054,48506,45987,46223,99091,32335,51699,57058,93525,36652,15393,20512,57911,59825,84157,55670,18225,53367,98244,72678,25334,60285,89200,78964,95051,18528,58407,93608,74672,47037,43004,94931,15134,30188,34722,97260,20129,15861,50385,17693,99011,98378,32498,66670,19111,69926,96946,51096,28627,52337,80863,44875,63084,13547,13056,31354,86780,92749,30543,80139,96003,83678,29280,10294,61447,57626,39004,62186,62911,51028,10040,75219,70124,39568,56640,14675,66928,45620,17844,14558,31337,69722,38088,95290,35536,17244,39271,51957,79579,72462,27770,56660,42518,31694,43065,15511,65002,18110,51864,58966,12881,81581,16402,96711,35619,57775,17347,14125,36516,73320,17699,25827,42409,61825,64516,57624,84201,86703,30273,97413,39087,48970,90055,28045,38120,39401,42660,30555,38407,26382,44578,83307,42797,89340,29022,44389,76712,28973,37384,48712,56186,62421,65133,59799,40222,11198,76363,14052,82342,11360,91632,63257,25324,19873,75488,62414,16650,14066,76732,71878,16354,29355,92558,21295,58523,45257,41612,44716,11930,68887,80988,52852,49978,47703,21404,93345,59492,46146,59960,54549,94237,81709,91864,78174,40772,93577,50868,89851,72700,94657,68458,88304,33170,51096,83577,98383,60873,36145,80188,89683,78560,93241,50197,37095,83984,70610,85808,13928,33568,69995,29405,29844,28278,66230,81610,57643,91279,60577,67089,66266,88190,55170,17568,71330,57707,94634,67654,34634,84614,60118,42869,57339,74773,36195,91074,99150,80675,16431,83171,44388,73606,97740,42428,17762,12087,64356,15043,64220,92437,53559,17176,17674,28541,23777,36890,52940,90171,63752,39024,87000,77919,90359,79651,75164,58117,49330,40646,69812,17846,59112,55161,34409,20249,38893,63380,49179,64677,60360,62719,89679,13529,15801,90757,46759,44668,37145,28152,63139,86064,58385,35881,29584,26891,30140,48596,12077,42289,86616,88075,94983,40178,28512,34928,40735,82771,10683,88239,28373,46258,52403,76387,33616,17621,14304,62321,98665,83033,51915,16454,45191,52829,14786,23537,26945,32034,63270,73164,14791,86496,95857,43196,60521,23982,57678,25944,69420,78241,69240,19244,37058,54724,55768,94101,95662,83337,11834,51536,69674,92544,78106,41262,54958,93679,60064,48428,56294,34748,35728,21438,19644,53501,47032,36192,22165,65379,60315,42103,49494,44366,74757,35735,72343,54745,67155,40821,25670,82474,31189,53365,19343,46966,72338,33828,98290,94945,94386,93769,93040,72485,96199,67812,99541,30121,73712,91916,15101,53857,93674,20912,47875,72972,91892,44095,62373,38172,15008,47712,39232,63673,12023,14991,18523,52320,14138,43521,44862,16826,58596,95326,16598,52064,34755,91968,85989,60158,42310,92411,80996,10816,57892,32731,23971,12461,93239,90999,52909,81851,30918,30810,98675,49470,13095,60118,91864,96102,25966,39807,81843,11167,11424,33393,76703,92702,94415,89077,56135,30587,69683,93881,58281,70126,14992,49180,74019,96185,52515,50749,67824,89516,21305,85309,29520,90733,73568,71993,87738,74012,69828,43004,35231,95235,56480,94341,82390,18066,50955,72639,30447,30056,14771,92552,20686,61606,58300,18353,39642,63833,47038,72938,95625,62425,98602,61370,23287,28539,27994,32740,98179,22527,44563,10501,32230,81406,53058,67147,46286,69906,11274,42006,57736,93519,14954,19922,90629,19573,53632,89917,46537,94834,11371,88715,61931,11004,63880,44719,18282,35334,37937,50000,83369,41133,47955,82777,59157,14433,37978,36119,79167,64532,48856,81542,27534,61556,50033,16923,46839,18493,71277,15129,42453,37421,10107,23785,90621,12634,29624,67097,61326,63264,75819,34653,65696,45233,44423,99822,13875,12415,27826,23044,18456,30906,56866,22342,89854,14905,11489,52349,24959,21726,69910,66271,34938,68765,34954,35557,70616,86698,75950,65465,28064,99575,86143,57484,50643,87405,37442,93343,66866,17682,47118,27232,53691,33878,67801,77300,80026,89007,84951,91008,87737,56302,19825,93160,53425,16522,34922,52810,51409,84643,82102,28145,67422,40906,10789,51106,85757,53047,86638,67273,99652,35789,59131,53297,40044,82839,46132,88156,85402,35655,23226,67368,65527,99286,61054,32241,16326,83160,11952,43753,90687,91707,32834,14707,55005,69587,62460,99228,80049,38926,78736,82090,46498,80565,85381,56605,69245,63194,83706,19114,40245,39234,57487,87572,46175,61395,78946,63178,45796,23672,40162,41344,45336,60644,12736,29215,80630,95527,72434,69103,67768,67667,18766,62550,24716,57254,43315,50285,50415,78594,59458,39578,25214,62127,56932,39426,73480,70918,66603,63212,58158,77572,57818,69214,60325,33659,42202,62820,94748,65256,67198,54234,78585,69471,58234,61499,44556,22817,21027,88561,33915,45425,26178,42552,10917,55119,61298,16266,65674,74435,59036,88078,26563,35404,18281,87809,68465,42217,98810,55584,22532,16297,52875,98560,61547,25366,22711,63543,13523,85326,83526,47028,22059,97693,25114,20999,83426,59499,86491,29265,68630,66915,59644,46302,17557,77564,54486,24374,28359,96423,16663,24445,83561,12970,66885,47773,70252,46582,24735,27984,85005,48777,44674,68775,80574,16749,38761,21074,76783,28931,51590,57366,30840,71651,95596,54533,63972,74989,42498,18108,69581,62195,80387,17090,25032,58619,84595,27763,72694,30173,84698,33949,54054,74801,97501,65986,63231,45203,82049,43456,73172,30076,85415,90596,87539,26960,63902,92970,47187,45489,72535,50463,92515,13286,36544,57200,53356,91175,61683,64521,19428,55822,74851,85861,53289,83097,74255,45226,95563,20378,31761,93464,37349,46161,17967,63481,25532,59383,27237,98558,74108,91837,43406,42176,41913,14755,25095,71444,33458,64044,91071,15188,45991,70265,71088,53622,18404,87805,98521,69703,71599,95396,40397,45654,49512,49860,67893,97774,13208,25657,53222,78866,55565,97987,80608,61032,27468,47803,36045,66689,36880,73067,17212,60775,94429,65756,42635,80495,95579,47403,14883,91339,79456,67970,92962,28051,70483,36552,33969,93342,28337,48142,60273,30200,57386,75076,53505,91560,61787,46197,22930,13088,13815,28005,33407,45638,70764,81422,27742,59566,38736,72302,92226,39200,51503,24265,44307,38326,77601,24600,50644,43890,78383,46941,71497,24738,18025,46528,62202,45862,42352,36844,74276,16341,46264,98261,58291,81550,93699,86749,73841,31631,50015,57219,32344,13146,33534,65068,65834,97238,30285,59942,50037,52906,35789,61137,47295,89167,21337,79739,69954,33818,66581,58777,12514,92684,46394,18061,56926,40447,99134,25601,38530,57342,86196,72906,41560,53598,58912,89818,65166,61157,26912,38932,42753,34713,66649,43984,64859,62789,41143,83197,23199,36688,39648,55809,34316,30827,57858,97161,58471,77832,98349,61168,48743,44032,60694,40684,65486,43218,25241,67808,96708,88449,10877,87938,14722,43206,68357,80991,45778,40957,89402,82810,28965,71603,31004,95678,31647,92114,84834,94046,63545,40282,72486,59568,17908,68298,66607,57861,57272,11631,28298,35846,16929,84819,59773,19786,64606,92408,38449,70429,39658,41739,14616,13767,73681,77935,32247,44505,72015,50351,37224,53622,42333,96334,88125,72573,20866,44953,77578,40637,61443,87701,34174,56770,95756,45714,64231,60722,85585,64070,47368,15192,99076,21783,65421,99798,98303,79654,13895,41930,27729,45226,88388,75388,67193,51038,69025,47266,44259,33113,84601,12649,51550,34011,11312,16010,80999,72039,57785,51984,52405,84087,77080,51072,82197,22541,68145,76554,39771,17475,58775,63941,37032,97289,56388,86867,35360,56097,72564,84810,16669,75066,60110,64467,39084,54679,50726,16030,67958,17610,10098,32399,24961,53791,88172,99802,19728,34004,37058,44861,94193,75311,55433,96160,23176,87644,73074,66215,19592,35456,51361,10202,19397,57215,85320,12660,80596,91484,50062,94311,54459,96967,23066,28025,27380,48409,26149,51925,78879,20610,27750,63435,56148,37153,39027,50485,96965,50674,83236,20763,38988,99457,58009,60365,62387,44986,19317,26117,42481,82870,25099,72823,17345,92220,96714,47846,41955,35683,84337,53956,55158,74667,75150,12486,71910,90296,21582,42527,80851,93381,55844,41961,67109,85177,26535,59438,16084,65468,97831,20275,57582,89284,34193,19663,54981,71342,49249,50738,20019,50603,30912,75849,35052,67936,76412,68316,73667,63857,74393,25483,14828,82545,21626,72201,65717,86663,54468,42450,54069,88752,65084,43403,29796,96959,73216,28360,36900,21664,89910,35193,73507,82077,46380,62077,32570,11133,26349,16407,53503,86544,28652,16569,41514,59863,79278,27948,74429,70042,68831,61457,58913,69982,97505,53466,76006,16450,29905,44671,69941,89039,57085,30761,56550,51609,94887,18818,55922,82007,98808,41736,47684,81015,40190,18920,62389,62707,63181,55490,28280,82719,63802,28071,62952,73851,74006,88495,82518,80232,75376,67839,20622,47175,42740,72966,62478,16562,95989,76505,74446,26755,11395,59900,92974,33315,74575,56736,94428,47656,18426,89884,53101,18996,49050,98478,70467,45104,63561,74817,79375,15036,83844,33050,99168,12948,44205,94945,31986,18764,31628,17836,61498,71464,11133,89585,55822,21443,17663,88612,47238,40322,39410,70891,76970,89738,56495,15809,38619,42374,84055,33818,86858,83304,61981,99617,99015,21306,46596,83181,56844,50061,70956,13400,44492,32991,99789,34337,30411,53121,17184,16727,41180,48390,77244,28626,42993,76681,26263,99080,27354,64989,73504,94635,90316,58286,26551,12961,39911,35590,52270,70332,54232,96001,82434,31613,72312,58365,47578,79620,54499,65389,21285,15177,25126,87872,76119,17591,34476,92004,37514,12154,85498,47695,99555,56865,33675,79704,40960,20665,20642,40300,11417,97323,57882,16209,33278,34062,27847,67797,20915,10637,27485,37281,66499,59149,70698,59089,25723,15656,10824,41728,95189,43446,88116,25160,98138,82891,20309,80393,70277,49944,19172,14355,49878,98772,98411,20328,63697,34274,78270,83355,87355,58960,67012,35118,35343,14531,15115,27662,40243,79812,27695,62909,39465,58847,91265,61579,66878,47478,52540,69156,70491,31648,54798,15403,55537,61276,47692,89178,84738,60057,29057,21934,53699,66203,20131,12401,69446,41792,18986,45289,46157,71101,50364,74476,16405,23508,96379,42964,31239,67214,53001,55993,41837,63811,25463,84297,15583,56865,85638,45946,26147,74235,53070,25991,92493,44236,46070,31238,20278,48985,62577,96120,62052,35072,28269,81197,31193,66678,18074,87935,30268,38287,20255,45051,90876,86922,63791,49168,46694,27044,28977,61886,59581,36646,60661,65502,26998,69943,80300,21462,31495,42405,13512,42258,75941,98214,91306,21002,36456,24535,88868,87646,77592,95773,44458,92770,23507,86238,18670,35366,25373,70895,71035,87041,83918,70456,76796,92977,62158,89042,74162,65832,68199,50311,39210,81614,34225,57934,19916,86110,62193,96509,61442,58115,87180,98840,39399,99208,28898,89683,49341,75160,41241,79857,12447,52857,96064,53191,35489,15084,92471,57534,95394,17834,98572,52101,42966,74589,38451,27081,55538,45377,82727,64150,52953,19892,41847,46566,68549,47855,18328,81760,62906,51005,57189,20072,65803,60001,46267,44065,23484,66799,36025,97609,16332,76201,21378,24571,32542,14836,47281,95295,34720,39993,27821,64968,49019,67070,41755,74465,72244,48137,52485,63895,50671,18998,72988,83203,74616,35217,81715,62319,60014,98395,60621,12600,57380,24683,15328,40516,18902,19440,53008,31263,36545,70660,75736,92681,65894,64207,68517,52695,44311,82063,48798,32873,28780,32102,66010,24344,24324,43453,26902,83181,70808,16970,39126,38549,53629,80102,96573,49026,11648,83067,82728,63007,46411,87612,52448,46105,20016,90898,11567,83028,47823,27440,80702,84248,75762,33301,35556,97569,98742,48846,97528,11504,59167,56748,88236,73620,35179,54904,90637,58628,31517,79076,86983,17505,65631,66261,92289,22637,50778,52441,83157,30404,31495,47097,36873,41414,58993,49393,58135,46829,88975,70303,63760,47753,92508,40135,58420,32148,74956,86063,42415,87652,63607,10810,37988,66571,98127,22443,41232,25862,34270,27105,19094,77099,20517,14934,47399,65700,48282,69711,65273,95826,79868,36297,89156,31959,82425,42958,98887,30114,90026,69299,34634,95716,78772,86479,86906,13254,57811,93067,63247,36174,43711,95440,41222,23333,65545,85641,34736,85811,20243,28967,65020,59615,44458,40144,31762,14989,69491,18551,94867,55498,61143,47055,54728,64576,26318,28631,68198,44101,83092,15338,60066,67413,86093,78808,96989,84531,41483,97587,58488,35690,80029,94835,98161,17558,82338,55229,55255,62957,20641,70833,31536,58937,28928,40074,89753,68752,60089,70385,37613,29785,35390,89779,81953,90980,13886,34088,61651,58923,33588,52109,94664,70372,46090,33702,41345,54019,35337,68455,26817,52694,88158,76327,57315,48324,94368,24014,66170,95825,42945,86441,44832,72674,27714,14899,13842,93131,19396,30113,30927,72618,18352,68844,10277,91096,42790,62653,95529,43500,91492,90363,94595,11916,55063,26408,54653,53398,16544,62503,71989,88819,72629,67639,52654,99549,12514,98117,32440,93822,16154,32215,41358,15685,77727,72664,44497,17148,99912,59568,75502,79925,80583,50617,49695,19061,10277,94221,50480,91867,47448,74698,73079,56461,64379,68889,69215,50933,69977,21761,56738,39775,44203,63079,90750,17700,12618,85128,83690,77751,54380,69112,86904,39673,34904,16514,13998,74640,31630,92727,79135,30935,25167,46835,50463,48690,50087,20609,14474,69256,67954,61127,77415,40458,91907,10743,38302,60795,18148,81555,68193,82185,50426,31604,45290,21987,51909,26812,27409,93982,66356,86609,39237,36198,37424,74391,95225,90513,22611,88374,98531,41074,27476,14193,77470,95315,81363,32107,94950,67360,43469,28259,46848,33402,29427,74981,27979,42842,46704,80147,51085,66997,82458,23448,34893,88647,30785,83903,69241,25647,82034,28274,15554,84679,84434,13186,45746,67462,52945,58929,23758,12946,76594,15502,52394,38546,61336,17953,86504,63869,25176,53915,43607,97059,52922,39667,98741,52620,42119,62344,29623,62079,94240,27878,57818,89397,83889,32239,71013,45623,88534,24271,64363,13387,24235,36816,76545,71526,42313,19128,52502,69562,62950,12915,90583,49710,32813,14794,86002,43287,51394,43195,89256,97036,92977,73096,82109,51976,76251,83581,16174,42225,57551,92870,63344,74640,38334,88870,46011,24226,20680,84854,93212,44278,18218,46846,98178,86051,85438,26191,71451,48970,85498,10148,72554,76930,93491,70622,97836,70962,16005,19569,92602,17211,56919,73610,30074,19001,38054,77168,16474,23760,46553,31541,15094,83933,60001,69443,84348,67625,62835,64560,74080,87270,33902,59405,71521,25355,53994,69199,98874,22524,87161,64008,99220,19511,58058,19512,73907,30311,52584,13900,34240,16834,79465,97053,13398,31393,69724,77247,99708,96688,47873,33292,43529,85615,92576,68212,28078,38432,64524,42087,98078,49050,51357,22429,69929,96996,97102,34221,52712,34813,83378,28096,79231,35531,61600,50932,37557,55869,23254,90816,41571,26248,23593,49436,32941,49844,86547,65436,51557,46334,73498,97516,56775,74446,54669,24775,64518,39930,84676,96861,84696,51367,24671,44083,78181,17839,32285,85052,19484,28650,87412,61187,45143,64694,69286,23227,59307,87093,90680,85713,34322,61526,16316,32359,13649,56155,45446,18626,67876,34199,31318,39975,93336,89965,61691,52060,27093,16359,85049,94892,20444,17444,12744,25916,61176,64416,90586,59094,10862,92981,96747,29975,25992,92415,92461,56003,29998,46412,23254,36446,26099,43787,33855,55427,34904,45693,65845,87152,86764,73997,55388,56091,56227,27985,29219,52104,34392,90758,97659,22110,56390,11615,78432,49443,45492,54204,88050,48594,67096,71477,60853,74155,43554,59201,28943,24722,21243,35819,10777,44561,46790,44604,73229,14688,12255,66176,60917,40277,10991,66175,32444,84840,76112,76428,67759,99794,23504,59866,97776,95573,99018,21852,85662,31559,13422,89545,50005,70586,74626,77986,54607,80822,87466,73538,27741,67269,39350,84588,57253,19564,74506,22057,92580,70260,89302,33041,76000,78721,73003,54822,30777,59064,65744,41221,34730,51505,97001,39809,10135,20099,85463,15014,34531,30872,24277,93809,50432,30928,72664,49667,47174,95497,20720,97678,42633,59635,19972,22176,29091,55546,99928,46334,71889,96880,67451,41291,62890,49152,50739,74185,96162,33669,85321,36314,35887,67511,10594,70326,25062,92594,91671,53943,24760,86771,14022,78197,39270,86662,91394,97225,96921,69701,78764,42071,29737,99939,50717,96253,59430,66787,38251,99825,40032,43824,34225,74708,81871,74047,24246,97473,43598,52717,91933,33812,23452,33004,46799,44726,23840,17586,31395,58707,32635,58598,69754,74856,77835,97032,31661,68049,16898,29845,57140,35625,99805,61033,34662,27270,34519,70514,78038,40865,21797,48267,51235,68724,91626,52616,36018,22362,97257,63813,16636,55434,90476,99300,76350,56539,62212,12413,57914,48574,25993,73816,37966,16403,53508,58626,30242,55945,59799,69881,54122,99036,36807,31980,94399,98515,27270,67142,91283,43612,31902,74295,81694,64036,90526,41061,30756,66168,15797,37183,14216,19464,11415,26307,98723,33831,87985,65029,81114,71831,74932,61055,87693,83372,96821,23234,57179,21104,32164,96796,95110,57166,65875,68761,79502,45158,76385,51375,50521,25564,35145,46310,47655,57459,38182,44850,74078,81964,57273,50872,12949,33854,67212,54770,58258,14994,75852,26563,44600,13065,69086,94514,29388,97420,11364,31325,25116,66504,26357,98849,91094,23469,73383,75028,62637,81324,22781,51424,46768,93480,21923,23828,27549,18607,90532,85748,64487,42277,43972,81163,50955,16849,92716,52429,34265,38970,90469,60704,91181,86276,56072,39821,39893,66414,51382,66056,95948,63706,73905,14723,39894,75318,93278,97312,61395,84402,90757,90902,67202,11403,65392,78854,85965,48401,69430,33392,20645,74498,54625,86385,41471,52182,64954,14888,36919,50948,88391,12009,82752,24705,98373,59371,68809,31804,33564,14552,59871,63913,10425,72709,81237,40410,94117,56563,70351,10984,39243,61692,35518,86312,73742,60012,56765,95605,12135,77933,11804,32396,96096,57363,62193,34823,62427,24338,15087,17022,21161,86514,23826,31194,74033,21634,96658,55750,26372,42331,23205,36237,22573,51061,68324,96813,54791,39298,11430,27589,99788,47279,24536,32900,87701,72619,62103,53757,37452,64297,31477,73598,58128,19572,22451,10385,66445,10205,64741,95034,23662,25492,66246,89797,78099,85738,48910,90121,81018,54509,15082,68119,71046,40270,27795,93500,17863,49578,85172,92711,64464,38876,54339,13984,33068,88947,21607,70679,12676,33440,54375,48115,57852,82877,18873,91253,93791,38452,71474,82351,58241,63272,24905,26737,28246,46421,38365,62471,40720,47782,13101,67249,11133,23830,56635,86376,16562,92040,89379,38872,69247,94480,65775,83430,46815,94152,84994,31984,38284,75886,32062,82393,50835,32700,84734,12983,66704,29047,22910,16315,34034,51973,48592,52408,52006,97052,75344,50739,71693,29220,69904,62388,44259,82918,68928,31689,17927,48362,28681,88019,75024,87712,64769,47461,39161,43334,12950,24166,66864,17784,59347,27308,94625,87585,15637,48850,30855,45177,45663,84731,32487,11233,89260,95884,61067,75890,79672,99794,61011,62863,56603,68296,96915,24338,86972,44939,67501,35190,48391,48935,77943,89373,61238,58594,73375,40112,22303,38035,26928,28768,11866,87812,48145,53720,72052,18126,12533,11386,35971,18261,21851,33204,25574,98924,99386,56627,15694,39712,66658,97341,72528,24509,44010,30823,30708,10613,21634,12027,54527,29685,62578,44740,19179,90452,37154,79573,32464,34049,71195,19130,40733,85338,83654,61610,31717,98980,23341,39349,37642,21799,75587,80789,40916,82872,87686,23373,88529,62090,64377,40104,60303,16414,30227,88492,10107,52092,74379,86212,16487,53496,52289,70515,75488,22419,39726,17810,46291,73093,39392,29519,73500,79565,36415,23244,36961,20092,44684,14198,44382,28332,34663,79769,69828,24780,97048,69890,93212,33751,13261,91245,68819,92922,31765,74783,24986,11679,62564,14118,69161,35281,13191,15295,51431,39796,18610,49998,87616,45904,53993,11242,66902,47713,50052,92801,18587,74684,85187,33917,90598,72298,16928,12039,54288,11581,97063,38906,58040,49222,92925,77722,24814,18817,41777,52343,44996,15948,25609,90195,12947,98444,35381,64725,98821,72917,69733,76747,48875,32098,28420,23695,11780,40448,47139,58355,17459,83766,13520,93407,76877,64257,53977,10580,63832,63994,26668,79087,87209,25111,68421,30762,49015,41388,12104,32689,31075,98706,38871,33624,53610,54590,78438,76400,54952,66992,12081,23767,97733,90481,46495,90125,97897,31090,20707,49250,27509,16802,52011,77882,33489,37633,84819,58237,79504,82986,82474,18144,89522,33766,63024,97622,73887,56837,44746,56169,68916,82041,33255,94424,14552,19296,74138,58120,69470,64150,66074,85568,49119,91258,24433,67863,43847,53661,83320,13690,26972,32434,66170,47564,32506,38824,78845,45654,31210,47562,64188,71166,18616,29627,66648,94699,12354,43188,91996,46602,36654,55853,14297,27591,14569,15717,47092,46684,27759,31554,84510,23051,26420,60402,77053,13612,98242,74585,14098,15663,54025,14287,75972,64805,85049,79895,65850,75115,73517,24723,22008,70314,99252,62152,22586,64662,29146,12845,98616,58321,85316,71176,64641,23592,34274,50088,43829,59507,99687,26900,42354,32543,35694,32661,20263,34351,82357,41160,71455,16178,37171,46725,22047,58786,83941,32740,23552,59751,53009,83156,33633,41327,38958,65248,30605,13380,52355,64108,68408,50588,30824,12652,51047,86373,56750,76539,83174,61708,35133,58412,55458,51525,70040,78989,30916,64178,64966,80293,80636,39105,46861,20403,53755,20165,90106,27806,70572,58421,93840,76080,93272,43796,41857,61768,28145,60206,57198,70155,50798,68407,10957,19326,63200,40535,27374,46117,80553,97331,65221,76193,99088,82191,47326,77113,64355,21201,46295,63584,39224,48049,49742,75696,83655,78521,73437,58056,19778,68957,59152,21637,88924,97636,64260,91329,56173,90876,23721,28421,85725,74101,52052,83550,54954,13347,32260,72808,53178,30915,48203,69188,32830,23365,95899,66197,11433,22178,61415,67658,53484,64822,53127,34925,29246,68501,61041,51713,28187,64582,12120,18285,46931,86484,30111,66162,98362,69375,26608,75667,91556,60217,61262,87694,54009,77792,36920,84997,64572,23680,35129,85818,89008,80865,41676,10656,54803,68489,33060,38462,86131,49676,59030,31464,79573,25378,83232,67845,63290,75512,29006,62086,11197,76244,20043,44959,82160,87713,88808,27515,89212,26792,94926,61300,71579,17336,89425,24409,94988,45050,53630,10123,68094,47216,28193,91112,44882,35817,19624,98441,78240,76626,92118,11587,23218,37733,81171,84326,99617,13945,78005,19973,20855,11934,20927,50273,62819,41243,36703,26222,41066,21732,42917,59353,13379,53400,31853,58598,89248,92904,62168,57113,96592,31706,86128,62539,13506,34633,68461,77222,67472,94146,87083,41653,59249,49583,64220,59478,59693,78410,96410,89127,79046,95998,84662,73343,10078,43322,98513,62147,73803,82294,36057,64855,35443,64257,16304,77510,56348,79860,45385,78061,31797,57974,13877,54782,23692,62841,79152,26825,81612,23016,46460,96352,89366,58073,45766,26274,36227,23496,49472,74404,13713,58816,77964,72155,10084,28581,99079,16568,27028,37384,31235,80042,95193,12926,35904,52317,92956,40962,28911,69072,94781,42157,36212,43417,67562,45775,22692,80792,90951,83519,15169,31613,79029,58664,14598,32371,12492,88802,60183,87862,62302,37444,67812,80828,30865,95484,29208,20981,91350,33232,12849,78768,64082,31816,99434,90936,24172,36384,20556,52260,94916,56243,26166,86218,20085,56247,14934,28091,87712,20130,26227,34956,35990,68722,99201,18006,17877,33766,79924,67711,91360,49836,56981,78653,94314,44024,31724,55815,64018,93232,36368,56459,41492,79325,40494,73028,95286,86608,24801,29558,69885,81080,73763,29335,97591,68977,11019,41486,20588,38599,13368,19835,88796,24786,24991,55296,38335,22495,25058,95371,82697,77922,77872,89054,99075,52263,62007,76391,61997,40097,89469,77958,17103,66276,96305,55833,80928,19452,26842,94127,48208,66463,68414,21256,41408,73411,50196,39190,37097,50030,94961,77616,38731,14063,50604,78148,63139,18493,66652,39592,24438,88122,28933,28268,53560,10732,47407,94847,20822,60292,10304,57354,96249,14427,16066,57148,15507,23454,26847,89745,71180,77995,46181,84953,61586,82409,85242,16308,33164,16139,65451,29688,21775,17473,62955,55394,30938,28402,24931,91596,22063,67156,32252,65420,62357,20116,61030,70676,86392,70098,44764,55907,27357,31650,24932,53302,40559,84161,70581,62918,17916,74510,47186,29803,42293,64275,33632,50837,74500,42415,63902,66230,42711,50972,52921,22724,20895,71534,94023,17001,27464,79742,18510,64998,15302,88446,36565,89622,83366,82371,85730,66137,54559,68892,75525,35439,94639,16378,74729,30922,95166,38512,71689,23167,54529,83230,79763,33099,44915,98256,70580,46154,69648,15389,13814,65760,30956,86805,53989,18117,41021,24567,88130,90421,82098,31338,38536,64053,12738,56087,63987,59328,22058,61024,19637,66096,37671,65873,86119,71273,20997,36212,61883,62626,66010,16968,88211,64322,51833,23927,18150,13623,36750,56573,88081,12664,67716,46739,63713,32917,50335,94192,95427,36518,25649,42328,83754,47918,92797,28750,44152,79318,90393,23285,84349,48411,12368,10855,45564,68709,28664,14336,15825,51253,78791,13865,60287,66237,35682,22553,41860,29246,38417,37793,29768,57401,92447,75633,10286,74585,94122,51956,82354,37295,59787,11119,84423,80571,82909,63960,66027,91848,61896,51580,70775,64277,83823,56784,18366,46690,78069,15814,27245,71012,73856,16740,82681,89256,98326,73529,76430,78736,39797,89406,84690,92240,69725,37110,81884,11035,29018,78839,39678,81011,64215,39058,63189,24432,61988,83781,52413,32421,14661,16878,22348,84410,42479,57282,64595,38906,91511,15306,75371,95530,34828,86008,27047,92843,66790,47297,42076,31907,82106,28444,43851,16772,83877,64507,98927,30289,34550,47673,89587,59290,88858,78677,67621,88344,84183,60371,18575,19995,77462,88553,22490,82198,22958,16479,73571,12257,11763,23722,90930,52717,83280,19183,46129,50937,13079,86483,20126,30453,50935,20542,81547,70809,35646,32053,73980,71937,35937,35888,63477,72000,16261,50133,79104,28228,73769,60816,16059,68176,12190,52129,30152,46745,68141,11234,52213,78360,60406,57226,19207,78883,33725,45064,34176,13980,90438,25036,11958,10950,46415,19072,35939,26764,29956,88911,32165,26788,69684,49559,11241,65552,86274,55454,37759,64118,36603,28487,15688,93957,97516,76070,50408,44604,81416,75117,20391,37391,78720,73286,56867,88256,71616,96254,18828,91504,70943,92626,77768,92547,75348,82621,26877,22608,99683,20467,99070,42961,88458,50414,82257,12245,61526,76604,96864,70920,43295,26118,80960,19850,25747,86306,24709,63833,49270,16130,70298,98024,27787,33548,98929,10642,70172,85142,63356,78140,30400,89942,12814,11828,62172,14714,33741,20726,16128,98535,59201,82421,95098,17547,93899,52012,98869,24223,61368,39721,50518,24038,34093,20539,74280,73660,51704,12364,98436,80034,70299,47202,24619,95872,93184,17368,71434,44512,42951,32335,40006,76490,88121,54965,38492,47095,94805,96743,50407,67282,96319,46812,74054,16893,84483,30241,83426,36855,21931,16289,52236,49343,83654,36913,41455,90181,39010,97698,67043,53852,80075,63817,58903,47958,71974,39589,28884,55913,35883,71377,45302,90981,66230,37215,23346,27331,12770,12031,21664,77399,45747,52298,84541,59812,43835,26556,63175,41935,60491,88433,49518,55953,78169,82430,99055,59972,69637,46701,64125,85684,53075,79250,67188,15745,38507,88325,61759,74592,59645,10271,61859,96817,34861,13248,66086,82738,43094,94857,89457,19243,36888,22930,88584,24008,52027,92242,43303,80673,75900,22457,54806,51373,39535,15330,57808,51005,74118,29551,56641,47606,23655,86875,93521,22529,82275,81649,16846,95112,17128,95610,22249,24765,45162,83442,15802,65038,51980,96692,67889,15545,90704,15807,30441,32768,41995,56765,94637,12733,55619,47850,90710,88562,47250,79498,71516,68217,96781,32997,56210,84908,81062,38081,86449,82339,59001,46578,71942,61625,59119,79145,85885,26856,24905,38163,33128,73229,47106,30189,42381,59743,16982,19777,71878,48553,47263,23428,29540,82718,58217,26049,44930,88297,66216,74202,94155,88351,73030,62829,32765,85564,51250,61526,58503,61178,31046,81767,94886,43407,45139,41838,62405,38557,50999,39601,50200,20406,31347,13834,79543,45576,26452,80857,79810,55174,26789,59194,19796,51749,98683,14109,85239,25628,93078,92321,58906,40606,60754,81382,32265,97601,47831,31601,98457,78922,31290,47826,44921,62739,99279,39135,94216,78669,35971,48505,17498,53256,74392,31264,21241,21049,48952,58427,69381,84430,34471,48165,72056,27539,73400,38858,61816,42678,32647,20366,11980,14537,47590,41431,39731,10399,29113,23902,98178,78814,56541,22935,19497,51178,88913,41811,89882,65475,75378,10665,65176,16334,57898,58843,23527,93670,40082,63556,76232,31328,11159,16680,91525,38158,92179,15298,33636,90593,84113,50576,60261,23905,94858,14829,22204,78243,54732,61117,33563,31158,61430,38415,79978,76637,90905,86931,83947,49094,41326,28500,80200,76770,45161,77035,24053,22978,16205,73574,57726,33757,73021,38044,93913,72205,91172,32650,61912,32323,12265,39837,64300,52887,18421,31186,25276,60693,29092,22202,57040,56463,33918,34459,53312,91536,29308,95598,54948,14451,23027,77252,91995,74930,78257,36601,30522,36982,39563,43761,37442,54842,95541,32107,14191,31781,23581,44581,38515,67297,57782,92433,88257,54043,62006,94712,59439,82528,73520,40787,34119,20154,29794,86038,37679,13270,34281,70465,92133,27847,56993,74405,93405,65192,91212,80309,79932,96321,60412,54053,82406,76132,11734,77712,67558,60359,30286,18100,61501,50113,92243,17227,16869,96523,39823,89124,98271,46179,81988,63575,92905,92841,93518,44654,21355,88767,80841,41848,22421,81609,93689,85279,17128,66498,13538,44403,68939,98593,70967,58350,27410,40545,17685,49729,71031,65907,96332,45686,19745,87861,79870,87836,78952,68714,61466,59335,86157,73221,48977,22286,76224,40183,33668,99631,25351,29449,40514,86161,67097,63531,27446,18064,21315,98961,30328,36975,63888,67033,53023,17549,38430,93222,77656,76853,52528,11708,14021,73640,65144,32502,80097,81278,85178,98963,75384,43737,39309,22406,81374,25694,51340,42090,54333,21660,84086,64687,64915,61227,83586,50082,37140,66053,93711,79723,57659,59199,30912,38127,84081,95310,49982,73775,87676,30187,58682,13202,56201,63340,44511,87165,61565,43551,37850,57557,43405,81565,35431,75708,20848,30044,56888,34236,27250,59538,43146,22835,19009,43689,52919,90317,59789,61858,39843,55800,35700,98253,49557,34084,75836,53042,91815,58908,20356,34108,94661,30219,74367,54529,44291,73475,20698,57181,30410,87295,42620,40372,35896,28861,21453,78047,64979,96057,57186,68153,50855,98283,57010,94739,45868,54925,83588,37945,49974,22746,29970,87281,77173,60694,64426,83597,65215,99044,88339,22920,15673,70224,39529,42595,39666,99254,66260,62520,14734,38554,35130,17372,66449,76811,59252,32288,57190,18676,67792,50056,90254,99830,72056,21140,47733,53207,46516,78386,80537,52976,50737,93012,49692,78924,64322,85399,89776,71664,34732,54935,24742,46533,25214,42362,35711,15209,58509,47754,26988,33591,82140,65312,48245,88233,64166,62362,67439,82555,16507,65845,25169,85764,65834,88037,88436,21538,93839,76412,96598,41221,76441,40311,25192,44911,22142,40291,39899,51128,24402,24409,79422,21575,69251,88902,61348,34283,34971,32923,97019,53486,11440,85600,86907,33605,85334,45065,39554,38492,37527,59446,28683,81491,68147,53735,23282,30062,79832,45978,58109,77189,49060,99336,14002,86201,85277,28175,33300,95643,75985,16727,27825,96567,13752,70796,42429,72367,74967,27550,85762,44976,58428,57144,95274,62902,11697,96465,42666,27270,22571,36387,98148,55261,90780,11803,35479,65486,22176,82732,77218,30540,72312,50022,29023,58350,11605,50223,63815,68441,27319,13468,46283,56406,35512,78969,10690,84609,48504,14271,70210,50128,38187,89278,14741,70738,56886,79493,84939,62137,94720,17067,84967,52348,90420,44261,78043,97873,31575,88945,57455,34958,83213,10776,11062,28733,76190,95060,27984,34302,12938,95495,91358,14611,21751,53020,13543,91904,91535,41948,86047,99593,46995,12633,56525,16379,61523,26320,92223,20533,54066,18319,48285,78111,33107,91339,15087,80091,26302,75070,76258,42198,46746,85598,25265,26067,31703,34633,49238,35096,19780,56642,10208,91559,60571,53090,29700,27163,35946,38384,87886,53842,46570,17120,64699,16261,87742,54840,43352,74590,79822,43550,50562,22119,30460,77207,49515,74092,43761,28083,33180,38679,77114,81632,83979,23569,98908,85926,88491,14181,99827,15641,75807,83837,22229,66011,28375,20327,40152,26638,45960,65245,77214,78877,13524,43256,42657,22052,96749,23231,83255,47192,69999,45791,41325,32755,34061,49579,44474,12812,92927,21277,49678,11498,87850,60066,19636,29412,55409,85290,92955,81911,13828,69928,78762,25470,65911,32275,49487,83032,50375,68595,78344,14463,98203,52780,71302,70777,11920,55748,77414,87923,79953,51593,99437,69905,50665,72432,88566,37114,11544,79860,10954,54908,88184,18260,38647,37085,30757,41897,50302,41024,22341,17462,28799,18366,11830,37515,58984,92309,16808,11053,46753,48472,73975,14285,62009,17598,90053,37082,80567,75795,53617,84359,72178,41682,94013,86818,27564,58171,26049,92524,31641,58358,14418,44715,63460,44007,96134,71994,17129,25978,38193,42277,91444,58863,66973,39558,19127,76250,86784,34349,61072,21272,24352,35316,86800,36732,12682,31350,80830,63087,33905,49494,29011,34690,84267,66035,10611,49738,34296,85998,30111,53270,66495,44593,17470,98508,50540,15763,67159,79884,72964,55390,84897,49739,16572,90481,14595,31164,48990,59649,53205,63090,11407,17694,80980,75834,64365,79272,93782,42016,88802,61610,24353,40579,63691,24597,57821,55170,76244,59251,67137,85221,63174,49943,10595,57541,48547,80556,88584,32882,48483,50466,73168,56001,28386,62246,63249,81908,10241,23838,12362,18853,71129,29827,85529,53969,86181,47434,83686,89381,79053,16760,56514,58287,14013,22594,16482,92445,41946,55808,23023,14656,73940,29140,31790,15625,60263,10409,59623,93570,48392,59120,67255,18132,31395,69384,68446,12186,57589,23189,99439,45648,91935,57509,22861,59437,57800,13976,56390,64059,92599,99972,97660,35389,30785,21307,90935,12612,10004,48649,83375,86386,93223,77967,27100,97320,66448,56954,40221,25532,89440,28718,81897,61589,75126,94719,59580,94993,68746,85037,80762,68767,98468,72621,63471,22986,92763,80024,34723,41711,50200,65695,50076,21742,76940,57958,26266,85604,78179,20816,52152,16473,20021,55667,69653,81812,16505,15479,64410,35804,97183,25613,40898,21355,37760,73550,78084,82115,93681,90004,93387,91189,68727,55106,81151,26296,94237,74751,71805,56251,68992,12345,96045,31437,57566,60139,64831,45927,75262,10824,12157,86322,25831,57652,95307,79006,50506,75464,21201,26644,14451,98825,12110,66173,48322,62807,89687,90308,28246,80908,70224,95625,32171,87769,76728,27324,50251,16785,54058,84313,68032,42908,33423,77190,49401,56022,56495,23737,87870,98847,42389,62131,56774,78556,53793,86319,86577,79693,52435,51351,49422,56171,92794,60261,78178,63903,50532,81831,33109,66322,54031,81983,82908,15620,25477,95040,43792,87803,98920,50092,72841,54111,38443,37777,57958,23981,13853,16130,91609,27009,20201,29541,32547,52866,88363,42445,85183,55120,96536,99341,90269,60063,70071,54844,55094,84551,38426,59713,21836,63265,51947,29683,56818,67411,72271,86926,60605,53484,12152,87247,81320,68868,16770,10218,97982,66038,64864,77868,59941,50606,55828,85776,36925,60370,61495,23891,28504,83420,69330,64413,14759,68587,22484,53103,55945,68810,41652,79142,13914,81372,38535,20423,70741,10760,53383,58081,55562,50941,20133,67357,82594,44565,14584,39487,28826,23394,71662,22913,27779,51680,51343,65099,80605,66639,77748,53076,84243,72960,25594,80931,92828,27960,32938,47857,37125,72498,16141,31800,90726,60901,76062,48761,32791,68567,84450,35238,76556,92934,16616,65360,43936,60841,29168,74054,89634,78525,46679,14753,93564,71352,99851,14648,76465,63242,30046,91785,41289,67450,73082,60840,18050,93701,37321,82733,76102,39963,24523,36928,90866,49413,72951,92313,18874,23091,10394,18231,58540,10037,54511,55927,91998,34885,66701,16583,49073,47122,79894,17972,27107,74662,64289,56006,94647,73654,16376,87373,25811,28215,55512,81702,25083,89128,91212,50128,36600,40394,27000,26695,64585,24781,72090,47628,57465,62493,56517,39867,11694,46052,12969,72114,42943,51164,21955,86834,77529,87702,26987,94716,43285,67370,72610,40627,86547,16182,15260,53514,43546,25634,75775,91303,49336,98258,81060,52578,40336,44217,41935,13233,59264,32158,93188,41586,96639,96157,80598,62025,98283,51439,15671,88898,61406,77823,37381,56355,29562,72949,67924,74545,34670,78137,85838,93513,10870,47765,60737,32079,54829,67715,93314,19646,66117,84348,70053,21706,24337,94195,17714,97417,87021,96012,28522,66040,47232,97287,26835,77930,18874,41601,14787,77118,89572,39803,85342,33137,57911,97109,13004,74415,53446,63511,70960,16313,36925,36874,99661,78047,20290,81403,64158,60391,88837,83561,35883,29948,37251,11393,64341,73171,35333,25100,31820,53216,20749,70538,76331,48598,68388,70689,50069,49401,96712,48150,53136,73773,83414,32609,66180,70339,18197,48375,26458,86525,16991,19989,92782,33319,20896,15538,75837,96171,29731,67137,95096,38564,68987,75412,21187,74171,40258,92689,24443,45392,67268,22291,73950,10830,90904,54686,53596,20929,15251,33077,34867,87409,33224,88172,58675,42954,92973,25597,70493,61819,52043,37408,57569,17876,92892,40301,27772,52311,72393,37321,54953,31454,26571,69159,11952,26830,52378,62838,63973,50126,35012,53669,29514,32365,22025,36783,20516,25338,95290,16602,38479,68654,15358,11279,51983,69481,76319,62300,94135,40876,18555,81729,42813,49177,55715,47047,97692,79573,80822,97043,88379,37748,43811,65619,33831,30341,75299,62003,55968,94077,80888,46438,84472,37239,32653,54197,99490,79358,72655,91000,95313,33562,82497,96338,62734,94423,77140,72379,40278,25332,79307,91840,26149,44732,56491,24657,66444,48951,52983,20619,16925,48104,50868,54392,98486,15170,32067,10680,33464,95313,52988,10058,36336,55963,61179,88945,86507,28862,62144,30837,85430,69494,30450,46954,24658,92936,31261,21018,89915,39546,22718,41438,16951,90222,19024,56089,29984,97209,67122,73710,58185,27698,32106,69954,41317,38889,92513,65944,23043,93558,95786,89584,15834,23506,35996,57517,17159,94871,86277,44803,35271,89776,42744,71480,98609,48755,52271,49093,61635,80279,16153,90752,73082,70977,50612,99587,39227,98166,38458,82145,16794,51325,31686,12846,47288,68715,59528,35823,55254,63366,91964,73269,51349,34612,70087,47972,67820,25781,21613,47876,14128,88162,10717,39481,80404,74920,65965,59897,24511,19249,42938,40399,75716,69101,69186,74242,72303,86817,79326,58610,25962,83853,98879,20916,55349,31786,38317,10643,84513,27585,78981,61995,92246,69212,54731,65169,99548,89916,20878,75263,92445,95928,69557,12402,53445,48411,69883,19501,60872,42584,42644,11692,45964,30616,21737,47427,93240,21589,97977,17294,37382,75517,79933,39661,37169,82480,92668,79609,45840,45373,96033,22050,55305,21333,69237,55750,70788,15684,96745,61983,34729,29918,50631,48725,19017,14918,94402,57843,76466,74201,30856,27222,52638,47080,98902,35759,55646,93012,23622,72471,60991,52666,30450,56927,88740,75121,24308,61870,64121,94141,49782,75165,19526,89517,43990,74397,71223,27907,69999,40332,46124,74955,98642,14796,74892,37691,58392,15586,75745,59035,86660,88170,17310,63949,19742,80919,17829,10910,19979,71102,16119,71052,68876,52398,32696,52827,55845,44757,95411,22349,29138,19275,85313,53065,77894,99053,37296,82536,48618,31103,76109,98929,29602,94479,74099,83509,48004,63202,63016,81756,93851,75755,93202,33031,70841,18799,96819,42408,59899,96510,64516,50814,30741,13553,84391,16089,80489,72384,48580,31090,19560,29844,53360,11034,20967,80978,35974,66648,50693,40270,17970,87648,36944,57344,41557,76917,10354,11514,26464,68322,73453,12220,40571,50468,30719,90137,94105,39661,44609,94564,53625,82852,33974,40779,48247,45488,57222,63056,10459,89407,90815,34020,81025,27030,13329,62335,63430,86245,24978,26621,87770,13576,51845,93301,17470,17406,29421,10457,65981,58551,18316,35436,63933,18316,17111,56879,60891,31146,44525,16785,32100,37100,45740,62117,96725,78573,84641,33695,23560,35801,20572,63502,39255,92030,57765,50585,15678,77872,63275,26952,10044,89220,45405,43407,56294,60442,40292,88443,31867,29603,66029,37238,21131,54322,83057,39354,61062,17003,91930,99958,67885,66595,35950,50806,59856,51618,69535,24897,96357,29699,98071,38548,14722,27483,42350,85215,34704,58032,49602,55764,26376,88064,14093,29444,58464,66518,27843,20393,32752,98876,28342,51394,83440,57095,66981,56530,46777,94228,48167,44542,26576,56968,38569,94043,79639,29289,95600,10152,50483,19711,47277,34728,81816,95380,57020,16241,53847,59413,44640,32141,36796,89664,65968,78177,94688,32194,69985,63566,78832,26620,56876,79951,49807,76253,71872,69567,39298,78909,61341,20539,26954,99936,89499,58013,57356,56018,89223,47242,22256,26253,96550,98748,96871,21252,28267,37256,15172,56085,74597,54678,37555,60753,56631,76172,85228,65622,74644,98540,91994,73163,82125,88641,31441,92073,13249,91199,69621,79067,94708,83894,95985,72359,12368,38860,79228,39813,51475,26698,45304,14346,35500,43981,19664,74786,89596,75772,73124,34355,57190,41243,11994,24975,30742,10597,59074,67192,27311,72412,99257,92744,11643,88916,40368,98465,90889,26987,30168,87833,44834,71448,14524,31501,13267,58883,77728,22493,28045,30441,55148,83730,48845,57058,20243,43194,52926,41420,62062,22486,44315,57348,43798,18216,61254,85909,84817,91942,37763,72635,73405,57811,53258,91696,12402,92582,81505,61239,27178,64532,90255,39060,90476,57290,75245,95071,54289,18648,76734,77048,80190,90292,90698,49286,33446,56466,76213,48724,33324,98572,18109,74179,76801,35516,86122,54968,11229,54204,48657,62887,42304,74286,97088,37753,32761,70394,38785,52785,53647,47670,27587,56663,42151,29241,85336,71415,83666,98692,48732,15882,93403,32357,45781,96654,38067,39047,26872,41303,79405,34568,25478,44936,65229,37463,19880,22980,23565,57011,41826,83695,88403,53024,97181,72055,72157,39457,47061,58588,48810,16535,55155,99661,25029,40935,24647,84233,89013,99423,13515,12707,26740,83690,19185,12780,32874,19234,87124,99925,67537,47248,14772,17689,64547,65712,51855,75922,98071,54487,97521,13690,67468,93004,77693,43285,41107,56902,39110,26415,24715,18858,93325,51801,73582,82858,86856,76488,86829,90371,64031,43583,40282,27639,47821,36171,67264,85116,94507,29631,35161,97472,53690,25117,68987,50705,38045,22690,87082,64221,97081,88996,29920,74319,71586,29572,26400,96644,23319,22989,91452,65537,26210,28623,72636,53534,78145,58003,89714,77949,91494,17949,53246,30813,76728,86850,91648,60595,20096,44114,10203,51950,86946,61582,31222,36448,93465,30733,63469,18078,54877,16816,26704,41060,39788,84916,49215,24359,76531,74030,62131,49449,19101,28996,89122,28005,10232,87797,16708,53232,56931,89954,75713,83328,57418,44456,47983,95983,85537,55222,49509,64209,25435,73584,44546,56669,62309,65767,53643,27604,42197,31131,32071,64424,41133,71773,41002,42054,67199,52616,10438,51334,34767,69444,16270,72487,86078,24308,47719,25366,98841,64269,46389,26487,15956,12209,81220,49383,91027,37041,56874,18705,21339,86819,86555,24579,84555,72919,60863,58092,44869,60344,28951,34802,33945,67210,19049,41068,25124,88746,64714,45603,56147,68057,81284,77240,99636,82773,84600,39815,28511,96510,19007,54707,68548,84695,37914,34227,20045,51446,12862,72721,17830,68647,53547,70131,74024,28526,77485,77089,71807,72506,92107,20987,13480,91157,33062,49440,45777,43068,13927,52982,39725,61177,35605,84671,72268,89379,96490,93051,54092,35754,49294,75213,71058,25544,90159,70611,97159,24071,38950,79293,81266,48506,17652,63173,68224,82704,50709,41333,69312,74511,71914,80288,71977,14577,10359,38237,61502,99243,70349,95874,67984,59110,15392,12577,42811,59224,19480,56823,37769,19865,17928,29812,84125,15141,79753,34677,67118,58041,90844,49206,13364,89449,59510,62459,79116,21878,96501,59440,31147,33901,53879,50190,49503,14519,51326,17755,21132,58044,24337,81121,33010,60096,23473,54495,42360,25664,26771,12679,88499,37843,14168,37523,59518,71490,19355,91497,30822,89622,37248,29671,88143,68694,89553,98876,25794,90898,36174,49460,28314,76276,24924,53832,63413,88737,11223,52148,67006,76245,27767,54111,83695,83518,79764,52738,55240,76893,92918,46465,95563,56016,62250,84478,78377,87353,14768,22203,36419,81024,39926,74303,65046,29932,43991,80864,85577,22877,60738,94584,88275,91452,56412,92878,54629,94563,66053,26312,23724,27008,33171,17206,36880,74536,80783,15312,80009,10599,25950,13204,74738,51312,66040,43798,34328,50355,74247,50488,44026,39925,67636,27598,34572,94179,24149,99438,47606,48318,19933,67995,34001,56048,70777,51299,95964,37110,72871,12818,93173,47637,93090,27128,30441,43325,17442,30307,50803,27431,13407,37414,20616,56207,99564,77365,86102,19109,32839,99625,96049,73378,49612,12869,93698,26379,90063,26045,82739,62917,75517,56686,14805,75020,64645,70815,61976,78094,66608,84129,97741,97591,26953,15435,94402,22115,54312,91387,73144,84132,67935,43267,34414,50876,89380,62791,86187,86396,49439,49907,44486,14546,97336,66219,22929,55469,56837,56374,45236,17628,94578,85595,91683,87723,59990,75083,76078,74973,44604,65080,52963,61041,42068,73285,37949,51931,22456,32685,19935,22052,60503,36129,50111,62528,54597,53208,74536,34551,64191,75861,13602,33222,93527,63975,51415,76944,25063,23375,52601,39448,70967,35961,27429,62078,63562,48035,37899,60515,89150,97888,34811,69035,37611,84352,60639,62262,89026,16950,68451,11189,57816,77280,77899,61208,73944,13725,79866,99419,78645,58909,50238,15529,13728,15448,27883,70508,39000,98125,59177,75650,38728,29516,16785,18936,40220,84336,52243,21499,38613,69823,63967,70079,93074,79216,98876,87198,23524,86796,37718,17859,69750,15358,73135,45969,15944,83007,39228,54788,68335,98274,82795,88097,57299,68080,41896,92767,46738,66655,11968,36547,34156,88318,13436,97326,20122,31741,85743,68531,19311,57266,63517,34825,64751,94168,87534,99210,31228,76215,76551,63803,16372,41165,56045,73183,56985,52293,62182,60528,31046,85690,53919,17099,42007,34054,78890,88165,93064,79032,69717,91869,99919,32979,62621,47819,14024,70699,88228,42327,70211,45240,75958,27200,10275,84431,42957,59798,68941,78710,88418,68884,60903,25228,72688,73742,53954,91143,23606,46075,90588,29431,59583,71484,87219,96139,69888,12810,80211,44916,36352,18324,70665,10726,17941,27579,32356,27071,23388,61482,48078,95227,13853,22165,26345,56760,65220,16828,37072,51568,65125,13540,60325,20814,13157,61239,97704,82577,54522,69095,16742,88512,37935,26909,70494,68821,12102,11806,85425,40647,44404,59978,17460,95546,11027,95926,43674,47495,23885,21194,31437,88906,57106,61928,16768,77031,74330,61344,39714,95029,99701,52286,70620,20849,29700,91788,28397,28276,17639,63010,73958,26321,13574,14284,62033,35860,12234,95226,72775,13755,11386,87008,13721,27974,45239,46745,17333,39392,73813,49599,76293,96851,32859,25977,41169,24669,76435,60440,15087,66441,66488,65191,39160,65344,62976,25880,48560,68799,98881,97360,71870,38713,25226,78270,99226,67983,39352,26036,90259,40990,19532,35133,89621,36359,37333,66124,10056,72995,81037,53193,24297,57975,68346,64213,32829,69883,68545,51494,22906,69189,67057,33812,19182,23612,15182,97707,76099,89683,67583,11641,36903,55919,53277,87090,56229,16569,24636,94018,10662,19262,61262,68012,33236,27554,41358,78170,42626,47828,26525,14358,44997,22542,71689,21809,25459,11999,21335,25773,62967,32793,45174,95893,28503,18732,50573,98109,80031,52231,76563,83440,14147,77255,58409,45916,22419,69115,84744,83112,23058,33288,73121,36277,58712,41109,18450,87690,38042,32610,22655,63683,12540,70338,47813,10296,13769,31556,87003,40721,26261,70383,96276,40097,42017,22664,39146,74248,80635,27480,92903,13503,59130,76036,69797,28485,87078,13931,73875,14664,32725,38234,74585,33407,22343,54411,21495,18875,48246,92763,11336,66451,98915,94858,53944,65929,54888,94995,31802,49020,66897,94961,68468,52424,39583,55144,34285,88292,72259,37053,40298,56145,90076,10586,40326,21862,11805,97526,48514,77104,64648,88963,77151,55319,40330,11755,14810,24244,65626,99997,39613,85226,47906,34770,12857,60999,51310,85617,36215,18741,23160,44759,17718,85749,40083,73749,20260,49669,83448,52944,72054,16607,87525,51002,63315,32931,45608,78497,11217,40765,53622,33874,13913,83943,24488,67938,30387,92898,18787,70262,34728,55027,92907,97133,22796,72591,65294,91201,56380,83687,80404,33351,90352,69977,78112,52607,48206,58509,66485,24235,27736,71637,58431,53910,32963,27217,21136,90239,26539,92418,30178,44385,54026,45410,89361,91337,86073,35804,89500,38015,99313,46570,90692,66261,70771,63239,11916,13737,41389,78088,63373,33316,27370,58769,35635,73480,28384,82609,79920,89211,65078,45805,17759,16731,57888,65044,84355,34393,30063,12353,95870,36121,20629,59622,92879,73301,72538,24782,53034,46937,63319,70657,88026,66142,50310,69839,71018,17547,24193,78571,78230,83959,91729,68840,70792,12550,93359,46420,65819,21170,44500,31112,31929,69278,54883,72669,43726,19433,27668,62845,80441,46707,83478,68616,39852,47841,69294,33673,17415,68475,97627,64412,58570,23039,69885,48472,10360,59343,49004,66224,69802,15974,39364,74636,84155,93833,87535,66951,41443,42325,11083,46156,44579,40128,76970,29345,98749,68154,20585,54526,13028,31565,22755,37676,26691,75690,33115,74706,60376,79229,79777,56221,32696,16265,32413,18440,45835,12279,25333,72416,98402,27217,55548,94095,10741,55467,80055,95054,11230,17234,84538,48400,34646,16830,97157,84592,17449,56169,13717,54400,89925,76484,14975,53694,49622,20087,16684,38849,33548,19517,64473,56749,77238,20950,42206,63977,22792,23362,25064,61669,70926,30858,32508,24779,30420,59266,67493,31731,30770,88140,14379,20305,62809,57430,56629,80386,10079,27696,82348,60817,93173,47569,97000,32813,14342,63456,79240,12591,35015,46492,40449,54701,64373,52288,98884,37267,85782,55797,28737,96821,13397,66502,40536,20408,32256,17448,76328,44543,35735,17829,62579,74453,76906,52588,24596,26268,38412,53270,33309,31255,10045,55000,48077,19623,42354,22158,50648,85357,22048,22742,96167,13721,91220,11310,20143,17279,76862,10643,78291,12403,92446,90548,37269,86682,38997,28724,79385,38904,97291,30148,41497,14675,38042,30662,74271,27371,31103,60047,86713,25838,33656,42601,69493,63316,27985,60858,29899,31402,97982,26424,91066,66821,95342,27391,70146,77168,60958,99597,25851,72984,96948,12371,48226,22291,76162,33188,75187,59959,91867,89057,28902,28549,30678,76693,44980,97606,10226,38991,85526,61675,14640,87136,19020,19655,63763,98075,37728,87220,38337,50638,66268,73231,15513,87799,95458,49536,64422,33360,74633,52208,18162,77182,72529,71622,17659,36007,17777,55311,20727,97285,46032,12725,13150,80672,88349,49657,81643,41392,40329,91138,60892,68682,45190,53238,26342,33463,93702,51455,49163,10922,95805,19126,13728,20334,24338,28495,54875,93992,66258,46814,47493,96282,19466,59519,23874,84103,32881,71926,58944,21678,15971,49298,38473,75199,81361,34831,12205,55391,75352,40660,86586,90676,11025,26910,20037,88872,39785,92985,54443,47511,63816,87758,37065,51084,44294,84762,94980,95011,45687,85172,69758,72128,41526,29053,22423,28534,89697,44295,65733,53218,34396,68148,65499,89598,53203,84737,34018,27721,71784,53484,61279,67113,12940,45823,20453,81338,96842,73194,95718,52058,38987,62238,15962,36753,84585,13995,33377,79976,74128,66846,79748,84914,76097,31575,86150,67868,73605,58993,55057,30314,84326,73308,67284,94372,22128,58378,44063,53316,44417,48883,47954,71509,14268,37774,59332,70294,89392,64370,18783,93399,79692,63665,27657,76693,49214,97098,72474,42832,17957,12953,63572,45561,42914,48496,10544,94034,77890,24906,64380,15736,81666,91883,83052,97919,52270,23684,52598,13453,32509,51858,49284,90726,78790,97888,47443,33233,23572,22726,20435,97225,37866,42098,15328,39951,32604,68304,29610,93665,69213,35068,27311,84054,34606,10399,35353,22480,72620,83671,47718,80802,11449,28270,62084,46039,58083,99187,36903,82815,97365,65278,10725,96112,68820,99509,85285,67389,53595,41828,35751,59883,28684,54979,86908,55713,30520,54303,79401,39968,93484,78225,54036,21070,78556,73999,74954,25717,29484,15024,92809,88246,39073,44415,47613,61108,43175,32640,40493,76120,61228,75785,12340,69423,54919,96340,14591,25822,53556,54537,91959,83308,87380,23637,21284,49482,24917,95044,88160,90146,53931,73522,43921,37266,85986,83087,26777,21488,33699,94029,87250,65891,87216,94270,78772,74306,81129,84141,44255,59178,73498,34350,87047,15604,83358,50678,47810,30133,39950,97824,49510,61020,62063,79105,93564,23654,65023,13916,45271,93141,83124,91171,19173,97020,95907,84047,75247,13496,80695,66355,83979,15870,28851,25401,10450,87500,70117,18806,20496,53591,53228,88025,36966,37256,50260,29111,39665,66326,23732,34768,91557,44102,76196,29206,99089,90944,60368,81103,43846,74994,95437,54605,36671,97103,89905,32011,43442,70551,55875,19605,44919,34937,59673,24452,12084,32083,85955,15530,74238,72800,28031,24553,64426,49782,57502,62481,48589,33389,48039,76934,86869,53101,87016,90118,47934,95451,22055,37859,73309,70835,80608,47218,44794,32230,65432,12503,41211,75535,20334,15661,47171,98012,60698,24422,36678,73354,77017,98813,22016,64045,94253,83346,12664,65478,59436,18841,30175,24766,73192,53172,37283,15591,12579,42895,64821,77836,88543,38198,59793,77779,53519,46805,77268,82561,23828,99012,88371,80317,63665,55054,99129,21409,57349,11807,99121,93680,42354,15732,30621,96716,20100,77765,59979,29996,93953,10945,41976,20234,17837,74810,40027,88134,57307,65194,59555,28244,60338,36940,58147,65648,87366,85763,38810,24712,45430,71594,59062,51484,70546,93567,88455,17595,78366,76227,48527,13928,77053,58665,87752,32658,27937,47441,33074,27811,30530,61421,44912,96410,53554,91401,50864,88342,96353,35006,34977,78688,90025,62760,62774,26921,40226,67636,22288,62341,81338,66284,80971,53490,90693,59493,33815,23138,22775,91051,66910,59788,13952,17072,15401,43100,35223,83734,28092,84035,50057,81843,62802,26610,30202,38488,10870,30919,89772,38646,17012,74759,37403,85013,99511,63964,55704,99262,74467,50939,47159,81528,59603,43108,69983,92461,54054,11165,31659,60275,28899,45185,96356,77049,49173,71516,19600,52589,11381,60173,35224,62375,99963,62247,71936,44401,60848,58912,50305,51988,73706,55403,99472,86358,51341,70366,55259,45518,52225,76678,16701,57863,21534,60355,68041,65980,98304,11033,45118,83907,86249,86290,53233,23781,34924,75403,92675,33625,98422,95514,25964,59141,47389,66030,62591,43955,33479,54209,64323,77195,74993,21343,53604,59209,44806,21991,71816,49797,87962,31635,99977,11188,67725,57303,11962,51444,82423,64982,55004,63814,24462,39313,58529,68555,11921,24146,36413,81036,39185,14815,90572,85907,74543,64411,10059,57044,74880,91758,79911,72694,25495,17991,87079,58918,16907,26596,64212,26847,77653,91678,87946,79110,62772,15559,69372,63676,82103,62767,17797,41827,93592,14203,10268,46850,15536,36672,37754,24899,50820,46167,69203,26666,79798,49966,71536,91681,43269,96039,34421,88530,46510,90876,99491,70920,51705,70687,79413,68291,51977,41430,44470,86379,57698,92424,71607,56998,24801,39239,71318,44518,18328,82686,26884,65562,11024,87425,38068,82020,98852,68732,70643,73226,46002,25891,45308,39202,94628,24316,55071,50341,17776,59948,44593,35789,93088,76039,65983,42406,21077,90491,42324,42349,16647,13967,33722,37126,95799,95401,37811,47268,59441,92111,61592,76660,96000,16103,69618,60228,18092,95491,60851,61167,76269,40590,16303,70109,45291,94480,22694,30116,21139,88688,31997,70526,56987,53787,55455,19371,95101,70978,14854,31395,80636,41571,50518,14541,75781,66848,41576,64409,74262,43043,21811,86534,17506,81932,61585,91128,68515,13230,19251,30908,43704,98218,96926,73996,38221,75305,41264,16441,14513,66498,42180,22287,45025,29984,98621,21363,81641,89124,51436,69437,13333,20137,85339,91466,96445,17086,52733,31511,77921,49830,50963,71864,34342,36965,69369,99198,82327,82331,12728,72838,64852,35519,75324,95213,19349,86832,82760,30290,54850,55375,34955,84580,83908,54428,33912,82952,26911,79246,51262,60466,44448,50474,36704,44904,61660,62066,56436,41200,41253,99686,42765,93874,35950,54059,78999,82542,59297,40810,71519,11563,56997,98230,71098,50609,95638,74662,81095,66323,14258,13136,82928,42553,99757,52796,36335,69401,17218,48340,16074,15764,13371,62260,38175,64608,14281,78898,94742,15795,43291,49498,39444,95841,81344,32294,36017,64744,59715,78711,13421,75287,22904,47650,46055,70695,18662,96534,64217,71554,21874,65302,35322,83921,26281,79405,38695,49130,42587,17935,43404,26737,83143,36947,80586,85682,84312,58403,42302,28670,71173,29596,70863,69320,48903,90546,64759,27819,16094,58032,63807,62963,43092,59189,40977,82783,57331,60714,97769,81421,19334,21725,71419,17388,59177,92031,74792,30899,94765,50364,51692,16513,27411,63044,51765,10606,68681,71016,92323,38210,57063,84372,19187,74229,66463,67848,25070,39533,88281,14033,64531,23312,57554,86319,22340,76680,13793,65722,92522,29160,42026,11674,73335,53722,80750,10428,43221,57752,36058,58625,59249,48995,51880,99403,43845,40722,15201,89125,16760,72287,83723,12469,26034,62034,74702,72475,30186,82491,97383,58762,96407,22645,50041,23608,97668,44520,68744,95906,67849,90276,36428,37269,24603,48779,65605,37730,79454,39272,45320,61025,66389,70692,44712,77324,20659,60299,24176,81752,96092,43444,31692,85977,79714,77144,87149,75475,13057,91732,71531,86690,77906,82999,93016,53086,60953,89222,82018,22620,80574,81341,74425,19076,84967,14604,45618,14866,81753,97125,49106,16588,41832,31265,93012,31593,56513,26711,24125,15793,34398,73567,85367,25234,81757,13648,26594,80844,26668,54951,41796,90698,67740,10515,56944,77889,58603,77053,13846,95319,92818,15340,85891,80759,40759,16958,15458,20667,87873,55621,87133,60260,51800,41205,78508,39576,88730,45048,70627,40848,20006,54140,10212,92669,69873,13300,78417,95801,85060,40134,58131,65289,50994,15969,26567,47742,55918,14462,18291,88172,62900,77411,48736,55141,80436,12921,59776,21198,69923,41713,82585,68318,23259,25123,50234,18208,43564,67016,26708,86090,27166,63570,92985,35301,21606,66210,11816,73988,96331,97449,79004,15576,36423,98546,30277,69605,96803,62181,36554,31916,47908,30499,91642,78553,13124,58817,53868,36001,42717,11974,44361,12034,27469,64997,72613,54132,26518,32490,23728,56145,79259,86767,59281,91421,75062,65103,82455,33621,91444,80935,67069,15247,36954,21783,97914,12790,16043,94581,28168,96264,51272,36268,47148,33664,82548,18098,91965,45287,91965,26620,67467,18683,59172,25475,10594,53636,68729,89157,78167,78783,27746,64185,56862,13057,68062,99813,47933,65348,57950,61805,98433,45989,96497,64589,34670,12081,77942,25841,33133,84780,22830,32839,75883,99511,91897,45187,53810,51148,27594,79176,99904,42823,12235,19379,19465,71792,18620,32152,93528,39168,47133,86261,69789,72587,75143,47241,39607,51520,75471,11565,76327,80538,98246,72103,40978,40611,10334,95210,54759,96009,29427,29038,36784,10995,72097,39385,95725,29499,69107,59817,40030,81622,47418,93774,48176,45029,81339,62406,88446,55320,40448,82908,13328,54449,31851,91527,35312,17074,75209,57986,14381,51834,97262,87180,28453,30279,91994,20864,62661,29295,62027,56628,75313,75430,48888,74336,97757,30196,50697,29474,91159,10145,51699,66806,28040,95971,66775,58327,37259,85706,57690,67619,58930,12211,36020,84250,75764,86925,23672,36871,16893,66229,32885,94928,91564,45903,30631,50956,25862,51677,89915,71637,37324,39929,49355,26692,54236,75328,31191,43399,13044,44337,95976,52987,47523,76112,17374,78914,88991,99366,67384,33098,99558,27193,94424,49968,76142,59336,69971,64453,32943,50622,89034,82002,22068,76148,59955,65685,32435,81781,49456,47336,53744,36108,37299,41934,56526,22742,33112,55025,47594,18447,19243,42864,38379,13595,58468,42227,97909,26591,91711,51936,34429,46843,26645,38939,12838,87596,26604,93725,89220,18008,95228,99162,71844,25068,88402,54589,43232,63597,21874,23968,51504,60227,80869,92515,27566,93939,55981,94600,82433,22457,71877,10913,71203,43474,23610,12361,91858,64425,68754,50640,67954,80834,11023,95392,74463,54754,16587,31386,20902,70500,67086,69484,41350,94380,57428,93613,62083,47591,92708,94444,34824,14211,53549,43257,47258,26828,90814,26068,64334,94577,12309,55509,56604,43696,63953,57890,79393,70327,79989,72817,14610,10025,49763,12866,20574,49693,60817,74350,92230,68152,54646,48026,70260,73222,18451,39016,82199,49497,86396,43156,15683,17715,35142,87941,86292,57129,96982,13229,67397,19585,20380,53682,24644,10968,50924,60394,93465,72681,12949,14839,52167,51429,70119,68711,12439,80189,45832,68344,76715,50378,66891,91557,57057,70512,86054,16476,49234,54628,88063,91806,21091,68326,32607,93725,30100,86798,50637,91123,47500,98590,58580,62303,43974,38760,82237,96122,18725,42554,65932,89179,78693,94178,88539,36365,86896,16597,99876,16125,92565,92692,19172,89013,38026,62717,82487,25362,66225,68003,16528,19090,45037,70602,18083,24286,76653,83453,69942,64986,45141,20073,31670,64788,96324,61965,33291,92618,61011,60046,23026,47126,40978,26265,46728,64001,11701,62530,93147,99564,98740,22288,56075,87206,60742,70754,38792,46210,54424,45063,73957,97158,23282,82071,15547,96757,21999,35987,21538,68835,80950,77479,22443,27181,95352,85730,77874,98885,34723,73865,35165,87923,48866,99963,21096,27012,39672,41401,26085,52412,37154,47947,24690,12109,73002,64435,68004,44384,25966,67756,48401,27380,92691,26085,83311,55186,81753,69793,85986,66822,29028,44137,51735,50281,22848,17130,55799,73587,69660,54148,55157,22817,17906,85956,22981,43297,88269,66554,15798,66764,16286,71494,15673,63562,47172,60141,44764,25267,32790,23490,63786,38529,40330,58625,66504,33071,51161,20751,70627,23115,72716,57315,29367,32501,41181,48232,98753,51853,75746,14858,82216,72516,40658,62982,99384,34694,66164,77432,20142,92608,86739,36323,68493,58091,90105,58793,32645,99482,88149,75451,58864,41640,81349,86480,76656,66435,74522,15482,62730,50472,15043,16957,56709,88576,23820,11936,44499,97617,97162,90028,64144,47590,50537,93326,18662,78855,18308,80595,59073,22454,43844,53311,65642,59868,74396,55311,53061,90244,59445,72979,71277,16219,35783,41197,36151,58024,98649,18117,85320,71033,94143,53278,95082,90988,11415,58710,58517,26369,43127,80530,30399,15070,70679,52677,60852,34786,51738,85800,65614,49843,68548,63914,80999,24063,96362,24003,40166,62688,36186,12339,32982,79654,65245,53868,39205,12263,66882,35807,81544,59763,68748,58066,90165,98104,45014,18831,82177,57441,49350,88974,40230,34858,18365,71269,36672,91193,40893,28437,49748,76093,29117,66430,19213,35535,71260,39210,19902,79935,46553,18874,95255,28793,66604,71116,97826,17517,20206,49815,29888,87622,56456,74322,51503,29490,38749,82143,21255,62567,46176,89263,12145,21705,40844,34743,26141,97451,38623,96338,51435,59139,61697,61538,32232,18463,16612,80908,57017,40012,61873,24907,50899,73200,71243,80442,19539,57417,64590,37025,62961,87267,34109,37383,45379,56444,30508,52104,18211,98383,55400,49759,67316,18998,15804,49367,43910,37226,86136,16666,40044,44698,59272,60978,70732,81795,53850,75323,18202,30704,72111,84765,10624,24179,55344,17357,32327,52039,42150,76986,45366,92347,89846,11191,95187,33895,90452,67496,15872,48097,57516,22641,66578,82413,90036,27780,96624,85219,86426,38939,50073,83730,68023,51613,62392,69923,12998,40243,22400,72970,40437,76810,67171,59012,41879,33636,86005,80772,77975,66475,75080,37604,49406,23773,12054,70200,49371,59002,94858,48907,12362,91698,23017,15324,90825,82994,84123,19786,47125,70136,55818,29310,67109,18439,27598,56324,94452,42046,58100,91852,84460,66101,94673,39442,49606,69278,88043,77983,61674,72097,79813,31389,38861,79160,32385,16285,73538,50992,16474,97095,67383,54772,78828,84450,74149,51908,23105,47663,22971,32584,72165,56998,28117,42926,59427,15888,24348,77363,65243,80529,82813,44787,60716,10484,44336,58375,33995,49869,58995,79813,21100,20390,43394,97114,81926,25548,25071,17385,23803,44030,30010,73916,28997,65382,31917,58449,63895,80220,49726,68264,67198,93995,41881,48158,34690,26661,25655,89075,97806,35733,76638,49526,55689,99998,93996,69656,31289,26286,53594,50221,94921,17537,16719,62010,27933,38596,96411,82109,80817,95539,76397,84135,79170,84232,64758,35587,53819,89770,88060,38937,34101,13721,38111,99375,13274,67227,25730,47912,52661,52012,94301,31670,79368,22736,58736,79826,57449,47196,91814,71402,13447,41813,29077,75213,54663,58430,80786,20981,99862,12221,54923,16350,67134,15022,94697,53428,41456,83267,20120,78869,35942,63650,71293,92081,17359,72345,22886,62329,14830,96189,89325,39291,87122,90453,45740,83038,50773,19579,19748,92040,66351,60001,64466,90795,20342,64475,48348,84337,74887,60519,42838,15295,77967,63081,66723,83526,65207,78831,74040,96342,78343,37728,56823,13929,60326,96046,85556,53466,74635,90864,48697,22997,37471,95355,76855,79645,23334,68479,66105,83987,23473,34172,15409,83747,12667,91507,62824,41162,86884,98078,23721,72447,65388,52160,11950,11403,50896,93319,30768,31639,88040,36557,35697,89040,61622,28983,69288,38487,54301,29343,49168,50104,77115,39565,45028,11595,82747,53497,20461,99987,60512,99472,68485,77566,66529,98896,47297,98977,79185,26629,81413,69731,29631,54792,30626,97581,33888,51025,57741,93270,59555,89372,84600,94148,18624,58925,54058,20945,31954,70521,70596,49109,34192,59275,16494,17076,76682,71263,34743,83371,67777,93837,25688,17588,54065,90341,63730,74420,62380,59555,65814,95977,58451,33014,73006,97464,46693,65697,71599,88892,55322,83837,38318,73956,69301,75608,52101,61791,45286,47857,29610,37378,45306,91323,76864,28772,31087,64743,87823,36157,62314,10736,60228,44709,40890,55989,84958,65827,27641,53921,19472,23905,94541,37156,13659,22832,65702,91737,71235,30125,63187,34178,48204,40933,46859,38871,45060,22260,92287,79280,88757,73290,73415,62321,16661,73775,73917,33298,21270,38112,59926,75197,18973,84324,30919,82804,35366,65962,33558,46663,79710,72703,90385,68726,18788,26581,97491,24925,58612,54161,28571,88503,76064,39785,93012,64025,44581,28485,58226,24512,70742,70655,73134,84550,13175,61704,13763,70681,21452,32124,11484,25200,64618,53463,75835,91232,53208,24038,27702,68671,17929,22030,92564,25013,88633,75793,47383,85371,86061,67421,64173,30331,75450,27412,33903,37003,87535,66648,13342,70372,36477,32193,40174,93015,52750,80269,79380,37678,13003,21169,88905,55923,85204,28914,68595,53427,87283,60315,79772,90183,25390,39211,50289,98933,10972,74759,47491,83885,74947,12036,80500,93605,12619,66969,84230,46336,40847,21304,36524,28016,35674,46338,19777,41613,19627,72019,91142,75927,26710,87550,38961,80369,93105,13449,47809,60309,37330,79109,40117,57948,70494,83057,22246,61954,54588,62536,50567,92627,72286,40840,78112,28964,24849,19453,65027,21476,68173,32353,11469,23845,19314,14130,78902,62446,78876,51923,84188,15871,78276,50295,70175,87219,38942,94571,68027,54582,78484,76114,41454,70438,44698,26134,30980,28047,57456,14846,77543,68935,62674,36558,54374,14789,91650,17330,53346,28567,27484,74057,79560,84690,38261,33947,20443,21466,88891,25910,94504,34292,48321,95130,74616,38047,64663,64669,10199,16165,48415,64036,40984,39039,40000,46703,35444,75754,32092,26531,14367,42865,10317,15948,22330,31856,53378,63568,27941,15162,21936,44055,53433,62215,51352,72420,58392,84334,85637,12456,23791,38899,89475,85979,72761,63034,54365,63989,38003,59079,22096,16549,73790,80870,53743,91549,90731,41952,59660,73958,50205,83073,53102,54130,83015,85047,72850,70057,40352,98430,47578,48436,65545,86697,86795,75440,44899,79315,64552,44085,52253,70648,16504,98082,11343,82769,30917,30523,42895,81588,48428,25053,36790,26980,16272,58077,92627,57090,94407,93680,17357,45756,70038,85143,62739,40681,89463,15111,52667,62947,43339,43192,66496,15279,71547,48769,19607,92134,66544,61651,67736,51984,73571,31408,71605,55042,10388,88764,81506,84990,44566,31139,59013,95933,78532,16441,24466,99449,76407,28683,23108,80913,35573,47018,27416,79406,55292,94078,18896,95105,95608,25791,24241,77859,17661,99781,69741,25621,92846,27377,22200,31438,29325,22884,92592,43840,10549,27758,68483,82498,75239,92097,12215,73128,56950,23141,95638,44016,71534,11280,59800,57030,32819,13786,58697,16310,35641,48845,59412,19474,69392,99944,55473,63066,25494,53908,92131,97679,99297,87183,55865,73554,23317,58133,81149,78329,39820,51241,37319,12212,78031,41673,84115,30255,74880,31246,59650,87509,41082,62281,37195,62456,61146,39519,33665,90598,23551,79083,39703,71177,45049,54847,98553,87266,77884,39007,80097,10612,89819,72339,63039,35652,83455,21906,70604,99913,96621,28493,58893,88642,97352,53166,17180,55557,69183,79335,27711,74557,91399,48944,84078,50989,91006,91177,23450,38110,78766,23242,76591,54271,72462,95141,58545,38927,32868,72916,63151,13267,86333,72820,10834,15824,94886,77965,88510,53408,71617,29623,67261,29524,84723,23102,97440,13167,98838,99597,80742,37846,34464,41555,93103,22375,44914,57468,90540,17680,81363,92567,76091,95897,22427,83835,59718,58684,77040,74434,17211,65680,85182,21685,95117,32997,72842,43276,28379,75538,39322,80964,95359,97249,81884,51763,73424,67299,12908,29420,18225,49217,55048,80041,13006,29906,38337,79688,61813,77384,32351,44119,94296,18364,84391,67736,72008,62857,79561,16571,60353,28659,23152,22033,90080,77991,33613,83827,56283,72629,35532,56100,92086,35069,58544,59011,79648,73326,86291,18868,31862,50803,54485,55620,93806,21817,59109,52956,46553,64289,27379,47235,82815,93469,90882,33404,20532,37079,83787,27326,35672,75770,48301,66180,89921,98581,34465,29317,17150,11557,58077,88955,28248,84956,98432,28341,18793,94813,11298,19128,78706,35589,80167,35912,58564,27667,28996,19364,42536,63992,42919,31841,68741,71598,81021,92834,89924,42400,71508,30034,97041,42996,28889,64478,26792,27840,38104,80532,22591,41210,67481,60109,50458,84715,17146,11638,61380,28226,70616,22388,17403,21617,27208,59950,43579,42658,98932,81573,46223,59716,65575,68120,27741,19862,53152,35436,50664,35888,32315,51559,69298,77549,73955,32614,38583,27935,12031,98466,64354,55311,64385,10341,14388,99178,74051,30818,86227,41078,95761,64946,77100,61465,76861,69887,57326,30851,49882,38822,62418,56527,48323,41934,66857,73705,14296,22518,39347,52767,23388,60481,59188,43446,63866,64674,39236,55750,37560,69565,66241,70891,18391,33459,37947,14985,99603,52503,77763,33567,74150,90953,22006,24196,47724,36071,37049,79318,33113,13095,17930,94555,31805,64942,17655,73585,54384,22076,51830,48179,27196,74887,26268,57704,38746,80253,50103,68463,77701,46238,47040,13137,34467,65342,90717,30369,30791,27933,67129,32791,22601,70863,20733,71940,13741,23183,18703,51776,39551,48751,77342,41093,31180,54122,70316,50872,14322,26146,79561,35176,41691,28512,15548,73233,91645,19436,39070,38724,21618,85454,52026,19644,41455,68150,51172,33546,70457,57482,98368,32798,33822,64733,92805,41955,27778,57610,37669,79894,57149,89637,13645,52201,77863,69028,71767,45535,15365,87094,30019,43553,67378,75199,13653,77291,40529,63418,80370,74340,57833,29609,56844,94337,92127,70459,77109,85276,96084,39136,87773,34171,47865,38628,79311,95362,29965,85996,19249,35823,25101,86241,29092,57129,74759,24983,95024,60651,43399,55603,60918,92944,26317,41417,82543,49912,39126,10613,67295,79510,81146,90149,41100,48349,80416,75528,83323,62158,33797,70894,88293,61502,27103,96294,15958,58232,54882,38959,40796,41806,86145,62357,10996,11986,25680,29209,15631,96163,61152,22177,97965,89748,42949,97883,17561,37345,67618,12916,91914,51879,97886,79454,20823,28079,56152,47441,56712,17706,44083,26168,31939,43278,87823,52710,88789,68212,66098,68270,75681,31297,94312,58582,77986,88496,40324,49290,63683,13185,83314,83069,72973,17217,15991,75075,75639,33493,67908,43104,90011,88478,80293,52275,94624,79284,45113,25044,11190,56739,71371,37409,22952,51888,95655,57442,48762,17510,76788,37313,35759,81640,92588,53751,27156,44181,34274,11726,64096,41609,28025,32892,84733,44683,71214,28264,90459,76991,58255,50471,32311,89761,57057,48672,32148,34512,48933,58606,81552,77909,52453,92232,79629,53395,15978,66304,11802,75682,67085,82365,16987,35482,71868,28137,79134,28699,14124,72660,31197,74000,13185,72491,48252,13772,51494,20511,86901,92415,61588,24024,30267,26726,51180,22460,85655,42884,68237,92784,79935,49188,83139,91475,82198,82115,42567,27352,90811,36957,41300,55985,39765,89236,93154,47528,42618,47928,37896,16874,32151,98712,89055,60965,97515,76017,83462,80947,21179,12506,65930,91543,76275,63849,75015,65312,80459,27189,15298,31522,26250,47612,97167,75142,53813,30525,21001,86085,72355,36077,51754,99752,22459,35128,18846,74725,62489,36450,96593,21277,87804,97671,92000,86567,96964,74227,13892,83118,30622,17346,75485,53846,95847,31295,34985,89820,90063,91130,14016,76818,23011,68938,25389,45573,61057,97369,84855,58273,78145,41081,18940,33204,21817,57297,61843,71059,12044,77110,82699,97358,94764,37884,37579,91094,30060,86793,56328,60218,89260,38864,84038,11615,99548,64303,67216,42972,13368,75609,35120,75775,19054,66850,32837,69904,38149,89508,45791,94084,39793,45388,24270,14863,55122,73612,69336,23793,19715,78018,26913,46625,45620,53128,42403,57437,83694,83918,83379,36275,21826,36410,71458,10707,55435,25117,92355,66103,51050,81877,37822,70808,10040,94225,83819,39416,16241,84950,32317,24549,41948,33383,48627,61802,95943,52984,76444,43156,43989,87230,56815,27862,11592,56306,64515,95173,24607,88771,46942,66418,94851,37290,44054,93220,33714,84405,53661,65933,21318,58341,65147,95518,47640,11017,95004,60911,38537,28340,15438,42461,44058,95704,54617,91052,33393,73667,38850,73796,55503,72001,37546,17611,99101,74243,76584,75238,10743,20620,85062,98763,90719,32759,71140,29039,52831,63136,44836,62644,62945,22005,76787,43955,42870,78289,84196,77767,39424,82906,91780,22583,39981,50619,48183,47380,89213,41191,81068,62205,91970,25681,51373,79958,37378,63259,86108,25314,86685,44487,60240,66782,61075,61913,30667,42724,73786,17887,33262,70532,56503,49206,43243,19337,60243,80561,54071,48597,39425,14891,81754,51010,58587,83365,34987,66762,75486,34264,78207,39377,97750,38587,54563,24820,14620,75214,27364,34150,59033,25547,35114,36313,39844,93177,41817,80646,19561,65904,68062,40129,12361,28539,30372,27997,97777,13892,29067,74097,53146,61782,21552,17251,14969,92625,44442,17610,66296,36528,22056,77041,54980,99476,65853,69784,89193,36188,71949,47316,60657,88075,97408,92775,89406,58239,79583,76553,46324,57394,43567,38323,96739,37055,68309,68808,41867,16123,34838,63814,42689,85660,48890,47106,10041,99302,25352,26443,75398,26688,48487,15392,79834,63428,13060,39184,15928,74884,85944,42145,51982,41154,50361,71687,17088,50106,50214,10908,56227,17062,90324,70038,48527,50402,82414,50630,94782,56615,30274,31368,33786,21842,90254,58738,27653,92892,68264,62502,77055,86500,74057,67024,53932,63377,14893,56886,37509,74273,28353,60946,53637,82693,52482,75723,26920,73270,91661,89957,41339,85609,61997,73904,85809,38309,86317,40232,34031,29948,56893,77933,71849,33355,88894,74440,53794,80388,30634,83384,19276,50756,65631,32734,27314,81019,99787,52022,91975,23265,96241,64776,85283,34266,80025,82722,47975,53688,16238,84480,14316,74010,28463,21558,64130,21234,92858,12358,23283,16028,20966,53244,11516,34014,99910,99116,97824,46405,57199,59630,45583,65720,34672,68865,37704,54116,96265,35729,28847,16426,74039,38490,86205,60172,62605,87027,15865,43749,30633,51353,70599,42206,81016,24547,99149,29038,75043,91655,56646,35066,45426,77346,19019,84875,38739,20590,27793,42774,50303,24594,48001,12210,17749,38160,26171,64283,81105,43713,10036,58358,76077,72521,89443,69299,74705,54734,52953,83790,24415,62582,85031,65930,40284,36462,57501,53052,21761,50628,88008,16389,27545,13944,39039,82650,76488,69699,22428,92170,22484,57024,65460,44309,60424,25422,83037,84638,82024,74379,16201,48419,82210,90406,40121,25551,93980,11657,26707,93957,14929,56027,84006,12368,94441,99050,25216,16119,76121,62680,65777,20931,48674,93319,45255,97747,90506,93886,54926,22312,54840,75374,60870,30961,23517,84650,58932,94749,36084,53117,22032,88305,71285,52957,95857,84372,81274,19442,86966,74579,71328,13699,27800,84448,83643,70004,81837,88522,42116,58644,91291,96681,70572,74499,93044,69672,89827,85647,94959,47312,15435,57088,84775,65579,93016,16062,70212,31484,31961,25487,43167,85211,89124,50066,60656,93033,49279,29977,49541,35829,56649,89863,55355,57629,10078,65379,13505,11076,37331,12809,41815,20037,52863,70968,34440,36226,43736,70020,20927,80236,14406,76544,81184,53652,79508,36961,28382,75965,94652,27593,52611,56106,12582,58840,29417,30582,85646,89722,53989,19606,78238,49973,30688,23555,31528,66800,86851,91095,31000,64420,64941,42909,41970,94321,49469,90918,82991,12641,72896,30816,97158,35486,43810,42247,22323,51862,42465,72952,10883,37100,79896,65654,47077,68813,40357,90766,10717,51885,54390,92326,59677,17206,45175,75544,81627,65949,86378,14453,90914,29720,67149,37618,61868,85435,53104,63108,56651,67255,72260,67048,17988,87720,39924,58681,61655,50015,73973,91635,34253,14361,55368,47660,98849,87915,76008,13168,58830,41295,10544,22386,22161,52951,61318,53181,76927,22408,71746,35361,18729,37981,37340,27703,23049,44890,58945,90698,87260,24644,54855,17442,16724,16364,87735,82720,68754,30314,32681,67010,59772,33552,34063,21128,28734,12725,98401,46919,12089,71488,59723,25257,27381,74096,29189,16433,22645,77794,15495,94839,11580,74869,47850,98036,22290,70530,98320,93499,59859,67604,33302,55757,99956,36318,90607,47766,58308,36842,88462,13746,12996,20663,26797,92522,57969,85387,54598,88306,10445,95278,39388,20544,48098,93621,36985,27157,68298,26265,30891,37621,52409,72509,64854,80099,75710,72609,78202,46999,79873,22311,64196,77880,47431,29777,90988,51732,78779,58807,91354,46121,75848,66258,72679,34736,21364,43422,34577,33489,64490,59831,89007,46471,29563,81669,87069,11338,83817,92268,50791,11300,97849,92973,54833,91720,97908,26108,21441,56487,59129,53320,22211,16106,69468,54882,79495,74347,83979,55391,63468,51501,96648,45998,12005,49928,53109,86201,30238,22634,22613,89067,66199,98295,59108,10968,49263,26617,63950,47899,71159,62509,17458,11824,90491,45469,76961,40264,56138,54569,75311,82953,63258,49343,14635,10768,12323,55278,36850,97026,53509,71102,59310,89037,44863,72707,67392,17584,79104,90215,80566,41718,14058,47418,20802,86332,27098,33694,85021,14467,27395,89057,77740,22510,32767,50796,59020,49444,19995,56614,46751,77475,20531,29274,79049,97291,58199,78818,12997,88470,73137,30733,63860,20061,22727,65453,88709,81450,78941,66986,51595,51393,45558,39098,35298,38381,96734,97957,44929,61355,79448,95467,29174,22427,64707,56584,52681,91638,81768,92007,93330,92332,31097,52249,93983,47052,51444,18463,51092,60965,59398,75393,50010,40350,18009,96684,79555,41476,93670,40042,93945,40198,38366,51237,47074,90363,48276,38515,15834,96268,89740,55862,65528,71226,61848,72366,64406,57080,96414,46229,46494,29705,78527,90791,55274,98877,41302,78116,62410,66798,95370,73665,43869,36857,10499,18477,45718,56558,35183,69327,58037,78585,74560,14604,53580,17670,16498,78784,12346,97354,41860,58719,11110,83427,34609,26660,30016,86347,52816,70714,98180,49144,90136,16270,53321,67701,47363,92490,60547,31836,33724,54318,36631,24591,51044,50099,91129,67323,20172,50477,44853,99744,14344,28974,19798,38516,34113,39601,68657,69534,71712,96373,48955,49308,99769,83068,65566,52974,37234,19608,23425,45308,18308,78228,65440,72301,21494,42889,40023,78823,13258,54064,62486,88137,35384,18024,80525,12081,75844,94611,45929,27306,52618,62632,19620,12987,40649,61951,46663,11399,20664,18379,47857,87757,32991,93234,32122,69053,40906,85434,97058,56274,18360,48457,19196,74513,52451,83623,77594,78181,26999,26832,66905,21807,84497,86526,46212,16414,15396,94968,88848,58963,94758,66441,90039,66007,77998,13811,71765,87102,64657,13666,81688,54019,77980,17722,21165,53229,44678,77110,87533,66395,91493,53901,66732,84786,43552,59776,99782,56212,92175,52559,82893,39354,84097,57585,29706,38332,37971,79558,21109,48465,93557,27447,28684,21028,59913,26750,50962,73484,51558,80733,52191,90769,92533,98259,61079,19512,81205,82833,77484,58954,38708,33177,62138,28401,70314,13355,10171,71719,71068,55175,96771,48066,56360,54096,38486,90374,55685,97988,17647,65072,21491,42268,10905,41093,40975,62163,33134,14992,17758,23467,79517,28731,92709,74300,72233,31525,31283,84788,59851,71804,30453,57715,77239,74466,61144,83322,72417,51916,68427,96379,15638,91567,24902,28934,64426,62543,53753,46632,37800,17508,20101,51149,59805,43599,30039,37039,35791,77513,35461,82430,54304,13918,82446,17025,43167,75849,59116,15897,47160,13618,80204,32723,41818,23410,83097,95299,51306,94125,56602,55888,91120,39089,97644,11295,79514,63743,13531,45812,91421,87406,47655,94537,29376,62421,97004,39343,83079,41140,29287,56637,94917,46767,52316,94047,76386,73182,88017,37254,33800,48501,35331,47862,19220,90369,58520,50622,52430,71371,93922,15248,98085,32830,34656,41258,97550,57477,45476,17398,56646,44234,45068,76577,59741,66505,43782,49151,32556,53840,65913,74856,39875,83553,48207,44471,97279,70515,80888,21438,73393,85664,91134,29901,23803,75159,77092,53385,39891,34566,23022,45102,81057,10495,37649,83888,88724,55421,14610,11512,50983,87939,39886,12184,71217,31573,10826,61547,79575,83046,93961,47127,16624,70334,90959,74493,41964,34166,45786,95745,18456,46473,89079,28091,13467,56244,44124,81858,62385,95070,96075,81296,63243,93191,35885,27654,80048,63752,90385,83528,49832,23603,11205,88885,70107,75397,57757,36212,23425,56181,32623,72890,61138,68335,55059,78965,86807,65736,79622,53015,91503,29334,63377,24307,36241,71971,95491,25265,26400,95442,94039,97675,80709,13174,18606,74449,63613,12256,35402,73689,74743,32278,64915,18404,43140,61654,57962,81409,11192,72909,59073,29457,27880,60699,67103,10038,67217,13649,95448,84657,39168,27319,20568,67686,22264,36960,53340,17081,76278,12405,42577,78364,94535,97115,62761,73424,70146,78035,68587,94384,33797,21617,18219,79286,79458,12036,55695,25986,74550,93329,25762,28312,95016,20363,86349,96417,33514,34457,92617,53056,68124,97005,14486,11361,26823,19333,44024,30263,38647,41485,73312,38281,53956,34703,66473,15126,95411,20693,38645,50882,20254,53529,56774,96781,39714,75665,62033,19360,98311,20078,49182,44893,77576,92351,56216,60520,60683,85992,54088,12146,77660,12856,43246,37237,59194,12632,25907,18560,34273,28132,81146,75365,22956,55216,55475,60014,81460,88490,72944,58372,85423,36694,64640,37981,64438,27412,50586,18899,40016,99871,26082,93373,94097,83030,67921,98519,83848,94312,32645,79804,36716,61343,58952,48488,25476,12890,98773,57789,49935,92578,75436,83558,29967,51888,91448,82053,53151,33560,14753,91022,56728,16094,26689,51748,31863,79785,67855,30002,78525,49243,51121,74812,73832,50437,37283,97091,32298,54755,62682,12881,39479,54918,49682,24748,96482,56516,41101,44961,36601,69669,89505,24720,26258,17250,32467,92398,13094,63851,32626,46215,74802,14019,16449,19158,63514,71839,22842,10926,46854,47424,17200,37702,97408,80186,25285,94112,43779,76048,51365,49279,59945,14697,84726,64822,97642,25429,45769,35408,89685,97565,77125,31789,29101,45219,83284,70841,22702,90150,85038,64203,32604,98006,92543,37608,11640,77783,78719,60330,82304,48290,63839,77407,46952,74734,69297,91568,70297,21001,64280,61047,75954,53534,66458,78972,33942,61131,86712,80078,16126,76335,68798,60530,34009,52634,82450,20851,28138,92695,74973,66821,75305,60286,62635,71668,92633,12536,67326,46608,23718,31027,68123,88897,38038,12145,85292,56995,76687,63756,38825,16823,59214,61377,79545,53799,26570,80554,76505,95695,22977,92773,15011,51374,26764,71332,94447,68458,54508,86486,25597,83812,42788,81452,40011,55723,37143,70199,72764,71251,60447,23554,13778,71606,49345,55566,17278,76921,75980,88077,99618,56853,89697,17192,57817,60287,96879,93945,59621,32873,72829,76225,74697,65256,73279,23021,85498,25836,85647,26660,24401,25730,56947,49223,15955,65509,36310,35829,30414,21060,97331,41685,79184,81782,70091,27805,36702,53576,22369,68384,41900,87978,34647,62258,85628,55533,16153,48166,73713,60224,49489,36742,57476,78386,56713,93987,59732,58275,45613,38310,53737,22458,24952,33930,35300,21409,39593,79928,67790,91486,70803,87154,97617,41048,35431,54033,32305,16352,87789,52009,15591,76215,21032,88422,14129,89096,89615,51249,81676,32259,68570,35271,59270,69800,80629,24269,53088,28745,41326,83461,96031,66218,71719,18013,58224,43972,73245,70804,57601,49824,34828,48035,84701,58808,80107,92223,35620,84123,80338,76810,39894,29826,45473,66127,91808,27794,50207,25110,95607,97513,32499,44893,43359,85736,51792,54633,61748,15992,62401,85558,18923,14980,56276,56530,23048,87042,10626,56045,20498,33614,37030,20425,68282,17958,74944,24296,35817,13352,12524,16456,47248,46742,94337,14145,28388,32022,57906,59547,63630,17985,27719,42986,45127,85433,24445,14533,19183,94735,71297,51929,76063,72851,96710,11411,35589,40624,34333,74312,39906,86424,85139,37152,41998,19155,20352,85867,71176,74476,66619,94881,74839,29510,56494,44012,45870,34293,95386,39858,50858,12887,25690,39250,20181,88081,97750,97555,91884,45774,12954,63658,60556,76769,87046,62649,55262,26093,42004,99812,80206,35942,26542,85196,67953,99186,20502,70728,76549,91658,17836,13168,43129,48107,73593,88194,32624,30803,35875,95665,45316,96289,38329,18928,20740,97230,91631,48129,53429,77615,37980,76790,93807,15237,86323,45340,56122,92937,33788,52784,99679,85183,29098,93749,81993,77236,78268,39992,41125,54534,76997,91303,56432,58673,20126,33256,23339,65823,85534,20344,83452,27962,57994,52415,80029,33483,51555,83709,44521,83517,70854,90359,12506,81015,74238,97760,24006,27970,38483,57368,59193,50564,10711,47894,10518,56635,49930,70166,98193,65047,83689,23706,21467,65276,80099,24118,56029,51754,41677,64291,57097,74316,90906,83952,54316,40264,44275,35801,24911,48141,84067,97630,82429,61034,15118,77481,18222,78716,72146,45873,90065,12803,94583,87523,55848,38985,58455,67376,38014,21504,32449,91355,35146,91120,63517,59397,47195,18744,69474,13340,41676,56461,49285,18078,14271,67379,74056,89826,44655,81193,41361,37752,79055,93650,71708,80923,96605,63325,39258,49815,12628,69417,21553,55657,18633,72475,31468,92360,46536,48945,36450,92396,75174,22878,28921,61090,85240,55929,56012,59750,31389,72270,21863,18567,25470,88707,64072,67581,12850,14389,91358,94265,34273,27625,89398,26362,96367,72900,38281,11882,11026,54973,32121,78947,74455,96160,53507,60310,54189,27585,41983,16882,12042,22505,59018,45057,64723,79466,34510,10268,79886,40076,46232,91674,14902,81914,86513,20660,96180,91534,91119,17243,21168,52722,52364,45802,64057,46273,32985,13888,36040,15187,87182,98250,35832,71475,34327,11817,29565,86155,27000,82021,82883,43705,40202,78190,83351,47149,19738,43724,73391,15866,40404,74028,92678,60600,35976,25772,19728,19039,56992,30768,39405,90164,46027,33209,39200,28345,73608,14446,25536,31444,70168,52158,76201,70681,67968,59854,98181,62474,18960,41176,77384,46171,64907,45286,14889,68585,92948,34196,81285,22608,30498,63667,93862,43171,18604,52182,76801,38693,39547,31883,72130,17955,28965,31394,37887,62576,94858,48049,72905,82976,80852,91955,42590,40678,33385,95870,41344,37327,22187,57909,90880,95048,78731,63473,72960,36033,24737,40984,19854,78386,29209,99870,39855,48334,28138,84445,36363,20378,11655,64402,85519,11126,95192,98112,50540,47770,78399,97574,96414,86249,11054,82588,21510,86846,21432,47968,48286,75357,82155,58906,51317,78395,48643,48698,43629,29268,19482,39988,39718,80124,82823,37407,50513,38501,65377,52276,32478,10988,49763,50765,92337,22767,12528,44439,37923,19855,31119,36808,69711,29619,83215,90947,26074,49490,31791,58884,33345,70105,72092,31147,36133,48848,48583,42404,81816,32002,51260,67543,75066,99915,78544,74675,79230,23983,69414,21391,34243,16998,49877,33139,42512,29340,62899,72643,48965,98528,39746,92919,45798,35852,69797,55132,58090,62472,23641,77144,40238,17795,81850,77894,51873,23772,93869,70876,18070,24586,50677,25784,63772,62371,37247,76652,49025,58740,86693,20735,46418,75893,82232,36431,71783,93989,78136,33252,38594,57135,51938,86286,36913,49260,21257,28120,55883,76141,52042,74685,91922,25521,34081,13244,41281,14583,16700,29116,97075,70393,39577,51544,27295,94321,25779,86535,40482,79980,42641,36975,18321,69506,57232,35030,11940,22052,47733,61876,26216,39038,14759,53351,29496,60606,62868,34875,54565,32648,66338,91708,10513,24798,12978,81512,72144,92828,18456,21843,26044,71326,45871,18868,26328,26656,85763,53407,53051,46491,76247,97778,99908,77954,36124,58062,94733,96264,22717,43606,49262,85388,87740,56979,43631,74439,15264,90052,58044,35792,85300,24538,60856,93157,33625,68367,32273,12942,28010,83323,12734,37375,27504,49352,93194,38095,34749,42879,49858,64399,61297,45555,25607,51747,97845,36610,42141,23217,44923,22841,17092,39763,62512,76463,23856,18219,50273,79186,36089,68955,89236,32777,89093,41750,70079,12209,92789,36984,80754,46850,72425,89536,26587,77188,85112,97978,91953,56487,33673,12494,62557,42183,40492,26554,96902,28790,84757,55400,38591,95183,61276,62388,75445,84324,43386,56228,87463,70933,40172,89044,26243,75374,57637,34584,62914,77324,30564,38992,43415,23052,67675,79838,26566,24713,97006,57632,66172,64276,14945,37241,74542,80709,72052,95961,33116,22257,44306,52370,81420,53278,36585,53087,44160,52118,34873,23282,62634,55033,27350,17361,16904,97272,67346,55880,17559,53191,71094,19740,72417,62376,66205,51117,80919,24390,97711,38296,76566,66174,84986,58844,22646,69916,28089,91926,85881,26629,38515,59368,75371,43351,67381,23560,45057,74606,27628,28246,89806,69308,44075,39305,38532,88935,40962,23229,36222,15036,36811,29605,71536,43130,59350,11658,54470,66400,43845,71319,58213,34928,64762,84901,81312,21509,29650,73418,73184,57187,88315,50680,36924,43550,64996,77217,61707,13569,52788,94390,79851,65300,55193,16634,50318,63104,24530,36982,29787,61409,56061,30808,34650,22268,11222,56071,36091,46411,55969,64295,30538,94939,85163,84670,93123,18030,49252,51902,62120,95615,20341,11038,85655,76627,65353,78926,15439,39539,41110,46792,87010,12988,21465,67430,30183,18855,76539,44892,14026,86710,43438,33373,25483,92153,71852,12877,56299,30031,37153,88493,82111,73999,66585,95576,35082,96335,35900,62113,79348,92542,84273,89644,66835,49637,29584,86609,81694,41976,96038,83194,91386,46417,87758,52973,50012,54759,17375,70071,13252,38921,65758,21822,21669,84604,61575,58685,94870,30939,11395,58132,56066,92583,19878,59003,81730,44508,31971,35691,49358,32864,75483,23305,74769,11370,72719,14612,81022,43695,35470,40800,66912,37778,84445,70810,72521,35961,33402,70706,30433,12835,61650,55437,23008,37895,54527,53073,92461,10692,81880,20613,77138,43008,13769,34424,46825,13825,69054,34260,69074,93080,63119,27461,35602,15298,83510,88118,14452,97185,98342,10214,36684,39730,46085,35765,75090,14750,48803,37585,30060,39131,55717,41773,60985,10397,82079,45961,42689,85315,67374,56918,89838,21104,38998,34213,92535,85413,54805,99056,56832,23018,78549,99389,70675,14892,51290,67525,62666,96761,42765,92041,83803,73936,85889,59014,26743,79847,25579,47244,83657,41395,91530,58551,83762,37499,93051,73592,75344,71892,21298,20097,22676,54906,63944,54611,24697,90899,19701,47567,51591,47189,56287,16724,80905,28875,32341,95308,77364,77263,54047,98119,59258,69649,14374,43441,59579,15500,63919,88281,35870,80002,47861,53392,19521,21795,94834,38437,31278,51518,86116,27886,49404,83857,73128,78036,22078,71133,58771,89375,67386,46799,46490,64876,48588,79506,95894,48110,17383,80067,88392,44147,99853,71129,64389,24988,13969,26887,37900,42275,87451,83777,90910,62174,30494,52231,40685,33701,77552,81378,27221,92814,58098,74134,66894,28284,98634,54711,29674,43547,39021,21849,34710,76665,54588,92739,93144,34581,35131,83612,22065,55270,47736,43961,67632,97712,87212,50434,28354,65446,85880,88956,93964,35033,74984,16020,76945,87512,25191,82749,22301,71720,56542,48097,13449,31647,43283,39897,36924,69199,44426,17599,43223,89167,28472,43061,26088,16510,69471,49118,10059,59210,66369,32565,11063,47159,10601,92335,89954,98579,79323,55184,41976,31330,92456,78683,53126,11808,49604,35349,32016,34573,65063,32725,81752,47413,16045,57923,31860,87078,13031,10980,79363,90902,84256,67720,90883,99726,95696,47400,90964,27696,79223,78085,41466,42850,70904,40558,58011,64608,62381,91673,77417,39026,68506,79019,17631,79921,56847,89207,28397,65712,88576,94573,85260,51238,48597,26721,89909,67524,69221,71527,71387,61758,39089,23079,21603,47593,82034,41320,94771,68761,59799,51111,36541,30519,32047,26621,48978,94602,65653,41704,16335,99508,26528,54626,39861,42139,84419,35026,13190,97253,30433,31266,55547,45007,98096,35304,12689,86081,65871,67690,45078,37155,61015,31418,30756,29977,12391,54481,56147,72424,91797,79702,76227,16070,51206,73053,35472,89834,91101,60886,96034,71566,14596,14866,70191,26543,32362,63640,79276,32091,59279,72954,44539,87430,13077,63854,23393,13009,90338,29176,71532,76939,54567,53638,23353,54614,36656,23250,60687,17830,79610,39729,11996,36234,47360,74448,31909,29919,14693,97146,30707,32644,91089,85688,94600,93433,99725,48099,20134,24158,58081,98593,61720,80707,32861,48362,77600,33395,32103,85047,47836,52372,53735,90703,76298,65320,83044,76915,63811,10891,34365,47042,34874,51783,89184,49303,41441,78803,84439,11674,57009,63527,78760,61329,72093,70441,14488,60520,41021,51825,87630,93974,67160,10972,52695,32892,28209,34818,53682,73252,65507,11785,98415,35335,89010,32899,90158,81839,68663,17826,63650,59859,50771,26024,82808,89498,27497,36687,86292,57100,78266,92477,24677,47276,62054,62841,21230,50214,78741,12016,80434,16086,33317,17167,11261,77264,46616,27483,75517,27021,29033,69860,74568,51239,76809,29060,21124,84266,68432,93187,54059,19556,12519,38600,83989,72621,86451,37853,64107,72188,53684,92016,26942,29386,93212,44374,86416,37288,16587,72483,99446,40467,39899,70348,47437,64951,92198,33340,53560,35583,80928,56672,64545,61164,90074,93184,79655,31411,17007,47149,18425,43788,92365,88167,93808,24998,98201,32561,31497,12246,52186,71933,99984,81264,12605,86280,16651,42213,35556,23392,15704,59425,55089,85265,39459,76659,52101,41891,93847,90850,76232,91885,63034,11908,24406,25726,38083,75753,15637,11706,62727,96397,86480,72009,85214,45642,68407,59401,45025,46135,56501,32445,41804,63871,23147,47487,32410,13851,83343,32786,69211,98160,49757,15144,84000,51940,90095,44356,71262,98409,16711,45307,29065,64560,67033,76536,93088,95081,85992,23835,95740,44162,45729,63974,57301,77561,97426,52346,33884,24891,77031,34236,69998,37754,95367,61170,72119,90262,97940,97676,90406,31933,15620,61051,26551,50723,28960,97450,59904,20508,64459,36885,52587,62418,32888,14104,42025,31855,37682,76181,32102,41094,84527,52484,77989,11118,45455,92279,84594,80657,17243,42869,30122,80053,91178,37805,14390,64744,53988,51101,87802,88398,42044,77725,57016,10339,18598,50944,35529,48695,47151,91998,86500,75964,27396,30742,43416,16226,64110,10244,99191,57161,19039,54042,73850,44079,66148,71057,30719,41739,53334,75073,67106,28273,94749,14651,48595,99740,22182,13256,10594,73951,56539,76458,74854,20129,71649,85905,86512,65057,71016,25471,90764,45671,60872,16534,36020,60766,71406,57893,23826,81669,69816,83737,45727,60634,74598,71372,29631,94141,88752,88531,25774,53230,74560,74122,25959,58070,35420,55030,43840,43760,77342,40798,52307,13013,57983,64550,49648,90062,47571,16224,83684,80397,11056,87412,78899,79652,71693,24133,54494,83603,38279,62441,85109,33023,32228,65968,72444,30266,51130,21111,98171,43431,97411,14559,91999,10323,90403,92616,93306,73965,42323,31573,83445,38430,14077,55430,66759,13118,44330,35677,67080,73397,11008,33274,18645,33282,53098,61536,61247,63259,90695,14996,15695,99932,79628,91558,29202,96951,71471,20835,15535,38234,34128,62965,46867,61070,39416,95439,68338,32569,56053,27094,13206,45187,40544,96635,60833,64468,25889,29087,33604,96569,23128,91641,45788,43747,41127,69963,30818,87327,16289,80548,98445,43578,71460,49202,56263,28359,70351,37143,27032,83753,88609,26557,57699,59285,46193,87948,34747,68157,56274,71857,76935,68584,53875,29884,22059,10860,40014,59392,73185,78750,40615,29683,65706,40659,58731,38389,78333,74151,64168,45245,71322,94064,62812,30944,97024,93517,85184,32638,47830,15914,53996,19607,80119,26072,38241,85333,79638,78562,17403,72121,31262,35547,24190,53789,67296,89088,84853,67599,64439,55196,54247,45607,49654,38432,60807,15188,39957,59544,91165,20926,10799,40970,70683,75284,47774,51134,16629,90649,58249,54261,34655,73748,33671,51186,71204,76674,47527,82483,83132,82448,82137,85869,65588,96621,89757,95250,16026,98383,91816,11631,66845,77324,76793,85316,64311,99384,97444,25720,66847,71567,93463,22968,73790,93711,87424,56671,35930,16150,73016,80454,71923,44223,52099,61448,51143,28179,92406,24437,54339,89830,72172,14733,37673,16982,88925,44239,96200,79830,39811,71483,41199,77768,34428,38874,36424,37940,33313,86695,23610,83403,93763,52867,71955,66096,21601,10489,86331,67119,69341,62907,39720,66961,32796,12457,44564,48988,61209,86070,65564,26865,20706,37279,48432,82036,48783,94234,54504,97123,30403,84501,68122,67423,99356,76270,84828,45956,78629,12656,30322,73301,54269,34299,89549,42716,61306,17360,73661,22642,21099,39893,82762,20314,30666,83851,97883,62406,69432,88258,71281,70936,26476,85963,76545,62214,52077,90544,88185,19096,91366,11203,83184,25886,91815,47066,64792,23961,76278,98983,29343,33970,82270,72223,79405,38409,45805,96481,34151,58598,62892,60004,11070,42705,64120,66853,84026,69159,64875,25541,93212,97983,24008,30343,23667,11315,32987,34401,88938,65126,38992,47658,58795,65285,78359,22143,51772,90086,37750,53510,66535,47996,50921,10608,77367,59864,79182,14307,40987,23348,13125,55891,31014,12720,60141,76627,67612,34146,66126,84314,36852,12887,71169,18633,90989,18362,47783,17387,54853,28363,62402,50771,48253,62591,28861,21462,14071,90123,28748,81483,43116,74580,87650,27448,14923,91435,63992,16445,63412,80371,33532,70518,44923,66075,57671,92577,50658,35386,37341,77386,39746,83754,92466,21271,49373,82197,33230,82857,57267,18772,35632,22082,61448,65273,40507,91433,59594,16030,72132,87418,53166,58792,54363,29017,23294,59887,37869,35215,20054,27147,81505,55106,94264,94848,32010,99734,17277,83778,45470,97749,77334,63019,77239,43854,78209,97238,49590,64737,15695,77236,77959,55447,97353,24905,44673,18808,56788,78735,72315,17235,50901,38621,11680,68484,42651,14396,38142,78527,43268,22876,92121,51881,58051,57149,43333,40510,23616,66172,87787,77886,57890,26769,13743,59134,45506,87786,29755,71555,68251,47984,13520,41808,83522,99243,85293,91096,87263,54946,92388,25118,16834,71669,77584,65542,24293,45585,56600,60685,53337,73826,32531,79225,86602,40490,68316,85909,90153,72955,57725,28902,36318,12539,35978,41972,28336,27509,32747,10368,63803,82001,73363,32026,56134,91731,86322,78299,13851,25818,78938,46325,43706,32992,44863,97981,82506,35810,32315,67113,69123,96909,64351,23076,34698,49210,17056,54541,11397,55210,58847,11470,96037,64790,55977,87249,64338,13507,23840,37972,82124,13961,36709,61032,22577,91320,56809,58895,66293,40636,12782,35362,49504,59257,20546,74910,11506,21962,25623,25701,50388,30585,47611,44064,13909,23230,17701,35657,92619,39498,93688,25858,37800,88579,12240,63653,22500,29542,68422,51604,71571,74882,80986,66262,13997,43878,28278,44046,65074,51454,17291,18140,58942,68322,39408,89908,91657,90575,74995,53871,86271,65765,22675,33409,43556,97884,50244,19776,71825,85800,83912,46492,63396,12772,42326,86157,90067,12353,49505,43273,15529,90359,98635,26298,74357,91144,40955,72593,47564,50670,59514,32302,17433,90532,25931,32835,80067,23406,55945,83246,83993,55294,66789,21089,64127,35307,28493,92072,52534,69108,65534,86367,15669,53605,25224,36374,10051,99525,45236,96982,92139,27319,27142,49875,23695,59323,78516,82296,18887,24527,31565,20967,54573,70592,64548,14981,34126,54237,34362,55519,32794,84982,57151,67776,11220,82254,89812,32884,62956,67391,87076,34408,75018,71331,82784,55637,77345,57265,29859,18418,14025,73516,62369,38499,79725,57145,16767,20840,62033,15232,17501,64461,93505,75952,91122,17030,67308,94722,66621,56832,38062,54367,35940,52221,16538,90140,56339,91436,72642,15895,33114,68793,78207,89250,94777,98515,10807,61718,84775,27626,21725,62984,21234,99544,36848,94833,93750,59229,42458,26817,86769,97194,36497,79267,47390,23911,62907,42677,28168,26311,29674,67169,68261,22134,85445,72152,18306,92251,26258,15056,75374,74610,38222,73181,46238,32746,94547,17272,44192,74599,90144,58023,30089,29573,30477,22037,61807,14576,76467,57628,71079,81995,94406,93321,91754,12130,80132,64177,52661,81699,30878,67276,38149,66505,70249,75552,94740,70921,78312,45148,17259,57298,59974,82381,32468,14550,97880,79834,92622,46013,83014,90573,84626,63117,18999,48011,31975,63958,86103,23112,52427,18344,58915,40094,68043,91359,92650,58264,79359,67917,25850,48548,59517,48936,98397,50748,79984,31551,77960,88828,84867,25030,61074,16803,54408,16547,84256,71100,93130,23828,60584,63349,57634,12497,81417,98350,68006,67295,76550,17504,10637,63673,57540,68636,58845,31150,26765,41216,49507,50498,94839,32520,77007,90695,34509,48310,15258,55169,37222,98070,65637,54536,33686,16228,40770,76268,24443,30281,52689,17685,82052,15132,26965,92698,12211,84630,25125,37793,53759,64280,55222,51684,62176,68056,42329,46338,90256,43463,89136,13343,91629,79071,11052,88742,28492,95873,91936,37992,97612,97372,77780,66113,20229,37104,87482,34642,30473,10936,11783,85413,94475,25241,96167,58425,83222,13069,95244,35808,84445,17540,35402,82621,79201,82946,90772,21115,79092,18466,19147,30228,84054,82661,92839,48286,71062,41352,77662,63948,80534,29495,13228,20658,60550,86875,10438,75019,29184,34177,38525,90261,58085,84446,85096,39705,39719,47289,18811,44736,75756,74883,39394,16381,14037,33746,88530,65846,26323,33979,42624,63202,79368,38430,25166,59760,19678,19605,69155,51824,50694,44256,61148,28370,54042,69700,32878,88775,49935,28626,43075,27321,94488,45408,16435,60930,85436,51939,70320,43766,28004,78692,87867,69116,93483,45099,99687,38061,44139,82875,45670,52590,54026,99949,55440,10925,46749,61528,48512,51521,85421,14457,95717,97429,33818,57934,45875,59979,53880,27297,61681,21293,70268,74190,27805,34882,57293,85716,37374,18460,74422,85148,14093,19107,75031,43199,43577,80388,15904,31412,58170,32256,73171,83209,45836,69848,61960,61901,20426,93679,62068,68574,28644,89798,44386,45906,22314,36112,74982,53373,45458,49432,81340,66352,83162,94165,30824,27541,11492,47097,85459,73830,85633,23229,54353,58378,29382,34696,76281,87079,86819,53342,87639,37726,20714,58192,34477,40368,21471,71891,85568,78202,43376,26926,75012,68964,68817,84355,91875,71445,83271,17961,48666,33194,93263,99393,18682,52998,69836,20715,33818,43199,28280,75488,24100,55000,60132,76024,25797,19162,34830,52788,56512,62797,61141,73653,86941,77971,28686,49761,82077,27664,46819,31972,75077,45370,66983,35376,48188,13131,10482,90549,53783,12354,64579,25876,23609,99367,26431,36526,69708,75935,63534,71409,90593,86144,96209,56958,12618,20245,44065,17998,11207,30827,99041,84286,51945,60767,74537,49488,95735,87895,19220,54721,27663,64653,43247,50277,39673,17857,56312,98658,27613,65412,37650,43399,54128,97428,38430,97280,91688,11376,20113,40555,63995,50287,88894,21150,59006,66377,60641,26471,19923,25950,88708,42756,75116,72655,94796,80746,45263,91990,47395,66294,61618,74721,16766,44843,15149,58612,96040,48781,38184,39416,76300,14578,79247,13424,43064,93839,97839,63021,95370,22174,28822,99003,33844,12654,37013,37315,41410,75428,74789,65874,14384,45188,20930,28569,73156,58206,49458,11626,44296,32599,24571,55382,63097,39681,12815,58828,86876,51062,95928,36249,70143,27419,41119,17290,43813,18898,98784,34341,55676,67010,49343,76803,54615,69844,80519,31175,92005,44100,99202,51170,71659,81888,80352,60452,16469,28712,61249,73176,95515,15634,67138,52413,25219,44753,32860,92591,35732,56559,93767,14263,31278,56754,62431,54034,89020,48870,79505,54108,95900,91797,27007,87510,19109,22512,40889,69984,35505,57395,18024,44247,85352,85685,19583,66270,47312,86899,91003,74366,31673,75108,84450,47992,58391,59291,71279,67054,76166,12924,58424,10780,27008,50493,26535,34763,22022,15515,33141,70350,42572,97170,26760,82921,52668,57175,92700,99398,92888,31543,50679,20269,35689,47244,18889,67714,64398,24750,26078,58033,82171,72279,29841,69862,98802,90590,14698,83791,46831,30711,94551,61508,94805,27107,96360,42208,80579,13653,48691,69495,38516,16582,38940,39863,90623,81542,49510,19362,61211,80105,64620,67242,97692,72859,70637,71612,87436,41398,28438,65100,46978,51418,69641,15996,30842,21750,28767,82682,19206,99735,11666,17826,42124,27727,13143,24498,66376,52684,22786,20152,65398,98546,47338,19674,27520,16592,52626,71719,37541,65512,75352,42818,84494,42355,48246,13077,96792,25982,92499,42139,68730,90301,92086,31806,26852,78705,42163,48031,87877,71093,42527,70991,62369,70696,56503,69502,75434,88101,82542,46272,75442,70058,13469,28063,49899,10376,35914,81925,76812,22781,61811,21634,92342,18288,63067,92912,16090,69893,84120,10390,49103,18997,71492,38759,68502,10565,46430,77738,81475,47648,35753,53442,57983,80311,75327,89041,99164,44096,13775,60687,31122,31857,21297,98448,57995,30678,29491,87185,52431,14185,64554,48471,11931,53255,93341,86255,34100,95683,32200,53139,49034,54451,10947,63592,64253,84870,68731,91735,97906,83755,78174,41115,51007,57136,87299,31348,20702,72275,15182,63291,25634,79374,47800,95025,76478,87333,24430,36075,65504,95279,24633,74454,44138,20640,12735,25105,92078,68710,72666,42562,72518,21926,33253,70260,13948,88093,12047,27869,31152,66114,70469,68769,40915,76917,12046,79396,45458,56474,54460,37647,88959,51179,81690,29269,76505,14275,31209,86472,28969,31718,24233,50040,44868,87880,58440,28016,41205,14525,36467,38484,70875,69515,25974,63300,25371,39988,84655,16550,96380,16547,25618,18554,38756,48511,32940,51398,10616,24696,71918,98288,96251,38717,43836,54778,70370,58788,63554,56020,33543,79790,23001,45313,61887,58755,56477,20236,24298,92501,57205,14983,71550,24424,85813,88776,14754,42035,13520,28781,11644,27374,42726,48019,85712,64290,10602,86117,99232,63197,42862,64708,93786,76888,63506,17010,48324,26681,88441,93075,16204,36557,46825,38151,73534,24442,94567,45493,68333,88899,73624,12587,68183,48302,72803,96025,56202,87212,51840,77861,70055,64902,72200,98684,53489,84711,41680,45972,35641,81390,83992,12577,92996,68571,22410,44035,81694,35965,10357,10702,34050,86535,17944,18174,10342,30623,60716,27549,69914,48687,49718,41511,49502,19138,24343,79136,76033,92988,65929,36223,87772,35326,12245,62247,22032,84692,37530,21434,73152,68309,96876,96147,52356,70192,70368,84434,94151,82322,85450,82405,87943,79305,70110,97526,66154,33673,12645,89919,74141,84957,32311,55913,99485,82328,71178,73697,17897,92455,41472,92061,76670,76326,30699,37343,91896,79866,89247,13636,81553,75925,14189,19915,20622,69290,17616,12697,30747,49627,36938,65724,55335,51003,71436,88976,58156,75168,64025,25558,83571,49365,26529,87540,95672,21065,48125,18418,33539,74390,84983,81174,57515,33972,30522,11659,55978,77635,13060,84568,36809,20471,10208,59713,84783,45816,25986,89858,50022,84909,71846,54756,60354,41684,99127,87925,36899,26948,24315,48882,58642,44519,43798,86331,59064,34765,98662,20815,56240,23673,36621,95153,62396,43865,53629,89900,33560,75187,88941,88706,73536,20259,34582,92996,77750,82051,94228,81259,69295,63066,26185,55715,57626,13863,44268,90103,70836,97520,23108,61319,51995,44673,59020,92376,46117,88802,27532,25279,72499,75016,18800,32197,46727,34789,55705,79309,51428,68162,97310,57278,69826,27813,33421,64762,35590,64486,31170,40319,15301,87851,78611,56088,45754,99894,77952,51974,75892,89889,54414,50642,87011,22319,90527,14219,78201,67043,58151,85013,45619,13688,82864,37900,54206,91443,34660,83084,84458,22893,12985,58155,36181,10123,73489,76293,85393,94127,16273,16122,14208,40432,17699,80301,71890,74029,67826,47192,89320,45657,33481,25262,36441,80500,41437,70051,33760,50558,12283,89253,13894,60351,61378,18720,28214,87622,76343,11824,68822,87236,67659,79495,71490,57285,69200,91762,60048,75271,45459,12268,96933,94155,38031,12924,91550,21592,85328,17782,76825,76309,85447,81348,14915,98927,59151,63903,24333,72472,63852,33284,58971,97380,30997,57904,10474,83958,92737,48366,68747,97930,16997,41537,30349,12464,72645,20175,37904,99515,27915,32566,71232,65016,37246,53138,31712,11576,46199,56256,18664,27804,52969,20400,95362,88311,63555,52594,47534,78284,70357,11522,50342,80969,15510,97613,91395,68391,77419,71704,61934,78378,33590,84453,66709,53805,13735,43424,78740,27204,84544,96287,12563,24511,45938,70266,26400,61167,70278,53458,63546,62874,46858,77855,97306,61519,13050,33577,10421,12729,92079,96544,86934,63218,43871,38743,75208,92434,30603,22759,56026,52141,75359,64605,15171,56876,87415,16449,32967,62577,16969,50785,46904,25551,89116,81937,91861,63394,45161,15399,43754,11618,98808,84185,86414,64448,75802,92085,82413,20884,22727,43168,53683,41984,75818,92229,31333,57989,79998,48898,24172,68550,72245,26313,26100,52936,72184,63807,36185,43194,52297,18230,59663,68061,52092,17194,88293,61796,19643,60861,88936,41731,51571,59147,12043,40061,74932,19739,40313,79628,21828,33153,62549,37280,56610,45390,52086,53446,52918,38975,13024,79519,78966,25776,21830,80772,87557,85234,21557,45593,64321,30452,89561,44482,68838,79639,37706,67157,38102,77121,50171,10123,25766,96149,13764,73960,68435,62570,34224,94579,87810,32054,26626,93107,28922,85576,28746,41531,64583,22561,29269,83734,81460,49066,25789,13376,36693,24131,72930,53772,13954,14759,79811,18233,22482,92558,94901,18444,97006,87453,60594,69064,81330,78201,39408,73941,64966,54166,63327,95721,92272,30561,81053,77895,42044,30932,86581,86069,75367,22388,32817,18406,84793,22812,91064,57234,57185,13903,19024,56060,45081,41829,87464,39710,37100,52822,96219,82690,59476,72984,56000,58479,52046,46858,87360,37477,83511,99456,78424,36631,76657,41959,30538,85216,89204,21138,91055,36629,89069,78953,39832,77481,99699,16649,50145,46207,23524,71019,36998,29789,66838,66535,63452,44676,98443,96516,34359,20294,87982,57308,38491,99274,46151,48897,40812,32402,64414,55752,52816,40363,11195,19906,84720,75621,37013,82292,18354,48683,86269,58019,70114,16552,96176,97027,37741,88614,41340,68119,73858,10601,46452,92311,72472,93212,38138,64807,69911,14536,86274,98068,27536,94144,56918,72015,12494,14896,74993,79072,21732,44609,20617,15091,19183,77377,81243,71454,80261,43341,72931,67504,87118,23377,50180,94098,97279,79471,41661,30579,59499,11520,56265,39563,58203,74703,99355,51376,39920,36438,78830,86717,11928,74566,83609,58099,14523,56783,50183,77956,36392,66019,67520,84930,81623,16199,28465,30821,45602,26218,76104,65270,34540,89983,30771,60886,21116,22432,34272,96805,81320,97207,67526,14443,50401,79849,71117,98413,64120,72900,16376,44530,89255,29169,30090,64938,96327,60024,97541,99233,34955,24962,83221,54396,98120,99768,34953,26915,54884,48116,42201,27839,75808,85178,97702,38589,50657,58243,27075,82610,69489,86498,90838,60296,85722,20081,89390,55554,83395,27912,69771,29609,34778,71861,78910,30156,78222,17755,15503,19381,98413,87653,73993,50735,74071,75940,19437,83706,85964,94085,82835,70497,58732,30040,59556,56287,27846,48031,49951,85973,82624,75702,99577,45472,25995,61197,80991,39214,76249,68148,56954,54671,51350,13641,34547,48595,31200,85351,73038,99633,37395,57489,71346,71131,31758,83975,22834,77536,70923,34482,62466,53810,73044,70363,97476,79778,24455,64683,64664,34753,48193,39355,65866,63732,37308,98613,50442,89825,31190,77482,93629,84477,32128,89514,16318,90659,27234,83959,19007,72939,85284,81981,42803,45768,98991,62021,79281,21429,22910,53406,53822,19788,82821,92187,82399,10592,68072,67710,43133,55091,18315,46796,24731,36116,22188,43123,71153,99352,73278,25018,78203,79720,53861,85718,84793,71639,97568,44407,14144,58211,16814,15870,85480,14674,46267,48306,62105,17887,57555,18295,40183,76860,21617,59968,51507,48009,92145,75371,23975,81372,19193,94609,95972,87486,19837,82199,82241,67839,75364,25229,53188,55484,47727,12628,85937,71045,85467,67912,28608,35624,31488,18032,58885,76428,68403,21276,17487,19507,23561,11281,69893,63657,24972,33620,42061,28770,18380,80972,22039,64138,60675,77655,45168,15919,55392,12379,14514,44233,14279,29384,60391,23675,52980,10935,43759,16180,93016,41107,69546,92181,53890,91999,74920,66485,61401,12620,29293,83700,10819,10893,60504,21404,40361,91603,97782,22627,96124,48094,61961,61516,98311,14374,27320,20838,16372,80225,74379,64525,29061,61443,83647,50125,42046,23219,54561,97577,77451,34928,29772,62698,19017,67876,87209,68674,79648,61689,10918,63852,99587,26723,51807,68036,72716,94418,86866,58918,87190,66467,65896,78017,82142,97257,21241,60410,71945,44232,93967,93223,76551,71807,93182,69972,67230,39461,15359,24232,66361,91671,97725,56940,65388,37555,70795,56010,52848,48939,42236,32476,88574,51669,21065,61854,39610,49325,13549,69749,78827,29082,95374,18600,32183,98717,60044,75601,97968,20427,91815,51361,74192,60799,37937,53310,73426,91131,88893,24993,37842,61486,71267,15567,13483,47920,22582,50329,94499,36038,64859,17540,16373,65792,81722,47301,69992,20441,33820,97438,12899,64588,24614,10639,53205,37976,97735,46086,48261,58825,27494,54443,61949,56760,76544,71129,80526,55242,48101,27117,48550,58738,43685,19676,35680,86951,76409,78291,93952,56366,55517,57573,28061,84877,55057,95454,89455,38992,96088,74926,92582,81395,12303,34260,38888,19463,97703,83876,37806,12354,69788,26767,39733,75397,47458,42805,86600,49448,23580,18241,91230,34007,26605,24161,13564,44114,28330,57177,18673,25898,61379,68109,30932,12253,31128,11409,71034,51197,75629,89523,63326,29599,98172,67421,23160,75461,94003,21040,73725,30548,51463,10119,60342,92071,24487,41720,66548,96122,70235,81032,54697,41679,20064,93264,67343,79073,35934,32111,48633,27883,86261,40601,87787,51463,84121,21359,59210,11515,71203,80254,61948,35565,11605,36376,96795,93716,19215,30751,94554,27191,70186,82774,10525,82277,89939,37132,83559,16577,51647,45542,22755,77463,63404,46135,75600,96026,56281,50728,60512,53692,12071,69959,41347,35443,35463,27719,11745,64653,36284,37113,74854,75640,39254,82093,18262,77031,43289,59829,12323,80297,73205,97947,34141,28483,48541,93451,75846,67994,51671,93248,48033,61350,48619,66245,21233,69098,78015,56904,32896,92979,38265,89640,20737,38370,67691,45304,73895,48625,29604,46155,72764,35970,92510,46388,99409,14660,87266,58375,99384,25451,81047,65777,13366,41774,55580,93612,56706,64874,11665,81221,40883,91319,25238,97319,37168,97753,33181,84716,88852,43150,38943,95303,39444,20642,85141,29990,67845,35606,74399,83816,68788,38756,80900,54224,47975,49093,25116,16984,83668,36701,14694,59911,32128,55465,38464,48755,25134,55831,70455,26260,89963,73271,47763,79550,15825,59666,72865,65617,16611,13297,60180,25504,85443,49716,78120,52844,74031,54084,54087,18629,19614,53876,76060,90926,54352,13777,61179,38546,33179,53658,30900,75943,95410,32267,64935,18294,80854,82323,71943,94627,94259,57657,55635,26452,80796,52479,17849,82400,14699,69743,10979,51420,17615,21479,39921,35257,56349,19290,68015,32706,68768,71205,42230,60266,32836,48942,40152,34902,51720,53935,81206,77397,88099,81359,64860,58336,18978,61666,17592,67148,99064,92080,98856,37774,29572,17476,85177,49667,19171,76322,92002,60256,94141,43147,28383,70254,21815,31630,72074,73514,46753,16602,99105,16114,39476,37822,32221,13758,23485,39192,64539,19193,21092,29444,63781,58904,71696,66334,78054,71569,12629,90019,52013,69527,15422,39422,67808,78775,90327,70685,25157,53293,67769,90314,25657,20487,97576,22096,16142,93324,78327,22029,85551,87951,96623,27366,46031,28347,69726,33396,49275,57002,65513,79806,65571,44418,42885,92251,38947,81750,43312,87014,49114,69975,51481,83146,54874,97153,42365,47938,85518,71598,55858,46415,20731,68193,26706,14226,67863,20766,96251,50090,13523,61983,25921,44506,59963,68408,33027,76608,98617,92480,91329,55211,83110,48340,45153,71689,17392,63925,77249,39075,95733,36525,60643,39072,89352,66755,44686,17483,52594,89921,34493,14997,71720,46432,84392,53714,71014,70040,57619,72195,78300,94615,90494,24602,83389,93880,76530,54501,56851,36161,94590,77315,74165,77435,44610,58932,56128,88505,57894,84870,29059,97233,65975,55565,42663,92193,71304,81357,29910,30753,92659,37405,90309,86086,83782,26966,41598,61542,25206,12379,74177,39859,21789,84316,52206,66038,77850,69626,77401,75611,50488,27744,22281,69213,28223,68743,81041,73483,39263,22567,97128,90813,99062,68544,41029,11982,41440,37654,15629,39364,74609,39692,58555,49758,22695,91987,61403,33876,55883,74409,27090,34713,51020,25505,63016,42166,41354,23649,68783,25741,72864,78376,25627,91091,93605,10075,72065,90873,16168,65364,53805,94530,64575,74484,71504,42078,90665,77482,22913,45335,98022,61838,91428,55044,36052,87696,77543,54116,90136,60663,76197,62955,11000,42291,42354,15929,16642,59886,34598,55767,25434,41726,40779,73704,34787,25548,78165,79311,30798,62818,60017,72009,31382,38478,55434,17559,33544,53610,21326,27130,19166,44586,76956,70751,85595,12489,78511,36168,75631,68658,91065,76132,80138,78271,65964,37252,79139,23856,71884,39621,87662,22120,82585,10005,39250,86494,60199,14422,10131,19707,46417,42694,55429,17230,66766,94856,84420,84268,22465,63751,61600,85144,16574,57339,79235,61890,28462,90934,60045,13385,58516,11234,94728,63020,96144,82221,59831,57510,82578,58689,62797,77785,38019,90017,68243,97449,81287,66641,98379,42700,34421,41610,65993,57724,40648,82900,27343,82386,98398,28645,20708,46114,54362,71238,54653,58667,88531,88750,78771,16278,15092,27234,83111,49404,23550,61525,81809,37391,22748,93195,59204,39091,10816,75358,17028,61451,64781,32353,23725,72507,47061,63028,47471,88416,80263,31431,79908,35148,46114,12810,91507,77483,75837,43326,77308,35854,78372,77224,40742,12490,52398,84672,31249,90085,32911,17439,35598,98990,72862,99734,21992,34473,93803,64510,11130,31390,63285,89245,78795,21693,41563,98439,31590,30482,31655,14461,41491,61282,25150,35100,69799,84789,70433,27026,16291,53093,46997,22762,42734,73887,68128,59678,36288,36337,16651,98970,96729,47380,14138,80923,41747,81344,54964,24300,93183,13514,66903,30427,94280,14602,39472,97715,22172,43498,31193,34848,92926,24283,81494,96986,26793,56036,61366,52393,78102,23301,11870,40945,84489,51062,15363,94014,94029,64768,75618,77758,55621,62593,19961,29542,84456,42045,59283,69550,51953,41693,51277,29742,42863,30873,37345,19103,20604,62435,51713,88163,74982,60264,72537,21664,95420,85282,14974,85915,10582,71326,66335,20173,58218,86640,69766,32279,81782,91436,48049,93464,54994,72105,24658,14047,40276,10437,90115,84054,64595,12046,12650,18928,55933,81183,98532,92017,97493,65154,40463,56668,90064,38546,28123,13586,10220,54076,70849,36506,33227,83020,45072,59081,24595,16965,90920,66089,42860,81023,82490,34858,39241,68957,15553,90573,80259,27757,76729,72608,12161,86934,49771,86989,83603,56229,38117,16644,41683,32060,62750,31402,49517,51942,41804,48060,18960,72071,72534,58311,29138,46431,89612,79713,87006,85308,78659,67217,96504,75272,99763,63424,66958,48644,35655,15559,96542,95529,40197,71373,50749,34540,82669,56809,52848,80055,75373,24336,99869,57242,84399,36378,53565,74140,84241,47101,68066,11991,32546,47000,76694,95921,66782,96842,82003,55291,68322,64161,65025,14594,52203,96434,72454,53181,33209,33041,30429,13607,81249,34545,44340,49543,87243,78493,94418,96701,71664,33659,89214,95490,67362,53556,24744,20581,70274,60563,45883,38984,17826,38679,35428,50153,16150,69063,52293,70034,30567,15090,35271,45298,73308,85614,23248,81137,19049,15956,96976,16146,52411,52642,46085,47551,52637,95042,47402,68813,68687,51103,60715,57798,49112,30439,84614,38203,25438,49043,72367,91397,71426,62716,86922,12515,15401,13873,93481,90443,97593,74205,56434,50119,71492,19446,16317,94395,66782,94555,45337,96340,51302,52430,21052,66903,20950,58610,57677,54144,12835,19178,48467,93243,84650,39546,32809,56122,15373,34137,16943,49177,16801,88636,71530,31728,14567,62778,58741,61600,59418,40948,72034,22782,93621,87818,85239,13682,34806,13360,19987,99928,82193,28202,31940,16764,43210,66653,84401,84419,98208,10721,88211,40988,95929,53622,95201,70207,76718,79922,61829,92621,23624,82080,79848,19578,77218,88804,26670,82568,13154,42638,71190,98433,61444,10758,55489,21919,27596,56551,68654,47026,10917,79200,41053,62693,10797,24425,57048,98405,50457,85582,90892,86545,24027,28239,92781,99499,20318,42078,93222,92797,86894,89362,95981,62379,42231,99699,23492,74144,15661,74342,48034,77610,82520,52552,74009,56037,40747,93172,21134,86693,56207,64873,56562,80365,68959,46521,49380,96447,87142,69008,86896,40311,79842,20483,48380,45427,51948,23433,70730,79825,38288,74775,31159,69628,51638,12977,12067,81149,57104,45535,56660,29770,46135,30128,32344,28719,67888,15336,20958,31723,27463,68896,28613,69371,46708,92974,88950,62835,80707,84613,27754,12969,17826,19012,55350,62191,37145,78701,67340,72715,99925,30126,27126,25672,96822,28464,25294,24206,66180,85544,26737,69707,11599,51555,34892,60110,17250,61781,38007,75287,16880,98246,20459,99167,13999,23411,83301,19627,19170,32034,43643,77441,46241,10637,81867,88797,58156,84992,73566,37922,54364,30543,15889,65016,66858,51746,83441,35800,96769,37553,35576,18488,69677,26263,61952,91598,88727,13153,31094,97575,96255,35786,16779,69611,28619,50302,29213,78946,35147,98602,15056,91342,40099,51378,22127,23692,77424,34732,13127,33361,66506,90704,17402,93007,94389,38010,48769,86272,71314,22616,58498,85308,78078,41035,78784,86917,34864,34360,20343,97689,22446,44498,16697,66489,17085,94539,87709,41844,94277,19086,83614,27561,68509,42558,84759,54546,87240,78905,43845,14814,41783,96653,42686,42658,84726,21362,92988,30807,69270,34797,49201,63509,76831,49094,93553,66480,33418,62768,81223,44568,29475,41687,12383,14531,13747,43113,51320,52131,63358,10746,30294,50318,18541,75332,55857,14573,66171,93987,70331,37919,11654,65202,43820,29000,27340,76751,49592,79826,75190,20182,64203,61800,64771,17062,84901,43256,51963,76809,30694,90213,49263,87734,45745,77065,22894,17526,50622,41525,86380,55400,12825,71846,17671,41474,85846,29646,49574,68401,22096,57039,42900,27515,11965,23711,64163,87990,28707,88280,68166,14628,65940,92326,98421,13220,83110,84629,73007,59352,52625,46376,67757,52445,57798,74341,88001,59445,15662,81190,28603,94287,40062,41054,42055,97372,70410,31690,11271,91799,88147,68564,47543,96178,53647,60616,77944,22815,27372,83464,24680,98033,51117,28865,18503,20434,71663,41016,87834,72163,32503,78788,52010,89793,43046,96297,31402,81691,88446,90284,12189,87528,26025,65092,46070,44853,83508,37306,47673,94669,83029,77741,34486,74894,76279,27212,27117,77075,77589,74302,14698,47378,23716,57045,71547,32003,69702,29974,34927,71772,76983,82563,41544,70961,46647,31970,40838,90039,94598,49598,45173,52489,60177,92084,94376,20750,72137,27378,95271,59528,15619,73193,80041,44357,15721,55728,99483,95795,15062,97569,55500,25265,18778,93561,74853,12156,31599,64657,91484,17713,76657,57068,59267,11222,23806,43732,55893,75138,80362,14330,36577,16210,32875,18536,72049,65650,99914,37914,53155,63102,97496,65984,71769,44409,68186,61395,81467,35332,91126,44298,34033,98954,73511,24181,58244,62159,78290,74454,51545,60787,60088,61742,62434,40821,87402,66772,16308,45171,55501,36946,66560,63351,36825,58464,55924,25130,33601,43557,60475,17608,78017,45456,19282,81544,74047,16567,93356,23349,52850,11639,13093,70477,59785,24598,48250,40246,78587,20140,17061,36036,64023,74075,37462,32724,93901,95576,13743,76695,88176,47199,53997,75603,97041,73934,42670,89128,41621,58452,10772,41180,39494,90158,19167,51915,90623,45431,89988,53847,90029,46126,27006,53522,28660,19882,52935,93917,70267,56330,13479,77013,35023,34769,84387,31045,99340,39917,59017,20496,27244,87695,69086,29635,72728,57838,26098,77758,54329,84501,59581,18621,47816,79332,52979,18937,13704,85350,57422,47353,91259,49288,92959,65379,48372,81094,55373,35769,13913,24570,42024,67433,48817,38759,14339,88593,72555,60119,91555,50085,58564,27164,42256,72587,12185,28617,66078,51694,69686,10544,28812,78950,13894,37689,75682,62943,71102,67140,66531,22110,39039,21350,11028,14736,94848,14611,38963,50554,28820,58270,13976,81290,55428,99156,23466,20662,17772,36753,45743,16841,76572,30013,97839,34812,16908,18168,36423,87861,23500,94136,20281,15494,24695,12260,17366,97523,49355,45289,28322,90299,60303,57738,84243,59746,45502,11464,98713,70919,67314,53139,95758,72593,44677,26328,54980,83389,34338,63624,79280,79923,14144,63931,43437,63568,46118,95539,14822,24447,47097,56198,82137,20471,60158,68083,50335,12550,24715,48374,77358,29186,21376,90986,86420,42279,34592,28085,60562,14794,66626,58323,81448,20900,43471,19173,15585,58785,19019,44169,83159,43849,45996,97747,33389,95109,42274,35530,68564,33648,23473,48460,38389,81268,13920,49488,97161,83458,36734,52557,46693,43136,29921,80286,96735,59878,76089,92277,81473,38118,21048,73825,65932,87433,88256,29589,29368,16752,96446,53706,90968,55234,35875,87653,22449,94620,62083,95407,58363,62697,64744,79282,44586,39700,25444,53343,77549,32808,58931,10264,92255,70889,88031,11411,38807,17303,76225,51291,38010,48934,46588,56065,40862,16676,62812,38879,75100,25904,33488,55544,10094,25939,35477,15173,15886,24932,96962,83387,63647,97869,52097,88076,41336,19464,38487,42611,13387,29669,74732,96023,69487,83193,97282,19130,94383,63041,43201,20659,31302,97411,33779,78597,39581,27790,64086,26700,99831,30377,72498,56457,19544,53063,98510,20265,38305,12787,17902,13088,50021,81884,12160,25338,39522,73430,52810,75213,82001,59944,63552,13636,16934,45972,10579,16549,20062,33136,20423,84884,18290,52603,22754,18569,43264,64622,46756,30744,69947,24152,54599,67351,72263,83975,70396,66149,24474,81810,56416,82446,80353,27802,27364,59725,46913,10994,99684,40753,61372,66581,69508,73490,82376,67383,71748,53726,64040,66735,15796,28742,75124,49253,50844,69797,55358,16662,31777,80040,34415,98806,13194,23371,28813,16182,13690,49755,53535,55115,61754,28051,14580,30789,75426,58335,21060,10425,95274,38988,49845,61389,99579,70093,21970,19129,94204,93374,32662,74956,41350,62479,65074,48088,99778,65096,86358,64696,24001,80047,45463,91295,56197,36104,19326,17957,78006,48825,41267,81880,69907,92929,88255,36624,54447,40934,78854,51217,84921,85314,88485,75918,27930,71570,28195,44852,89546,55091,50634,76732,57710,97717,27149,14835,94721,78231,46223,62530,27004,66405,92441,99452,57090,97610,17042,65499,79713,23533,45090,89929,27574,93699,94454,31975,24445,83124,86611,31340,34393,87660,22737,52424,52869,24481,45647,35231,45893,38807,94578,13877,22591,41340,85126,47515,73102,32498,27364,28997,97956,80316,65147,19189,11489,12572,94054,65500,66363,59728,27507,62454,91595,53856,59741,55036,88413,61843,30564,71849,26559,52631,61842,87006,60084,92997,87303,14843,29152,69337,28543,49602,66783,14542,44120,54606,50962,16229,36800,67671,74328,50350,65703,15280,88019,97157,66171,39810,95131,62113,40017,82433,71543,60838,16554,70704,93547,21957,35064,69826,67814,17139,42888,35784,71679,63090,33442,90053,71819,47944,90375,20439,79665,58674,29031,72570,56734,71368,15767,30914,67710,66069,76384,78347,29094,31505,72970,16001,28715,59794,73785,95798,14225,57597,92298,25517,12733,21979,56822,84687,60099,94816,73789,20099,19820,31438,36255,58431,18237,25570,80980,96662,28324,47094,23159,35464,53000,44769,95136,24650,20472,80158,55918,21156,38806,68109,48386,15566,47040,59066,73671,67187,38277,56843,38718,61205,97717,25280,12085,37536,29853,54478,99473,70451,24273,83350,75408,47863,75611,75873,86606,71483,90969,98274,88492,15714,66517,66129,85807,49615,57277,69225,48258,13686,89709,91407,73542,38817,52459,94414,68186,38009,75773,93592,89672,31727,73125,50637,15167,47543,19927,73301,36012,72623,35124,72490,95472,57037,41834,56817,88358,99091,91282,73300,62328,39189,33751,10949,94009,55147,46637,52109,31497,57779,85690,93343,67627,81550,67881,66997,87453,67926,57272,79703,68408,77042,80491,64113,35443,19305,42700,33764,33334,97769,81642,68954,44950,52884,36903,56704,37132,40117,55452,21405,68506,92630,71120,15438,90198,22911,27744,77307,64278,71651,90458,18367,14520,56174,10494,95784,51886,32553,37355,57093,53698,39412,36996,86059,37220,24609,99010,71587,91733,91652,99159,89317,24493,38772,48231,48968,69778,38294,35153,51949,58031,87756,32957,10720,83312,86583,50762,13645,42352,10394,81912,60867,25443,21231,92932,73471,22431,61976,50106,93532,16400,38409,79264,36832,80024,73056,68550,31130,96420,85454,90107,88202,10764,38800,99756,14692,90102,49421,11766,68867,52360,40988,96251,75100,13497,51415,47096,64923,56129,78467,99197,31577,68039,34731,98464,98619,29043,45259,54103,37807,38694,80249,44546,38514,67222,56211,63778,58500,81375,59435,69460,20550,78499,29812,37014,48037,30939,92752,53362,53437,48990,32991,15664,92225,67656,58455,19416,20019,81756,37948,92985,95047,67148,48521,57447,68553,31817,38758,85024,82389,77516,85850,32318,89888,12683,65534,58116,65423,30419,82244,23428,14764,96786,77475,92072,94019,32931,73883,71818,75052,75503,33565,21320,76337,42642,97552,87212,46478,21323,37061,31190,68053,21960,44846,78317,84604,52611,97164,84753,68621,28899,51507,44894,26474,44593,88679,42640,76638,19467,81977,68581,98031,80205,61938,54055,55774,61661,92938,62167,49771,98561,44678,17307,95246,95480,49330,80853,51094,41173,69575,75383,70945,43894,16399,55118,69852,38272,77787,68747,15428,73600,60828,50986,39825,15555,64803,24648,62042,30410,65436,75571,70806,75067,24886,60588,65834,62750,39540,33073,78540,59666,42550,65237,40737,72432,44085,17905,35343,54235,49472,66610,56537,87472,53954,59330,31471,20277,39908,35647,52529,53886,24545,35259,54889,58059,10306,67490,37284,10526,41334,33818,45998,34641,57819,20597,65088,13357,41570,63045,41627,45161,85656,81499,46073,20705,49918,52350,21685,84665,66168,88597,67259,90048,85447,52332,33782,10632,69482,11317,20631,82304,28790,74034,67114,67203,77847,56792,96748,73143,36979,42708,70352,17819,36999,17081,16618,54545,18656,39284,64905,66502,50475,16617,31391,72726,15755,46188,63536,21012,53222,20201,52305,55716,85130,48715,96972,63448,37805,50413,44773,10463,64389,76323,63704,56622,13927,95890,94602,20185,30244,91036,53513,64013,33063,87884,85019,74382,66592,31061,74272,90228,43660,55121,12653,75529,87610,35948,26769,95595,20132,85397,29008,24650,99867,94394,20728,74931,45522,32541,59552,99835,94528,35198,31975,43615,44170,78693,50245,27664,62445,28296,27680,28877,42928,47301,74844,72056,75467,92963,79512,35937,94279,71213,95443,70903,69324,68049,20425,43795,46659,30962,92296,99579,58672,54149,38636,54639,59274,82970,16121,57331,49901,11742,61859,12697,35986,10968,62713,10520,40577,64711,19213,71222,21937,42216,98294,29340,54533,38750,91692,24902,42033,77042,23671,35780,75258,26103,48525,36322,68815,90722,26179,25085,55263,80112,65107,14418,82493,13786,25665,96929,27824,42546,15418,58604,63393,37721,55383,84040,40931,27595,80743,53085,13671,50772,21850,86266,60708,15501,68093,59210,87675,52061,86570,42996,67925,13527,81830,31957,84837,68122,37076,78497,98588,25956,22960,33773,17339,46619,21683,81534,82665,76195,96063,40086,64758,35004,79549,17447,50853,67503,71340,22977,29341,22227,77283,68084,61846,42316,26169,91898,88676,44247,18900,83793,58949,38765,23969,75884,90839,94948,64868,10854,90687,31742,94423,50147,75824,72761,73795,25011,86263,83755,81979,10929,72965,70427,66004,98030,97241,39554,21079,34998,19897,19885,75796,21111,80483,49616,62367,88829,36050,64247,76573,78326,79394,59324,88401,96963,52628,71299,81331,43853,70909,41647,80499,15720,46123,25526,92180,60863,84143,79368,57834,59930,11391,95771,35069,17972,37068,97465,82064,90624,32285,48024,50181,44688,94020,27158,91564,95874,16204,13357,59837,89919,19103,18734,21586,78890,85421,46965,36971,75108,38621,32498,12198,40937,54647,35398,71446,80376,40592,51128,65899,20304,76842,23791,21265,35496,24905,38725,33298,23649,73017,14087,61113,96730,25261,12542,67046,76701,85865,62325,75127,57317,68277,64252,87419,22311,67718,92007,49576,83569,61451,78821,90859,31376,44745,49448,56189,17026,62421,42947,44279,62767,83884,18091,54832,76291,18966,97575,99458,93391,65554,52537,50158,60300,11538,31528,76779,45684,14019,83075,29646,95917,60963,39653,99730,55097,40231,36482,68154,33793,79859,61011,21420,33369,83454,10135,24493,35631,29994,65793,65866,81245,11026,63643,65275,84735,51967,59797,18639,48348,19134,50290,90445,43718,81000,57605,99281,29592,52032,58515,45538,29946,49090,18982,55423,20799,26492,23461,10571,34776,89911,36380,86576,23099,35170,96730,80711,83694,22083,27988,59648,85182,84782,53742,11393,61978,67362,53060,34759,59155,95269,69411,19741,91352,82540,50497,42963,45518,45776,16517,19412,22852,69374,41888,13715,13257,30916,89466,37686,28839,16163,66404,76835,14863,53226,86228,26046,79006,94713,20711,75583,75114,34010,27017,42539,35883,24859,65116,80110,19737,82579,85562,40806,12478,66425,59809,93325,40104,60915,62390,93064,10692,49646,98803,32539,28947,32762,22425,75177,83428,65315,52179,82810,51632,20546,23409,57858,17166,77024,22343,92183,26991,99200,27979,63965,47020,92357,34004,34109,95136,93818,56811,12039,86683,81297,43540,33336,39843,73793,78090,34756,34672,64977,29667,22641,39674,51048,84340,50488,14057,54147,28404,66925,34399,71540,91863,56035,37627,52166,19440,28187,48151,44176,78831,14306,65201,20651,65335,93227,41435,42053,72729,38657,62592,20471,80431,45347,58969,13628,19597,28024,56194,49297,29551,21942,86560,67645,33480,32373,25811,94095,39815,39143,97369,46311,95914,42411,31406,16253,67376,12665,73121,58770,41027,49645,85860,73745,38651,58276,75962,29740,36335,45196,27045,36503,32092,72149,20051,40220,21082,75673,78571,24564,72653,34309,68120,92384,34360,32680,74122,95361,52995,87920,80312,11625,76307,98248,21393,91382,81197,59638,30482,38614,27117,35438,79753,20094,80685,50579,62189,47232,37587,10011,86029,22554,53527,46148,66836,47518,23660,14165,18895,53592,58269,27821,27790,34072,44396,23446,29859,20414,53584,92107,89461,93840,25943,86300,51876,58911,39310,39212,30463,43237,44967,77380,42717,57171,41766,22778,12763,26384,79515,16205,25471,12712,75409,89473,56444,97459,25188,90850,39827,86761,51671,29811,59902,57775,12481,72533,76704,40709,31958,39051,42086,98618,19062,16137,53072,23790,52389,51093,88583,37638,76441,96694,79529,80684,91957,25579,20510,41471,48580,74071,44052,90375,95771,95918,66027,37914,76422,79882,25655,29942,16534,59605,42483,68311,77747,84002,98197,15805,41957,89073,93845,65133,95476,65640,48530,50137,52452,42490,61090,93358,75930,97387,58556,30705,41730,20614,31223,67261,76657,93425,70672,38676,25714,83632,93085,50338,76464,49968,98493,93668,29364,63405,81819,18234,20811,57991,65123,43100,23707,20096,51835,28390,33888,45761,38039,78656,99925,15247,37835,17197,57526,71183,75365,75832,32516,73000,61659,12378,16897,47137,17613,17540,74988,85456,82096,23702,14624,71959,87109,42571,53869,93147,55895,63624,61978,46820,38286,31840,65944,28358,61559,95094,24693,36876,60501,45808,11325,60641,36632,47271,31925,42335,35680,99566,85342,18890,72281,90255,43205,22285,82818,60998,99621,18720,41993,94150,20184,58053,31226,55274,29743,16859,83972,68635,88644,44906,23395,13306,98573,48128,39506,68925,10682,82527,91617,31421,39631,54723,21179,84326,31161,80008,17617,80309,28944,37328,90793,32444,91021,93302,15049,28274,63854,38787,38547,76549,15352,52880,81925,58235,68214,36542,11961,89382,84352,51583,59892,54466,13516,73493,18676,85581,38878,52624,71279,67661,73360,41049,79287,20480,21064,68408,21976,78652,99863,54300,67940,65338,44825,66222,44462,51834,58310,32409,18059,42470,47582,91374,90247,80023,43456,35799,63862,28930,23181,43281,75302,68321,50588,23095,46683,19624,64047,47156,27103,76083,76520,79134,30548,63496,99823,76574,77402,32491,56581,28683,29244,21911,48513,23837,68782,85140,86448,86040,31680,55055,87941,13541,62397,83827,91474,44321,33530,49973,85024,90950,93046,53721,44480,12956,99264,57692,54879,58815,31044,91921,51719,78936,44701,34707,24443,52409,89572,43222,87902,44501,36183,66491,31148,77878,33214,66669,21016,25073,10241,89797,37837,43628,91750,54928,27083,55260,81302,43859,17496,27734,31293,59478,52726,55983,17625,93504,65836,63496,43175,74866,65005,75183,48078,71423,82387,85440,41587,48106,56930,63049,29798,62957,50295,49099,12600,13744,36099,42375,26811,94419,35210,42290,73186,89234,51151,84562,12764,31886,21186,35457,27025,67599,79576,14052,44102,50641,12965,93243,54012,53788,32964,51456,19343,48507,39515,95304,34951,97884,72203,63882,90240,38845,42425,24388,67086,26186,40710,52241,19824,63230,52129,25336,29000,31139,67489,68231,38559,55656,31600,37431,46463,83405,65365,25422,78845,48398,24537,91017,70304,24208,56532,33215,36468,16619,11664,94491,36004,66164,83976,93463,91003,87496,30640,20034,41375,12256,19043,78174,66294,35108,15317,75366,60260,34372,73139,94990,75147,53977,85282,24276,55233,13686,56514,52113,41571,47165,66224,48430,44401,88296,42169,81409,18313,80797,26293,30162,25457,14155,30899,19315,92672,26263,37804,78873,65052,84538,72183,77922,58743,45615,83942,83753,73764,67232,74240,98513,32339,74844,72325,82054,95867,31334,90057,37420,29853,43588,10368,26309,87541,97459,95209,60247,90314,54023,88600,14532,76184,59191,52034,19050,36455,76304,29195,30280,66106,88087,91773,88410,34773,88660,17908,62836,18908,86098,83583,16361,39382,60851,62954,91249,86439,72803,85172,56244,28953,89996,18331,94836,60026,75418,20106,53758,39116,20705,53895,94930,93826,84981,46932,96191,91083,24774,49619,43232,51842,20884,85316,68543,92510,29606,96561,78575,99154,66665,75789,91500,53784,25952,51422,14994,56405,82304,16463,37852,23198,41827,14125,36754,64688,40728,17900,48990,17138,64988,64093,84280,55605,45046,69211,51183,55100,48207,17520,86021,82863,45409,34976,93777,51186,58166,23091,99173,86685,66211,82038,47494,66889,13320,67957,79828,68220,86611,57762,82997,12761,15269,21413,50274,53633,24552,70634,68892,49375,94865,15536,23993,54150,16557,11088,95262,19334,56406,67208,24405,36516,91063,47191,43315,26454,10535,64968,78379,27168,29833,45290,36906,97141,77446,31314,83505,81115,34224,31293,63470,30222,88626,46735,60493,27167,60832,69307,51755,94565,42888,44382,19821,35587,28449,58257,15433,40592,32067,28951,25332,73989,67219,95022,15195,61113,79807,32607,16031,16001,28741,69359,83086,58698,97302,10773,32826,60810,28168,88973,70908,46747,36427,95371,21915,61181,91500,49477,48364,92321,83726,32186,65747,53647,76041,53152,96766,35016,85573,77111,42309,40824,95276,82058,31118,16245,79909,93103,58811,10375,44488,95505,97476,82881,64665,10763,36351,76321,58240,86196,52097,92278,38095,75707,26752,73388,51806,91874,34214,85744,54729,74565,35532,57928,20218,14005,42075,21564,23714,83654,79122,78679,15806,63827,49484,59313,44631,60519,25553,22547,47055,44217,44227,84344,99095,61332,36426,73135,79188,21938,11045,81771,56052,88448,31529,86441,93135,39699,60254,44353,80090,98756,79195,82589,65571,63864,57437,63457,67202,87635,92555,29372,55536,93162,94860,60485,43734,55716,46023,33072,43346,69346,80301,67442,19969,15828,84545,15881,74696,25539,87200,18698,88068,24564,61158,83918,61772,27713,20069,26126,20411,59919,28155,17375,39449,95949,64116,12613,37743,70500,12675,50208,46193,85350,82113,80846,13709,79837,10452,70089,38409,20059,44672,87087,82104,58881,83635,71724,80214,92101,63336,96713,71820,62886,46900,58165,26701,62008,58257,79908,55852,98881,10442,22050,38170,75735,13692,38441,43186,87481,52826,18928,14648,13634,78303,25977,69842,23835,38483,30643,74677,53389,37979,70744,46756,46833,53960,96802,33295,72799,19956,67266,89824,17845,60780,88667,16562,43437,13828,55746,55821,21214,91851,88196,40608,80134,41292,54089,50709,61778,94094,39744,24192,42546,86158,44779,36592,56484,20977,34082,63781,98983,94960,21081,51826,12391,67977,81244,19960,67821,79163,57410,65770,44234,95271,46431,96570,82499,22228,91080,41366,49947,81949,23769,30327,44018,17103,46433,58271,54521,42982,14876,55814,44936,42916,80367,41191,37830,15502,98942,15549,14387,28083,86903,50803,53621,42101,77700,47466,64231,97416,40602,54690,49541,30419,26513,75061,81957,29085,69986,13599,37661,41662,90367,65295,64787,63284,72319,33709,32623,78296,83403,38840,92235,87119,91371,76577,92690,52211,30170,14263,26217,82000,74148,89009,56302,99565,47921,20082,96682,64008,60821,71522,74828,63101,69800,15086,24079,21372,26687,65442,86508,30803,77429,22159,73469,26640,28563,83136,11743,36148,60037,27041,80124,45397,86507,66765,32115,23886,42658,83942,27373,76730,40854,33697,30328,66884,22582,17088,37740,20230,66473,66965,26849,54337,90936,40730,57918,43731,34333,52635,50578,59263,41783,87095,40316,21021,18074,18786,73142,39960,82712,67723,64387,38065,43902,96741,29756,84002,60255,43159,92220,89659,49253,39667,82487,62386,93534,79675,79390,19366,81591,81615,31060,22494,15658,61554,70936,88996,86202,11058,48666,87837,94762,82534,12488,84693,27599,26727,19790,57525,10531,37017,88326,62938,19271,43699,60374,66826,84650,18230,81254,58995,22520,68554,38772,38049,39290,61299,55146,63171,15253,77721,24929,96294,22939,95903,43891,33544,18857,93924,73055,17439,65506,98468,50966,46480,74212,23987,54966,99617,31348,24399,90301,90463,10171,49081,33776,12443,37243,57110,29247,93964,97251,87449,54743,26280,25626,38646,60080,11797,79059,49169,82861,47454,34037,25207,37647,65826,16548,72514,99526,58812,61361,39589,41238,81586,44600,25476,63631,95582,71190,97623,38235,42017,19163,59936,38423,91089,86637,35045,40184,57684,95651,77152,14206,15191,68660,13642,77891,77459,28953,33424,22829,43801,57291,57865,96907,76803,34700,72051,81499,85353,76887,54997,30969,84479,77070,73026,59140,15571,42696,68125,62944,46682,64450,53410,36665,68221,64990,76123,60280,22958,97185,63283,58026,96594,91938,58742,20939,30833,70046,44305,69508,93210,40275,54626,12196,34281,15455,49724,41774,37345,86540,26285,59394,93609,11591,32891,86287,67764,15472,56744,25676,28230,99898,89588,62309,11694,99689,25281,94499,46862,62383,69888,66826,96118,56011,50614,33728,49116,76970,84891,19072,62076,32785,36838,24722,65574,41653,16247,80610,24352,96368,68001,47280,26765,27609,90686,15426,60751,36165,71675,57008,13837,99050,12454,39707,37697,99396,58993,29191,29085,60978,12916,61806,34762,14716,12224,65412,16491,26469,68239,15841,95082,62054,18178,36596,57113,21228,20264,21509,75247,22812,37280,27398,85259,55702,91754,43212,42386,71778,37791,80225,40243,35967,59183,34188,29203,96781,63415,59757,10667,55314,81235,44703,26600,64647,79638,19007,52229,94652,88468,84549,10713,92604,64496,39680,47128,95416,73074,12947,38797,79216,90006,64967,95531,93233,67825,12199,42161,65075,52401,39559,57261,75271,17295,92116,83605,72797,87446,39171,69846,62201,18237,79370,38830,86875,91624,14030,43950,90235,58817,58331,79638,36502,79658,89027,15029,15076,29963,91209,21444,28218,68624,62528,34862,30568,61181,36232,75957,79098,69909,55900,57193,97703,64483,33240,91674,71939,32505,43895,95733,17935,39570,83109,10987,21661,81402,60590,48587,31648,24279,65679,13028,57148,60200,95579,97335,31014,99226,82411,38437,67833,54953,16259,93455,74311,33976,64020,78133,70348,14632,66806,57319,78731,30810,30689,93983,16780,64995,19799,89007,65316,97111,89620,90827,70516,53582,43967,54157,66828,26144,13262,67921,25963,91628,71017,67654,60944,70354,72174,23217,68444,23609,58095,99442,10157,14917,76632,88355,39540,99267,23214,23605,30673,18883,96566,47351,44160,46247,93702,34326,80969,10921,82175,85495,94526,48577,35512,61270,65311,63162,75003,10170,76359,32699,14890,94008,50323,58883,91148,19465,62103,82569,87596,48954,61701,38149,34679,61340,37643,82577,49996,56125,30481,78807,11935,42801,92499,92153,44086,14515,63325,89112,50619,22594,84777,41758,39314,53361,98134,62825,66810,82590,88874,61178,23580,13629,31769,81706,10412,88910,55348,67050,56028,75443,86137,73074,37680,87377,54372,47533,36375,81178,31388,89885,92844,23614,47891,47820,71751,61454,68829,65480,10581,93229,61825,24041,82140,64940,81204,43517,80953,23310,53462,57490,67793,29528,54886,45999,77701,74295,78220,85272,24457,13127,95165,12451,44001,22628,48316,88081,80197,80248,12073,67858,87535,19610,55503,22942,56717,83923,20367,98885,96230,25514,54859,90747,90411,56984,80878,15310,28747,38675,61987,24544,84523,39928,93792,88133,76387,23368,84546,19797,85397,28855,46731,84961,22748,40120,50331,14118,92167,44927,17113,44278,63465,20249,62118,41912,21150,49576,61860,19727,33024,33445,21541,61292,21620,59958,53896,25645,81110,64042,65354,75486,18505,54013,57262,46448,82825,76047,29437,92010,16075,88192,87843,31343,24012,21896,89985,32244,56813,38372,79317,58026,43068,13283,37216,17660,36861,40983,36568,93109,98244,89354,12579,42482,68709,30722,20190,76506,26143,72613,31477,90624,46555,71418,15118,89213,64660,77534,32707,49043,85811,65066,45656,15679,77747,72184,23216,77381,47103,22092,85641,17379,98091,37076,12256,33480,53691,61570,32696,34969,51460,19466,91903,70857,33429,14682,59727,94286,26879,99230,48657,67279,97191,42610,36466,31691,76718,87831,43458,56961,17578,89996,81820,70942,68034,80071,75813,99156,35760,15381,80755,46398,83513,91170,73936,61754,68510,38334,67050,17536,28389,17024,85160,37853,16923,13450,95590,79451,50844,79735,64770,67700,51241,24306,43403,88821,48773,90555,33231,47107,56932,56639,20813,76753,46024,51801,44107,31651,35985,34332,49035,78936,82899,40388,47780,87259,10310,57148,35520,21426,96681,85386,30309,30238,88845,88093,56905,87961,37206,22970,13541,63129,70777,66956,84556,20191,19008,67927,86271,66094,69911,31849,46787,77502,81368,60025,90961,57566,91263,22063,32422,48739,30133,76207,89491,93328,83470,95913,48719,32752,47955,66709,52187,92337,50451,60390,77041,20470,68691,79490,80084,18748,67595,84448,36419,82589,61062,84278,64774,67546,84055,45215,80271,87387,84806,76837,14902,61273,28282,74754,81138,66105,39416,10142,62508,61025,88658,41091,40050,73160,80596,86734,76757,25013,87055,29830,14989,82241,59589,91422,28281,43150,60701,74145,63303,69103,97892,34386,80952,70894,28102,26437,96454,39090,49587,23241,63923,93495,79374,11904,49019,17452,77610,28476,25689,41121,50275,77771,80625,12694,12623,20144,92017,74455,86114,42520,50704,54072,33984,78497,91492,23925,37806,26128,85618,42786,29705,94452,53428,32307,90452,89163,51887,21299,52026,56244,24180,19355,50312,77668,10055,61393,84267,49538,30439,65569,80631,52991,66932,54669,72048,97907,10516,47929,98723,50799,64912,99558,21841,94931,40576,76898,76989,44432,59776,42104,18327,89101,28686,55738,32417,35981,37608,93933,69386,43387,47826,62216,17182,69941,29345,77022,35009,91332,68240,69461,59710,11927,49725,21412,65917,89120,24494,75522,53935,23758,74544,59936,64334,32760,94361,38498,82413,79381,50930,86170,66480,50917,47810,53340,75373,26859,36061,23719,87213,28435,44427,79961,85144,37624,41130,52748,37089,88795,99963,13770,46425,26500,65656,83042,25448,11645,70118,61910,97381,18431,94071,78190,62992,31906,75339,62657,92417,99457,94217,76726,73326,47191,32764,82209,49969,20639,37007,71644,68743,32807,24085,27697,47582,96185,27437,53865,93852,22216,33390,98184,28055,82071,76742,68861,52817,24976,23312,63247,50284,38372,17763,98209,18046,51407,25845,65697,35331,32587,95146,40579,76227,84686,37347,38366,25017,42980,56426,87595,89016,70674,86480,28443,60878,92802,93222,55237,93585,57715,98926,41998,20701,98496,29865,16023,61002,81649,79874,14888,93480,79574,36791,61930,94635,15263,42533,49354,92568,68846,11271,15378,41548,28447,30815,19473,77777,78369,18645,43932,95636,35894,37553,89439,35845,25096,49627,17520,29200,26174,32176,38133,29996,22605,96790,66666,84367,66004,14564,64337,45738,56559,26660,64946,19709,32805,77630,18366,22407,36728,20866,69383,55586,50076,61527,42140,47927,13990,65318,67911,84321,37690,38872,92446,92315,63929,28219,11985,38457,84872,85674,14221,23948,82313,62385,11076,14116,36042,78740,13729,13103,67387,89583,86837,72203,28464,76086,68621,92741,51309,35635,58249,13787,43476,36091,41135,67777,20926,28326,18404,18280,57656,68275,29077,58806,28429,67082,64768,82891,27393,45611,94802,70259,47095,27840,54607,58987,96500,74462,76699,25792,20140,75181,29326,38663,98441,43803,91772,45121,18062,86160,23209,54935,66323,56204,90151,76102,76413,56991,97378,85847,48734,42626,31949,37710,73645,14528,10394,58522,43680,87937,48984,27118,28987,99043,22694,95145,48653,69406,12392,18260,21027,70511,68886,62607,58296,20286,53614,70277,52164,48515,61141,57041,70172,10217,31932,22338,34138,48296,46301,75163,34217,49594,22100,12949,57282,22677,36005,70023,19966,73379,41956,51038,91628,48566,46056,39468,78589,40770,99090,50819,38268,91158,47381,91360,41905,68866,19844,28005,65342,65551,40291,29795,31523,36098,56646,55785,74885,21759,42577,88332,99019,20113,49157,69302,80439,31820,73706,80464,61403,29296,32604,48306,33067,65693,25571,21438,75173,35596,10313,87250,12037,28569,58220,62236,77213,28356,86602,62159,21062,70730,42050,37433,56860,67439,65413,81295,81553,59592,86360,93408,40014,18727,74072,28260,70884,93252,71181,85616,74735,97489,97906,81881,26991,22504,56749,52263,91835,35191,16426,43325,28528,51233,73254,40144,63114,59821,24764,14402,40044,28489,33360,12492,33738,52443,19102,16049,47162,99502,63069,67938,10702,80599,49155,77052,65759,76960,89910,30993,44082,96761,41648,88835,22049,22650,88208,41432,43447,82682,70023,30713,95105,15093,22825,50360,33947,47037,57572,86389,39085,21468,28269,72657,64174,26242,12606,31045,35357,56124,42198,58803,64305,27405,12355,56583,50971,46984,61919,62798,44012,71666,68613,77779,20939,77274,21967,67193,68481,40061,99594,77903,27463,21425,35262,82185,97527,96469,91399,19866,63535,34515,85780,11978,20506,64496,47330,42180,49569,11502,95582,17562,57251,33882,38821,33229,58761,22923,12020,92572,62551,15910,29712,96975,22546,54102,20906,59870,71085,92167,59926,67846,57214,40957,68580,52009,62412,43995,51943,30503,27693,42636,60110,68862,96127,22620,96597,96146,24025,40875,83250,12687,27708,94564,43331,42314,16010,96626,43090,73565,53971,41510,85648,69438,69863,21321,41327,92643,66793,80297,95172,45639,85315,54259,19046,44820,12637,88623,82824,49902,19686,58879,57064,24609,41572,33724,14533,81494,89272,68657,34553,22232,72222,17173,51163,73991,80084,50634,53130,34730,85662,39980,27859,80661,54226,68916,99120,14233,24328,13139,91399,42149,93038,10789,99421,84529,56967,58498,11519,90470,63889,84564,84377,83796,21245,39154,95687,95762,61237,11197,37444,31831,10237,60849,85930,79098,29371,73475,92057,22209,72703,60226,69064,51698,26917,20145,67628,55544,21439,18944,10802,39647,70643,41889,77372,32026,52034,43996,36227,13483,10486,46721,29348,83368,93469,97999,70558,15977,64254,23921,78249,38172,42077,24451,24926,31191,99039,91526,47579,57077,27570,21634,65372,93522,17640,28028,99160,55888,80314,19243,34922,81621,94700,54182,73614,58654,27854,51878,19404,89738,83205,96587,21980,97178,73723,91160,44218,86481,32985,33774,20287,54401,23303,13070,32424,25265,49692,68305,52303,52180,49733,56887,35051,20927,85633,57285,48776,49716,57819,41493,83004,59759,64776,86787,16065,66495,30947,48172,92642,61397,32527,17060,86098,73161,98956,40920,23034,79609,72383,81090,73345,25702,41057,59134,80369,82793,61901,45011,37910,55845,34939,26753,47246,82798,38294,81365,37946,93531,60411,85492,75116,79109,61196,50219,77108,53943,62720,77056,29946,59027,11999,91654,81628,65839,80708,15831,80300,32471,47614,92090,32960,18971,24725,74442,31059,76867,49015,66256,24641,28706,38942,54996,81469,21352,59756,12888,94692,61478,55950,40049,61515,46283,69258,43737,43070,19331,65375,38962,27270,87396,24994,49254,43001,76144,33894,89481,99595,88416,87072,83026,58639,33151,78723,19980,11520,84896,90947,97532,59897,34865,96631,79597,47911,85636,27535,72133,27543,76727,18502,30526,56264,98308,84046,71088,33948,97672,85933,11217,28735,58484,99711,90723,14330,51183,31933,91136,47992,73074,23963,37012,19995,73598,24282,71092,98599,31822,67069,74585,53817,56618,27259,12638,50010,82736,76365,80636,36354,41660,94781,50687,61384,37375,61956,22183,92034,89873,89667,95020,97312,82529,63412,33205,55340,19066,15863,32313,46694,74891,14724,20414,74998,49237,82685,61424,95913,39208,29557,76421,13457,14560,69166,63461,59869,35884,32602,51517,24521,45994,15570,20313,17752,31571,37594,11716,67672,90923,95903,71860,46338,31233,96382,10830,90464,52015,40812,67443,61123,51860,91823,30148,83798,34393,68552,22790,65443,38682,54405,75295,67001,29319,55197,89411,60222,21192,42290,98897,87681,11722,86517,26517,31952,13406,25376,92484,93795,73377,55928,26409,18698,60353,96762,59379,66076,65404,59508,28280,69293,65506,49214,95289,87143,57519,25976,62741,89454,59190,54103,80782,96166,97407,28789,57530,89630,45327,10334,58551,90949,99485,89165,71810,67630,36903,69007,32246,57928,61424,92286,35413,30522,90567,80090,26691,35510,33545,88575,94473,85991,75730,22036,97320,10394,63409,36973,20746,30508,77274,93869,16006,60961,52954,87594,77889,97987,28442,84075,81459,29150,64887,44853,63280,37039,59257,67009,27990,46939,65842,46345,85173,69876,73880,79320,63396,44520,52645,73716,12491,19386,46065,67483,78047,20314,70055,86819,59716,80878,61772,31150,32941,16759,87827,56764,80852,16320,16370,80911,12628,57977,57810,31178,51617,29696,93992,22099,90781,61731,66278,58968,96782,91911,57841,99691,19141,60807,13628,73379,70509,35040,18294,66037,12582,26256,27325,15154,39512,77077,12265,11504,89986,81610,49636,14016,49072,44044,14267,71700,40587,49711,49642,69412,41399,50206,84394,21563,61110,73545,64649,67485,78145,45697,12721,14099,20458,39619,66298,93856,10393,86747,46760,47371,79445,72393,29998,65964,46562,75435,49694,61030,90898,62362,68630,83368,46875,77840,82947,72948,95715,95390,52663,84317,37290,23558,22386,74049,77356,31445,60739,99325,76160,75909,44673,27079,38565,68403,37196,84229,67454,59907,90541,11217,96537,21712,79285,63176,19847,52647,23955,95816,81537,81769,85650,95030,13812,41303,20005,31726,55413,84383,98311,23448,65726,40738,74598,51364,55826,98969,24895,51388,59771,69110,29131,64192,67388,82257,69320,31086,63741,89186,58280,31556,12867,64843,83072,84457,54655,88916,40946,76159,56225,62054,90282,11348,40632,69430,77918,37474,37540,50129,47443,36003,88623,68681,27390,93092,88778,30625,64901,77292,91235,27144,53902,90533,69326,46329,12808,71480,47784,89605,97007,36515,41011,10657,53097,39042,20336,21941,53823,86926,10760,94933,81120,14397,16031,36133,39575,54938,37517,87891,52235,72346,19384,18296,56562,22678,50180,77296,74798,20773,15825,27877,80527,34274,82565,19182,92644,96072,11311,13279,25806,13859,49426,56436,89775,80507,49135,52587,22287,33331,16773,87310,62368,41129,15256,25065,61271,96265,87930,77246,69562,35109,27357,11016,90216,90728,35816,38623,65589,88153,57319,71988,15896,94730,37275,30557,42480,81882,68406,59967,83649,20027,98899,51267,33106,99014,78817,32591,35389,14598,47631,98893,14400,38820,80330,84050,43352,85182,26475,15217,66781,59644,68972,61202,46735,47802,42994,47405,41688,11801,94066,41119,68714,55415,42933,99101,42559,86845,82887,88045,28968,96201,61349,80532,42896,91320,69197,15725,14833,84225,14651,71514,37457,86817,61244,77749,66387,98701,44683,68106,60418,41496,99422,77385,72209,82114,40592,13090,24102,79205,66254,24090,89094,91187,31515,54466,20427,53864,92329,84260,11001,79934,23028,13602,27116,29174,81813,62500,42261,72823,47032,37837,24800,24111,49336,99977,79274,25960,13871,93193,51863,32500,85688,48171,15092,70200,98343,86977,51012,27431,12582,59067,28586,85682,82817,32249,77422,43096,80612,17677,78303,86640,68368,33071,69519,24427,10456,20703,29905,42507,62751,66571,46008,23310,36625,23172,21920,96528,85207,80242,89071,17396,26201,34366,50169,81141,46486,71521,45781,10467,56105,13212,99494,31914,22892,39206,91707,92114,45085,77965,66490,59033,88170,37843,50463,92615,65649,38381,49450,97079,71729,49965,49587,84861,78473,17354,32623,53863,25087,48011,67486,87781,86693,24000,89134,11080,61187,44396,51050,29621,71888,15006,40113,65330,18302,94160,42079,68114,30270,72352,97455,54360,10903,59123,26081,14527,48603,61039,74518,70442,53613,15022,47661,43851,94724,27841,38846,83726,45868,40714,77215,83727,38840,39670,21580,12759,85946,12359,68051,84962,72273,28758,31671,25246,70874,89798,26861,93885,70319,19935,71146,86544,75020,15940,62056,90107,21226,74349,66800,80184,18587,22554,70706,54919,77533,14897,71103,74881,18261,33600,64486,17740,36372,73294,25354,67247,95970,87257,20748,32470,31304,23555,81740,14098,69633,60376,61575,96763,24014,42134,11272,18479,59257,78106,78571,87431,44186,31138,41437,90844,53516,33420,67261,16374,56014,16452,14279,29100,88291,26320,12032,68520,91648,66235,57698,25461,85445,51201,23986,57286,27425,81011,89476,69389,98121,82533,40656,61988,47290,94883,59003,64977,32192,68553,33513,73192,48468,90311,13532,85711,38340,54810,20637,35507,14491,47499,80262,40188,33712,57480,32067,67346,77753,81795,53105,19428,37385,59100,73744,42676,12080,76974,66344,94184,66198,62434,38659,92250,88201,51003,99042,55399,29583,77904,42132,66624,53025,40670,21628,13650,11597,11268,83788,27560,61934,77362,59463,69262,61892,15848,89089,25656,14886,19054,75960,63324,16552,32714,13583,95218,31064,15600,87296,53091,92541,28901,35071,97724,97863,44802,98885,35105,42884,44548,89688,36413,23165,23937,37435,82127,32696,42408,33783,24477,63947,95828,17387,74802,13331,81821,70280,40996,14399,46072,14811,69108,47905,89297,87627,15314,85433,19687,17249,16347,18593,13433,64317,71430,48936,45240,84823,20452,46764,70172,26524,66068,43736,97631,17535,92796,74964,27692,87069,77559,63012,81940,58542,27677,31700,72342,31523,40201,98287,73527,33968,72569,54143,86640,17219,85376,97332,68888,38352,33362,32871,25575,24826,35035,64900,91332,45686,31494,71141,94565,45949,42963,52113,99304,56661,76641,40793,58846,77860,69394,69143,22244,66510,19942,68285,22459,94965,87213,16921,49941,35673,72486,66592,55256,98847,56874,44778,28195,95824,53431,25337,97448,11272,95862,69745,81228,45071,93582,97397,74117,74415,31826,69486,48863,44372,11183,78547,94745,30881,20850,28871,90062,23127,95879,72342,75493,89554,46584,57546,96615,24398,56892,46284,71287,21898,38957,42050,10645,82993,10349,25377,41037,34502,59000,69144,21046,61723,18484,96082,96663,90376,72835,24756,86965,91601,49611,32299,86836,53098,83039,95212,25293,76608,28069,77627,71945,35543,87981,21516,89038,40028,61316,26812,57970,26599,99815,92110,65793,55464,53682,42614,98517,13300,76167,12426,61199,68890,28963,71000,38470,45215,81751,45261,57736,96136,58168,31227,96196,55548,20013,88200,86234,97894,93207,23975,36929,19955,60933,44692,91110,95719,19172,43567,97927,79164,93247,44723,49571,97170,81748,63752,33757,92242,64616,83371,63818,85525,63676,28898,62985,70932,17287,25882,33541,66707,67699,14074,36464,49632,43151,54338,61737,77258,68126,73242,10336,95177,81361,14805,30205,64538,59174,11829,65696,95293,97764,15117,22770,84368,97843,29211,44453,31535,23880,35683,83895,46885,97803,98542,88392,49919,89176,59959,99784,25499,88139,83821,26362,42663,84266,17035,64716,74958,56715,86964,19136,52754,55482,85051,86833,12665,68186,63038,93144,17311,43492,42560,53840,31519,86612,48648,88657,46593,88040,22821,45244,41640,42993,29895,39016,47490,53718,60174,91100,74079,96866,40230,50125,38656,99623,71542,15550,14890,85677,22423,31331,68345,54308,72024,52733,32665,15783,88606,78595,82034,47476,82630,85771,53747,62823,43983,27389,82098,24559,56968,87240,30478,41065,98657,94819,27504,17887,49245,33760,75691,95137,17951,99255,74799,18295,84930,20809,39946,89983,18079,68943,17739,26749,55876,59875,39301,88925,13082,13839,84714,70691,53544,56487,54582,78542,11408,71272,86889,57360,24785,88895,14082,62418,72585,93779,96366,51875,13733,92918,87807,87415,54200,15425,64842,41354,91007,71344,52067,86303,75882,69251,27584,73344,33355,54062,58613,83623,67315,13691,85230,16079,31709,70786,90627,95894,65268,80727,19295,30330,75007,71765,64080,88493,72013,52702,23709,62178,29657,58568,37096,36365,66990,70416,37331,29456,72999,65673,12732,19686,93205,60639,69653,68417,71701,23908,55136,56687,92833,14220,37680,20706,18739,87804,99047,75232,16086,76452,58498,64220,44752,10459,27584,76686,84283,34436,75098,34323,63826,37695,52367,26555,97574,71089,88044,68978,25367,96125,52779,21200,91194,22236,55727,57308,14373,47453,51522,43507,92928,39132,47358,29184,23207,42030,92394,95891,60334,16453,33990,74625,49211,90400,13365,39197,89510,49708,71528,42820,30605,58188,78829,57539,60209,16023,99501,78179,87130,37794,33072,11580,38450,75593,44051,13546,45661,32136,52880,43752,83514,81255,79195,75350,51594,84256,17963,30772,58515,86928,29159,13342,76991,19931,38096,59588,68079,65751,98642,41171,57812,86066,87669,61603,16094,75862,34730,23322,96766,10049,46425,89290,20628,57072,30322,35659,60808,87179,95860,84848,12342,48372,87487,90518,55138,98423,17298,31372,10245,64391,44701,83987,21958,36713,88604,33444,80738,45312,77747,98649,37491,81586,30311,66134,47379,30718,78108,16161,46460,65587,69137,13254,76000,84533,53934,35891,86139,73527,92857,50149,52814,87490,28448,21803,96098,34310,63895,51836,27887,58019,62848,77048,91597,16417,86376,24362,22190,31364,90447,86910,39944,37054,48419,44613,46550,97546,56455,46866,66366,18248,90175,50632,18500,91104,16169,40937,16422,10186,60298,56687,58169,15457,72265,28470,34638,65079,20610,15056,36933,86850,10847,55998,80231,84455,30433,16214,95644,77534,44086,25318,42230,23616,54490,31263,37933,14431,41974,66179,31484,82620,47130,90871,88888,25009,97777,30551,25407,35447,43410,87206,37918,44131,70371,84828,10527,83541,79774,43083,73932,54446,68928,67471,24488,30927,30913,22283,97346,77229,79894,75670,86259,67733,51400,42446,35666,78970,67821,65226,16378,29604,55016,30814,61101,21577,17965,35354,86465,69668,57881,49239,61640,53384,68042,99782,98219,25405,98226,54427,73056,98127,16765,62330,46610,16147,20556,29729,74530,92233,58506,91042,62816,89197,34479,54867,46066,85519,65881,82965,75051,34557,44231,29488,11527,88174,34569,37727,20218,73885,16660,24143,95508,98897,10616,80598,75689,38310,81884,95214,53979,54382,81057,95176,83645,91536,55329,27324,17686,84877,67308,96866,80979,92442,51225,62467,39528,47562,12194,32962,20247,27164,22776,61258,19531,19250,11421,56222,49653,40067,77083,23665,34658,51382,36233,71910,79210,89191,56313,85954,93794,65472,44960,42501,77976,13379,45241,94878,59873,15632,28406,62537,48287,24767,44916,48964,22044,66288,56814,99985,64309,59943,95559,75896,15095,79873,90609,29758,57968,56047,16256,55339,86708,91841,23976,23121,60745,14042,29297,59655,43747,14551,11573,78696,30847,16269,40917,44109,42707,34991,46371,33584,85810,92387,58571,27727,73872,83159,57629,28846,58335,80901,20122,85027,55978,40768,47304,13110,58764,25091,52266,47664,46591,87232,31856,97187,59252,91953,73818,60016,77220,20730,49062,35788,37666,83562,28837,35966,41092,73711,90202,55753,70676,29280,21679,64560,30814,25959,14865,24519,59460,33724,73222,89075,57180,88348,29268,41321,60948,84731,60746,99791,63923,83147,58599,83798,32925,91798,12505,79683,29431,29517,91864,33296,11940,82483,94726,42671,30410,97498,82130,81848,15869,57205,42292,73086,89386,91319,50363,84109,70753,71738,77927,31369,26525,73070,65865,14016,73751,26889,67390,26114,69105,50757,86374,99483,35301,98468,26136,33236,32469,98130,20184,14271,79194,37106,11190,21588,79009,61675,19689,95201,80055,78116,24338,82273,64059,85996,11076,34755,67277,52407,95917,70148,89798,21928,57688,34818,51956,53018,64400,99683,41157,21345,22434,81955,22017,86984,15375,36757,38600,38187,99797,33865,56353,11936,29194,67136,33382,97387,36150,17910,42744,22394,53559,30758,51846,42072,62331,43834,48705,39782,17135,14712,73650,31846,71865,30527,88843,23925,66358,44599,71746,12078,35572,77713,45392,40182,22458,83574,62661,91662,64323,69331,49749,94146,98225,58661,77489,33391,17193,17805,75661,94964,85288,45055,92622,37815,87092,34839,43635,41559,73475,53566,51481,21428,18508,15887,80646,60482,66717,27224,60582,92170,10542,73917,10908,50431,79625,88412,87711,96826,21670,81210,21160,56248,58032,56349,67365,68346,31296,27233,38082,14669,60673,67206,15010,48371,28107,43708,32585,72410,70992,52221,70903,51666,41504,12636,46128,72667,37845,82909,84762,94050,59698,20470,78721,38312,23799,30208,59539,68712,51624,49814,24918,31084,27866,58720,89598,16612,69931,34498,98599,51078,83633,13409,28442,42877,60348,70888,32064,62515,86301,48411,22109,80410,50148,11302,23011,42774,72861,50119,56976,44535,68300,93192,43194,57713,34625,18898,61011,44322,41442,58837,22134,59683,80491,23913,72546,95965,35497,79862,82488,42472,27172,78374,41072,19723,82959,30546,27079,25643,29576,19497,73173,34872,81431,51502,62984,66831,27487,31323,89186,95836,78865,44375,93506,58291,44049,77368,93110,68263,92515,48482,89622,29763,30429,24372,37619,70523,80959,26364,93815,15463,74309,53679,82448,27528,48806,56074,62479,10330,49423,28671,15629,73142,95030,10138,48799,51958,23044,10839,32300,23150,71680,52057,17874,77543,80846,89635,53385,41072,79714,51998,77562,40460,35783,47115,19215,21148,53424,74168,27160,43423,23308,46083,56136,86740,44432,25207,39323,28779,44800,15176,44662,27706,92702,74772,99650,55544,37915,75418,93887,64102,18737,42457,53560,71464,81360,10656,67218,65406,10552,77272,75592,97881,97423,28778,79085,57449,33263,82720,91211,84840,82881,39067,62584,61208,18846,67812,97970,71474,31805,14555,33719,90632,90391,22192,15037,57080,47479,15152,84479,93337,73512,30070,30774,23879,63947,80887,45060,34736,86333,81866,47818,70286,59611,34512,44786,73941,71387,57336,57186,69446,67657,69883,22742,92149,50714,84392,64858,49720,32126,38566,83559,12469,64521,86400,97959,55354,70515,93653,45315,49132,61063,36802,54404,98573,62142,13902,14271,88956,32512,51177,96081,24769,34243,48981,98045,73834,15464,25299,30650,84922,86981,35541,12859,88396,73709,87325,94799,43450,82324,43127,37713,31352,18735,28216,98740,46042,44189,73514,42105,80996,99076,10015,36060,12879,71997,51140,78461,60017,19159,43022,13031,23813,68641,98817,94781,90825,83769,21737,44453,49378,41687,60586,34605,20329,24277,86390,10948,90860,11776,64875,94861,70152,60015,85173,91879,26235,49809,58427,12347,74678,53215,85467,41841,35401,41020,75775,73692,96890,57146,56891,14749,98899,33504,25848,53644,29023,57724,30377,54444,38517,26469,15443,92081,25235,15113,39210,40164,96262,12204,59287,76437,39474,17747,51448,29595,87367,50579,87857,44063,44963,81013,25935,61352,30882,44696,69226,33079,43819,40220,26006,94970,72777,44084,70018,54980,68371,16198,49812,58942,17197,55302,46899,13731,21239,44520,33297,96143,21368,85894,41901,10138,42742,22771,27902,62483,82975,85409,76296,80267,25111,16724,63329,23147,94532,54278,10965,80117,84436,40524,13433,98188,54144,10395,14074,18018,98400,20017,55080,76724,52311,68701,26870,69938,74567,55642,21642,26563,24490,64351,50461,90350,22699,60024,21951,99756,68676,29461,35247,36866,89673,67728,10639,50166,32276,17990,49699,67461,81106,38113,22709,76774,54383,10460,80435,81744,70641,72726,39049,96299,22244,27162,65068,22247,30580,40669,80668,17048,89365,46266,57608,77843,50208,56731,48690,84423,28238,47676,73230,34642,47490,95355,74393,15204,73695,24005,60359,75146,76214,16000,73769,99748,51450,28182,13099,90646,27455,64353,83945,36632,97664,52977,88143,74239,78987,79226,11606,94603,27493,89429,32165,78688,11381,23201,53988,54786,39367,73820,11025,22743,64340,49757,23140,74358,51749,81598,65388,14216,38861,31787,55854,13793,34920,47149,73506,38852,56303,37818,37641,87476,18636,94550,31663,24900,70880,97944,47191,42979,15121,53757,44687,36653,53941,23953,79819,52999,35442,30251,35783,24395,62685,31162,70101,61518,35662,29549,64535,37115,46726,63349,10354,46387,17255,49518,77613,31137,72498,15358,12509,76989,15511,85886,12763,23222,72417,31243,94650,25990,54807,96621,18701,94571,93488,20708,56236,59218,47104,93065,77395,10352,32731,76280,36319,60428,17349,54774,19393,16336,51976,16656,21826,13168,51803,87698,80161,33219,73465,59385,50768,81406,79432,97962,85645,96123,10849,13905,29882,91479,34675,85428,78030,95348,39472,60763,90653,16240,83022,65211,61266,59858,59967,67271,46582,21213,22896,65332,47683,61291,21118,77296,74791,80349,77568,98534,47901,77007,30580,24913,40799,22252,25414,44254,92366,16273,27105,78861,90972,59900,31006,31759,33955,97979,54185,50693,95254,95819,93387,66093,18745,14658,15572,75371,56859,83023,38341,61300,19242,30886,65386,30769,93713,11849,12067,10646,78987,16152,71425,19899,37435,71561,30847,18946,67128,27309,49719,16566,80152,12356,98510,13002,47118,10555,75772,32714,65581,77325,13158,99087,41396,39524,41470,88718,73577,36260,22377,48695,18112,15022,99094,18127,96384,45448,48587,93307,81345,63711,75094,98777,67511,47749,29284,91109,35920,84215,30439,59405,62151,46645,74828,78848,76791,38135,51026,78388,79786,79168,73370,74865,92151,63870,54775,71906,31922,66942,24020,40290,13793,78821,27688,50811,15867,68068,33962,77458,36534,14008,86347,12362,82041,59643,73042,71822,34612,51151,77545,58626,39476,33663,63262,99770,94844,17387,24209,83645,89718,84291,53043,47412,59563,26327,38024,69641,21900,90291,42424,50037,44657,50504,94087,28520,15635,82831,65677,84506,75154,10950,33454,90566,80780,16861,78721,69033,16836,15354,43751,95055,46669,95907,12096,43857,73273,13416,35224,12347,48234,88991,89453,46636,27545,60407,74266,50587,25587,58791,65371,63404,76409,37548,91913,87078,34473,16755,49296,42312,48913,26178,32872,40287,91512,60336,97239,79862,96953,82992,52383,97674,93063,77859,92641,15665,70873,77835,64185,97676,59754,52012,96996,21970,83869,46631,43161,95185,93244,54397,94631,65082,47929,94919,59621,42268,24146,82770,45518,18343,69751,59681,70165,55158,30865,43701,41820,29918,70391,48218,57687,84913,26087,61299,71578,58082,81929,96383,91399,52637,98914,46258,28318,99356,82832,83649,38989,71808,83203,51216,71799,81695,92557,80545,61186,37102,67256,37988,91172,54012,47909,90213,10296,19048,67221,88587,43512,76214,49846,49088,88616,44623,70791,97636,16805,35192,97032,97712,39578,94969,22917,47731,15880,83785,43112,61426,80785,57415,21485,32333,46091,56872,47699,72675,41439,98543,83896,98277,15963,92813,42969,87009,96871,23133,11273,71493,23745,27545,93341,69421,24784,66143,23013,48910,26025,18756,45109,34066,20803,43162,55651,70622,67352,52613,61096,80895,46880,15711,33106,22858,19103,91820,73020,71757,69433,87636,46547,98419,96759,30057,26150,32989,39291,61246,33076,61978,44667,22813,21051,97789,75450,59431,90768,60159,41669,28584,34304,97432,92480,94492,45467,55575,31253,40720,78885,29777,79357,45870,83661,48616,52942,67164,73625,92564,12208,55895,56128,60833,39968,48317,36964,46392,77088,65186,72005,80451,36545,37209,44924,34687,60495,17251,68333,65642,73100,20420,49022,44614,63869,43290,88865,19476,12887,75366,15739,32441,27320,35275,58192,58402,49499,48819,74387,14027,69962,38867,72524,21484,93659,15411,19618,95545,48894,43210,86616,46476,53714,72893,66105,25547,60873,49652,35574,41467,41645,76457,37289,47691,64023,72806,41426,29293,31999,61508,30528,17247,62017,62973,65103,31400,43883,94644,50016,99702,82529,60468,82475,25867,91099,48134,55800,24860,61735,71353,94609,29607,19005,47939,53958,17022,21957,33172,73988,82815,49773,47266,87925,23251,12601,14697,46147,45233,55788,46644,46948,61126,48132,84935,97269,94308,43713,49976,72064,70352,89518,38440,17292,37269,81888,65528,53877,41149,44185,37834,69385,70464,49364,72865,77932,48732,96130,10769,54189,17931,42687,12594,75404,43627,88911,42982,40186,13211,40942,60454,83044,51943,96814,96373,70672,23081,81369,11885,98836,47906,42482,40489,29762,89117,72119,60514,74164,43961,73136,82786,56181,51115,45372,66357,73202,32947,54261,33815,34857,83425,15005,95805,35034,61831,54764,76498,35755,13907,36565,14581,96294,25179,46659,27118,94419,58307,95104,97608,51361,78180,62687,42907,37426,65198,66338,45583,34932,49013,81772,18574,16422,53533,53859,82768,71970,71515,59893,57242,46109,44972,25409,64020,38080,14626,90044,34746,64040,45156,37618,35151,17394,83620,30000,51718,54707,98646,47945,76605,21170,62296,28936,97518,58046,61474,61806,27240,43901,81877,52386,91410,86369,21636,22710,70037,53628,17272,87854,54751,72887,16255,12290,32997,50705,82249,36626,78806,39191,63968,54532,13167,45083,90675,12063,52477,10898,80009,10057,92771,93680,22738,20100,47333,31564,23982,31794,94339,65905,98618,40260,20884,21092,30040,90310,41783,64007,86181,81934,20106,70794,32684,84124,93620,90068,80631,50258,99013,79231,20089,53324,76802,95233,32614,26270,21089,50011,90583,82415,48223,94145,20459,25093,73098,82839,20286,14903,87702,10668,75919,63964,63888,42965,83387,64467,15560,94249,71072,78318,42321,38427,87756,59127,82812,66685,18509,49192,61831,13983,95811,58697,11441,43528,77056,29342,22651,99849,45959,75035,38695,48955,22358,55379,37707,74490,76006,59737,68093,87409,97858,48883,23724,44260,38531,63339,97671,65309,22556,25335,88797,50071,51349,17444,40135,79438,70014,29848,31089,33123,64413,24602,31801,70942,35028,59309,67088,80992,27396,51752,83633,89526,54895,77843,49215,42125,85874,77390,45439,98158,36920,76933,65231,85842,26136,97929,26507,90263,94023,59594,46254,42265,81159,74672,49622,58092,31960,99909,45508,16403,17925,15223,88855,10012,21474,12325,78325,77275,56031,93245,20249,85411,32045,11794,26897,44779,43158,22306,79134,38379,27504,78660,85812,71289,43272,67196,44587,88581,19771,39264,50146,29272,74899,86457,28239,17607,92977,15127,48038,32817,26825,97438,32859,34709,16600,13866,41598,80017,70944,23421,76627,54599,55767,99580,90191,53003,42627,62030,95535,16633,48632,17293,46836,15402,54648,78749,30242,69950,89785,57644,20585,53583,33525,41590,18763,84407,37533,34930,33609,17228,81983,47892,17457,46549,64517,40695,10444,47117,40184,74272,54602,89944,38298,39772,28277,53022,95083,50693,67085,39606,98198,91026,35299,74120,26162,40684,45519,62558,20541,41684,60806,58108,58456,69733,58227,17883,98135,56359,24537,12481,63711,87692,82803,47283,40452,94909,22272,32450,76785,56409,11545,96440,79489,16768,65572,14306,36929,29913,20531,69337,84419,81629,17679,54096,66672,14088,44506,20299,33514,31581,93755,82392,41809,27887,98156,64820,67239,23208,21909,21755,34610,31795,39361,83517,85977,38158,99117,28572,15541,39617,72519,68968,63611,66275,34335,65698,20090,33376,33537,46093,15878,96979,54344,53230,70618,45610,90730,61907,65417,95213,99014,82373,85679,80673,96136,98923,57642,38810,20215,90308,83284,31693,54043,30430,35418,66928,76119,99195,93283,75648,91942,89919,20627,27495,12048,10334,37124,37536,70104,42806,68872,19580,41851,55852,98445,19807,10070,25958,55246,45113,73779,35740,49277,66825,36033,21516,69484,76631,81642,79729,88083,81202,25015,95681,38718,95751,17907,97643,84864,66680,74801,49361,43917,48988,69910,54093,98418,79521,50811,52862,25199,25704,94951,98269,75846,38303,53168,56293,72638,12169,53530,51727,23208,86401,43415,52125,42826,54478,89455,41563,40293,47776,98527,75428,93597,41335,19357,74765,76669,86139,49856,85671,36869,77864,57640,71310,86563,88142,79362,29954,12899,78846,16809,42302,75236,29871,83757,70573,85166,78545,26686,73230,88153,87040,11485,35876,59691,87323,82321,15293,50141,68838,36088,69842,57367,41801,52149,88082,67976,43122,40505,37207,28270,51372,87438,62665,44846,61029,47674,84107,64031,68445,47419,61436,72962,62383,80773,47820,89441,97370,84713,77943,49136,99251,90765,33288,26019,54904,83642,36285,64403,78291,62743,50769,10044,20107,14983,19103,56833,94060,52304,98120,75288,20136,24247,82489,59494,74102,71139,66531,90751,62709,22733,58917,57455,37143,47746,67910,23708,23138,56822,59211,95956,33495,44718,96473,90934,33063,18332,27052,76610,75738,82266,52638,12578,26848,55707,85908,63388,95366,91296,27680,84591,40116,84729,98285,11090,94999,51193,67980,13375,35698,58673,58220,47852,23971,27019,42712,56273,71202,33892,11338,23340,96726,13376,53392,17200,65918,99391,99505,34180,66294,69484,74490,67645,81065,33965,37798,27726,24116,44609,82539,93956,12121,43766,48981,88688,47614,53119,15400,39464,69957,97226,89457,91123,37602,17123,28832,82910,80717,29959,51562,84760,57213,44504,33924,44870,54302,52134,34351,96751,91185,36385,25541,14505,19897,60025,90189,48753,11026,70142,79905,75370,87082,22346,12697,97567,86000,16954,51830,93233,88560,10864,28170,39279,16501,37245,72328,68690,51671,10332,75603,63079,92580,69169,98651,23388,13950,12759,22429,54231,57460,30884,24221,33848,96581,64288,26593,34380,48589,48087,45312,59141,30553,85270,44990,40927,76306,12120,67947,96146,31069,78003,19938,37946,50080,62326,32288,52621,47016,14238,23806,26410,10264,71444,64234,32012,87637,44547,81884,41546,95447,47830,40869,65786,18561,23666,37673,65557,69558,58058,68985,69655,69331,15025,68143,48942,80570,14686,37088,16179,40118,99653,32775,36327,81799,56190,49854,25667,45621,70694,11181,79723,70560,98659,49055,18233,33991,33375,62965,91191,97623,43492,27470,39896,23085,94185,62604,20066,48876,90163,90922,69413,49407,20385,99354,47993,87573,32733,91159,31204,55998,45897,37568,19624,65670,66052,24818,26335,74290,39589,44443,26503,29524,28018,79529,59230,62966,78447,58334,56048,70255,58075,56989,99379,31745,45494,79126,54262,87744,92888,19054,45098,40610,71300,28563,81345,77858,92343,23497,91929,25696,24469,61214,12111,13881,60856,65889,66698,92701,91703,12523,18272,19196,50558,10325,15636,96941,88287,93326,67720,29152,47622,72432,79397,57567,88565,44694,15962,55506,63569,44130,27607,62403,85809,39175,13169,12951,52584,87716,23627,86502,94736,38005,20219,67327,26623,54952,76615,96112,89565,71870,85965,94831,16127,68931,74181,39997,16771,75787,22186,11239,94469,59455,51053,90703,35342,28327,57344,15571,25318,49782,80669,97215,92508,24646,69951,82566,38796,89987,33766,27973,63882,67419,62270,10920,25278,39063,60586,49775,25132,42824,86314,84245,47143,92529,82389,93743,67296,50158,23968,12533,80634,27616,47559,56866,74929,92678,74833,59224,44740,38130,74503,92644,17762,68812,24266,66777,62651,94237,56836,95122,75074,19352,29970,11120,78692,19472,78161,74826,25523,83559,68843,58146,20117,98863,78003,85500,43853,29270,55260,18531,71615,77292,82262,37833,69835,13335,64641,22808,68195,14320,73968,54615,78010,22450,25256,33435,44295,85653,88223,93388,96993,77784,29525,18561,33268,43541,85759,53977,41885,61666,76438,84000,72907,21464,86081,72413,66740,89865,36244,65442,71578,35972,45635,43172,55829,54578,90707,89231,36707,56134,69471,40261,32300,28804,15262,86750,12929,98826,52769,26785,27413,31020,92036,77508,34555,32107,59736,54382,78148,71034,82559,79219,42573,79893,49777,25754,20758,85296,39037,63891,35255,69073,63328,93857,57483,68904,88148,25986,73773,93891,11077,45623,48547,43111,61021,31370,39032,64031,68102,60609,10632,49471,36643,95474,90440,12808,49412,30007,36791,72092,33126,36644,28171,57527,26002,38903,97385,72559,65222,48926,20280,93077,29008,33928,55716,50188,51436,81799,94790,41144,19908,12604,52040,27976,26909,51436,43644,23008,35020,77233,33342,45945,67881,88973,49468,86224,29710,75582,46788,48691,68141,13021,33750,86567,76357,22087,75378,69668,88084,47326,97541,97730,69544,43581,91537,38069,99098,19156,64005,53209,83273,58233,56506,81230,74414,13242,77827,97725,24027,35027,17854,57273,66251,96873,11453,23875,70693,81938,35941,61691,77923,92796,62120,27666,89433,80741,90217,44315,85704,88814,83865,70441,64707,44304,67537,76459,26923,61273,29237,95755,53735,81232,47866,96861,39744,22138,61902,64723,26157,77288,39327,69078,60238,81444,34002,27920,86193,14396,58219,52894,82404,69421,59366,64452,86840,65884,75457,27927,60051,97831,35311,63209,53194,16857,73103,10619,13708,33996,54857,63042,75008,65505,91713,33219,37290,59437,23508,19135,93514,40598,79081,25832,20603,56621,63798,56382,29714,18670,41907,43573,35858,41320,75972,93481,51699,70486,91821,64276,75124,54243,67734,32264,43911,78533,98018,95757,99379,99902,27365,10106,75111,52826,39405,41897,43756,83572,75295,92565,30396,96061,78512,11740,18171,13330,40216,63572,14175,38460,99645,49222,87613,64573,68069,79223,26976,77020,33375,66527,66371,90887,22005,46546,44211,88004,62890,50222,75774,19089,61669,54062,75832,12783,38105,93511,50658,63790,80269,10917,24107,48426,38302,50885,64677,61106,20326,55633,37223,16608,57690,21766,77277,73756,53575,58875,75850,71769,66205,17099,64469,48410,49662,77305,48872,10635,14072,82990,24905,45248,74003,65372,10470,21790,88781,54969,32161,65091,19947,69552,52881,95074,19988,17643,39701,59943,29251,63597,70340,17535,20825,32783,19211,32098,11264,99842,80828,18000,23061,84127,98501,57741,97608,31100,69178,29749,17333,23332,52293,31103,57836,63120,84414,76143,93012,77248,40077,35927,58053,85449,46620,44425,56274,56626,29790,27408,44898,28190,24815,58890,76016,64175,75689,94810,95224,24074,54148,96863,64154,60631,39754,17339,20448,12978,30341,93774,33945,64869,93556,51884,56593,98896,72396,17091,34615,84039,89281,99599,47582,15636,29679,55424,40478,36321,65903,52268,41162,67858,98335,47205,79198,75126,51484,73653,96540,92644,35423,55155,65293,18532,67415,46598,75801,74161,72267,69598,97158,35308,39854,96844,25791,76740,17524,55229,34980,11462,39509,60937,48924,16657,41687,58484,98295,26976,85647,64380,96272,37637,55792,95508,48507,59846,60119,84670,97938,21274,30384,20448,78479,40560,40415,70655,43113,15743,51362,65205,11061,56961,35535,66359,89058,79319,90416,67712,17789,97628,85104,71880,41599,53549,91219,20223,89132,93640,26267,35466,93800,18819,19441,50566,18636,26703,45973,82320,16545,86225,69465,63176,38913,67131,28592,14952,74091,25373,40556,38348,68335,88486,26263,16188,74171,66034,44779,45933,58452,98175,42737,50248,62790,87059,93622,40486,82537,23288,96588,28404,75327,64168,81156,99626,79028,53964,74161,73008,57110,97536,40004,89469,37462,79879,37335,92105,74264,51207,38604,30517,17361,50780,81631,90666,94306,34431,72104,62504,32434,43481,73589,51211,19505,19517,17743,42955,26258,98767,98318,25513,68064,12156,46040,86689,71313,83015,73380,30593,34127,40416,97825,97491,73562,18349,82169,51148,53785,36848,66731,20013,69604,74659,45918,72421,67580,31404,74878,47471,86861,19611,42205,89205,69987,60225,65229,92937,94771,36576,67461,44592,81702,20944,20622,27988,18528,73304,97270,90101,73473,76819,25289,33452,20855,29328,27012,95845,14215,26363,16838,70589,71799,90643,22036,27871,97673,77253,89448,25221,46224,66125,57890,32888,61059,34239,97096,17302,74091,30125,88108,19110,42024,37397,12491,82382,19556,10920,80137,91334,27812,73082,80937,99804,33298,61954,72601,25713,95089,36874,64885,13191,25404,24048,24086,43033,34312,14580,49562,50047,40137,98934,79251,37464,45064,37009,46716,29756,82500,10885,30403,49786,46499,20557,24381,61643,56859,31325,41617,92672,46205,54704,45583,10174,53070,53667,74159,93885,28547,83033,46286,37963,97497,35887,13660,94233,66976,93127,12182,11704,62593,27091,85204,29207,67951,26211,32418,94683,20636,38896,41556,73646,15318,98347,56467,54532,44691,82996,90518,83169,19342,87877,64900,16949,67385,40183,50202,51629,54277,49763,49716,27061,99234,86698,50568,39147,13130,82160,32838,30154,89241,41606,77199,43462,12942,16762,60795,60234,65506,23558,72615,95123,10067,32121,74428,46294,89766,69619,63552,89723,90964,12157,25830,91998,98049,92597,41054,27550,46494,13744,94481,61793,29493,84451,71983,49814,90459,40979,22259,40383,36693,41847,18860,13134,75855,65086,73382,20687,29590,55632,44088,82068,21031,99507,39857,26157,37542,58620,23982,98137,50122,31158,83539,87132,21463,73698,78486,29208,96399,34073,94391,62418,90452,81233,14314,73985,29618,25948,54149,13118,59804,95094,64928,35819,18403,24075,81234,69520,50880,11842,18871,86765,10177,93326,58366,18572,78484,19697,53611,25185,52265,57348,78741,82524,38899,62301,74194,93549,94062,75973,55940,42892,60062,22683,47263,58286,26773,56270,79858,90631,11251,29099,68252,61771,56519,84521,40863,14290,24194,79262,95630,94592,52453,78749,28649,20746,75173,39960,63698,37326,16962,14226,53811,68988,19254,20819,30636,82957,82488,44687,81555,29510,15999,85411,75896,46003,47959,57282,96628,72310,19526,69576,91795,44799,44170,55590,39890,35987,69334,73614,60483,33692,56130,83704,11910,96018,50967,32227,59072,46899,35988,40090,82337,22089,55947,67710,38509,70621,71069,52587,70308,98429,52568,30408,57565,30037,32531,62402,90376,12006,49528,96045,13283,74561,33484,88700,55748,47629,13264,28210,83579,74855,12198,23107,95496,32397,32984,57696,37465,99723,95468,89204,42792,63725,13011,43590,57513,96228,24380,93173,89249,50714,73749,81742,84314,34399,70536,95917,90476,87779,82117,95602,49387,10247,43278,97377,68884,14830,65524,39042,77319,66867,20364,83046,48253,35271,78463,43008,11244,97776,80992,93321,23203,64423,61286,82226,81371,27813,31646,81424,70223,20326,54850,84227,53106,95246,63806,23725,22568,99173,18850,30132,57750,23295,18359,79755,37663,18180,76144,32208,67525,72714,43702,58039,48193,74025,25311,65892,18046,21442,75753,37434,69877,57834,85965,39591,19562,47068,45260,66028,13450,19141,93442,36058,59401,22254,18927,57741,19148,29837,44487,97530,50821,64987,44083,44806,10546,19869,77552,67718,36482,31897,91772,81708,88820,34047,45375,63996,41458,79261,32457,19501,92020,42601,78305,72865,66028,84851,97395,59904,18828,92041,16900,90276,11160,76173,87241,24998,74082,56131,12660,32412,43684,68620,49765,70519,46299,56952,93405,39603,68462,60505,20659,72505,88871,26664,77354,75680,92461,48123,47904,19425,79519,58245,66229,89154,29390,28206,12435,85720,89696,81555,27611,51952,99814,59595,27605,68629,14941,17732,48807,54261,21817,18326,75497,44206,80305,19288,34899,75313,29837,87542,79639,42345,28125,82488,31468,14008,38746,33288,77806,62687,72328,51196,32510,46463,52316,71183,17346,28863,45830,74829,79863,74782,54196,14737,22983,43712,96635,34420,83531,87987,42628,98150,97651,82926,18244,73648,29814,83336,85751,76332,41391,89531,46805,44280,55829,43147,66638,51534,12282,70790,82304,12120,74167,94266,84262,55666,70644,75640,21615,54459,55335,85810,67854,70757,67514,63353,30571,12563,34096,55767,40565,12924,27151,66456,97733,56911,38796,60587,71605,22002,89614,89842,42531,68180,87690,39238,91746,30571,92366,69387,63860,14082,24791,38779,94160,92979,72876,69972,94085,34124,93156,54504,30195,15710,60105,68067,99338,81922,47631,42659,61341,74305,17985,66784,47092,39029,99867,54530,61703,60550,81922,30516,95444,57996,31497,75490,11485,10015,57507,58187,95780,71443,19809,56125,77342,13367,64563,89378,13503,24122,99540,95011,50199,27827,36715,93421,99655,39374,84076,50018,12311,65708,26850,21996,18018,89859,97918,94106,12790,46207,61973,19272,69177,94671,81974,35964,86823,52990,34758,76486,97921,80288,52668,75381,62344,45024,25941,76757,34410,76155,77964,11380,94249,51502,36698,54949,82330,36284,55269,32015,96430,62167,36716,67767,55883,37749,97681,37540,26046,83412,87127,76113,13620,44045,81581,16915,66030,92800,70840,40285,24873,99288,89283,65354,83043,60595,94971,94799,66299,65957,91237,64699,50706,61311,78655,60446,10243,78026,86369,50300,40954,69339,50723,13612,70319,60561,12564,48080,86024,31375,65560,35840,27788,89696,15946,94748,26160,53984,40396,92594,99730,21481,29412,88387,31809,82003,67488,46869,92298,66932,31394,65008,23905,52843,69310,70436,80480,15550,80373,24643,72082,42728,82552,20503,40292,94438,40331,64157,98333,17277,77404,81702,68681,66142,38226,22267,75004,57881,67952,33614,24797,73229,84524,52002,83274,67219,20872,83087,90231,52600,66892,32664,71959,95171,35395,16288,35158,14810,26537,16551,57691,98424,33486,17413,11036,37088,26755,24913,43455,85257,41884,29736,36989,14188,17680,31656,28051,54899,60608,33688,54293,20425,10556,79412,82595,18168,93759,36784,83435,24457,24931,70009,95392,31206,27122,62312,52123,50248,77909,93535,25743,52766,65472,65845,68925,69889,50312,21171,96858,74151,96937,99178,19901,31565,84760,82555,87734,34199,45722,61507,76746,97783,64083,74929,48369,98760,85652,87608,67852,93184,19094,27160,32726,13502,51280,88624,65356,38434,36711,44851,65806,14686,37141,26580,97385,56067,68439,41052,94769,12311,49396,78673,61008,99961,36317,96150,43767,74183,36140,66513,10532,85749,99342,61041,13107,29037,96413,96958,43241,85381,69089,97474,91763,91548,68796,70684,58408,40925,36681,93496,31643,10690,14195,23964,85752,82252,39054,44127,76596,56261,32631,32721,77232,58274,95687,36219,10516,86592,82879,50373,39039,29806,88966,20804,46863,23594,65905,73159,42269,48600,18980,39220,51199,91406,81613,82533,34060,86647,82601,51524,36448,70016,23932,38682,36344,72564,15969,58723,79165,89560,32896,71738,23612,79367,60820,40275,41181,26068,72305,10688,46829,15990,76170,71597,44327,76710,86831,10111,74664,93062,57559,18884,71574,58508,74448,37534,17656,40409,13461,51626,34028,15074,22130,88970,49393,25085,15770,12258,77784,96627,50545,14999,55020,86711,84954,90152,43512,96042,70530,56136,79253,72779,85836,49173,61878,20762,45110,63824,18580,70975,49276,88664,89684,87851,11835,71825,89442,44705,95465,29278,46574,13763,41460,77216,64658,71639,92182,18282,46077,85415,84132,54628,16684,83869,70572,17052,60654,89820,39081,17246,11369,61279,23865,94032,89955,50943,32207,24894,61411,69369,68466,12986,22763,17303,51143,27540,14242,38196,76514,25373,97632,53610,29316,78073,17160,36419,33931,40217,75576,95915,33736,52436,32954,71551,90605,21367,68023,63452,66417,50354,34492,25784,14780,57053,12126,35814,59526,99292,37854,92860,58510,47089,96538,18250,82814,58450,94199,98984,49837,71401,79599,32273,40685,99878,50745,69405,84824,70083,75646,75664,52766,58843,51380,59905,67358,56099,81878,88412,85064,47316,65811,97779,28426,29435,35060,37543,27649,13591,94395,30871,46322,83374,30946,14121,28337,84021,67045,71444,21396,26763,36913,93118,49761,73671,80871,49739,75592,83339,86362,77507,94719,83053,12182,85351,68710,36048,31601,57255,50935,68114,78874,88702,53752,15797,67520,42782,99948,36560,27590,90654,57994,16191,83021,19750,53478,61745,75747,16343,95527,80654,82315,53168,76599,62129,50007,81011,78195,29612,89315,45238,15031,56316,17767,90771,98354,55946,82597,89995,48525,36055,67663,75034,84707,25808,84675,74003,61678,91586,65737,83161,49156,57882,36862,98269,99272,38959,49696,97622,94794,41005,67541,20907,90058,57667,91691,70792,48867,24836,99213,90487,57607,26396,23520,37583,97190,39274,48120,14428,71199,65726,59038,83470,57452,30261,48101,53751,50881,61367,89495,84113,15551,74646,48341,94587,82628,35272,74050,44342,81831,16690,30289,78049,75217,57596,56772,73641,65132,11154,20228,58279,59863,92781,36360,31854,85546,62168,77717,46343,13396,34786,80529,77500,83599,15823,96650,33351,25170,11610,50818,33617,32861,15223,37558,37130,42998,26226,52237,76252,64880,34038,91919,30806,15747,42651,20744,63308,92922,96706,47313,58211,74219,57877,10701,57435,59517,87930,84017,64083,29997,87462,78408,46407,40934,42226,69678,82010,66549,15388,62434,84983,83660,63043,64671,58007,36686,65732,14609,27397,77953,16291,65603,48566,77846,51117,98059,54571,28794,19735,74104,90177,54706,77028,78463,26519,73070,26913,43909,69981,50432,40124,48693,52069,41599,62109,24506,59867,93371,73919,45604,72351,34115,61627,86939,82614,57816,29628,91000,68957,51315,73940,29272,83278,35868,14415,73791,27777,42008,44513,83894,94864,69819,64480,35988,18199,11397,65470,73968,45186,20336,90112,88692,23818,55424,61750,63797,23631,15687,95927,40441,59443,99093,11407,41583,63482,83009,78637,22694,15960,82368,58983,57799,82142,81895,87673,42117,16245,14199,75196,29212,86033,69364,64781,19642,74353,23207,36741,81180,71520,16867,53357,40891,58297,50698,44085,73666,36204,74768,64008,54556,89114,81032,46790,33350,17486,16718,96348,85289,70405,88142,85128,74297,72498,48710,76748,59883,28501,36979,25133,49469,59399,30536,35426,70252,36534,69619,85404,24017,11640,88975,70971,68093,39287,60708,16620,19633,63465,48503,10858,33903,23547,50130,78054,62165,59794,36481,52520,95997,18131,36323,28224,77956,30462,11492,87351,76301,18413,94095,59642,87609,74299,19250,20212,60766,58027,31442,62135,41079,47844,65505,24118,45804,89909,33079,92515,81753,39800,99661,38767,94025,25042,86840,33545,88969,84020,44377,89196,78493,41572,64674,63843,64428,31076,48099,56410,52333,45913,50743,54855,38097,46754,40059,57308,65912,80860,31002,34035,95013,78745,73427,50768,98567,36149,81388,57432,17780,64462,77824,77926,48850,15101,86481,95538,19576,28359,59108,18191,22696,65153,11121,25035,79461,46248,54305,69146,51356,45708,55917,83857,43023,39292,44387,69497,99844,52379,82003,44091,16590,65588,65773,43851,14840,53254,61651,62432,96162,70089,73008,22540,47616,90024,98607,49084,14127,34583,27764,42363,93883,37132,99226,79912,17258,14433,32374,29535,89370,79781,72691,43123,20853,57598,36986,35895,71192,88143,46052,56426,40212,20027,28175,98506,50221,92481,32225,56013,39211,98669,94531,23745,38241,61068,29900,78458,49141,97614,37703,61304,90712,45895,43345,39302,11615,11962,37846,36356,38310,45020,53820,64648,56674,63380,23633,36728,61506,32155,51952,64052,15307,49472,30697,57520,39463,69191,35952,12283,75492,54857,49112,55233,69655,61075,91272,80819,71702,80830,94142,10011,37145,18996,39266,12637,14728,66987,52272,28719,17591,83793,69385,11223,43434,38680,89198,44627,65814,33022,27719,48274,94956,85161,56428,37038,33909,17186,79370,18256,46799,81289,74851,81463,68479,92589,60093,45712,25868,31184,35698,76305,87912,42934,92500,66054,22631,44078,60873,66220,18730,20535,24875,57223,33089,55509,42330,82125,83197,39420,44220,76172,19246,68168,97891,91190,10557,43866,55603,91106,56543,91768,96181,28339,50158,60455,79847,89491,31830,56303,12348,55347,33240,46826,59704,85194,35708,91551,86886,30976,19300,48325,26007,72550,45577,28674,45112,97334,99979,43844,96597,59185,22479,49555,59647,53039,29784,32900,33385,40224,86050,12256,85169,86195,69503,87182,75316,26955,32040,94331,57663,61491,81494,54508,45880,22831,60471,59692,74151,72022,79459,72486,18027,79514,98354,24887,45154,73085,45761,83653,22310,27372,11256,30633,49843,75747,96743,13844,69683,75312,47367,66392,80301,71483,23383,97154,50483,36982,70668,32789,22160,56664,58856,68026,97505,44019,17189,63876,32126,63663,20565,87918,83831,64151,81587,40786,37415,85605,26817,82645,56116,63227,92003,70419,84837,58691,30455,36372,64699,23461,15151,55649,25349,83385,60637,48128,69894,96014,39962,15468,50101,30240,82840,92478,88549,80745,94697,85579,57458,68289,12036,70116,77143,31058,62734,55774,51864,56286,95218,93454,16654,32731,20579,64604,35367,93524,78228,17441,69805,38047,96203,95459,97100,22452,34243,66047,52301,72107,59947,64441,92189,71207,33328,86150,89169,95674,34195,63419,87324,92464,47803,60325,48282,45099,69477,44323,15335,51825,93768,29073,12497,48453,89958,17486,11475,83044,43641,24177,68404,42015,48261,24505,51287,65020,36644,99633,89487,19757,23487,12666,22090,60135,72236,91424,17916,15811,95333,20104,50567,17049,85674,33285,44299,71458,35767,33835,43991,97941,71278,70850,58019,30391,51210,99321,98535,85314,20634,68781,39975,10578,56042,17951,87940,40459,71895,58060,35016,77991,19170,72323,66025,86244,87051,61128,65425,35033,70092,60869,42199,40888,24561,60609,46073,81034,58301,45829,81663,56203,43855,44469,31953,39254,59240,15026,19727,40833,48012,76416,95725,61216,26729,46320,50722,56984,29310,97197,73933,44160,57812,10531,26092,89022,72431,97825,43906,33194,94812,63814,38377,60919,63396,23246,36887,54584,24827,79218,65854,47037,50640,93372,67441,25693,30297,25677,58725,13687,47780,95250,97086,20338,23652,35869,13867,66805,54719,11202,92294,58507,43009,33147,57790,89428,46551,42887,85503,21455,25785,53077,22919,70935,60772,77077,98652,20288,29692,93465,72319,95937,37188,70237,53832,84663,69101,34656,38682,55309,73801,55744,35933,79671,45315,64853,96357,70657,45667,92114,99852,12073,71586,49313,79336,67577,47276,87725,68982,23862,14111,22758,47151,66466,95637,95062,64449,88266,95001,74279,82300,60477,88086,48217,54407,24225,13219,72952,72045,39328,92780,84294,22669,32657,56785,37534,76009,75998,22850,91792,36599,99264,99815,93907,81200,11254,57569,23766,85665,93827,32683,57262,54682,24928,49430,64285,49631,95448,52387,59645,72761,67653,11931,86211,91048,23828,47973,17278,79331,12843,19417,39713,65290,48080,34266,52890,24780,43166,51820,51589,32521,60774,29677,58278,78630,14507,53873,58767,19745,75393,57594,38359,79434,52140,58607,50035,34772,72222,64620,39602,99649,25416,25845,61441,63291,74850,69717,46013,51502,89493,98670,38157,57140,21945,44367,92473,28197,40463,80452,95542,67329,84695,97878,78853,72689,72891,26861,31888,67181,29433,60384,79557,21885,20268,20452,16465,28750,15322,53455,68025,46190,91087,29383,45736,89121,24959,16960,44092,57083,87632,36105,21511,60612,19053,48799,96828,27908,22239,65473,25243,44711,38491,35618,85080,37981,17412,90371,42342,87648,45843,10666,82303,80628,66352,15467,86412,12924,63482,89105,44596,48145,17132,28740,96578,92590,50735,36309,13667,26284,31007,20729,26270,54990,17689,36224,11138,17878,79695,85353,72107,31749,32102,58735,55616,13456,63153,49938,40935,12482,75359,31468,22425,70593,92657,82491,94449,73019,11589,33634,15522,34664,46685,87459,75337,97310,89025,85308,17343,14280,54880,50086,83667,70718,51316,92662,99848,69543,63699,39057,75164,44520,46883,95856,88866,33101,18234,50013,74972,59539,18177,53419,99477,36896,96080,78350,78101,39211,63863,54636,32466,62048,55969,34364,89051,17072,27213,46056,20917,24611,59035,43806,18112,68166,82900,69372,84031,35927,58055,12277,30177,46551,12411,94354,53489,92882,51302,97593,76928,68469,43859,18561,78468,28638,44815,96114,98991,75945,94579,35352,89056,43334,11741,27354,52693,59237,74425,52468,15945,68847,90232,24061,19221,83012,67069,81496,32169,34525,84360,44920,94434,74289,28941,95820,85281,67584,86002,29199,32901,47059,35778,29479,76775,47803,95151,83861,81948,35272,75052,57166,15059,79353,14974,14494,74870,66960,33655,32662,32520,71483,17471,43733,80956,33501,59916,70470,61145,76031,88969,71139,87386,83131,79834,45563,42233,42138,77884,88969,28847,94965,55776,73046,83529,47677,72777,92198,58499,29693,12139,62142,35708,14275,66349,93925,11805,72932,71323,94827,16698,19317,87107,42286,58277,79680,79401,23106,55982,40323,24228,22106,66522,53769,59001,55547,77153,83377,37949,14486,39784,51453,15810,57244,58392,33031,65878,64365,59438,48028,70892,63651,69680,70275,35657,50643,80071,64432,19021,63557,23257,37079,67070,80786,11315,24232,50539,57047,30677,22577,30656,84865,43155,24016,76334,16830,91731,81649,91264,37911,19261,79545,62325,60897,48271,48522,78069,54844,19703,95243,69385,60583,85983,68015,96420,35941,83599,70107,21644,58116,60445,41574,36609,60727,24479,38345,59082,34138,30206,79268,72750,36915,85473,51854,40070,45311,34539,90726,54872,54670,24834,53872,39351,59554,45251,91885,53205,88432,80623,61687,47822,11429,58476,17785,50525,68162,29626,26809,20694,65836,33314,56003,10762,45245,88835,36988,52160,57677,90140,38918,54361,90264,81285,13070,85185,96452,50612,31580,27613,36525,52010,70742,52412,30589,62409,79926,92994,60543,46795,85928,98884,70437,11382,52208,28714,95832,55996,82607,59367,80610,76256,87449,21056,70530,71273,75609,48835,53750,60065,50697,67054,89923,32289,48922,36525,67593,26646,78383,72869,67745,16539,30641,37234,59640,44379,96060,64091,67340,34848,40593,16718,80386,55373,36810,11146,48854,14713,55407,32021,63220,66876,12146,17190,96917,42968,83404,73611,22539,14140,34171,60962,81371,27579,58658,41663,25002,70938,57922,29910,87805,40724,38445,81105,50526,20677,52323,63167,55133,53330,83975,87126,60085,94739,60236,18039,35446,93679,36837,24644,10744,90008,60895,71899,34119,66309,24620,96945,69878,85100,94846,16488,77494,32041,90217,58364,30156,97127,17088,24834,48474,38099,35208,99525,75370,30139,36997,54922,46749,38224,65636,32825,28223,93240,15305,21314,69418,72762,64345,34277,16563,83056,54956,21236,77670,78148,44048,77016,51045,15222,69927,15410,90787,39738,61651,45728,13119,35700,14033,57185,36195,76893,53680,54638,16494,78164,66076,19387,34879,35539,79732,23858,93872,18024,57304,98652,52504,71819,72963,25628,54892,44341,87848,51186,69620,49666,30153,34177,64395,22680,82448,50920,76587,81634,45044,61348,42576,46614,17803,94064,87097,79877,43228,78212,88526,41924,74003,40450,70351,88790,37655,78363,22049,38795,38450,43543,10752,78415,46152,10210,55605,16414,65265,91747,66637,97305,22889,16870,53072,54979,88591,71939,90945,49719,66744,52923,68508,83975,85052,94007,48733,93621,45471,19256,85075,67822,45763,79574,28616,52045,52060,30079,49905,82932,33990,45648,51370,16981,58600,90506,38386,90995,76731,14208,42763,22935,61437,97484,51378,81705,26834,23629,44369,64163,57481,36919,97806,56800,33989,93158,49817,21704,21948,84789,25474,82245,24568,51899,59924,91645,57010,52818,71569,26783,29952,15614,73467,78763,62575,61972,19218,92107,75024,42239,70104,42289,41284,59042,19720,28666,74861,33777,71449,86111,29379,71974,60455,80344,27540,22268,45186,84180,43440,57960,17467,60485,74764,50758,24017,83379,24100,48345,68311,99266,13268,28474,51137,87511,42562,95334,79989,65237,97269,86914,61830,44870,68418,39209,89152,54610,18367,70060,58619,12832,59487,86856,87581,99616,36478,94854,33078,33661,20289,45922,27933,10769,80607,88492,82206,29859,87284,32777,38807,85522,65303,11901,80508,94625,83147,49625,87244,17419,55655,96081,77064,67113,30914,87538,15064,53336,45184,85026,84466,21298,27531,97667,77941,72433,49316,25924,92960,28940,94055,74729,68148,84623,80840,16500,10311,13241,30479,85605,39279,75507,84375,69732,12428,86518,85994,86799,12674,39748,63218,46862,40620,67500,21711,67979,70391,16774,42319,57260,68515,74077,70106,20550,31008,19334,42875,14510,28935,33841,23961,49236,49081,73596,87398,20075,69117,93318,44349,23161,17913,72248,68702,50318,82760,34606,80476,68021,28308,19217,76707,85709,63378,46226,39311,29560,16651,23701,45975,54520,13390,73941,13100,38383,21671,68722,66219,66852,51928,16960,80083,35362,60584,41903,17333,13124,41939,97391,63186,86345,94145,34267,49637,45865,14757,84240,11495,64665,26177,98670,38485,82486,22816,88846,24561,86357,46046,86394,44671,55701,37002,43413,64140,54488,71147,30589,46061,83446,61697,90406,58055,22413,85077,51056,52491,60268,93804,34121,65643,46537,39429,95252,76163,85697,83417,40486,55199,70915,87266,74695,85612,70649,44824,73868,25507,80665,92494,39379,43046,73551,54510,38038,62201,26616,56653,59576,36072,31279,18800,19930,88182,71196,19793,45815,88996,84130,92107,94735,65863,70885,25394,44648,19037,96889,50458,47002,60265,33177,46796,39416,73263,65232,89331,64378,59977,47073,24633,74086,38298,88694,55727,13822,33087,59412,95615,18048,15061,13067,88972,67623,87237,36856,50278,34292,20563,85872,55187,48115,75693,69521,52262,97108,87424,25279,84207,14941,93216,10756,15244,63265,44363,44605,37639,52499,70809,35306,23759,85453,34071,45684,49880,79740,78298,67346,19923,24833,92660,43462,58938,68903,55526,99760,74895,13402,23146,77435,75512,81472,59615,58593,59419,26061,49456,11721,39040,69530,48931,58361,10691,78216,44781,12727,73054,23452,18186,72530,22395,68466,56294,41007,76123,83644,51431,52847,46729,37520,65276,55859,76283,89785,86116,15223,16020,18191,81353,43614,26339,69350,76220,94229,93138,66841,68279,45836,12290,44922,31667,54463,91652,73370,35468,25086,76035,52777,49340,83902,51106,10577,66950,63671,54607,50331,15411,92650,77240,93446,16706,74121,61408,96118,30712,11347,18109,30636,83957,19624,55901,15194,68105,29481,54495,19822,58324,76402,64302,24189,76184,29079,84578,97555,50262,10844,78378,54921,53997,18346,71082,84815,47196,76025,12431,34838,73738,61331,56154,58840,73443,34348,55933,33779,65120,31508,92799,92420,93761,30314,62820,83305,37770,38825,74616,50676,54214,72540,79861,25524,42003,99068,51865,91875,40661,52546,46904,63227,92155,95197,20352,92811,81358,62649,55493,57440,77185,96664,50969,35311,63891,39368,88449,73478,69296,50301,93581,71932,75174,60479,69633,26693,92483,22047,36846,88199,70777,59251,14065,51460,77306,48250,80940,86020,93228,64797,89460,29362,96279,36664,16693,42967,29111,63945,73153,45886,89570,83981,65382,48574,76806,59814,23493,74280,40543,88243,42168,76130,17157,45158,48769,89103,39412,36694,82940,20658,58894,36504,60162,77145,82117,22408,25656,27893,80864,58481,32538,11061,15548,55721,87430,47524,38890,39969,45254,14415,13431,71183,56608,42754,13392,85436,74155,51824,96952,91785,30884,30654,94514,80300,40845,74004,22338,26170,39976,71657,65802,88950,96673,37092,16649,89484,28401,46662,84630,41598,49869,41640,34119,62175,35002,25243,80945,23644,59105,95434,48423,24523,21719,25347,21400,65469,26645,84842,94831,47966,44470,14306,39051,78134,39103,75942,70564,11154,33116,18812,99135,16363,30296,94468,10982,88059,15592,48480,88827,90375,81317,85431,68008,25882,83009,81828,65583,28031,27363,27774,71895,46987,80095,89245,82440,90012,49525,18828,36477,61383,77094,60214,67308,35839,94020,99271,49994,44387,83969,40657,67840,53192,24192,35551,10430,85895,74786,21564,30621,66307,41646,81154,50365,92632,21111,65562,76153,95239,31891,24207,42611,39081,40869,14741,39514,98884,16024,58741,19983,76762,38866,80841,77335,20234,57884,77909,46027,36970,69006,91511,21413,85250,86839,82879,14176,95312,66428,27092,93674,20993,37007,84707,14231,25406,98606,43710,29753,39581,89101,84670,54056,67650,36425,59466,88873,30501,13181,46714,43391,22796,40234,53712,87252,55508,76063,10904,86207,89695,95934,42063,31251,63890,80750,87956,26066,81155,33192,13479,49261,74618,18504,74811,96647,47359,20666,62953,82172,41810,33503,90306,96087,78713,59704,29008,14953,84853,23936,70237,71465,43038,96668,82531,94362,95415,61062,13274,69965,42048,72439,45472,21633,25263,75749,28943,25746,16184,60562,36587,80968,13025,96568,17769,43449,37431,46800,23002,68047,25255,26429,74727,31454,54643,89030,68058,41246,56453,50595,26458,83724,58702,97081,74427,25074,41595,44205,48106,17945,89884,94029,11025,47159,45622,60617,37565,75143,89105,63024,55680,16018,59889,56953,99513,15215,89455,10603,26451,71690,72951,31072,16553,96772,56646,53510,97300,65179,99295,90780,14406,44340,12932,56744,54505,82013,80782,36694,54322,87864,59366,82034,14296,98663,60048,68798,84147,70270,26823,73779,19744,88626,70139,38121,96253,17573,19255,61924,98510,24221,64905,27487,51926,81110,93631,72113,10224,13407,65081,65325,82275,34795,16009,85928,39183,37550,52302,30249,61019,31584,62340,69527,45631,71835,67003,52733,89047,99299,73473,11702,16843,84868,23170,45444,17712,67325,71804,84700,74024,74951,87487,49429,27771,57283,48981,51155,84557,72564,55820,41216,23805,32481,71458,28847,59378,76241,10679,36233,34226,33710,94978,42913,23660,78931,25550,68347,40417,45938,26973,16808,87226,52176,65110,34255,74139,22951,97065,89221,68259,40002,72428,36879,88346,35450,88282,90822,66435,15551,56175,38504,86476,84951,33646,48179,54051,58039,36784,25418,64896,56127,77022,75045,16271,68645,71835,13505,68018,47277,32852,14602,53429,59096,57251,95928,67094,16504,69275,86755,31972,25105,74052,47578,49757,33528,26288,12450,52629,33476,11737,29319,13816,24980,85379,76290,17114,10502,91249,28899,88583,57684,73853,70136,70009,67593,59285,10009,81123,36347,26899,43398,92989,54966,30157,71943,44911,79043,22337,15912,89395,26352,63497,61725,19348,41117,84258,47984,94073,75942,86782,49899,81023,35920,90523,51840,56414,52796,15583,29100,41944,16019,91016,14827,58269,12863,37970,33901,30046,81288,92696,17171,93310,20586,39128,18635,38363,20166,82739,86847,56966,64901,25523,93090,74727,39884,26963,60494,18502,59737,74451,48945,69277,95936,44827,63124,30183,11561,21175,51408,19656,46830,48838,97834,17561,56953,81151,69428,20734,86140,55446,67264,32158,38466,27272,71391,27693,72371,83593,11316,81069,12451,85209,38343,28977,29688,27932,94210,14651,19339,69025,97667,89234,65636,78551,66501,92904,26920,11950,89908,70990,80721,67773,18881,24730,54659,93035,40167,22225,98155,29565,56391,89980,10116,75782,23288,39916,92748,97683,58263,25288,49842,76219,36120,64629,60477,71293,55662,73410,37042,63567,82013,27525,82163,94733,52168,71790,26886,48678,90549,16368,21124,63341,34576,70004,81663,16389,89664,20025,46628,62478,50352,44921,63891,34639,20683,31428,15481,52221,68542,92132,46644,19165,63135,13773,42224,84457,66102,66986,16302,44732,69779,43872,74845,29360,48200,88914,29810,30798,25520,29419,11063,17648,13742,24935,56971,50183,22524,20203,15717,46685,41191,74009,73783,65144,18704,79914,59899,19217,42421,67135,20845,22912,61258,95241,80758,63403,95406,89890,99938,76517,10462,18623,70466,82708,63818,78635,22525,68920,68162,75680,16797,20873,29712,71510,41934,88331,92072,88613,63480,43611,13871,19072,67671,13990,65333,50039,19281,22486,33984,35462,16202,75741,65874,14924,60609,45021,44031,46098,76736,23386,28453,24908,28363,75596,16431,79085,73313,31081,37066,57528,69612,20107,55133,93876,41326,32473,78297,24115,59708,12475,66194,77946,43319,36683,63920,10109,18264,65063,86244,87733,71453,54534,74871,81652,45273,41829,53685,65579,61593,76130,68189,46256,29075,73370,92826,88505,60624,31749,23041,57002,50907,39187,98253,14526,64855,52569,30979,48969,96608,17294,29819,26827,88824,90852,70566,21570,65215,47828,53387,10307,36826,61510,90818,38796,58919,39964,18179,10063,69552,81500,42971,76961,65413,71204,21837,66397,49536,80539,71944,95093,16977,59201,62322,92638,56527,29878,45770,83267,97143,83647,12897,15685,53710,50164,50619,68103,37401,84424,14896,25719,67471,74741,65556,81074,33891,91724,84640,63598,94357,98949,34445,70703,90081,57061,89348,67089,69140,45683,87750,80295,54386,81364,48868,57708,28965,97994,64063,65685,70925,63928,14614,15779,72929,60581,53757,52933,23198,55441,40518,43995,13313,94427,88615,87941,88158,22442,37484,59667,47090,22478,31306,41063,73718,52372,41601,64383,76393,33171,85542,26810,58313,63789,77851,82037,44760,27617,18177,42313,96212,23313,11280,83152,98901,12734,31494,35043,60562,40920,99158,99768,50528,92086,23025,25678,94491,22950,32498,88202,82040,54395,46397,87784,97772,82874,81169,72714,77795,76182,60211,91436,80048,58269,68172,56993,72582,77396,23150,88972,76789,46643,11482,14464,38777,50793,66652,40211,53949,37658,34783,79157,74536,50898,80905,26075,52314,11041,14727,80116,95633,70438,66813,56969,31483,11555,63844,63496,85804,60973,48967,23108,79266,89099,78057,55958,85045,59718,21458,93732,29977,98190,23448,81277,97327,19771,22990,21595,45096,71719,22748,86423,66269,30864,15097,62393,30307,69413,40375,95208,80419,29222,73574,19348,63458,87045,93884,20414,40951,74585,13399,48607,65893,26248,79862,64287,54570,53738,58445,32375,21484,79162,28000,37735,38902,92208,92778,83769,87755,81304,45363,90693,32856,57719,53988,14044,84808,97441,41898,63005,20160,21360,32187,97437,61141,48503,95066,21702,32383,58487,74061,39978,77824,92825,39251,46365,66153,29394,30091,10782,87115,11526,52352,57767,55669,65548,28252,14811,59136,93320,81461,60808,57343,20501,39364,63062,46985,51090,98230,26692,43894,10433,41968,45621,56028,31315,77096,82415,39327,44365,49328,69265,35951,86540,19102,92720,57973,63279,62805,80047,30288,78797,24381,43329,49228,99465,29689,89092,89333,70573,96571,22308,89929,82060,58073,36663,78415,12332,65664,11038,32247,30602,93271,19422,14248,78214,98766,57578,46838,47305,17944,25309,11116,97852,39954,93402,36706,34598,16754,86453,55437,66784,52263,84207,29731,64198,27559,79405,35794,88201,35342,86429,78546,58492,60674,24623,77737,44000,36921,59957,27838,96048,49991,58865,58594,96921,44049,74809,98470,79760,54491,27544,31959,28589,59862,31181,58255,26052,80648,88032,12465,69606,73595,68021,84054,55250,23587,20156,84515,96541,77126,28262,31082,70666,19739,29314,16557,84982,68706,56227,31467,50775,99672,56951,99276,48726,52699,52874,92094,41608,14477,95827,17567,84392,32260,30772,55353,78661,55118,73025,30272,58431,25778,19187,29017,44024,55713,96992,95642,25026,43237,13640,86188,10040,63991,62245,44701,72345,44480,99022,49095,75069,25695,21526,46166,92961,96134,98227,59928,89100,37544,78420,28626,33025,35194,22004,60119,45180,97832,35706,36027,44209,52572,25466,49841,80971,76060,39152,54192,47370,52124,60075,16598,78002,88585,83198,84773,71403,48807,69931,62417,43249,99564,21012,29242,67301,10491,39818,37220,12166,62156,38187,42409,98441,73375,43012,75253,79193,18073,45126,72452,92270,20239,90154,28191,39185,45176,15665,82173,85699,95950,61921,42629,40579,30792,55791,54326,39744,95759,68419,51183,96798,52296,32783,72630,53335,54921,34907,73673,24121,52158,71559,11352,34811,13874,46817,39628,42685,69537,60587,34724,84655,46254,86624,85581,85359,97054,36979,75975,65577,77531,88948,12869,43702,43669,53879,79093,62985,21395,36479,80025,58569,88544,59815,78937,65238,14597,25575,42280,50260,46207,51268,59755,24055,56322,54183,52189,33684,74956,92830,61928,23049,22351,79392,63269,72474,92108,37409,20819,92134,37859,67221,19219,84268,65673,16328,82067,75589,93664,98105,37597,85434,26934,10836,62111,37081,30003,48370,17831,15789,33624,39156,83619,31992,99699,28588,53976,91455,91103,95747,28421,69232,91195,10131,47737,95411,72673,97709,31911,29867,65242,83510,38082,54215,70518,20083,52471,57884,85696,76604,53414,26747,96152,36950,28073,51610,99512,33301,57690,64654,17612,42138,61812,55987,62826,52794,31319,46413,41238,78926,70846,24366,80131,56450,64440,11525,17100,99886,79317,16556,16133,62398,63037,17434,33733,79219,61586,45016,10130,12070,79097,72854,25628,54223,29374,10370,75643,14738,70371,21643,46112,91628,77975,84341,51735,35645,56103,37470,47514,10629,54956,37967,34505,12614,17915,25418,94353,60360,11303,92766,51060,41443,29233,40912,74084,88681,89987,87301,44065,45120,45969,44507,76070,86818,86443,65122,36701,37335,21463,71413,85794,91465,71072,87624,59820,21354,53283,15807,68759,90895,25677,46863,56023,83363,43040,13286,43467,78068,81444,47485,70923,36261,16596,71453,32483,35509,43775,97714,15132,45827,80922,16435,72132,62816,35129,95792,34326,17071,88381,45832,72851,18397,14981,24410,99723,34347,68000,55875,15992,68028,38496,83719,53327,42040,46896,44971,69172,89834,77386,25560,26738,84781,89318,70828,16959,27589,57575,67241,92465,86112,22961,11130,15670,66106,11289,26300,30820,62346,63807,36204,64897,87626,11073,80244,54688,67838,30508,39288,56770,90150,77971,65316,61222,59028,34595,83287,25728,19900,65655,86088,36134,11532,16381,12791,70896,74615,84371,80971,99464,51691,34566,35932,50275,62946,62888,82376,37544,17086,59761,93563,50065,33826,15960,54785,89187,22891,89608,20481,30803,19063,48219,73233,14016,92931,78017,96048,57751,15570,54866,67302,65411,23744,34501,45013,82720,30244,37353,35619,48960,95399,63925,67156,52877,76331,95643,18381,60725,11120,34402,69714,10309,51497,44029,38811,58474,58759,74524,25075,74294,48037,75304,36503,91579,32826,81416,61618,95910,70239,81206,76024,88874,76592,31930,22909,77936,55059,36772,51170,64245,83097,28354,15541,63190,15322,81248,16184,95790,67050,76875,64176,57053,82660,64945,96479,12710,31181,99740,19096,33171,21801,72586,57975,39925,76243,47477,21852,66295,73128,80346,95079,20820,51476,76687,46141,83263,32706,72614,87890,86005,68506,26193,12295,86842,98703,31585,35897,76363,34695,50387,39479,66110,96449,14118,35060,87348,73824,67302,32150,71850,59907,35736,79525,52420,70457,66742,93543,78879,18369,33411,63565,26283,98224,41185,34215,99582,59371,16621,39374,60882,84641,31844,60997,48482,68780,42282,49198,63168,92559,83649,93454,50774,84313,59995,75478,13380,93697,17399,10715,86362,31899,29584,30178,96502,68682,72114,25733,95206,76077,15397,39483,64941,35981,10228,77642,19733,37265,23262,43379,35237,54021,16830,98539,33595,26055,70815,40226,58171,86055,79596,61614,10691,54647,85165,57594,93017,29369,40657,36312,92016,98335,68494,78841,13184,80074,22306,41486,84721,35221,29572,29863,94654,67771,84705,86761,36188,49552,59383,49937,90720,66043,38571,41314,20879,20865,52457,95316,21620,74110,61791,44199,44090,74381,30096,67700,25227,89823,38322,18523,91285,59635,23760,97203,61981,19021,21520,21807,42816,50090,56380,52575,96658,55998,20391,42693,62573,47696,93859,65430,71980,47544,24908,37693,24726,68574,42202,13207,90668,41808,80033,41277,46393,34293,23928,27807,48794,44538,99438,32434,17725,15800,15589,86493,77334,42588,35095,26465,19805,12966,44163,31845,38162,98533,33968,19370,57416,51843,19661,78532,20666,36514,80894,91433,73682,24391,42464,24009,55377,60129,90292,87236,93499,75626,38416,14783,58602,92209,18698,13342,63059,97965,21109,97174,55521,15156,21033,83074,24748,31850,32556,69895,99559,93890,79350,20574,70728,21019,17446,13933,68780,29834,64781,58231,71839,49493,21839,79921,59434,60003,83906,77593,62472,67188,45465,68594,16747,59765,87468,65093,27016,28815,98907,66467,52399,97722,77404,77739,67329,57949,53325,10593,35283,54505,42661,26271,16079,49449,39755,29164,19152,83810,87722,97166,16273,90930,81553,40391,10519,51711,54245,26446,40317,49900,35351,85344,60902,41941,33559,26513,85140,27389,63008,73411,46818,91863,90368,22695,70578,73003,82176,78645,85841,45528,69302,86554,54861,78939,69064,20160,96173,35945,23692,32294,49533,32095,83164,27735,76983,90865,46417,59453,76787,37928,75275,87900,85265,32044,90371,52621,26139,71807,22416,33297,48001,97576,73162,85292,53146,46232,44059,75962,63537,31345,68708,53701,73682,98119,91763,17489,54207,96919,32357,75675,46353,53985,27187,99358,59458,56235,67131,18830,50951,99418,40505,35080,59605,21977,93652,24362,23699,37109,51841,65515,34828,45220,34891,99669,45708,56800,66422,64462,38512,19372,23519,30981,74639,96984,72243,72555,17827,49558,98527,92844,77515,96721,65121,98741,65228,57142,92396,81237,10373,94703,97373,51230,59963,74122,42636,58414,54677,13480,78651,68224,20645,21790,74109,59055,63246,33414,63298,56601,75968,96321,58767,80006,32180,43744,81210,97392,13127,64223,17119,73648,60885,69542,24654,65773,82885,71274,13188,48923,62924,36965,32748,84529,38331,89934,46615,13878,98416,74076,34552,92932,41984,55736,87383,20909,75102,56764,62204,84287,37350,88440,75473,67889,58101,83416,30333,27526,61975,14496,44472,59713,22931,98401,44428,92430,99602,67330,16978,14633,49159,20056,80145,67123,47106,98095,34455,60406,92942,22028,93206,80634,23978,45161,16378,67316,90062,65897,96251,93107,34250,12231,66612,76130,29260,34187,44637,86401,52341,45194,59797,94893,21601,75673,38156,33457,53136,41455,28325,61339,25446,17964,81096,74890,86409,31672,64980,47712,38201,97367,78796,81896,41358,98339,66782,31832,15395,80572,37041,72356,13541,21728,58587,76328,43374,39507,53523,12463,85684,45862,15780,14437,72172,60668,20846,25012,86819,34865,82107,82773,85269,12117,50464,36167,70907,68401,46904,13076,64447,62288,62577,21346,49547,31804,23188,14070,97803,86843,90633,48278,68568,26482,11841,70346,24576,10680,17853,92796,25344,97641,16441,65714,16608,75581,87550,53863,24593,69639,31658,77481,40042,11934,86138,48948,18918,51191,39891,81252,63035,76387,49986,99216,14306,63436,39843,55319,15502,20643,71567,51374,46911,19074,92933,20042,13370,61560,90187,14465,45588,59641,30454,79769,68227,48572,71031,33902,41727,42844,60633,32460,29298,87966,18442,65878,44990,55336,18401,33469,83180,57472,18602,44893,19561,27420,31957,36178,81826,44807,99660,55417,69823,19331,86983,32463,91464,71968,76110,75632,93328,96867,44257,56559,44421,46640,31091,76140,82075,90730,23423,87739,23902,34478,82262,38283,66308,41290,61243,34960,49946,23743,92204,23729,58118,28829,67671,73265,84987,54347,39167,54597,89429,46718,13245,95925,67570,89475,61572,28645,35988,47830,36028,75213,25215,88427,21906,78623,52130,49141,80318,39978,12655,91422,40354,53897,48513,78183,74371,91653,36131,53139,98915,10730,28639,97739,95264,55235,16761,70505,38079,71849,44018,65828,53366,86074,50947,58668,44054,98202,18378,15775,33619,89800,73443,84495,61776,59975,78268,89287,54251,38838,99909,58292,60102,81379,15222,59013,72878,26026,54545,65787,62767,37453,15498,57251,57295,97584,32469,94530,76221,60995,76250,58549,38749,39716,66508,17848,31484,89683,12451,86753,43555,19299,68401,34661,16969,34028,63619,44152,99484,89525,34958,36774,56842,78710,21407,83283,99303,98260,84376,33154,37611,56374,62163,20074,61992,59115,97969,16935,97053,77038,48551,42757,92898,58371,11071,42505,60302,96373,18451,78919,36243,64306,35298,55497,84504,22164,19169,24728,51739,80273,77441,75022,30532,12599,98885,32245,49720,52423,71209,62323,24975,27129,51908,64276,41400,28867,23298,68546,89627,53543,36888,34973,85659,21611,41814,85941,17172,11539,59898,73354,80732,79505,51768,61415,39079,65638,98465,87390,73637,94801,85546,29588,68850,24611,97600,55515,22306,77292,85024,19956,27403,79861,70597,45418,30700,18081,23731,34163,98203,62754,89272,43860,39580,88359,12395,14078,52454,89158,71300,58613,94875,32739,10532,77900,25799,31009,58767,45363,78596,73928,59003,15219,35458,91491,23144,82534,45773,28009,33005,70356,39860,98394,49073,65059,41423,47425,66855,88272,69068,27184,33851,76696,54825,61426,49735,22759,61289,60303,22710,67149,89563,87692,63349,36361,85300,90753,28669,66798,65603,10472,18077,54213,24240,41293,17373,71946,23494,79677,96232,20294,64906,58144,46391,72810,41549,10967,72707,43792,93183,55507,64173,91032,78190,77514,17551,27460,91949,10326,10507,26893,11847,32298,55304,93480,10753,60396,55448,84746,46621,65454,82844,16143,65081,27307,91056,50457,80260,62591,56959,23482,86569,63630,79828,22163,22567,56123,92486,48741,23574,91611,43432,97054,48813,10042,52185,92031,16788,42485,58241,22812,54919,71335,25701,24992,27631,91536,64779,13109,55663,42982,68182,18465,23318,10744,37239,77202,42109,48931,99032,23119,73935,17871,90261,52612,25332,49115,55261,64928,71694,21282,16060,55446,90259,80561,82999,98479,23158,25416,45287,66351,89012,13651,23843,49969,69392,13250,59715,77694,14881,91690,58258,46436,91646,80946,15044,86187,95075,84859,18396,97392,19452,42602,92417,41290,53196,26875,53274,72922,58675,92269,73163,15156,73056,41415,30130,75736,39533,87088,52654,15612,94669,68939,25064,13841,31905,69729,36866,85469,59651,57943,30885,42234,80729,27099,76761,73283,25517,30561,96553,73845,17812,84540,27750,18435,12317,31146,14344,55938,91821,80215,39446,27005,14800,77191,55695,34676,27333,18809,20816,82516,20424,16430,83992,23941,67601,86973,23553,21494,44856,82485,94507,57187,57284,12017,17138,73849,80892,24597,49013,18744,68848,69807,96211,95834,36843,26574,82684,97590,88371,28821,87984,88628,98378,85222,69277,56942,43590,53974,70109,86187,97376,55789,55746,50526,73565,37436,26829,94146,64394,76991,83321,10380,97198,60947,11319,58380,51712,59618,88231,96032,53471,88262,89742,87330,94482,11124,88402,70980,98092,44366,67993,92178,30537,95304,28136,84690,85403,96577,80428,11825,24766,31280,86231,60224,43859,92806,93848,36686,51391,87717,71707,28989,68766,85294,80692,44026,73049,11633,77044,66652,82132,11594,94022,40391,63544,26129,73104,82980,92299,82603,88543,71030,98300,48600,67140,33204,30379,89691,28815,96548,23699,60132,22505,48360,29908,22724,81833,86682,15579,81394,94842,30623,61411,82139,78604,97828,63362,98882,17722,42100,40036,30475,53223,30786,80094,49825,82168,71438,44119,49090,50098,22284,96402,33031,20544,72750,29168,43644,92069,15473,63254,22298,96744,14956,60789,30066,18066,24087,67473,75354,50135,79524,86204,46200,62078,79492,45257,67478,70190,48938,63424,44578,13042,93081,74725,93033,69175,54541,87376,28895,99282,85950,63482,23356,23429,67569,16432,63307,21832,89173,40496,66334,79284,94466,45289,69676,57551,23190,57943,55481,80836,42751,72678,70788,15766,49444,17025,55332,87038,78267,21870,88197,46890,74175,30512,29938,99661,45232,30123,12615,15653,49998,97922,23001,61530,13426,54124,28560,45632,88748,10501,53598,61810,86421,19199,64121,80657,75285,23877,95388,11227,85985,35980,93409,20288,80808,69033,87712,44039,67834,65926,54987,23903,24606,11977,35858,82447,56165,54609,11008,38246,81325,69275,64662,87731,60819,85230,96910,14493,94238,37426,59899,54142,71690,66319,40082,33099,97138,24894,42851,26288,88815,65840,86412,87166,61718,23242,95329,54436,38854,58354,21808,96211,24640,84897,74262,88192,19644,79617,69406,59791,18626,45969,83702,52353,19752,85060,51314,44922,10172,86337,37397,60214,31249,79290,11785,25456,52821,84696,38766,27805,87334,67878,23328,90040,41367,21699,77667,37188,84691,29688,58584,36911,77348,16199,31322,12285,64112,41927,82629,44367,87371,78472,39195,70995,70527,21453,66312,16578,71885,86602,35783,13163,37168,39507,77857,93968,65626,10971,46379,46329,46569,50526,96583,25754,96238,37805,50577,88356,68123,18927,88447,24002,30134,45302,54143,91351,76697,87209,75979,65034,91334,65422,19493,45424,58874,93536,59412,51485,98503,88976,39672,80043,35526,83137,80453,16931,95586,45729,44200,97265,92316,38920,20005,38729,87319,17592,31234,11149,18715,24866,73325,51514,44188,54848,53584,58038,61980,56865,61108,64052,13984,48519,33918,66422,75841,44621,54374,14692,72046,13537,98427,72083,97861,58097,27281,82750,40904,67416,42957,55253,64030,77448,96989,30157,53636,59898,89964,62011,44010,28849,63341,67117,64802,47136,50637,11138,92656,71582,25864,89961,78733,87366,95661,72930,50720,49989,30957,86855,96219,10552,45014,41770,79538,18976,69912,44709,48818,71921,18796,42596,74462,25892,94550,92435,30513,56572,21780,63050,58850,32725,12198,53742,87516,53226,77591,82390,50663,84218,41621,27466,32719,10867,66253,72357,38503,32827,11683,13292,39859,18969,83208,31122,82614,74780,13419,75237,96938,16161,41351,68911,83240,15063,36727,55243,20166,34006,45499,66235,46733,83055,31623,25970,22300,62090,95789,58857,81141,57634,63722,35965,67474,90466,74712,84934,52265,21946,90382,37238,37864,36278,51356,67861,80057,12328,33453,53043,57691,49976,18517,23738,90826,59303,50683,20298,51122,28033,72224,19335,44430,62516,34702,98602,98397,74410,34922,16554,27860,54566,66110,52506,70842,86636,35948,40415,87498,31863,40732,28653,92141,98555,94857,91561,93401,59123,21145,82957,83737,94386,54923,81367,64852,15903,53810,15958,14692,20678,18027,70182,13861,20767,65887,89086,33300,37255,64470,93465,12452,11235,75634,58922,78989,21424,72272,56395,97841,68061,41155,10976,66396,92143,76177,59130,56897,26723,62901,44642,61576,14704,60102,69270,32691,29051,11973,97991,89743,68370,87279,30413,94878,95413,76089,25928,12471,83270,10095,59436,59959,67649,84183,21253,53554,33446,87215,59374,79531,45307,76315,76626,66770,83460,70590,89044,89381,83474,94361,83810,53053,20289,33843,53676,94600,31926,11592,92192,90123,94653,84891,79566,36887,67373,63062,84074,53005,83323,92347,49533,35923,31779,13526,33835,65494,79020,23027,34447,49628,21892,42508,15349,51511,58412,56797,90628,25339,82717,24775,40418,98670,70533,78961,55004,59237,96714,57151,90618,92127,79739,43914,91830,87952,45136,91631,49821,35886,38534,24419,44801,55530,55326,94780,16016,10552,83117,82083,78685,36184,10522,52095,71420,11179,61207,48148,94345,87298,17657,98822,27615,53289,13418,35207,52619,78138,79696,64541,43910,10109,41764,16376,79579,94073,13365,64978,88210,60703,41391,87671,87618,60516,81989,99825,34897,89376,97661,43123,63689,38413,23915,85997,79232,12313,49785,84361,27199,82108,88750,70747,21222,71751,18429,37244,61539,29960,64897,70779,31073,38427,76509,74659,66122,69322,33488,79780,46837,95052,87887,27244,74901,92024,26887,16792,60150,74935,38842,89796,74364,98294,62660,54310,76079,30370,29469,66628,74136,20993,80323,16920,34113,32146,30147,81218,17939,87327,38959,95102,38115,15065,91114,89054,68825,35005,92230,71596,80690,75028,37967,93613,27677,85010,15639,91117,66813,43672,91771,96489,78590,59365,50349,19489,90207,21261,93604,14905,12074,47423,47016,35621,16499,69992,23988,46452,74209,29822,54325,39668,27369,96753,48264,36273,70046,55117,70071,87381,63538,83314,53250,37678,49231,79927,42198,81152,85268,69895,14832,83260,66861,44092,57193,56285,64382,91744,11097,19078,68408,60933,54089,77474,12224,86131,25881,53468,68112,10290,17555,55689,36918,48673,88137,78020,18858,47978,76626,50425,79678,93627,49566,26522,27900,64219,52867,32393,90950,71854,41473,87485,89638,57247,54261,98290,80216,38163,40714,58001,98704,75739,28755,25958,15963,88819,96639,34929,36645,96758,15371,58757,89115,49194,14904,93347,29808,36463,66308,81778,22168,77627,72253,84627,39166,16556,53074,56905,23507,95085,77133,13734,53841,11344,70019,80758,98049,23791,91905,75582,77459,40964,70769,14626,32130,57455,79931,42618,52069,72476,48078,27834,88494,87084,66552,81659,39369,67164,42729,13518,98441,32812,53553,20761,54485,44018,54032,75815,30103,68389,49006,62211,58761,99387,19876,30230,84480,60974,66070,54244,34988,62179,63841,26882,18488,96530,90287,49260,99762,94928,77399,85857,69219,76986,66378,30294,49346,80991,71112,73088,24411,57847,74091,54097,18895,58941,95800,70896,84644,29001,77555,58130,71328,29311,65429,52154,21292,46181,26824,12779,35737,30375,97504,68336,53502,28822,57235,26292,59760,45746,93367,44697,99931,12569,77216,95876,61598,42309,69946,96204,61378,85167,71985,51616,85771,50721,88457,48021,85450,96767,84025,18665,12022,76155,13594,57621,87413,41451,85317,13502,94330,93561,53225,45954,11342,27175,87460,24303,80091,69386,46449,36240,25588,16945,27727,68687,55924,82726,43843,60792,35325,87356,95916,19493,67161,37499,27289,74316,81596,54133,86599,81487,41470,66863,73498,52616,19984,10203,21096,44548,19120,98473,50392,35716,45256,40182,96765,37046,17690,50621,67453,68628,52122,91723,12185,98721,36824,13018,63954,27637,31258,84598,36574,60728,84561,98872,66508,79241,16833,56204,39921,13075,19700,58390,10639,91795,98293,13418,76759,21260,67072,26648,20923,63850,93831,18584,58735,95764,40162,95697,79839,37372,69640,46337,12245,75327,50450,29635,74930,88619,66263,90757,40585,80163,18954,35093,35930,63302,61199,77654,61207,26682,75938,44560,97023,25981,21366,23109,46661,17568,84386,17059,70412,92847,37877,50973,39524,63212,18141,35625,98877,14936,81138,73306,67074,49588,67047,83782,33882,61210,68328,95241,41665,93853,51291,73834,46443,65193,80996,61091,11339,64777,64304,23572,10825,42966,33965,31682,27848,70703,12525,59874,81458,91849,49591,85120,92619,62385,42030,24004,76422,74253,17459,38079,16914,83989,16294,28843,18270,82307,63756,98260,81118,36761,16503,82499,33194,94959,61410,20241,13239,93056,22240,73422,20049,78688,29693,95441,34078,32463,20701,67108,75564,42733,39636,22113,46900,50764,66147,79433,42242,71296,37955,64806,57240,48339,23831,47640,31796,20720,38258,81216,75455,59704,53161,26016,72871,12693,93506,57946,37494,83052,88634,12485,32285,93800,55539,37280,51097,68002,56246,35974,33581,99652,20229,75778,42454,25592,71909,85852,19954,35752,40959,72585,85407,11883,73713,83324,59886,58155,24202,40947,23963,50439,42394,55454,65330,57268,50082,64832,77786,14705,54781,79936,70753,90961,54808,91636,57111,50032,55613,60293,31707,19682,57836,23807,89157,15723,96702,13456,28086,93509,58899,17534,73886,58851,82547,34400,87328,62874,23956,67753,13259,50522,24410,61549,57367,31639,66908,61768,94539,57982,29974,92885,19491,26393,47610,64585,53746,91563,37500,44027,31130,43905,44863,57842,11422,87527,98589,69046,37032,55003,28655,42616,32438,20419,33871,92640,17906,51270,57188,24547,10431,25770,29528,27874,79791,74821,16338,13308,44671,85080,75380,26059,64226,74570,74199,95619,79805,69213,10742,42460,62489,70364,68730,37977,85991,76494,24251,57985,33735,62659,46200,22864,93946,32557,93812,95764,66614,72341,98444,37989,22037,80475,77771,65643,73970,54366,34852,90032,71532,50442,14058,78047,62052,82347,97576,96192,53503,96003,65972,40892,96918,59821,35841,10043,75923,10493,52811,38367,44367,91281,13008,38085,71082,45616,58598,75471,35973,60423,59395,52749,55043,30732,94741,99500,38623,37274,54566,88051,78244,24861,85349,93570,89875,53934,91616,55925,54997,47265,72762,13650,30474,43190,91015,50273,20812,91245,87763,38271,60166,49239,84276,17058,46489,73280,46107,81601,49949,52378,83814,14219,73689,26394,28130,21207,99190,56070,91214,66470,51697,62692,94636,51840,81787,69924,53775,37991,25725,55259,92555,70467,23689,48747,87707,40428,82228,32019,80798,43840,36085,16815,50428,13188,79024,77621,41359,55855,83421,76794,93424,26243,35215,12678,58933,73318,73936,70595,47764,12298,94334,10250,23220,68035,45678,31713,80690,48138,51331,96310,89401,61219,63408,22741,97845,38419,24305,90569,33494,53530,56921,34081,85716,34841,93418,61624,33054,61635,42706,70322,16500,46481,65401,94998,57490,23475,91730,90335,66632,82818,88653,71663,91331,95583,34243,91837,58453,98357,99302,69624,85748,27266,94110,91833,32363,98894,70916,44832,33669,36483,37646,78001,90033,88756,90178,34374,27800,82081,62051,84912,81570,35300,65042,28349,41472,68269,55223,20141,19460,44693,34647,16695,45488,49178,64358,89145,14070,26362,12919,67590,14985,17736,90323,59616,62330,92050,31875,92161,90013,26916,50147,36705,47131,50595,16637,79866,99748,14221,93651,33817,36831,65405,79866,81461,95893,80163,13482,73339,64389,83862,21421,43918,95391,75691,15936,97516,71042,11352,11099,70307,36080,55463,29214,38838,27858,49697,18630,80342,56892,86741,26175,92825,62684,49739,55716,19361,82238,17868,86625,61528,68847,43536,87349,12994,84694,88998,47057,83726,69521,30322,57104,47888,65241,94611,89594,46469,35623,59556,64980,25156,46023,14425,70294,11716,17810,34142,80328,92713,88894,76156,22774,39876,82603,35340,38444,15892,64306,93684,86730,20178,31795,95894,27004,44990,81374,59344,55169,95813,37507,12195,52166,70733,75874,24495,71148,89941,64110,49477,92934,36349,39740,30638,94889,40086,62896,35981,96937,39442,12021,76191,67115,53109,16265,84176,22822,42782,33805,47782,28123,38021,25863,31117,66130,51679,91039,96937,99651,28710,94270,33047,32376,28595,39203,53868,60759,10615,10205,66570,56943,21703,83580,49262,79650,27017,72065,31765,30146,15612,61058,58745,83925,29506,64068,43844,88029,37864,64736,96363,68210,15022,71380,91896,87693,13933,28679,87173,82121,46440,53778,64772,34502,31604,96599,99732,91528,89620,49692,34369,67278,26855,30891,26048,66715,53009,12300,55892,42665,18680,53464,31778,60671,64317,80754,73193,10508,48225,54522,40009,11013,38310,61897,33483,10198,22980,75644,43935,71960,75091,49447,13982,40421,64377,55465,13471,25301,35671,97804,26055,68161,84203,16108,13002,99183,26352,34957,42836,40584,80487,97232,22186,14275,94330,56386,70618,76778,20265,71130,80435,30251,65756,50436,23514,80803,58920,14845,89994,65444,80263,85555,92873,16534,62060,97480,79070,94055,26472,23327,19057,69102,12850,38268,73945,33333,81456,22529,95071,36829,27095,41553,55596,38095,18394,10776,60118,18613,36305,44401,42590,27497,99155,53300,54555,26938,31064,39376,98581,88528,29741,84877,19483,58995,50228,86496,91522,15305,81713,48115,83709,71260,53735,25728,79434,87189,96604,68367,23170,26542,28001,37072,10421,26486,67222,27008,15179,96912,78590,87727,38237,73421,80915,23146,57730,99005,17150,60963,87151,62855,97159,75943,70612,23827,60626,42366,20535,25913,77844,17053,44322,46079,26179,95044,45883,80445,50495,85319,61167,76554,85789,42348,58165,23217,27818,32824,33953,45811,71620,34076,46156,86773,82933,45777,74261,46127,32527,73855,67007,61325,57864,86251,83782,69517,24998,96875,74288,38919,52153,34128,60157,82820,83976,33053,26349,74898,93771,24182,95223,43867,16024,38402,93159,97802,80186,35776,38131,48805,27746,30267,20943,17696,38074,60426,80853,96974,24411,28701,64634,15000,40226,60844,82320,51680,16405,64966,41402,15102,19935,74043,37645,39280,17857,19140,21808,85107,77469,48652,96723,12397,32219,49761,72788,86278,56835,72056,85835,67230,18545,71141,11135,57428,62958,76961,87518,67538,77692,50296,20187,12818,51915,43305,13618,55929,26903,76902,54881,87457,71001,57785,57038,43048,20220,38467,27165,42261,15193,21016,46882,86131,73977,89270,37769,64449,45381,14539,80497,36192,76545,42404,94129,29981,28277,61046,32967,75025,56781,46766,56121,76316,51615,79629,48724,28469,53093,31481,87726,49687,82769,41259,98163,78786,62148,61671,41827,75095,86972,56711,28429,62705,87526,42045,27207,77959,12499,76707,86212,60018,92039,90232,92585,93555,34930,52855,16236,59702,68764,85464,82996,38495,45367,59463,11260,99713,64823,36927,59801,92505,56791,16352,54158,85549,40372,88130,86338,39620,90427,33818,41767,81552,40423,90179,17910,67482,11030,11118,51955,91151,28922,58718,56603,29010,19253,17294,99231,78081,51433,83826,25753,71639,84969,66534,47687,59561,10087,21920,10551,36733,17522,65442,94990,54104,31626,79703,31947,94124,21129,88359,29053,35418,65218,60649,66110,23607,27060,38771,71401,17900,96803,17616,18244,61771,20688,62310,40024,25885,14110,77657,78378,74478,83770,38395,99261,89060,43184,68218,38568,56724,43092,96972,83500,84898,67248,44502,61284,62988,17280,80980,55273,26211,29525,17547,44503,65112,15702,32523,33404,88608,46044,51956,59818,32818,35812,84106,36819,84717,21356,11528,89534,85699,19346,44693,28737,46112,20803,69535,89511,32242,51612,12069,23544,32672,42454,84293,73515,97721,71883,22157,44596,67704,25363,39214,12768,13990,79537,77713,69989,59434,16081,91353,50379,73774,19644,83734,58982,99909,27213,87332,11015,50624,76636,62852,47052,13593,42840,99383,98396,16143,43548,13555,10869,33074,89167,59028,19498,61137,48922,55191,54828,62604,54043,55521,57387,28726,43943,22128,46094,85535,56577,50529,78755,93588,25811,77701,86466,46483,51292,50574,40170,44841,37249,69046,43029,65141,71573,38041,75797,45788,90486,56518,94258,11653,68630,25015,27465,92907,84664,70150,66330,75191,31912,33486,86285,92589,36149,88488,69331,81225,78996,83213,72980,20746,18411,23453,65520,93918,24857,30443,95079,20683,24814,38566,74735,45957,86838,96629,57395,67900,11874,32629,85207,20848,51190,41235,60682,93235,10832,69891,25430,38750,55617,92466,98104,85647,67801,58883,82711,92572,46152,78677,20681,50700,80216,66208,19390,69469,45940,24256,21600,18739,70062,69610,75700,54712,65364,27187,56090,63829,65960,44171,74193,91783,95610,42389,47662,53542,29379,52940,25754,91222,44745,50727,46052,84995,85077,57975,25013,19112,73116,20038,48202,15885,51671,87260,68127,99136,89208,99260,69331,31703,50396,24882,51614,80465,53060,70305,44017,29881,17021,19151,50925,56357,20496,47186,61097,73389,49094,71046,90772,93557,65186,34937,32644,86987,30128,60127,28455,86447,62939,89602,36610,54133,66596,41319,45602,32170,49226,31289,61442,91777,60861,52673,22992,63502,70962,87418,73726,39061,22074,98833,25446,99374,28427,47664,95555,72874,93763,64166,25753,51187,17020,57268,64175,43616,20192,45115,51804,51935,66179,47567,70802,39389,64362,47826,93170,90602,29464,64281,92472,58985,62414,80113,25465,25085,31212,45678,86123,29760,43035,45595,65610,24977,90052,15724,35791,95145,86865,56844,68198,31135,76639,25436,42459,79144,45065,95185,69792,68164,98516,80918,52849,73366,27616,44774,48776,92557,57636,66432,38563,54392,77102,33248,38598,20265,42076,10870,80649,93934,28901,12880,44852,67748,95162,92865,83920,69715,88997,63451,90228,73169,15651,78221,34873,77890,28499,16811,10792,10409,61791,68940,35141,97803,80440,89134,54713,56472,51032,71719,82909,51821,78541,31055,45692,36902,45255,58419,69380,39273,50518,99552,14967,44582,68678,15042,46529,76421,54317,92760,23525,87778,46630,28164,80323,62813,86176,22112,82920,38922,69945,23709,31141,90997,38282,64723,42553,43999,68654,20663,46150,72385,11821,16603,99767,57093,94561,20300,50607,65166,19909,92567,88529,18832,47898,79345,66369,56537,59593,86466,51412,51545,50799,40610,99664,40305,26500,50631,35652,54844,20085,61605,94621,38161,45235,28904,42963,36061,82602,44581,82485,29093,25909,23420,99805,28359,16608,82709,20786,56128,91855,67402,67228,59041,10747,89730,99445,50795,20490,57836,99148,60468,97864,95561,29759,86772,11262,54813,64626,14230,98101,92371,80470,70079,39988,48380,27496,11708,73089,88854,17689,22627,39906,52152,33641,33991,22578,94822,83662,42444,24440,40163,34318,11799,31410,95726,95022,78543,57998,82112,63122,33571,84324,87953,57927,90295,62931,71640,98471,44221,15130,87338,40969,52569,17373,49604,48390,53064,61728,32673,35702,57984,62163,28346,41485,10551,45822,87329,98902,44928,17806,68082,24430,51852,76339,59468,66191,51068,39976,90116,39908,75210,23404,10711,15873,33386,74793,77992,72393,94011,31546,32882,80194,92519,79324,95464,96276,51159,93259,33675,95856,37421,91895,57946,25726,32067,65172,93999,40532,96669,15223,14923,69742,24660,54820,90999,90472,21206,66489,89809,66261,29166,28093,72083,95922,50952,36025,46180,67269,65653,59961,33920,25029,39581,91328,49299,28996,58174,26262,31107,75973,93963,61552,48534,84543,47176,73714,74048,75641,76660,81476,37656,96822,88705,84154,68645,69618,91699,91786,64639,95213,91363,51161,78108,26315,29592,99227,38399,33686,48878,18425,16624,70677,66403,87611,41130,10558,60944,43070,69729,23045,59772,53022,90700,39960,50285,37478,60820,82055,79874,28671,33335,80505,44038,29300,95368,85826,16668,37057,98423,94684,89233,92262,84905,63596,50705,31065,48055,12732,42438,63677,65722,52733,95659,79188,63200,54432,16053,40810,53899,98018,80026,55794,57304,11152,32747,47871,71895,30461,77999,16674,34949,98656,80219,17645,47227,97663,60868,31642,50711,90653,46067,89906,54017,22705,97500,30014,79166,16113,50397,70241,85454,78134,23313,31996,17682,91197,35261,35207,12992,67044,58348,58586,16506,29344,39675,21061,95413,21180,73562,11628,36855,74756,84392,40149,48355,26000,88842,12991,69802,87616,65487,96641,33540,51667,93909,44798,91208,91755,93831,14679,41044,47208,23628,27370,52729,32788,46275,57150,18661,43966,93825,19806,26353,80358,11422,25841,59609,30897,85409,22356,97778,39203,21268,81795,86075,65164,98778,76593,86150,80034,32139,94509,91743,50114,21320,70544,11161,87586,17039,75207,75291,67555,44572,50216,31132,94350,46384,41159,26341,86045,12958,35989,23747,49480,73522,54007,33200,37371,61238,94636,73444,31104,10884,72496,68032,88458,51244,28433,20319,33360,17925,68022,45230,84976,67582,63952,39069,87075,20992,54253,48452,15383,51514,77452,49529,16910,12383,18238,85225,83237,50866,95142,42133,49700,49531,11527,11807,51316,34840,40708,91911,45933,54798,84704,32957,38094,12556,61633,70795,15046,94006,56283,64861,61834,96455,97749,73518,77362,88810,15893,55752,28137,10401,85663,39916,71792,89287,64409,93578,26886,29827,83914,68138,41668,89145,62774,97300,49735,61153,52605,73524,27034,26456,52133,61670,92310,67301,15904,45291,65391,56085,88006,67457,63069,18957,96678,60194,29713,23138,69081,88895,15535,66242,59798,41181,20038,83358,92097,92850,31426,65592,87874,24828,24486,11465,46671,44029,29998,35458,20467,39527,43901,44197,39028,28882,78551,66208,42848,92978,16524,96441,40515,84959,50450,39327,74781,19093,20992,92255,88386,11811,65245,37346,18761,37095,53785,58534,41198,26879,36935,90104,56720,92123,71405,54125,41942,20129,59295,92289,71954,10009,10641,34909,28559,73057,28438,35981,94699,99606,15635,27398,62525,81113,44572,57913,23930,17349,20762,83135,86610,76176,42729,90083,54006,84287,45341,11098,74961,20836,30536,49155,23324,18742,90976,98762,97990,42746,23194,65085,60395,92762,10030,26448,32525,16311,59492,31003,28389,31234,48564,19548,71933,89592,59328,96479,61785,26855,13664,51458,16723,29017,57856,21935,79227,94230,98784,59348,93954,70068,47248,27370,84526,37234,95386,40709,90248,78472,63463,97816,68988,23933,45229,38882,91692,14361,13658,20881,54632,21284,82606,15310,92081,25935,68305,49220,71024,66784,65539,99073,55386,31609,76104,62173,11975,60914,89998,29511,34695,68804,93086,75260,26076,19616,88426,78737,62082,61369,50139,34750,58323,60503,65221,77246,67594,80915,88868,39894,32458,40193,63016,95307,20188,15974,75045,79853,94761,17533,93807,43467,18776,90737,47566,33217,57846,84536,32234,38868,59418,22845,27162,36562,69388,82305,46828,59524,17075,33812,29529,86568,90416,34576,85256,49700,73753,18219,92655,92710,30625,86790,12270,58882,70685,72000,12560,25478,63958,50825,18433,46735,62053,86555,80456,42704,18120,93957,75477,63225,97945,24481,19712,50953,17664,92312,75239,90604,93854,90699,37450,22555,71536,14317,30574,34750,42059,79511,75706,35773,27301,65092,73552,48302,82575,64095,12627,39871,12078,51523,96001,87375,27295,37834,26116,12167,10515,88827,81591,77047,27780,80748,23221,57667,98058,57565,99274,41176,68229,41876,51405,93175,85121,79891,88588,20619,22795,19640,79014,99942,18701,53340,30345,71871,90061,25034,25409,89783,72605,77293,75019,22861,44611,76073,60830,80044,61802,90631,20745,30906,85027,11539,19346,51318,20474,38876,42830,40828,97076,11262,12392,88236,88851,62263,70460,54539,35870,30866,68389,42130,69379,84299,72909,22853,35639,42736,20357,77868,62816,70290,22431,36552,91040,61305,11475,52043,13978,81007,89562,55245,36778,57486,18314,15315,63645,36262,55121,15027,68782,85924,92141,29697,88861,93860,90846,25668,75422,40310,14581,53164,90479,11851,27630,65433,58275,92062,61272,70562,89061,63522,11308,27562,93075,96078,63352,24666,71304,73575,37444,57518,36572,53603,46236,69190,75877,12515,16849,53328,41688,42359,86029,24635,76006,26941,16513,83662,26029,94886,57957,56973,68368,42404,67926,72847,50360,69641,86779,85369,96275,59241,36473,34550,78424,46515,97082,28030,47497,90583,29821,31460,31666,43763,24503,32704,50106,29650,20516,55934,17768,22938,63987,84907,21573,94461,99943,74398,67270,46957,20830,50796,98058,56090,28159,35291,15892,63037,50029,66494,87088,88993,96598,51245,66293,36372,50837,19474,27090,92921,20229,99171,79474,68094,84030,46322,23314,73441,97901,40291,34426,40404,38994,46459,12639,92793,38645,81293,69839,85044,19202,86678,44379,87891,90276,81461,61906,63158,84531,60410,22207,41636,89686,93501,57554,52355,50592,93681,42870,89743,84926,71568,44803,45149,19465,50598,36857,42331,64167,97521,90221,86717,11393,25841,16626,59463,27480,77771,65536,70186,84094,59344,61224,66994,42132,90060,60011,42431,89477,18165,88939,78109,53509,12633,93795,71468,18213,95384,35780,48987,73164,93704,51491,61198,72938,58981,81427,12283,92336,90500,53695,66177,19775,15677,73796,13710,51644,33332,82798,32901,40043,48171,72593,11690,75917,41594,47062,97080,67572,31598,70726,17008,83903,99674,30882,95622,34815,32396,47950,89643,83656,58193,68389,94370,22562,32859,85372,84118,16880,16464,14193,18410,72827,39953,40715,80183,58585,34765,67780,14133,94500,86301,56036,75074,97068,13462,93845,37114,74431,10795,99456,26258,55879,89423,79518,30734,77995,53960,23834,12388,59951,97192,42765,10806,11250,44409,76531,14322,70243,62044,97719,72398,16303,48644,44531,42699,97129,88253,70715,34152,33948,44602,55329,14610,19134,28259,99148,85276,72977,11790,64459,79366,71690,31321,98280,80768,56786,86550,29172,19356,56831,26543,26383,28441,85112,55872,68921,14974,87571,62831,55734,35759,32238,11660,39252,83088,85363,33581,77050,62100,25756,15312,51384,51350,11329,64352,71978,54351,40414,25375,59809,92255,79176,90690,53857,65701,59158,28011,84710,71175,71241,16341,29823,98962,81186,85800,96196,90351,58469,86070,42770,95234,57599,74300,23810,90513,83121,91026,58832,39245,90964,73206,29696,46359,81685,86171,35387,82870,78570,95682,55120,46257,67465,63143,28338,17448,45153,33415,99225,83709,69345,81747,55800,21468,37991,16233,54032,46490,76252,33835,27007,78298,37139,60757,68382,51905,55367,10939,80528,89555,29866,35825,24312,99889,65182,38180,55967,58263,95728,64160,95170,85384,44111,53682,89355,85083,32379,97462,32655,44578,69458,37505,71365,49326,72882,19596,73520,62629,51508,23987,72716,79770,25415,31209,63073,93280,31992,50749,53598,60948,20755,85212,56099,17871,85340,41721,69256,22997,14251,94773,15614,67309,96104,78481,92548,80825,37542,32490,99460,38343,99237,24581,57126,38586,27324,70159,47416,15416,83048,84804,81300,31643,19360,98848,19034,83309,66284,81084,33880,18408,35794,92836,40987,44144,25352,22851,39835,99643,11240,91855,58476,57311,88278,61798,83797,20179,75586,77318,66332,64816,81690,52410,34590,98145,44153,58220,73707,65702,31024,51904,52625,29940,15795,22406,94688,41992,76066,57775,33083,25033,35488,67189,70623,83149,18081,32529,11936,80648,15968,20867,92364,77796,30496,14027,14045,53676,19199,94254,21728,44522,56138,66490,76989,24045,88126,47379,60532,74195,34017,61202,65711,70830,38735,58866,37666,32081,84256,95009,98434,26774,11684,72528,86171,70227,95579,99807,81688,74032,63290,64545,62803,88755,49072,92279,18962,48870,57352,34722,63483,99828,53873,75644,35404,59352,42131,81492,19007,42617,41660,83099,24675,30452,76500,93091,12291,23734,44846,79616,61814,32159,19274,57940,23238,76610,76684,38190,25406,39080,93654,44775,32245,51663,47182,93781,71514,13572,17677,81695,82428,37879,98738,18054,69420,48790,94930,43014,72978,21263,17622,12929,97363,66482,95154,40990,25048,37517,92698,72660,90228,76444,23008,27456,68776,65911,22987,63701,44716,10766,45577,46441,69976,44875,58496,80340,37124,41220,33855,40998,27011,35830,59199,82678,85326,59897,49783,90120,90024,54656,67835,70166,56702,92122,92563,78001,29101,37052,97032,25541,46466,90009,11791,54894,14145,57225,73490,33507,68370,76057,55705,81074,31263,11147,22413,45853,16959,85528,77814,57560,78858,44165,11652,98128,17381,25173,98285,66123,75017,78710,68525,12307,46013,66970,72207,88918,13655,13750,30977,96533,81430,17214,16679,13134,63891,86472,88229,95691,89374,63389,40297,62607,24684,39031,85929,34287,20186,55464,92425,54635,68344,38465,68977,85393,42189,50110,87332,29960,67516,13979,46310,98143,82597,69256,25252,42139,87680,79366,66022,37118,30038,17037,33496,54361,35316,20199,59250,24852,92348,15062,45319,93159,19373,75465,43443,78594,19326,62063,30484,81669,83286,49005,47095,24366,52215,29500,70853,42578,31270,31739,72110,25739,78220,82904,98547,32596,15526,92874,37954,82371,56835,62330,65702,50622,79199,69496,30200,48223,56431,33346,21024,44667,66642,37553,96169,38953,77619,69295,79642,57544,81286,92423,22659,60632,79156,79467,79809,75982,52991,55837,69104,92009,47711,71683,14206,32255,66321,65495,12175,32827,48072,18452,36247,96989,34755,72736,28843,62265,71332,71214,91079,29588,58800,61306,67782,50844,57026,35222,94789,10467,70238,83513,39833,50529,63924,61614,26538,64052,71958,34635,55271,54388,71984,27050,84391,37031,69470,92457,98330,71417,56775,84540,40314,64342,42007,12005,59328,75119,96545,99075,89167,61849,22480,61502,50745,48455,46301,85235,54502,63598,70280,84304,30076,28030,79222,65703,71130,98253,88312,61625,90678,33085,72919,76563,70391,74566,83506,84553,29940,14282,93695,65927,61886,70398,12760,44645,43632,25716,63248,80761,33713,12123,13529,89755,26323,31573,14802,72466,77622,41352,75731,13218,71954,35337,51733,61993,17571,65804,17585,41561,36907,54422,48829,20681,18601,92658,55445,81698,77195,26255,13660,57010,27020,81828,75243,70568,83884,68931,26339,26766,33465,67718,56769,42111,25656,62997,25514,36798,43048,63061,44911,19112,82846,36668,99413,25222,69232,96082,10068,56650,99786,42754,59673,99406,32528,94323,11725,98663,52502,79806,97430,73651,63940,49770,97509,83523,75600,10427,40357,98565,44467,87081,14163,51069,38551,88261,28590,47213,26311,96170,35113,93882,30328,40191,74010,97312,91528,80244,38875,87107,61692,12222,50006,53776,85682,40630,16215,65371,41444,71739,38788,23992,85640,77659,62130,83019,82351,82900,61181,62285,52019,85688,78929,48350,27008,44384,18175,37571,83668,55560,52497,92627,45516,54114,40431,74361,31573,54433,50204,72162,69855,34206,64535,18674,47092,97346,96918,64362,77114,82661,84555,77714,99656,17407,14851,26574,21195,56197,90883,21258,12049,22582,48293,22214,29955,29244,62217,23931,86398,14709,54275,82549,55218,41615,32670,66667,86784,52261,22334,31838,87491,12958,75257,35959,45278,25154,72502,73277,19539,86081,10028,86528,56863,83990,71475,63095,32744,53623,21840,30614,37971,77155,56032,25728,40464,45834,73331,34251,47060,81393,31735,68459,46004,72651,35138,66302,90912,18501,18644,55330,56432,73182,14388,80294,66753,72415,37562,91530,97793,11482,44323,30004,95908,21441,25395,60586,72458,18792,33172,15505,71911,49844,90019,60355,53411,19360,18276,57483,31225,54679,40032,55228,97079,28400,11842,21003,31815,72514,34791,72575,48555,73945,60639,22629,68116,21022,98744,40913,26761,70013,91419,59274,46543,81646,73487,18724,28086,59608,23968,56163,71413,70539,66993,65005,36337,79179,42297,94228,93083,11092,86432,27009,82497,12381,39392,63198,95341,29016,59839,73993,73372,86627,99768,68470,23987,93699,24137,63624,90651,90750,69418,49155,24363,38535,20482,97576,40840,66775,97591,14971,23643,63943,32333,87944,71564,95022,13312,86386,44315,69512,45153,68565,71040,32874,51755,19496,31622,43195,90789,61629,78493,53215,88133,13013,40357,70278,69925,18327,46438,57438,46716,75944,98837,33850,87959,71782,23082,65784,19950,13563,81896,27093,55013,20338,53809,27883,85736,83830,68164,43634,26183,93650,91116,91639,69795,23601,31778,79507,93761,61434,60323,56979,96098,75116,18475,16117,72898,46310,36020,95500,68485,98425,71223,48392,46112,50840,10617,42065,16808,54279,36201,73501,89401,88252,15563,66842,35895,50782,56584,40502,69759,23983,29539,22409,63981,65597,71570,70922,45452,43124,52966,87749,51899,70349,13813,67994,92767,67312,41258,50034,76528,80043,48201,49293,82731,74353,86498,27975,46338,56804,56555,54213,32896,66292,12549,12606,36001,11104,12532,12562,97456,32783,20261,29258,79179,86358,13674,83832,12359,53553,91659,86448,61941,55639,50173,86674,96309,85256,67415,72663,17912,15459,63583,35066,32411,36956,55030,84082,24121,59656,74924,26876,95791,63901,15729,33211,26225,53533,94064,22486,89565,83188,32229,31453,14951,74824,25576,88268,31530,14950,82540,83154,15625,18333,78327,81141,53402,67736,97529,60099,99659,81862,30908,35057,77425,29836,76768,31105,85772,17734,70091,10150,25295,79557,38231,25367,28060,92041,81778,86437,75176,12073,81399,86696,88154,42510,45029,77201,33746,96731,74806,67460,80204,74294,98576,79465,72215,88720,26831,58782,33351,17377,21046,55851,81519,29959,19440,42972,38051,26072,69871,22653,15339,49838,17698,68208,46299,55157,77209,52943,76947,50751,22915,31387,31077,65537,20567,97832,19872,43852,95140,17521,27823,92955,24686,51136,77298,31085,20887,42611,58131,36122,32719,44144,97115,11687,64040,80587,56031,95358,51961,91079,31492,78620,76285,58100,25352,65713,68215,33969,80745,83763,10056,31405,96617,43505,11451,67987,34040,47544,47944,43331,47572,42065,76838,79854,70732,89851,48465,44873,49460,19084,62486,10853,32767,22558,99685,30456,62306,24382,45699,52126,81943,75215,84153,22894,36276,31868,78442,68975,56210,36551,33090,39686,10767,91858,44560,83805,74763,68345,69892,38791,38902,98807,48516,48942,39752,98990,45718,61754,41651,80560,44461,16058,94149,73922,48878,39323,76757,86112,35806,92615,52393,21080,71722,43317,32647,13840,12280,26960,81878,95507,94824,64333,66020,43064,77943,36827,65950,53538,12285,79443,48174,46680,98996,46750,94488,31553,85279,58526,29246,69466,44528,19856,53298,81686,88655,93399,33407,88861,88181,20937,85479,15915,94337,30010,11786,37287,80362,28776,12823,68438,84341,12566,71641,72904,12093,15885,96377,88651,20629,97820,30446,53324,74693,33657,39963,29985,26987,49808,49798,84625,95050,61552,42260,64689,28548,35846,74464,30831,68241,68280,81807,22479,86694,62790,71718,79938,86899,48273,98884,11262,25661,84218,29284,15313,82205,44375,28725,84255,41235,15859,48884,14686,86500,23284,32035,20658,12780,17234,65662,73282,46967,23699,85084,99226,25163,35637,93329,47759,41075,76452,65127,87317,12166,84957,13196,71835,22389,66779,24286,50064,68815,60116,66476,54909,67642,98134,46547,34514,69026,27831,87835,17884,64920,14247,89096,52088,45315,71196,38164,67806,75166,48757,63499,91451,75579,66386,66696,28451,45100,12438,98343,92834,45033,35153,86731,84543,60339,33117,37880,65304,78373,73687,63795,98926,49226,32357,22755,82564,63018,40554,30228,74143,82667,66732,53864,17413,46544,69559,25921,14674,59139,40542,73025,65679,51124,96260,62769,42052,63814,14918,92579,90223,33838,41882,79306,73309,54145,11904,16300,30298,54025,29541,89959,10268,94115,39235,26829,32150,94528,69017,75445,95069,17066,19433,75879,50118,59128,27378,15386,50337,55254,34397,74426,10477,65111,44913,33319,17984,85061,33513,86677,11218,88107,72271,32630,53250,66331,35620,93143,69748,77097,84229,85251,11534,43590,88454,76598,23782,16637,69926,61363,72484,40761,81833,69854,84048,81595,88533,11844,96354,61158,28153,77575,14345,58626,91346,69639,87070,88893,71392,30340,23691,11279,86169,20481,94132,13503,97107,67792,34526,28199,19737,30569,98442,50378,98477,54303,72793,64125,73264,85473,40861,93398,59529,33052,28228,64546,30801,65825,37018,88036,93273,35835,55734,35035,80135,32649,87365,46794,81189,82494,49627,38673,94300,96937,17270,73258,51782,12266,13075,26351,91635,65684,32920,65880,93238,27168,10555,12488,70394,78294,70698,50704,64690,22153,85620,30646,69058,43216,12299,36328,54869,37677,87238,65508,99929,14446,43674,23159,77575,81613,84374,94474,14949,59481,96838,59820,64391,42039,88683,44576,24523,49247,53925,93682,10123,94403,30907,51596,54764,67229,61501,65649,25978,15399,15973,42550,31810,21141,78643,29248,85814,23805,97389,49023,83412,84685,82963,81133,84920,15377,87492,62133,21519,36240,31758,97919,87949,53481,73265,70593,75484,41384,21865,95196,96587,58344,12047,74029,45841,50422,66264,88436,10720,50276,69798,87424,86110,23974,94158,56917,98858,92854,63745,50282,71332,97905,97506,81768,46868,47951,72309,46538,82929,61619,17075,37915,33961,22138,96188,42146,54504,10513,43628,21788,41869,12744,35742,52544,65486,35678,13279,58762,19046,68913,99416,81150,50952,91225,26057,96181,16416,92837,22824,44255,62131,20227,63675,16703,20397,59774,34674,54947,11251,78306,39387,55226,75822,29736,37044,16689,46606,11859,73278,70651,68138,45196,23282,89762,16135,22730,94402,90800,60548,41953,76825,92085,58295,81237,80028,61468,18979,21220,48293,30492,68269,67571,79059,14327,66222,17334,47377,46018,77765,76265,57907,33827,35627,62583,10016,96389,93288,20818,39879,93007,12042,81739,91984,97344,28200,94553,23980,83846,73402,18684,26866,94861,44100,32656,12798,24868,45246,40370,15353,60804,49109,72625,98209,87005,38253,55575,40316,18452,58721,10699,22847,38726,72248,32993,84954,19509,20272,47412,62740,79519,49566,95412,19608,49019,68585,97038,48977,32556,33984,40976,69182,80352,56597,22030,19034,60161,64747,21750,13287,75075,87672,14767,70160,68236,80200,76800,62883,12747,27519,34509,39535,25000,96491,94815,43934,24305,67360,89916,49502,23962,93680,96255,50459,60901,48640,61867,29334,96673,62078,85084,99256,74333,87096,68430,42067,91706,78236,26605,61495,87542,90310,13259,93710,20872,78536,86628,82249,89768,93536,40820,11828,15445,89147,17635,68550,72932,29223,43772,81688,28638,18746,33985,90094,45642,10656,16639,32610,47992,71751,66456,96150,76753,30993,96857,18737,31510,67374,97741,92052,19309,41826,40086,47644,38613,56288,48162,58953,60389,98554,50555,18099,47683,36284,95467,34916,50056,10229,44551,44766,82134,91447,37202,68878,68629,50801,27987,12944,20555,54631,86497,89712,53149,62509,88038,41311,30361,19631,36518,67813,65014,62343,81914,28610,78923,53479,46155,49491,85803,27227,83066,45171,26640,92435,81900,36335,82309,44344,45539,49067,81446,50451,46387,74705,51599,80871,67619,79692,80337,57389,66473,33766,76276,52585,66672,60075,95370,20515,47247,82564,52096,34182,75127,81964,97920,36961,13613,67344,65955,87192,49608,34750,87629,87227,44710,49622,13063,89865,32717,60498,84724,19153,41146,23153,60961,63542,49532,79121,51271,78496,24747,74443,88549,31426,60735,72566,51668,98247,91860,28544,52574,14469,98016,57736,77212,45570,81409,54443,67673,78612,26190,61110,91611,41758,87297,77120,11769,52940,80738,14389,35995,30418,44852,27451,68204,98714,10929,17667,19149,97262,19892,36705,97917,62644,59792,12338,47850,57530,77918,84323,72911,71216,40423,80032,89235,72632,58103,11776,77687,83302,92217,23275,22194,65208,13117,11722,16792,32620,92514,78020,38691,53490,51668,59714,89196,42897,95068,96366,21544,90405,56455,25490,71237,54730,61212,91472,64579,61002,76262,32202,39495,38253,20921,75638,81056,68246,42594,74513,55723,58836,86200,48442,18618,58622,29952,18278,38244,76537,82520,16620,34509,68794,96703,81506,27900,86248,98683,76006,49226,83610,92409,33256,21710,44710,50851,53542,90392,34258,16507,51479,51429,22617,85327,25579,62977,97242,71835,78946,90105,86661,29145,72301,67491,97827,28140,86917,71841,45919,66888,89585,99230,59475,58847,12089,37072,44888,15838,52604,92295,62363,34858,23939,13022,56333,46121,95051,43318,42149,33610,70738,91710,63755,64466,32428,55103,40810,36775,23819,10967,78387,95140,63959,70449,18710,38780,59133,17898,35788,77327,23397,70891,46883,81717,45410,28811,27057,35267,41795,27584,10390,55896,46582,55616,78099,48930,65246,14429,34361,92025,54920,44952,82149,11319,95857,50970,11772,99632,51337,62008,91286,13364,55701,20940,99567,92103,81496,59124,23939,17428,41848,11155,82150,95963,96514,21288,42690,84704,41499,75726,97577,44867,64628,44218,65355,43848,67867,28374,21744,58039,61041,21092,12037,39542,91749,94048,51234,85414,23787,66375,87269,27392,35002,74088,49845,28008,90313,86408,32545,39251,35563,85119,76354,41720,64350,24228,42426,24167,17847,68894,36386,30077,61140,90027,58551,82594,35231,56556,36771,19907,44917,92345,45995,90648,88854,72656,42155,25293,13157,65922,32232,19466,97389,83628,24273,34125,13973,39452,31231,20147,73235,31824,98687,30291,43998,66499,15298,52816,17091,36069,13017,49369,41481,33084,72533,79261,62740,48626,70863,70281,58403,57925,80677,28791,63776,50312,78130,26595,39720,67330,79988,44292,13522,94663,71831,67013,64853,99332,58787,16604,73648,54529,65914,93281,59043,14934,14625,41967,86071,14945,79394,78934,13029,45197,28471,90359,92022,66758,84178,46656,28270,58384,46741,54404,92338,65017,98160,45181,73002,92802,76419,49268,66467,85238,46552,64780,85093,88614,97629,42190,95246,83599,52631,65711,74959,25561,34737,54148,44671,59722,97367,35983,55979,27055,96746,92749,65233,13705,94557,84449,65809,33892,95785,67642,28229,72877,34365,50155,53954,83070,32579,70713,53151,78661,45414,25396,62617,57411,57145,14328,72422,39159,70883,79563,17732,50491,50655,79047,64117,32939,30894,10383,72406,42848,92026,23343,26223,33660,23346,12941,74928,46299,90081,80296,60276,22211,57402,91383,91398,27213,15032,39146,39712,64037,95584,72478,65996,62747,70600,45800,30678,95400,90014,29780,82576,81897,39176,69478,16218,66053,84973,40884,90064,97942,96987,66773,16974,12127,58920,53402,58931,51458,82464,32428,80588,46268,76099,71220,61968,69179,29929,88307,32966,12903,17648,56817,99574,84886,89745,34906,44451,52718,65468,52417,50318,74416,73494,74124,51235,47035,36604,85157,10508,71787,99114,15683,65648,67052,35514,93402,19070,50753,23373,40152,58286,45690,12922,26814,11869,57300,30441,56046,65075,39027,88400,30888,32728,73201,58194,92063,88995,16197,52021,89538,43570,45184,34493,54817,29901,14992,98235,29962,55312,92669,87338,73189,21187,51417,37716,40916,63257,81005,43720,84417,16859,53309,22900,70353,22759,38871,73960,70563,27042,28225,23857,49345,55244,82861,42299,12881,23363,62703,38887,57944,43244,18617,39841,72529,70151,40929,24326,95458,52880,67859,25280,28455,36859,54388,67064,28596,28414,63326,61604,21361,49702,34280,20664,59161,39834,95585,60602,30702,55667,96823,55689,30900,19492,78962,38210,39254,32243,90478,39983,44350,93661,16346,13227,74613,93129,65033,76849,52388,11063,85330,23595,57409,12919,12961,84576,56518,87691,53547,96207,89462,75536,46534,55274,66760,71518,34482,62849,33020,53983,17496,22765,47590,23135,79682,19496,65096,53020,71769,94246,47750,99795,48929,14694,67468,85704,20731,19907,87437,63798,94887,80910,72116,21343,39508,38216,78047,77589,41641,51844,98432,44297,53050,60978,36447,94796,97176,86810,96022,42160,22266,37264,58275,78158,96042,26585,78967,66942,64780,13541,97214,19474,48384,46647,18599,23585,97235,15504,19529,35149,67459,96391,33180,47817,62615,91616,48197,18122,27745,86620,95947,89197,71921,97253,63073,27766,39216,31780,13561,44253,67022,60056,44060,15654,29660,94542,28286,78566,57033,31355,38538,74641,46153,67758,72547,66923,26901,17192,35733,16886,67093,86125,70890,18161,32764,65974,15653,15272,53000,65748,76590,35416,81578,18717,43009,82769,83326,12818,19541,37638,51099,72810,73096,16786,94696,39669,84553,29334,91489,97035,93425,46616,64167,18335,72461,99143,52323,93713,16715,55405,34476,81304,90746,88653,74980,63634,56881,95325,99495,98673,57568,47700,62152,31567,18624,69010,95072,48296,68761,55403,27095,23029,96163,33322,89755,48272,46596,50061,46943,59074,85121,32346,40170,67570,78464,41601,46485,74816,16931,31756,42125,99803,31245,51174,92964,55108,76907,20732,98796,68185,93646,33913,63297,36259,80732,39651,41838,98700,90867,43952,54319,69813,99582,38446,59922,56868,36192,51331,94202,81506,54930,61447,47511,98335,76274,83722,34170,86547,27452,90898,39049,62315,59686,44172,37664,86626,24823,27292,99554,66364,64935,88367,59197,43985,87683,16222,12452,83933,89302,96786,35426,30457,63966,70979,59842,21408,93859,61980,98621,59175,61977,50291,27264,34471,99520,13231,10837,88855,76994,82407,91930,31608,22230,24343,17777,38997,99233,26151,82941,85253,68810,40014,67177,41131,77226,47110,63957,18286,11680,57500,73854,35595,95744,67774,37489,31706,74557,83699,13714,82688,33951,34750,59983,66429,38991,23674,47832,59650,44815,17724,64881,83110,69743,46640,64279,41662,83319,17520,62118,30685,87030,70089,82905,48199,63700,58499,44295,17659,93865,42529,44057,67183,11150,83033,52069,35894,52932,88585,60791,21001,43248,89324,96175,49277,10425,98706,79956,12972,65495,32850,16341,93085,97954,28364,70554,64986,16289,83400,51117,96511,38468,66022,87097,56531,93476,66291,97767,75721,59125,59694,22937,43523,15940,45031,10735,43383,35379,90575,19638,85900,81930,86814,93090,52487,35925,12955,42373,12869,29059,16398,71982,86402,13555,42403,46913,83913,44238,46267,14238,26310,95085,79855,70873,20151,80297,10684,29677,39315,68765,32524,13566,87793,97432,68070,69119,79964,81448,74279,57672,92725,87195,99882,17072,36620,30235,63882,72580,37593,18204,49395,76686,94465,48236,81612,11940,97240,41508,70816,51624,20869,65645,89289,19559,12687,77660,95643,54392,17958,15914,44339,29671,35307,80009,27083,94985,49855,80540,77590,81923,38085,89869,76724,16078,66524,22549,92398,69313,15940,42432,47621,31112,14609,18791,61581,20746,69249,82533,27364,14056,90632,99296,93524,67476,33872,32267,71485,20575,61467,73119,41547,44050,43952,24570,16799,12954,32135,31866,55098,34007,53198,49886,16254,58977,42942,32910,13739,40025,66904,60310,62047,64751,99714,40580,44509,11967,76446,11361,25836,25577,21903,53670,42736,58529,19591,35336,21500,48192,73234,77620,87264,10515,98888,56603,91160,21486,79384,32925,93822,44034,33092,26337,21677,28302,36390,98810,95097,52679,65068,21690,85654,14603,22596,74639,89037,58824,71288,51079,59873,71281,30377,38601,48451,49854,63591,77743,32154,29627,44185,51210,57583,47449,77635,72118,50138,53871,52205,71493,69773,37349,80642,25412,95883,11139,42315,23829,66629,98350,21594,83260,99859,72030,77838,60201,94106,15343,64327,50037,73690,67539,26027,39996,15356,33778,86378,41895,84295,36757,33888,17547,92251,32804,63582,34552,35343,91087,99755,22906,40280,78687,21445,90329,20521,89364,17687,27782,84815,59677,19978,85369,72225,88306,85407,67092,65288,15281,49350,77395,28441,13402,17488,57581,89766,85274,48334,59072,70147,92533,39215,58695,89702,30767,50384,79866,58571,87293,38708,27256,92124,43989,50510,92334,51452,83145,51065,76708,79637,99875,64498,79329,70688,87198,31394,43185,16206,79873,63540,26881,83880,33467,42279,59556,35313,19023,55412,61504,27567,60181,86610,91222,60289,81748,20919,34546,84702,52004,29740,91985,89842,34027,86405,58784,96993,36150,16186,92109,42650,34531,76093,40131,98508,52639,29812,83714,87620,73605,53333,22409,31564,27067,69507,42304,56089,84514,41896,77786,30708,38970,34752,50733,19815,74764,91430,74366,34551,98474,70207,42815,23901,25028,89840,61085,81303,73409,58194,56342,54219,72784,69846,76041,18081,51391,86227,26540,30995,22044,66472,74142,67882,83624,21117,52958,58306,20352,63732,78038,65971,35793,85012,94102,75306,92988,99159,20177,89475,89930,53514,54482,56472,68490,31191,68975,60006,92013,56430,65681,99075,40140,54974,97861,20324,74536,24627,70606,73115,72198,31169,36688,56499,41690,16560,57722,22980,77471,48862,20705,61455,60273,72885,67394,33135,74894,49258,59952,56697,27844,25128,33885,75912,72353,28989,19971,94617,97388,45453,18086,18357,58680,42926,67097,46954,93966,95468,83019,16932,95621,22309,27756,70921,98244,81246,23435,34984,32367,94818,66445,13091,81035,31440,82391,98592,31373,99148,11784,40696,51478,49569,60272,66880,17332,10344,46777,66353,96496,36707,77917,63976,20154,29320,98985,57274,32106,82346,38635,15915,14284,14703,12837,71340,31519,73456,57108,65606,69702,27525,85395,96341,11801,28584,31092,81351,47355,66874,12671,36223,27362,36530,73372,40470,78047,77638,74737,26029,84817,21541,55502,94592,28862,82398,49286,54357,78689,85026,36116,42930,46106,58918,80519,50801,74079,21295,42049,43789,60028,55573,68522,71490,54037,89703,88118,24711,70915,72365,46144,74894,23647,56064,23290,19193,52450,83568,31895,16084,60341,68447,93112,80390,50089,75753,61141,61080,25493,34008,91661,92370,76804,11230,91738,12668,15645,77824,11212,93502,17586,24979,92550,53467,61860,68149,12280,59898,76174,30176,70566,94035,21376,54166,44685,15272,15608,54621,75107,80751,99087,26365,63010,34126,64339,59107,28730,68927,69557,55572,76444,50471,80801,65583,48828,22647,91944,65706,95924,81862,63290,72572,52196,67716,36092,57728,54719,54229,76140,15626,46936,76077,22297,95805,93011,28686,25289,11813,80041,95269,36991,20757,50218,77643,49644,14877,54631,55182,62536,23135,76094,74919,14569,49499,11403,47583,59795,85650,31079,40117,74931,74972,22823,92972,92086,27430,15323,57875,12619,52610,54134,27312,44988,16405,21876,87238,18524,80870,56380,38902,65237,44855,79483,23210,34035,15837,35432,46902,54551,30432,72720,43704,69393,69651,20031,97885,14144,30449,54780,56001,92780,24422,84740,85801,15209,37554,70963,14060,29382,76861,21912,86095,62369,32870,73232,82091,76222,18444,66204,33213,96183,34111,28454,53429,58632,45880,20756,33474,72258,92207,61226,17256,36056,98602,92256,99359,78268,81007,72152,79130,49445,48635,85974,96547,45958,97006,19742,35754,21835,13542,90193,69589,21196,68810,67492,67354,25528,39566,64606,58142,97394,68035,24889,92380,95122,21503,63909,45783,98681,69153,20768,14666,24131,63325,61054,78355,37992,78131,40402,86022,39539,26852,94645,87098,17842,25014,36123,90104,63640,97966,51002,18465,57035,60486,87564,39400,51298,70716,22776,63012,82531,45141,85070,34104,77401,36417,53765,46215,33157,50693,82951,23250,43253,41857,44768,50627,88843,77445,98922,51167,91925,29837,59090,95924,29820,86206,10356,13543,17178,49916,70353,51819,81241,17752,92246,33404,97614,47365,30941,27987,35712,63053,91326,61114,26384,83671,30890,77528,31538,45441,74958,47392,68731,39365,50235,28993,40257,85879,16334,91744,65281,15062,59904,51113,74266,51401,43304,31553,98363,70336,48193,34804,33937,15753,27771,70780,90784,90816,31565,46045,62850,98337,70247,60250,74920,14647,21001,67655,46024,13567,74771,91877,49355,79209,70437,65903,17268,99061,19653,28443,23932,73717,97384,20183,39877,35494,55951,77212,83116,88289,51838,63240,86795,43749,88603,95309,27423,87268,40030,49910,38640,28631,37111,18580,80132,89093,87806,71878,32846,11504,55610,66926,49291,60871,70871,59537,92966,42393,51512,52769,54460,31240,56849,32992,83859,25269,20267,27028,90903,37481,73824,51210,32708,36186,99365,84365,54793,73765,62715,75671,70148,44955,92633,50948,39401,98494,28228,69521,32256,86475,13366,61625,48124,18255,69825,74597,89790,74678,25704,58883,47399,98715,57686,80955,32428,32012,31713,63067,67751,78104,34400,89407,86910,51960,60736,49643,91185,24146,57933,59349,55013,78600,81234,59338,12286,97638,48803,66229,90181,11648,88807,77586,10032,29457,92732,23394,59099,87312,53757,48194,18428,54057,80378,16784,10590,81557,75753,22877,74044,69680,96611,57365,91729,93075,69329,65140,77752,90460,93339,93972,47610,61874,40896,23216,84525,97782,72488,18798,15472,36091,90519,92427,34972,28785,63643,70181,66898,66863,76998,85114,19107,41444,15181,73543,64962,81536,75868,33108,62139,24369,90928,13491,93585,74113,48510,74993,47596,44719,90409,42787,72716,59858,86359,16210,44374,73097,34197,29475,23509,51328,44333,29455,78492,82936,43582,41611,34119,67382,90005,86820,85040,74623,45074,68831,39548,79451,20007,50329,55409,72468,62025,44075,45479,74631,86522,89570,66852,18943,52104,36996,40826,33228,63213,64232,31986,26922,51456,84496,83670,21469,53063,83739,37324,55212,73450,99521,98626,13779,50645,53446,27245,87791,15543,64701,65129,83847,26004,67841,72961,71445,95577,24416,71224,38063,38915,47913,45034,62193,93380,23934,11594,56518,56421,24358,81679,21400,93431,49848,42453,87732,76502,16912,98967,22112,73485,76896,94629,60293,29199,36536,63514,14804,56894,60236,69946,65970,81061,86259,91577,36163,44262,28529,79008,48399,15624,43221,98377,98556,98868,73640,94987,13477,30469,69331,69630,80607,49426,48412,25735,86008,37531,77515,16306,24758,46433,29673,92604,20740,28085,98299,32444,41724,70201,85668,42484,92169,68025,22061,67886,41034,52767,53170,58399,24160,52805,96833,81732,58796,59555,46477,46234,97184,68128,84124,76554,20038,47789,70309,20357,32841,91836,38012,41296,54592,49667,31628,39051,14197,35182,26985,15913,26189,74370,77428,89568,93518,42550,68513,53898,25474,35253,60245,10329,53929,57471,32084,93112,22101,99710,82493,17826,64334,71948,25854,90602,69379,74229,76438,69211,37717,59633,33882,59325,69475,95446,50164,64257,86493,17816,82838,72575,82035,41096,24805,88014,80503,93572,67751,36573,22530,52604,72439,70464,10848,96007,18028,42795,36446,98415,73616,21758,54513,97942,27231,94746,53594,31892,66772,47764,69782,77020,47148,82203,29997,15200,55885,59353,15895,56493,97293,11442,14975,58086,95403,36087,11493,38268,98179,86093,13692,36988,94638,26319,47862,43747,22570,59307,58886,91621,74400,64770,65658,17859,34593,49773,60552,94794,98646,62046,43190,54325,24723,80833,89378,83813,89087,26153,69256,74763,45386,36266,26018,33255,93203,17888,28193,46962,67468,16242,51711,25998,22801,81998,36313,16884,90359,17308,21808,34844,53704,88993,46759,84386,66094,38797,28563,96093,25321,32765,24018,74938,80532,17155,91764,92137,73845,37914,26263,75877,47230,66637,54932,20580,86166,16125,73313,67623,85460,18416,38039,94742,16908,38942,49522,30301,91324,66144,79194,47317,71112,54317,63211,43295,24914,60255,55824,94433,88222,18954,50139,48425,14277,30271,93461,69684,74943,83812,29084,35488,43163,43937,16724,40377,58918,70473,37248,33032,70987,73714,79666,98126,54659,88768,70908,67042,40310,79414,20671,67672,78327,28864,55066,27687,68632,79394,33169,81302,91048,88513,65212,82753,66250,44703,40626,58826,98679,67992,40822,40859,89983,95206,62149,81471,46618,94448,13550,23053,79677,86069,17282,56309,82310,61456,22403,84124,78125,75281,82182,33041,35172,43694,31213,56420,99081,89483,53226,30268,81860,29186,74468,68880,93549,80364,83366,87558,19925,43804,70832,94372,53903,98459,18315,75023,69168,88950,32720,11178,67826,75565,45181,74018,66709,88914,40627,87633,34094,56387,37938,98387,77052,28922,29000,15285,32811,52508,12837,46152,90441,92290,30232,98555,76711,58182,37083,59893,49356,18542,51186,89074,50436,57370,42945,96567,91396,64577,52345,16716,42189,95452,15297,76831,57358,90899,25690,46757,31273,20076,89476,17661,22608,34467,68188,51826,72707,37535,34174,81047,84860,43321,19679,99182,78462,18016,97724,45745,76574,90145,42126,74911,33090,69510,92928,29057,21746,79546,82855,83974,93012,81439,37230,43055,40755,73561,88949,30024,24103,52496,79940,89504,81285,21831,97958,54074,33625,32000,58694,54789,50415,34066,30007,42675,44052,58116,45987,63814,10440,59559,36862,41288,65943,63416,19643,19489,72117,20031,53654,11875,52251,21866,59809,71391,62523,38512,66716,58024,89146,52175,44398,93652,86314,22754,52836,80693,31760,95309,99002,83503,73020,53360,98374,90485,60697,81653,84120,40423,21443,99179,35334,27721,62363,20313,65121,74694,18519,23418,82273,21168,18173,76656,56730,71104,91664,81999,70911,45091,29074,27132,21875,73766,36997,62079,69713,60303,97936,34386,32789,63341,19586,64282,31327,63786,53155,61355,39141,76738,81698,22326,42082,21141,18814,15255,16293,15403,63961,59480,16597,38633,93372,54652,23737,79782,36151,82645,40329,95807,32625,71722,71204,99144,62833,86819,97807,86999,92224,29011,77478,32627,66742,86361,10219,18638,19488,11881,68634,26819,58426,33274,32587,37348,50833,95807,50026,34549,89083,48171,87614,52084,58604,75970,48784,98291,13972,33820,44502,45668,80292,44590,63640,67491,92903,52553,62878,25632,70734,39801,69895,36609,29083,46346,81154,51268,72825,18279,77138,70935,65199,55214,46716,53387,92331,85372,10542,78955,49999,89569,55157,27455,11281,78208,74944,81353,21807,42822,44806,66317,48320,42456,42238,11071,72660,86203,66535,99965,82060,91560,29930,30022,23710,28873,62177,8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36,36489,30091,71964,75360,57412,50453,72849,54389,43803,99901,65046,50651,66158,56637,71258,96331,24138,43519,26147,62647,57105,42944,83156,48440,73873,29991,75135,77138,67551,83625,15501,36436,53117,12814,84886,46154,65906,20751,46484,65158,31977,48379,37346,93488,56019,13374,43354,68090,70602,50882,75142,79574,21386,18729,26478,28642,39366,53416,67755,33927,47168,34700,61896,98473,32013,86315,67342,54447,23596,66481,27892,49479,12444,93616,64781,68426,66606,97123,30074,80946,82792,51790,57754,27111,14851,86372,52443,98660,44545,18067,78210,25561,22298,17797,19238,95230,34043,75171,66708,12032,46841,96583,98500,51909,45829,27631,71938,75547,10795,28575,37440,31089,61729,54498,25798,57682,87307,84760,96215,64508,16551,49317,94997,24741,53190,10849,18241,23362,69814,97068,32224,38945,93402,85314,57424,74457,85321,60188,97571,78063,89507,76796,91071,72180,77349,63890,25356,60458,82637,93528,53387,57145,81664,43297,41068,37557,11671,14793,16181,45695,29254,21967,92891,28538,51821,16637,34460,35146,27852,71833,20406,57835,19570,97618,96380,47889,99342,96998,48093,44940,82818,56740,96266,90823,19219,40218,46632,43033,76849,22631,80403,75149,33702,58223,41083,98660,29726,87562,62588,67665,60099,12276,80844,42139,91456,40609,79919,67736,90652,28357,23218,64375,80092,82345,87412,50703,81762,21032,66043,79214,58800,24862,57296,28539,73689,77797,10094,45462,31889,11029,35775,65029,30623,35790,33364,12555,69070,18218,43234,62284,14137,78479,69612,46120,95789,87945,79347,28260,59293,29883,91858,13436,24665,24605,14528,63609,81580,26778,69280,36685,83741,43734,10695,78678,46410,56814,95629,14843,51828,18490,83518,82280,83606,70647,82427,53331,53571,81871,25957,30279,12067,77723,10686,23948,10476,88933,82852,70857,82079,42851,95540,75288,75829,64382,46122,18661,23449,72447,33101,46874,31485,10763,92788,24877,26066,72761,66788,32256,64507,23904,95408,44631,11636,31988,35148,69661,77635,67378,54677,82397,70122,43693,53077,30508,78737,89753,47831,70415,67157,36798,73653,77893,74103,94126,50821,90415,11992,83764,84074,63782,63294,73829,42095,86200,74199,26271,11319,93499,68597,52686,62707,41999,70318,54661,35135,26727,66672,41566,43712,18589,43329,27908,75698,66157,46376,90079,42505,96880,82031,57137,33886,74083,95215,95043,98579,95110,94185,76729,45183,86065,38523,76150,60618,25500,44878,19120,77521,88584,68091,62804,85003,61232,76116,12133,42062,12477,76001,53080,38490,75327,51610,81673,85701,12240,89094,20165,16073,35763,92486,80977,59968,48250,52252,93610,55448,31899,39726,68478,18201,61185,15421,50049,20268,35781,24313,56033,37989,35119,82735,96009,13435,20372,89855,58141,17663,31677,27364,42927,78940,11082,13755,13657,30031,38089,22844,88343,64286,88763,65482,67828,32011,24370,38187,21271,57921,22708,83661,59915,21720,48432,19182,90664,47018,22025,84639,37484,38271,89036,40613,45613,65215,43573,39173,75312,21903,23489,78241,47906,27005,31885,51555,35229,87807,69689,30434,75204,91115,52872,40154,44998,91019,23505,58426,77736,30491,60200,43018,76577,86468,17725,67427,11416,66346,81413,18309,16763,38291,97057,85789,89291,21603,79053,88890,51712,17907,27196,18448,68713,93266,50948,95410,65214,53275,85130,12383,45575,37413,63569,39292,65041,37258,24116,18259,46613,36545,25129,31465,45191,55841,85673,22307,18869,51361,28173,57577,63809,63370,25235,82169,34389,53716,71992,12069,38121,99609,76963,96314,91080,85597,56446,76390,76004,59155,60772,60003,27935,53971,41445,67569,92719,77677,99293,33815,72457,32775,46780,43027,38984,60950,10991,63510,10099,74453,91811,97742,66702,55747,37980,11889,67730,78266,77756,19590,99380,52285,49639,94215,68857,26273,31823,94277,54506,61349,93307,59797,41490,50189,86445,85019,84846,15226,27035,78907,28117,83106,24818,92883,25100,52002,25752,38946,86639,49485,97210,27852,98173,36016,47812,44752,12289,28686,76956,12525,30811,92303,83342,51024,96764,34228,63728,23460,98243,88190,33176,34814,56179,56557,20714,29325,97993,11968,14460,17558,55181,30005,66869,38616,39792,58995,34833,87685,11700,64599,57224,51107,68869,18472,96429,61194,59466,80880,56298,19634,46904,52878,34122,99255,30087,52444,16434,57185,86905,11250,29700,26384,46542,25118,83994,55036,42373,70631,23518,27669,74688,54060,50378,61317,13708,33949,61554,92262,88200,50945,53769,30485,32237,40428,20125,33690,87008,65751,50831,65086,80670,79822,12748,78776,29017,87657,53583,28227,53749,22169,78969,95885,82852,31706,73902,40275,34591,32720,53799,84367,55788,74547,80375,32212,34691,59830,90300,61787,97402,18641,48247,99181,24962,30430,44724,48824,23907,72621,42610,69314,53701,36737,11678,17179,40799,63467,34034,25514,84635,95282,58018,85027,64054,17448,31010,77599,83636,99391,50945,13631,20474,92298,69738,35330,71467,15661,98758,67843,70041,49306,88459,48956,88631,40543,75837,79881,81137,37985,17280,43098,48572,71643,61256,80106,87534,13005,84634,51420,35124,94068,73594,57582,37431,95753,79619,62578,15814,23509,40086,92666,82895,92454,95388,26088,74975,24321,69983,28985,57395,64110,63198,22235,43635,11187,17776,36270,46944,39749,64823,35253,83170,66527,68553,90249,89674,13464,73156,25359,34042,93722,57675,40274,65611,45647,62700,17355,58655,55821,98952,29543,55333,23396,70589,23189,89067,58637,88914,61825,78381,56384,47852,12378,14369,40940,50585,67730,48154,48028,43358,69404,86253,68859,13419,19036,73745,44440,10833,34992,40322,61076,65305,85887,61945,23852,51519,33494,98835,32030,50289,17776,50563,18937,57630,40451,30556,51618,12040,94518,46544,79973,71543,84266,65231,41114,78596,60894,91078,95974,85976,74058,38659,71430,73589,28021,80984,35084,57672,85197,49004,82765,58383,64321,99465,66863,24992,30567,38882,23680,67962,66027,93469,29715,51587,89235,30650,43457,53395,87682,75239,62713,46574,90407,31736,47488,38895,73792,45826,58006,58039,49506,91453,52106,20834,56152,83764,95113,23099,42830,18486,78809,96605,25156,97070,52019,87533,89839,14475,50884,86363,27853,72101,11060,18551,78943,90133,62443,48717,59810,40923,38106,82244,15165,37388,41508,24319,20741,77118,71755,19743,43965,15745,24659,53653,75337,34701,29168,28406,14821,53654,58931,41172,84557,76067,71275,74452,27956,72339,62935,29133,95337,46449,14970,22870,65228,17651,10258,52448,62906,31209,72957,50587,51739,77424,23108,22092,37118,96915,54509,28209,51948,29753,32965,11077,40097,24716,69131,24211,36683,59453,15348,62995,93069,60226,81662,43620,59058,67503,64290,58719,23010,45961,37564,11668,77636,19711,37559,48036,46487,49554,14740,34044,13371,44408,36707,51524,18781,17238,87501,91657,43298,59400,85448,87148,77357,86204,88764,17629,38300,22756,27168,91386,13525,48860,27755,38059,43353,52372,95757,50308,32958,24009,77972,37432,78035,30606,84056,62441,84062,70927,41305,86428,40929,87671,12850,31436,75443,94944,90453,66854,90852,92837,61769,75670,49220,76994,63841,60373,14397,67903,53466,84497,22853,59926,48757,39240,88228,78335,76613,12870,62053,15983,58393,73973,31229,97063,22606,71263,33013,50627,23345,57620,70735,43898,47631,62080,74377,92791,95442,61497,14822,83012,66345,20560,44312,29619,17975,12829,76514,44761,51856,18750,58952,94186,96789,98707,94788,76763,90995,14842,52669,27094,27585,59049,71722,47879,10881,10391,93448,29172,15719,46977,63000,30190,31439,49924,38527,91391,34588,72035,22434,65983,45605,34296,69121,69355,36942,72983,89780,30206,48609,93472,42239,58184,98043,49739,12886,74353,90423,49901,54852,93593,59257,61615,43345,83478,44610,80521,99380,37864,58727,18758,98916,16688,53320,57645,40396,75412,25824,95414,74064,90231,54641,90362,13190,44346,35456,31824,27866,93126,15002,33836,71864,11979,39963,28034,17989,47943,50701,94018,44793,88275,31896,41397,31777,98772,17488,90304,22906,53600,42390,29523,99650,77479,41606,34166,16265,98802,32569,72683,67686,99146,89573,81602,30441,39375,72864,31513,91363,23742,76725,50143,59323,29152,28126,52720,97246,59250,21724,98095,40536,47037,23791,64878,16291,88323,71701,17327,98621,12170,61612,90473,22479,25762,23322,74768,38198,70112,64094,79016,58840,77387,71986,31666,38221,69081,97720,23728,19372,44188,96028,95469,80556,58883,45723,97730,69662,53830,42668,12499,91564,92037,34723,75583,91925,11274,11493,23781,32394,43071,78573,50105,43324,30560,60157,60634,61447,42158,89801,41191,92799,86224,96646,47673,78439,16722,41913,64084,33429,83387,10549,90445,14575,90629,30020,85292,84987,77900,27331,85368,69956,24539,22793,11718,93911,94989,41118,17692,49971,31784,58624,77359,35052,81553,55034,93801,19880,26779,11239,40631,70327,38482,28626,81927,76240,49717,32486,30244,58447,43600,95078,11523,56575,27820,36026,89041,26962,88804,46531,77082,56957,19127,89265,96496,36591,75591,28404,87011,27063,76869,73451,12393,80741,31574,96391,51022,84023,90413,23261,35018,81329,34339,50401,97761,25461,56439,85140,26230,74643,17680,44858,57368,17032,30183,86151,59804,52180,84225,65214,79853,29314,78487,42329,55294,76391,54063,27061,75424,46530,20350,74764,23875,50329,65925,20843,81326,36004,53219,89636,69086,30167,56120,76761,15676,90371,26102,13756,18958,35052,82516,25899,93750,31466,63230,61974,77063,32702,94169,80076,59467,63533,40763,62846,41711,89292,22053,19698,33069,59628,70582,52282,40919,68239,50907,94374,37180,47759,98264,92366,85273,33307,32655,30211,18428,87836,38471,40856,74685,81689,19998,26861,19805,32678,19849,39411,91599,39583,23372,81881,97295,19158,34076,59252,29212,41770,40982,75986,23625,40841,12628,87402,20931,99992,27913,55267,58179,69789,82229,88257,76763,20592,26966,12287,38129,94908,66264,45127,56024,15336,82955,44456,70664,78515,46651,22885,13564,77474,50507,71096,39488,97588,41738,28461,88799,52585,39533,46184,22127,45386,83616,13057,93125,72300,97603,42610,45016,82666,28579,46748,11983,34784,94292,16964,32152,95726,13203,20795,14049,14747,59991,74744,50596,96276,85315,15723,25476,42598,92365,10115,80920,70108,18227,30900,36777,70935,70559,29692,17293,58381,10327,74365,83807,22482,72980,10763,50232,47058,29229,61434,37981,88161,71093,25503,55832,24245,46043,71704,40667,52159,99313,33757,38954,62759,97874,23628,21406,66005,69834,24111,55315,35982,84794,41700,85316,84989,92673,67313,21980,99730,53030,52109,59021,30173,49711,85141,43241,66728,24832,46197,84405,63358,44158,82115,55710,81692,24655,51781,37040,39451,34357,85553,81150,77889,69795,57605,50484,50194,72145,95449,57950,66007,28559,23902,97663,22645,34805,43246,28575,77037,73866,84985,86027,53811,62163,88014,80882,52483,38008,40563,12484,63836,82324,73551,10657,72276,24194,98715,57717,31630,55465,97792,80054,99265,43088,69727,67643,29030,64017,24314,57708,64883,32337,36106,44430,13740,52333,64252,55470,11688,85209,79456,53509,40373,34551,83863,23422,28734,36897,90241,65700,98822,74781,65009,86100,32551,54015,36268,64474,89999,40841,55520,55090,60299,55126,85102,85069,51055,69266,60860,12538,87950,23570,79900,95661,45164,88589,31457,12022,68032,51227,62750,30393,70796,12351,10662,19074,19788,72389,22096,60323,88437,78930,32431,99237,31345,29604,98102,78305,11106,78604,33749,68983,41115,41989,71884,41667,18502,97861,68749,61280,49358,13126,88335,92895,56882,87497,19826,63320,74842,29128,38303,57431,86876,80725,74468,70792,49421,69656,49102,51533,22614,95723,74381,73002,22322,48017,34305,86900,96792,35208,91101,71539,26628,56922,10386,54955,11055,94428,50761,30025,14531,59059,75328,58585,38401,42660,40987,99856,55399,12786,40066,67852,87916,49130,28839,12674,17539,63284,88375,69301,62323,94292,93306,52429,59305,68860,67582,76307,45534,23515,22087,58967,34794,69179,93254,67814,63237,52482,68667,53640,32514,37742,64383,85604,28307,24622,60446,26191,99757,35826,16924,52443,18554,17179,83493,66568,54169,37832,49695,46681,77995,18632,10772,51907,73456,91576,93909,16869,66139,54617,43528,57508,72377,37720,68495,15306,82736,93505,15718,75779,39382,73449,13894,64749,88293,65903,72718,93592,50912,14151,89716,60526,78736,38907,92608,91605,44745,68743,23703,59331,57275,55907,56529,19685,70017,63134,97575,57131,24169,79870,14850,92908,45707,63185,26382,85292,33069,27824,52235,52576,70030,87200,39891,85994,81506,10145,91913,73975,66976,47991,63648,74393,43481,32600,19023,78291,89203,65843,22882,69269,95056,76056,20100,87843,60599,45620,69203,63714,96361,90051,54454,96244,56470,80308,58778,60548,36321,68318,50962,20565,47350,83116,95065,77115,24857,18500,30745,84388,88553,62296,70604,38875,54194,12486,75563,57329,79117,92471,90505,99725,13566,95245,94344,56179,26989,70549,49371,92290,57564,39030,17897,79000,65822,11316,96842,48349,64761,83763,37777,69378,69368,98338,83100,42720,63516,64894,69654,66318,12539,85513,53664,43451,91662,22469,92909,45210,15053,32104,50639,27403,26310,29051,98330,47238,58992,55078,77189,65712,29306,58127,36561,58224,26046,43844,23299,98212,73119,71819,79917,46961,41625,50221,65323,67655,84643,50866,12061,26431,21491,25536,63054,77409,51268,40451,70829,24932,35799,55672,68288,83270,77339,24849,24205,92740,47833,36626,91337,58479,67399,21746,77824,82070,64889,93672,79075,99172,39780,81353,54150,29198,25293,34507,29940,51302,60789,86774,76171,52399,43458,71183,80739,51737,86875,26932,19489,10132,63631,73456,21366,98572,43868,17007,64765,54833,73390,81048,96079,18614,33723,86735,82875,38103,13612,85595,89099,45609,87147,56419,19708,30183,43020,40382,76568,97295,13777,35044,31865,15533,81840,39664,54049,68153,39884,47761,96844,96638,74813,86105,58716,84185,69384,86553,36791,95830,77585,88750,68882,75867,84707,92448,30645,66061,53063,50203,96408,55002,26618,35065,19759,44808,41124,52964,64836,26415,30665,46809,36587,96019,69606,18640,69942,28098,52191,71546,68684,85316,12800,84636,65484,78306,22105,68086,53160,98550,11494,24060,88196,27127,63433,36447,94544,36282,31195,17092,50598,48286,88356,16940,81949,84246,59997,22926,15734,76451,31498,54762,38877,56984,34708,68448,10427,65577,77538,26605,35022,42162,38364,75282,31621,32150,52665,82304,10279,93329,65066,12102,52336,31996,51228,94002,36338,46924,17749,52264,60285,56995,30655,29931,75177,50884,64298,17981,25457,30114,46141,50418,70986,55872,55843,85733,33315,77558,49666,38301,54804,35831,37245,88872,70547,35381,78229,15670,11040,38529,82043,19843,87911,81149,76472,61084,84597,64867,79177,45142,13021,82074,42687,65366,35022,87400,37993,87847,93751,95120,59461,41385,19560,70891,54577,51198,43687,59970,42863,41225,68038,39555,27277,35033,15608,79480,68295,20657,25075,97051,77369,16952,29604,77750,54933,58814,75538,19767,96521,87251,91025,47317,59228,64524,56114,73027,38935,17903,15314,37458,47850,91067,95299,96949,94676,27438,49293,26776,44161,72523,96659,97818,37090,81294,42192,63913,86793,21986,47396,19964,21131,99812,88890,37064,80744,91835,50496,16175,44459,84576,32917,57707,25850,40130,35014,52274,80050,22646,31011,13942,41273,76638,29749,56769,53836,20731,98185,26264,66910,57754,81737,44118,88286,14227,60078,45082,74719,31502,95036,40686,83182,56962,47370,23826,83067,26514,30873,43644,87607,50107,73991,74923,24673,98496,86003,12481,97188,74577,49569,67572,85843,85057,98029,31628,81228,39952,12007,82088,62551,10099,25407,41854,13363,54660,85191,57175,32208,14041,14259,20874,97184,15089,82610,21140,18550,41228,26774,34857,67062,36619,59498,29092,63616,47122,80097,30004,51844,92607,70865,98767,16439,43554,73777,42638,29652,29639,14997,96842,11146,68552,63410,89157,96914,60258,95171,15804,67599,66486,66640,61890,33090,97997,24089,50028,48307,92552,61745,88916,78898,98722,91597,14205,39273,68441,42258,32600,78659,92154,31587,89725,68788,63553,29915,83740,49404,48972,57598,17716,17260,29440,20598,69243,72052,74643,13688,30238,65355,79182,76027,67789,27527,54279,65812,84042,89706,88405,73591,67428,43959,73435,43746,80764,43525,66990,20926,95055,19730,29427,43821,39226,45399,37636,13247,57247,75861,46938,94348,89814,46599,44333,39014,62241,38357,20174,55557,40453,91425,33092,23713,96501,40427,81173,11765,47735,87311,19454,69063,46533,36439,53887,89942,51375,10255,27619,41277,47630,60016,70241,56284,83303,93523,54452,26423,57020,55053,92767,78382,52270,10965,72311,19593,49553,57090,18214,41132,50794,54391,33344,96649,31327,69946,85057,20602,80718,13746,13329,98716,89807,50684,23765,63005,37862,35948,65162,69548,82842,31751,61119,94343,80000,63912,62469,38490,75834,63861,64066,22565,26422,23487,58344,86792,37283,10721,32792,78018,77067,75183,56497,50264,88459,59834,29532,76996,33629,32701,73749,91024,88905,40180,63742,23302,75405,69714,38659,45483,65073,73758,95602,17335,19409,65175,14132,72774,83151,20722,69345,52629,67052,11678,16679,61256,72468,47011,21083,41844,70131,11931,20328,20962,76240,60147,93971,21268,65001,53522,21994,24107,15127,40612,96140,92225,19156,63243,46499,65695,37857,85729,61659,76706,35657,60275,29050,81324,93390,77780,96059,64862,43534,45965,65569,29007,73380,40662,28236,95608,48771,20838,38299,20390,40803,22202,73915,67460,44340,71184,32915,75128,95955,77717,90983,65475,65116,11913,28037,50604,42204,72489,69308,80701,82292,64175,17265,48993,58829,47703,39394,35284,68050,95173,89217,42443,77537,13182,49044,12658,23348,11526,22844,54363,54020,97981,47275,68099,34104,26866,44956,25594,33312,64093,47328,63763,44322,35546,40108,70208,97995,28159,46994,24517,41553,91860,25337,40416,15148,13348,78144,73262,59115,49030,97507,11206,81523,64789,52145,59735,40790,38888,81352,57201,18424,15171,86938,53060,51626,20478,94470,41431,25605,46935,10174,73678,85919,63902,27609,25023,36903,73317,21133,36351,51326,31873,14504,70266,97365,36816,96245,94422,15331,60426,51629,77974,79448,25461,15468,60655,43636,31000,37402,71753,64804,56455,21469,45891,81460,76361,23162,80768,50652,70359,95317,24292,42410,69263,50100,93833,83766,19135,73160,14543,93498,74577,75890,90215,14853,50532,32920,73989,19749,97194,34586,17432,23705,52525,88231,14676,26558,95067,48653,62038,28150,37373,74680,82946,84839,55153,39188,12793,23623,47720,53898,94032,86033,82996,79571,37411,92694,64132,72486,80314,64022,11268,29225,16097,95105,48552,62367,30454,10152,19214,42111,93266,50814,10619,55812,95880,90754,96061,28353,61581,76761,95498,69710,57494,34702,62197,69888,94675,93842,57607,36118,49482,58021,87588,88156,27475,92449,36973,54493,48254,16560,70779,54650,77402,79253,35802,93800,50540,86330,40733,17530,46771,49008,81042,19613,34697,26456,93193,69782,52829,66888,12780,36560,96892,93532,24056,64241,73474,16231,48726,92331,71857,73843,95134,98165,11099,77396,24818,24210,50363,70782,68190,67290,87090,95941,68558,81866,73503,97466,41538,91026,69371,83080,38575,22007,72964,20647,87045,73260,46203,48424,80034,70097,14935,67089,87478,49431,72821,31453,33941,52426,80570,13980,92892,66127,21375,95107,15931,41324,24048,76540,68037,63200,66818,97914,70183,53915,56859,49608,76456,55116,11064,63039,46791,93358,19617,31799,19182,53794,79678,11883,77129,73704,60530,65073,69507,20212,15063,67877,29571,98605,19056,59966,49803,95864,91872,16663,12720,79721,79395,44139,72181,12625,24258,75710,59952,71221,59676,86808,70161,84288,59147,90684,95154,92799,70619,19396,75580,28219,28842,19986,45831,70033,68540,40782,52655,85862,79326,43935,12329,33742,93217,82374,12331,11468,62410,84180,54029,69389,69918,24238,25286,28289,84665,46429,74412,40995,52052,99792,31563,75591,80630,25861,18380,30605,17966,11493,46292,20958,83093,47326,77470,50201,73886,63432,10735,97713,16273,47872,59175,81850,36155,44229,28778,43619,43919,37435,61188,48703,70897,27730,70793,18722,38671,93470,33654,13176,50060,15805,63350,25853,65215,17620,29187,24988,71980,21473,10583,90132,88581,63783,32207,94472,16837,61890,42008,32189,34261,71561,73159,59802,90774,51096,57716,93505,54982,64743,84373,19257,49684,59367,24972,79410,77214,65689,21459,75417,45343,47209,71916,86783,67826,72439,50094,31333,56511,91501,48366,25360,97662,51761,39886,63523,69181,77005,17917,67400,57224,38230,83524,44696,49698,76285,27204,20624,55061,84624,12856,63540,94700,72970,44463,97157,21204,33292,62537,27354,10170,19513,79570,55791,32016,53459,30483,84088,68572,31854,49705,62544,55103,14473,81719,40778,92266,49857,62740,63336,77781,36593,48157,12426,34562,68654,22743,72949,62400,13625,27118,17260,44637,50307,91317,15740,74911,34176,70138,17703,59280,11846,88646,50895,43805,27303,32376,11861,71396,52416,33055,58979,72706,84402,77896,91890,76229,67994,32123,63620,29780,96995,95348,19085,77271,50739,82964,77328,16312,44379,75069,76975,11303,41749,90810,14142,17152,64276,33426,18901,51834,93645,39540,40391,64789,98368,29636,57693,78166,54025,77155,51279,29386,37892,97838,61342,19491,81618,82362,26321,67398,32545,47310,90948,74318,20099,80581,98268,21396,69981,45354,72623,25205,99348,20761,40686,66716,83758,74130,19954,58143,90287,41647,68861,11332,68002,47899,27001,86321,13700,30872,82721,72472,28441,46858,52677,18125,81902,73296,14146,25729,90697,38281,93871,53145,90795,19796,61093,52100,89601,16980,90272,55201,63939,25248,86294,23867,64073,48296,67227,90439,40635,17407,78385,35000,95824,50634,19514,43195,59300,47015,21799,82392,94914,19836,18502,74939,92276,47404,47431,65296,97782,11712,38638,50691,19120,19595,42812,16817,21625,24926,32543,13871,36498,78070,56980,28805,31006,47558,75357,15250,13689,61849,35429,31420,33720,65840,98878,77440,31908,17654,65372,52559,47978,35509,97404,99885,81579,32027,66670,59650,94360,39969,72005,22324,64845,44866,64332,38083,53688,35394,45934,48432,31745,82738,86141,24330,46791,70450,92627,66029,77305,81474,59670,79577,49847,75031,58076,23560,30389,80641,93439,25515,97462,42213,27899,19126,30333,49448,70293,32053,73887,41124,55503,30505,55926,63460,13520,43285,81461,33848,49393,46677,94615,58164,99360,30074,45725,46967,14151,94946,24979,31988,77714,32177,43559,62707,32215,30478,35137,16331,41144,34208,10336,10103,43227,69231,84502,90702,62672,82462,65663,80317,55104,23390,97835,93047,89674,62356,90173,95455,56252,46886,10092,15697,25331,92977,46491,97772,89030,93661,86356,45929,84915,30096,24846,23178,45837,85289,24990,45119,25553,31490,32799,41392,56478,58820,48707,97413,34709,65912,66696,99751,75294,14516,17265,37986,72645,31286,91624,77084,18949,55241,99160,48570,16801,60613,42103,37550,94607,80243,80629,81378,19709,14541,54705,83489,63923,70351,28258,39731,45517,79525,83151,63229,66031,21031,47641,86023,50323,68553,72176,56049,98280,25805,40879,63634,82688,43437,78536,25393,82064,92237,84606,27253,71381,88818,29371,94138,92842,81558,89247,13556,63453,64490,98213,61485,66758,65545,80064,38045,83072,25353,54481,40366,24546,46221,81198,81196,57162,79372,94373,42440,45231,98319,29333,93072,75754,62874,53362,11358,67474,40058,23372,21996,89014,95748,14715,31919,70470,79071,68044,10942,32124,71840,10452,92652,83483,56024,71931,60776,67953,63834,58802,99120,79558,57378,79604,75175,98374,14181,58872,50721,28001,30839,67655,19725,43434,89715,95845,32008,55605,67248,29584,85468,38030,61736,72315,37794,33209,85540,10012,35427,81971,26181,96959,54519,34461,36551,33020,57507,56900,64645,99216,73253,19215,35917,47736,87836,23073,41379,29946,85626,81205,28770,53372,83891,10489,11669,45373,93005,42121,94595,10648,34138,76020,38768,91969,67724,94994,82998,21446,84844,35350,88869,22851,49211,52147,20638,28474,93708,17959,80701,72816,43097,39071,86828,57726,59569,50859,87275,32802,30470,44808,86542,48982,53210,32322,37808,77604,58627,58457,67553,91573,41543,59210,85783,35159,16190,71991,31361,60065,42278,74395,36959,63645,24792,25581,36854,69300,85873,13037,80869,28196,61884,40200,74673,16764,83834,46250,51017,77070,10751,83988,86865,87392,36880,96960,33485,21385,29740,36810,89645,52411,97356,70111,92529,47177,23287,73353,85820,79310,24142,79205,58946,97795,88072,24056,33691,14079,33733,10361,69502,84557,12448,88272,88934,27146,74782,17019,25783,21762,60827,66406,66448,86857,58166,46479,68401,79559,79076,78190,97396,56119,24001,71604,92946,17377,83403,99808,38439,14724,14985,34217,38508,47383,43890,38413,86914,68423,52401,20093,22211,31247,61579,25182,75364,65804,42212,15554,15032,51225,15773,74431,61633,91688,29204,77049,20583,52331,12721,28026,29068,30077,84181,70520,11284,33115,25020,12769,63759,98968,70749,39296,67837,29654,39209,30075,66105,68734,66658,84702,68722,17299,55746,17450,64075,36166,37914,60372,21982,26643,41618,26580,64013,60071,39155,53307,78005,77345,98449,60279,68627,98539,89031,80014,50056,10790,74851,61429,50012,51584,79206,15600,34276,27889,19644,40460,57699,19624,14873,55343,88577,61716,62952,86110,33564,80926,69669,36863,80447,77918,61753,30611,83103,56489,59364,25292,45945,57444,58874,99430,27595,77772,94951,21196,16847,15667,40479,15981,35054,11014,87138,68626,66542,82778,12475,35150,67714,92997,19034,54437,87736,78410,61942,49055,26681,38501,50961,56458,25137,73349,18926,81389,89799,38720,24949,96775,70843,52765,59481,23135,23012,86037,88060,16846,31643,97715,99754,74239,40526,53533,59928,14184,55005,65455,84965,87307,18347,54455,85265,87611,41493,68385,24608,53851,27331,99969,23622,68249,97142,48427,95378,55829,72648,89769,16941,66853,28606,77605,96546,76761,25576,18908,52192,54430,44275,12130,55655,18468,15755,62565,21660,96241,85923,89039,63187,51888,73799,57172,32929,40876,19733,21224,27166,99763,38440,57047,81515,58868,94629,23907,14323,14206,47072,63231,54411,27844,39441,84444,21869,16470,65828,50128,35515,87765,94400,85034,13399,85433,24419,87244,48260,64740,80592,39437,99840,18064,53801,71778,66066,69916,10929,45508,29553,95675,18680,41555,33327,82579,60106,75786,17627,42916,32890,74459,54294,95441,85676,78543,47116,46500,71977,24116,22675,62972,70295,13819,81813,45575,97388,37238,33501,36453,81367,15754,65081,75428,57533,51913,45613,58667,91938,50777,35321,54366,60825,99032,80520,88314,96475,90188,98788,62137,96420,55815,13863,37371,74701,14771,87336,11545,70874,47729,45063,53743,95901,80827,54700,82377,11118,26426,92344,95125,78419,51815,15474,43583,23348,96507,67719,47797,27465,62353,97760,65856,82678,14329,89303,37184,92701,70807,69589,44625,70911,59267,50136,92873,98916,83725,14787,89458,86580,12461,17504,63817,77912,80996,44311,28373,21740,31681,31495,83050,88215,48000,69331,21305,81908,69825,20457,77114,13917,90254,90542,73917,81204,74707,84845,18975,20613,54282,86547,35703,63314,34239,65428,60823,50368,19151,50273,82185,41769,81545,35506,84371,97557,13662,55667,82744,69243,64553,50518,29174,93002,86655,44369,93328,92556,67630,72364,71048,52604,33553,94612,26972,52813,54792,79441,73462,33920,89331,19645,30747,45623,76225,36952,44685,96715,94245,87679,10299,48391,45824,78313,45757,41839,13807,55686,85404,59004,54715,57795,86639,70094,50225,36674,47176,31191,44176,58646,17549,72224,99883,81479,11113,45488,44241,55227,98474,45399,57208,82244,26361,80867,84908,32846,13940,99229,62944,50930,98773,21846,41394,33675,25072,22862,25839,61719,30298,51611,42350,96323,65047,15571,91332,26466,22487,31261,72650,18675,42272,93130,30540,30160,48024,35752,27407,40298,48914,96931,88949,46921,56096,77254,65334,51298,44218,85184,15357,37616,42845,83672,94480,26871,92584,77597,53008,13252,50650,67547,47139,67728,29836,70551,82216,65537,53699,65051,18612,98864,18579,36417,60479,86544,37549,10333,24665,60223,15060,20924,92756,96840,80236,55321,29699,88249,34615,34095,66504,71268,13260,94601,37314,13577,54711,58417,26729,73527,52899,34056,24329,46394,35860,93849,82383,85147,95142,16292,46075,66577,47680,27140,59315,33038,22670,12031,41963,92708,45530,42084,45737,34023,33971,80776,34049,33697,10544,17271,32894,60865,90292,95401,19118,60952,46677,76024,22627,31361,80661,95160,89869,58788,95349,67362,79706,73020,98418,28508,94048,67118,50936,20612,82072,95591,37987,71055,90181,24243,78140,32961,11747,27785,37252,78237,49949,14764,58532,24188,88328,38169,95137,80105,51510,37263,66080,55997,49656,28107,64733,27779,86901,56718,86653,23243,11627,86734,87761,15321,58228,32133,38203,31775,27338,11607,89492,96848,92116,17131,71414,12210,57424,11404,38743,60666,27773,53907,38399,26583,39610,67730,25080,64115,54259,83392,59248,55215,73063,75355,97757,27880,30246,85190,32862,59316,11370,11940,32932,36094,69845,44645,83311,26414,11809,11201,53663,56770,49978,32923,29380,32749,78915,27110,70496,32041,98207,52155,33928,39361,19341,26649,32102,74324,69272,69932,57878,20336,58531,40569,77496,27313,56999,84124,75839,45335,29432,99297,30636,52168,31327,42065,89384,80070,73888,89237,41497,22982,46224,21899,14431,99676,43478,75541,35055,51805,38998,70257,74472,32568,17540,26704,98042,17342,69847,61822,14217,23239,20329,89505,89678,66438,76934,88556,69938,24246,46819,81679,26672,90266,21119,38684,92748,42780,82535,40951,81676,36164,50071,29831,98613,57357,80137,24498,46261,43959,78058,11918,95135,50238,67312,60916,35456,96182,99734,94389,84362,10717,72301,73684,85832,65580,90888,72575,18925,12521,14872,73627,29135,13136,54435,47064,24380,54728,40563,89036,58881,81640,19281,99301,53126,59502,39149,95658,25517,94013,16725,59754,36415,70312,75964,47885,44406,95712,32397,15412,67003,20097,69310,46046,51205,10082,10785,83924,62960,95800,21050,64800,18357,67114,25190,60481,84478,15429,65706,58174,50885,25930,20669,74388,46320,66676,73364,27696,68802,16333,26323,66390,91456,71281,66681,29701,69470,95824,10158,89839,16800,68591,16363,93347,94196,75278,44744,10373,60076,79066,73028,23417,56099,74548,22486,97050,12398,58407,92518,42887,72278,35647,25712,72481,12298,59976,63136,96206,47905,88523,67113,27304,92809,30122,31790,53816,13652,90066,92573,18345,76008,37179,45027,84219,94745,19275,43853,46492,13493,12984,26777,83174,26111,49018,58236,40857,18618,37741,74989,12547,80114,75700,65644,46787,17831,31046,39204,55888,81249,18193,26249,95320,63065,48228,91463,23965,26361,16853,48272,48021,17166,93110,84701,26474,53390,89613,48102,31291,18614,47446,80950,69016,53649,12850,85279,72603,63657,59230,35253,63204,82337,29197,35455,64185,37583,94368,28280,97506,43288,87063,30850,15732,73066,59344,60694,21207,68705,60794,85392,56638,38817,49700,87646,56025,59994,65296,58000,85622,44959,89465,70967,21819,19497,94393,34495,91732,44470,37522,22798,36433,36431,15893,17459,14364,47707,95273,32311,26508,59456,30437,60599,68456,94659,46789,23099,62734,79017,67635,40234,53036,67449,23434,83746,13544,59018,52921,37554,27504,68390,32311,77243,76429,75599,94248,85278,77451,13967,87362,58185,20210,66929,17265,60873,63281,33779,88616,68740,42512,87735,95456,76647,17031,29445,96281,60434,34501,91013,63858,11474,37631,24757,76446,84288,91970,85948,78227,42930,16485,48366,74310,68406,91605,47755,90759,34238,68850,64326,96550,94029,19560,17151,66681,80888,37811,67357,88158,17982,25990,48473,38088,87755,14736,73045,31926,94327,63978,15934,23706,10528,88433,66263,59810,34001,69086,43120,29095,23876,15707,64857,74230,96577,40234,58163,12559,91136,48473,11367,65819,46278,92179,66010,97734,35794,55184,68560,68510,27475,11941,80952,92538,53186,81472,81476,47514,26385,40061,45645,51358,18373,25581,41455,45561,56494,70471,49760,96042,86068,29225,96919,95269,93126,32603,60181,71939,91768,75178,86926,36511,69142,91026,49042,37394,86426,89147,87698,11483,95699,87929,19718,56987,43682,12150,99889,13053,90207,77139,54696,21326,46646,52740,19940,95449,83336,73855,11033,74015,26424,79889,97893,19078,93161,79708,39933,41817,75841,69741,34847,91889,64169,62502,18037,54360,57014,75457,58286,60575,63891,73881,43957,88629,58461,10337,48301,37047,68184,18015,80552,64689,29339,84683,13808,94647,10349,90473,29481,14981,49111,59186,64166,26048,21742,22084,60437,44829,66151,89583,51548,78853,57891,18129,15660,84992,41488,75007,35361,80675,45164,57636,62666,53533,33555,44975,86072,94251,19736,56915,11998,76677,21378,18282,42777,36470,87290,14920,42719,50792,25041,81682,22058,16800,42824,38274,91823,94869,66177,60175,38172,15484,70315,50236,52753,53202,94120,29919,44998,13949,45149,27602,97706,35812,47840,90224,67332,49411,95239,44623,44063,52206,29689,34603,21230,96420,93362,80431,26953,92474,34101,79798,76284,37396,93064,67874,47589,93352,36022,96963,59941,10418,24432,44234,36461,74970,22187,37624,68177,19164,35052,90281,19225,33214,91402,40172,14776,69443,31295,11508,64403,47276,68288,76228,39977,39259,68019,43858,78745,94778,56550,33527,24097,89722,82698,82259,96729,96174,65335,49810,15383,54205,44159,99839,69752,44572,82711,98670,76329,88140,58923,58173,67429,83904,29493,55061,52434,92778,67724,44500,21319,95926,53623,74586,31207,72627,69824,91311,33147,80623,61989,95362,13084,74282,64636,56277,93341,76207,17858,46723,24239,80658,84394,21532,79537,67610,63574,11397,27083,15454,97290,27355,64697,23273,49899,87349,49442,90880,48284,32651,51756,71291,44270,37176,70676,49721,91450,24534,66291,23856,77229,14067,84991,10070,69333,40361,50017,29668,35210,39209,90559,90972,43615,28658,37547,22640,58190,98719,87913,16174,82484,70224,46320,89005,98931,86761,10970,99698,10552,63787,50398,27648,82259,59024,31321,13757,23039,35458,73028,92730,97583,37067,14650,10109,76530,50223,52138,61132,57918,49575,14052,49549,10888,35614,19078,50623,84240,22890,28914,52590,97173,94584,69705,68481,49089,19176,50398,23897,91044,97972,68932,10914,21895,34407,10096,27893,63510,86090,96313,67687,11147,24266,92678,86084,57342,89139,33396,30289,63910,39088,24839,86544,37760,10605,72244,76247,94891,13342,71711,30953,34769,47401,57271,66947,39952,57269,97832,27397,38672,62431,19087,69825,72869,78892,28469,95605,37442,62635,14348,82336,30586,47927,83801,98632,97398,52460,32186,22288,75867,43989,92548,24463,71240,92133,25360,10859,37926,36350,52100,39801,34359,45402,18266,76154,84513,60770,43099,90121,24413,47282,61858,51123,69892,89316,26753,56228,21137,51742,80123,21428,74535,46036,34231,27917,26002,27166,17187,99946,20423,48451,55827,78985,91489,71706,57463,92011,90613,52640,76235,19210,74870,81361,42285,29462,30821,37462,71510,26849,52807,41114,40325,57454,50056,36456,43288,92200,17138,47968,15579,55602,62925,50161,48210,47952,17569,87742,34700,36200,36711,74023,16624,17529,84698,36955,39177,42360,76225,64100,50891,25572,54840,39313,36850,86488,77340,70497,80939,93946,54797,18512,91766,49760,92112,75526,43240,88540,87097,12831,42044,30638,13916,61640,22375,57993,38744,41859,73326,73119,82599,53875,33876,73385,31863,16766,71191,97455,62867,94243,29849,91424,62326,22197,85594,57906,88487,57371,61227,81144,80319,87176,25455,52253,79235,54312,12462,79492,57632,84866,76033,21651,79315,11912,99451,58581,85622,39909,96963,80131,42758,97467,66345,67079,37904,61428,72171,34533,51533,16932,86472,93765,60735,93615,48687,88409,94036,97872,27410,85096,42243,67063,41310,30319,20454,50617,21664,46661,54586,38362,19160,16593,63286,57989,33375,17216,30715,23532,91566,59508,98551,96084,57971,62571,66634,94762,31443,58596,82340,88252,76615,14371,65018,90975,80166,25532,27245,25913,58058,72496,50512,55460,63333,94943,11951,57482,48764,42959,14574,34759,83328,22441,16211,63231,41245,39193,47391,88119,47819,63016,57680,53376,82222,95181,54129,92304,31361,87207,13595,32266,79611,78832,10678,18252,60631,51459,90225,40734,27580,58946,52650,43929,81279,80925,24620,17725,69209,51514,75256,80548,27371,57970,36180,60434,81428,98758,56409,89377,47078,45849,86618,34860,94852,16750,53049,53449,28186,88089,17820,60404,74521,68252,90907,36550,78478,20162,88373,70977,83126,92760,72944,44548,54428,57882,35066,75928,36016,73867,82211,13570,70270,60649,79452,87316,51832,97610,76054,27033,34232,37819,23966,94733,53681,94246,50959,71014,76130,98761,80967,91685,48559,83872,43962,63022,69981,96851,56311,95258,14119,90761,50448,32516,26876,99236,43344,50054,50393,13646,70139,35296,64987,63529,29761,95272,47319,43878,52530,70709,28309,15386,21742,50597,77014,38622,64475,85959,80319,58231,69874,39228,72484,96285,76753,96263,55343,35889,69417,70911,45693,55876,34453,11397,35905,83995,53405,67743,91664,48655,28864,60686,33966,83866,52316,39268,11677,67925,39332,86350,29880,14772,81213,48894,47124,84856,62967,97434,45161,88355,52116,96571,94754,79121,51989,89804,18062,62529,82926,87455,79369,44434,59981,89680,90769,26796,82180,39389,24478,16726,69222,68908,28039,81379,56717,28659,71423,57456,52015,52276,66372,46504,47794,32681,61035,58915,58846,10648,14755,80440,63985,19048,99379,33192,79993,43144,33190,79239,43625,34202,33598,41805,16287,95441,47977,12856,47237,49165,45961,50283,22312,75839,73224,85442,86767,64252,80834,14706,53734,63270,88317,69773,72866,30931,60736,58820,65002,49157,36812,46023,76423,71827,57397,99042,10587,46001,26816,71573,32526,31394,88209,49217,23510,61900,67210,84446,42286,11782,54855,30690,21187,59357,72195,34047,95941,99781,49702,95601,79156,40441,10004,23166,56314,29392,32997,93585,10184,98073,55631,80743,78172,71688,99759,25383,10603,65717,96425,56547,33978,98748,27086,96419,26821,13725,47691,51953,52826,38885,31876,23578,74515,11360,62125,79357,44560,33409,63441,98211,98210,40902,65652,16994,57863,38476,75183,93656,63847,84440,80883,95070,77442,69922,21413,74942,45480,93206,96686,81261,55232,33028,41511,64314,27210,18836,36887,87164,42131,29900,20261,22707,60705,45899,81293,42304,35869,41318,77566,27562,64198,92630,38511,19894,92675,47345,80598,94449,80314,25370,18867,83005,89318,41842,68643,36932,15504,59313,68160,95057,96387,14030,70008,78708,20515,44702,19028,48190,92770,21753,59087,71173,57214,43623,48881,63190,50874,33452,48192,14686,99329,48281,19970,91025,47526,84640,94202,32623,31802,95847,62605,80243,70828,66439,17145,61242,96100,58535,11180,26174,79190,88920,32499,33673,55313,45481,64300,32545,28772,94295,54669,90731,31284,93126,56103,98695,85337,35397,48973,36975,73910,95710,78610,58937,33665,80339,75556,52398,57017,83466,11687,41915,24353,47939,75653,26348,82365,42649,22251,93622,93355,90873,70802,61240,96794,23276,89750,34989,65419,48160,31680,94171,79470,19021,37547,19151,96345,38890,31690,59051,42648,69856,39704,66006,85082,30645,88843,54154,27682,54316,35050,16100,51262,36678,47692,32096,75610,85109,47488,40678,91454,35841,28340,88014,36636,74550,43477,76721,48210,94819,10407,17129,60051,21130,59064,35097,20535,73535,63590,27849,37694,63218,46472,30322,23584,73137,52153,34738,47341,96543,88930,98941,54225,80729,59635,22754,77444,10077,65657,94696,91332,53859,11368,72945,99652,22186,63846,80772,63167,19522,10902,55773,14760,33080,27720,75548,42933,11793,84506,26198,29188,35181,55929,65334,26389,27467,21573,82420,15869,13254,76900,42493,29127,60419,43179,13639,22498,11494,44502,45532,20205,31203,84732,89276,52587,52021,75235,26592,11455,91469,80316,46594,81719,94402,67066,12531,60909,79111,50028,24476,12278,61245,27474,13457,63089,62743,63479,71158,49312,51486,33697,66764,41904,91773,53603,47255,43693,63540,80564,14690,60162,32179,65186,99077,38290,24304,69896,75521,99112,81916,69763,50949,39115,78514,32415,61545,14159,44502,91903,50730,71462,44617,31329,47456,64726,99901,35591,71941,90255,34968,64061,38210,21350,28578,13133,78368,73001,85642,37106,12109,95580,95359,72667,77561,98696,56963,66176,88424,82937,83040,14700,90903,74237,45109,44908,13129,80130,89534,72852,92898,50459,15463,94035,18274,61498,62465,15924,32744,45182,96741,17823,81222,12281,18979,46539,43488,54928,42594,10338,57452,94807,89038,83452,18060,35635,49878,45449,80130,30808,18560,79888,79795,28402,42886,25166,94999,53530,14936,39122,11074,95100,47052,74694,44759,11912,59000,30411,72363,63292,30964,14868,49576,51329,36729,67906,72073,87247,78514,83076,61540,71811,79728,90620,74275,45255,52886,80734,37412,56256,15893,45926,37942,77566,42981,37469,15278,19699,75015,97129,49272,55686,14280,18991,57351,37679,80411,99683,54048,55085,14164,15306,26116,97376,29254,65667,77312,96937,50824,82748,72315,37665,19738,50679,71944,91199,18878,43837,47353,14273,66035,45104,45658,44756,18896,14117,84371,27414,98971,80622,85406,62082,32968,34586,12083,80338,50841,88175,81294,66062,28020,55669,69697,58600,73638,63187,76405,80148,83104,99627,97852,93142,94473,95372,38295,90211,89416,49560,66027,66842,94937,13467,71780,86935,15346,89938,13759,94273,61107,18842,16882,51185,41924,60047,88600,18847,46728,68907,74414,36991,14147,60969,60852,30922,94288,97177,62820,19290,69633,17728,91737,99904,83279,26053,37342,71968,73066,46225,63252,16291,14940,97858,41910,81739,26041,37720,13265,24873,30582,16640,80353,77318,46943,35225,78373,84080,20406,59025,35043,81002,84792,15444,90987,23213,53057,36369,74132,29639,40277,72490,12041,35018,49621,94685,94460,29316,41590,71150,92099,11725,51740,16224,81253,77815,19642,96432,48544,10016,15149,24786,13264,90196,21422,67561,35410,58093,94786,99683,44689,63171,33319,24871,86761,84146,30120,74261,70692,37182,39182,91036,15175,65506,25177,38563,48986,84211,66280,26467,92794,87482,76555,62388,59718,52541,13221,54349,94467,67663,87929,97402,78318,36612,79055,52766,60606,33961,87330,21366,29139,93161,78934,60231,71506,79897,97107,76321,13913,81952,23270,32352,11087,25685,82529,88115,74035,69188,18113,63326,63151,58189,61635,13319,67764,32860,18599,18618,72421,93135,38209,65145,90499,95617,30674,22552,72702,46335,72897,76292,62523,82478,67254,76115,84766,62262,88263,79564,32340,80844,58240,38973,73608,85531,83252,21397,85448,18631,65993,43846,75743,42884,38011,23403,95056,73041,73424,57311,17421,39915,54996,67947,47858,29807,75695,63396,21341,13257,22769,45012,61636,33856,83855,35580,97034,91067,17855,64319,26190,18548,66054,74466,82578,32864,43363,65539,47456,45558,34960,56306,23811,74415,33855,73007,12577,88477,59344,60498,38075,56763,73652,36559,44803,57484,76249,61826,50878,26215,25631,38414,88679,18311,90522,83455,50186,14971,18347,66426,79439,49263,45805,42408,99669,34157,71227,33445,98993,31609,38182,32483,12610,86685,94081,79308,27855,83240,28379,62425,30086,66332,39518,12889,33697,21015,93052,74215,37971,70479,32213,14068,97713,57334,53370,69133,27682,69557,10141,57661,98677,86821,74927,26496,51804,71725,68220,63234,74574,19864,72534,26428,32860,96703,58846,19194,77103,44399,55569,36548,91003,67156,41522,60970,44746,44819,55492,30691,86381,43014,22222,61063,32449,37411,22866,26752,93905,13256,46762,52037,20372,36169,12802,42250,46101,75274,58882,61937,26449,13214,37990,81955,33332,34211,12770,48046,56979,18901,85737,53690,60125,27835,64329,87989,98543,71730,73208,58935,36859,31573,12729,69491,68029,80562,59796,82434,95933,67933,51848,79472,72577,74281,14060,24749,97487,40238,19749,12500,74266,66687,84772,54004,80109,59312,76713,39419,26155,25084,85862,89315,10921,43694,17936,55417,68416,75681,22890,56519,72708,82047,55064,85984,64450,90428,35333,33030,37982,17585,37775,77824,21766,68469,65039,65506,23524,92811,11586,45264,44955,59537,58205,32773,45343,47013,19694,74051,11338,78626,46934,26211,38182,60480,29912,89260,39018,38984,78802,45943,22950,52183,64309,69977,11794,17366,68899,85715,48926,50248,47275,24337,29809,70229,76084,82125,50877,79959,62479,38860,41868,37456,62003,33638,20906,40978,19090,73682,75890,22477,18023,17816,91936,12246,59919,23901,49382,41697,83714,21314,38615,95223,18114,36170,58352,54235,61291,51688,48944,34397,65318,33653,58863,44053,66376,61836,45560,42553,68996,83825,12554,38664,27700,52637,93312,93494,54221,61934,89889,75020,74529,35977,26947,73342,70927,50286,86524,63961,30706,66309,36134,35267,39933,43533,45096,53152,55449,86271,50850,16478,63760,97612,74432,45656,72482,94282,45051,73210,80349,86646,41354,26228,72920,54661,33424,59915,76673,82364,34250,99938,63198,49635,37949,94001,14581,81917,51812,68789,56473,88128,17259,87694,98524,99644,53143,24557,55275,71430,42658,25449,69191,85410,90521,42117,42113,19129,13210,54883,33800,70360,75235,13493,19967,14960,23019,65239,14647,84217,80107,80635,62737,33250,31337,73112,95726,10648,83754,75248,95889,66992,51441,77050,73040,58152,77373,17162,43291,41227,47044,71414,22776,35756,61845,36284,23481,95124,82930,80281,99559,96608,23431,72248,89583,20278,11106,15542,62930,90087,51171,39060,20507,34821,84431,39796,83419,78180,98729,52486,57700,73068,64175,22251,83442,56305,18415,55025,99874,16512,58962,85909,80883,78863,40356,15112,85178,62225,82091,46594,26300,20983,90638,38349,95463,86356,67551,36903,14586,30936,28192,81791,56415,55578,50957,28535,51781,43371,22977,83090,26472,52929,21349,96257,83754,40361,79832,22540,27452,18911,23107,77522,99929,72511,98720,77826,94937,89851,25739,92625,60119,38577,62025,61366,83150,76262,42531,76269,51863,36872,22967,70470,43725,64935,12845,73321,24540,71336,82194,86282,16235,55175,75834,35051,96438,30920,85555,63904,24357,89436,57474,79967,18616,91538,38723,22785,17665,82199,77798,26966,45520,85988,82241,95471,21918,99039,63238,52327,30625,19188,27014,39050,81634,59867,61692,14439,73488,45797,19167,61246,78939,33115,52691,54752,47392,99586,88015,71978,59854,91507,71446,61933,27094,60589,13993,45892,15443,97475,62373,20959,85751,33159,16797,79759,33191,71219,32439,89108,45855,24660,88017,55362,38460,48481,68169,97161,93187,14291,10277,71740,61288,33367,18647,43476,27527,73923,83810,19409,19191,77048,39529,69174,78669,10601,33600,90671,11964,81490,32431,17028,49156,65208,80542,76615,81864,88585,84410,52991,50042,10703,46083,12308,35184,33788,71294,75906,76381,11342,68461,50809,67494,99650,25476,57018,73609,56481,62280,23782,18252,41987,97708,41869,60406,30199,62685,93473,35439,28004,93127,78969,47355,31258,75475,21067,69279,31441,95852,16135,27286,89780,97189,94541,72309,38601,17774,55562,74781,63285,17601,84926,43973,13940,96043,97785,67674,69953,86513,17386,87708,61846,68581,26777,85369,93350,15876,92161,70255,57468,87085,34541,76529,87861,77166,79672,41495,91349,24489,13657,96712,60462,60508,57989,23895,88583,26567,50345,86937,84466,84618,22316,28419,83558,68745,80113,86544,85208,52292,66361,88504,30974,26698,33276,47388,43424,13986,70619,77075,78013,76178,73497,70839,33503,80466,11979,48425,29093,52298,54805,62295,12971,90995,91774,76440,10648,21690,66812,77512,79100,15439,76285,45958,20177,98718,67569,30853,67807,14461,80093,10252,18462,47270,27731,21693,23461,37657,73656,67930,21150,18890,27391,16610,38721,53006,24139,35451,73296,62632,87701,15970,11715,69196,37581,71643,50977,63966,11237,43966,53009,98667,86877,27231,21941,23345,33955,14162,47034,10546,44183,93645,99077,99689,50757,86730,10299,74503,95729,29018,26049,66475,70215,92908,27770,69777,51774,62124,90940,76214,93230,11692,60165,35048,50586,64887,41912,82999,88067,92922,46733,94342,92621,15554,10817,98928,50634,56882,60304,16925,79544,44919,10141,12447,21092,35201,48079,74578,79421,46020,25726,85951,56216,51113,55196,66516,42239,75387,18713,15610,45689,15217,85169,64908,93732,86997,63061,45475,81085,39662,79073,84093,28426,44629,37149,59739,11147,19109,78731,66708,77023,98177,15770,45117,93129,35400,33918,31750,33159,23902,65184,46106,36901,19301,97694,44607,30180,27548,44788,95016,41312,42067,67558,44084,19516,96105,98369,87241,39344,43152,19426,97291,65475,25061,33603,80379,59084,84770,49409,46487,30410,70221,87693,18393,13003,13370,97367,75772,89740,82912,56372,62575,50409,86796,13612,56156,68308,42631,79160,53447,52316,43111,81081,54915,36132,72379,34697,10074,90054,24613,86816,33045,95294,11647,57308,34878,90807,43714,48181,11595,62697,77224,16610,88424,78207,50845,90649,60930,53008,59351,19667,47017,14198,45927,50824,16469,37801,55316,59910,79824,40175,37475,21033,51823,69359,80769,50711,50332,65312,87734,51755,39356,38182,33395,50863,99941,56373,47710,77560,84558,52030,85179,68479,84048,85400,79055,95062,62635,61657,37184,95078,72793,74024,40070,65653,61620,77987,27732,47857,34446,17413,13167,16461,13558,14261,90084,17374,66567,51583,65165,17825,51495,77588,29028,68389,69826,14680,37854,79196,90990,85403,94790,14101,24546,61289,64608,77837,10977,70870,83881,36161,29957,42392,36563,57696,85596,22227,20551,39646,25146,19063,18978,51979,35537,71194,81452,98952,23571,67780,51930,30170,98737,96749,15803,28837,85511,71201,10982,47434,72212,78202,57566,21452,55749,85415,91388,23702,21701,90519,45587,11495,65616,27466,77505,67963,72244,26729,67721,92631,48770,21516,25364,25764,84565,57341,34879,20733,86130,59352,75454,72086,35689,31913,39354,48327,95457,24542,39196,96814,39863,82499,89916,93381,33780,78586,43493,48388,86168,66662,11571,16838,61765,12327,27647,89544,11342,20206,11294,27139,42623,59501,35376,39549,77818,28880,36269,15347,88136,95628,68120,42793,68626,79087,29147,83566,42864,16022,51844,94231,67794,97510,44562,99507,43569,99215,47761,94549,92858,99384,65413,14940,35341,15555,57182,74240,72133,80094,44891,58621,64008,55045,42721,16912,33437,77705,69214,16105,11248,28361,29990,43859,84952,99952,42890,83455,66160,52494,33651,48868,56023,78023,40333,63700,32473,61586,37203,39643,18881,73833,36880,30424,93107,82275,29618,41515,29737,50609,46093,58466,99722,69907,27718,39181,28125,43537,98026,28876,32149,91111,28317,54161,30944,64310,92505,64735,32567,93151,41706,21499,44059,92788,19106,93276,91250,26506,83192,63880,48421,20473,71020,13344,67478,80035,90843,48644,11357,46690,67112,27868,95219,44219,85981,85301,77837,82357,98822,55951,26102,87892,46849,71568,72518,33967,74724,27971,15666,43490,86495,89409,46663,26865,68224,28098,92213,55933,86413,83414,61467,71676,55799,12797,46098,90585,81280,72467,24207,23864,49673,25144,84948,51252,48443,78338,26249,27898,17916,84279,81907,10844,58106,96625,53244,28275,88269,25156,16378,51987,59505,44838,14347,21299,79392,93984,58585,84173,81463,99737,61913,54134,33265,12464,67284,34309,87443,67730,19654,77824,50143,57536,83185,26945,33490,88513,56790,98274,72197,39670,71296,68711,64145,14945,49045,87499,11364,60643,18065,79189,77332,87798,75313,99513,85081,95875,21622,86018,49612,94052,84009,45784,18462,63301,20879,66840,53618,38299,72105,33643,15704,43627,33112,29445,24723,19755,70103,29216,21248,69857,98232,94081,90582,65623,69267,18459,43715,42907,34449,28109,91192,21083,88029,19287,29814,71583,15938,36684,29910,65826,44101,58609,16046,46223,44878,93485,38743,13911,67020,59705,44441,82489,14434,85569,82883,28336,83449,41246,99994,51507,55803,11671,27866,75340,21109,74727,61335,39800,54991,83156,72658,72726,10424,32957,34184,40197,55729,86985,64561,87210,40024,65493,94695,88691,71186,92199,69356,49742,13899,63085,95343,35302,59316,54913,10768,60580,94538,45932,43233,31878,84055,98432,22261,52160,51236,17698,76835,19197,84122,34991,64066,42868,11571,61384,34548,23302,98860,29451,14323,39752,37230,76153,55771,16510,57612,62098,18153,77660,63065,10028,13258,56745,71078,59639,45184,45816,61998,66047,37814,81662,20854,30833,28744,88399,45043,78758,98199,91164,34743,29973,19252,64292,55703,52024,73953,86101,76897,94397,38588,76599,81328,86742,71478,18401,52518,82973,12245,72681,42949,14704,77042,28541,55028,73357,51437,94808,24727,58435,97558,40730,76487,12066,73243,82468,88130,55299,47143,57332,78158,10228,78735,43412,92094,81279,55525,31577,38471,94533,26099,14621,66371,13993,82536,44093,50865,59839,77645,31076,80859,20111,83535,10503,12225,24941,12708,25468,68682,70935,82737,73710,30024,65802,84427,35823,74665,19787,37545,43963,55977,21623,37459,28417,74477,40342,89488,85809,96795,83914,69426,18640,56566,93549,66174,74063,68860,16744,75819,74512,74373,76067,99340,29588,10976,46807,43209,87864,54828,62939,63563,34977,30788,76209,52669,92566,84343,49084,29771,43725,87326,16531,17563,87664,47118,79550,12558,17202,23960,43677,67131,92954,62284,97041,84375,35543,74223,77084,30449,61807,41495,11278,14802,83166,62076,19441,29906,54384,91843,62305,73818,96751,36268,25229,74761,77074,48692,16767,93713,32750,19476,65483,52713,12901,91829,30860,38845,67566,91704,81274,14524,57451,98359,36213,73954,93840,17576,31469,76708,53560,50092,15981,29907,46730,92099,75897,65574,37584,91877,13002,56960,57943,47001,88856,27537,67532,96182,36408,46905,82022,64926,48869,82948,16322,78177,12165,20625,84143,85149,84891,68241,17181,55623,69914,82756,22050,16458,65829,29687,23662,33779,44480,96048,74686,36008,47899,48920,16604,83260,57229,12552,29259,56421,29224,94632,41733,59472,53251,29298,85176,32622,79755,74549,62871,25845,46035,67689,33824,54083,79742,95981,75609,38787,24389,55302,59577,94729,10801,84718,66002,82068,69004,94440,78696,58751,74859,94167,80073,45365,24900,29841,64106,71828,85718,31180,96900,20277,78673,93683,26002,53530,41858,64616,69580,47706,72180,44694,12354,36236,88732,70096,87306,38974,62519,92224,74712,26744,74771,31779,26023,35982,34200,99774,69638,41078,94696,19665,37052,35709,88974,79453,84086,44113,34912,70505,16734,24095,59572,54401,47523,19996,90128,80942,46331,66537,87184,59080,40242,63089,98326,64764,74680,90089,85088,68965,62488,80792,64106,28761,14467,10766,69874,56811,87079,74988,93840,18098,17773,53461,38916,91170,81324,82713,92746,49711,89106,44183,12062,48618,57033,48496,97427,79668,44809,59798,88843,41444,95635,84735,99882,67998,24193,63042,12484,53127,23718,18728,77206,23402,41570,58758,59437,77099,85887,11935,99276,40781,58735,12354,86701,17430,36748,12432,34525,31850,73141,53332,25278,67513,61176,24507,81446,96199,79554,59014,28382,14379,10048,11172,15172,18283,26809,59887,68681,46855,70344,12106,40141,25499,59364,81688,60444,83589,75383,84597,11373,11793,17652,45816,97556,15946,25634,56549,17658,12182,63321,42350,82365,34536,49901,78709,22398,69517,81381,57054,17210,47937,23103,38710,28905,88782,56237,84534,57182,52479,68472,74724,47114,23464,10241,98504,13307,46845,53758,94070,73352,88908,81006,17628,77762,63416,24250,83662,59387,65023,17010,96654,36820,29681,29658,72018,36830,19154,17849,70756,54325,21597,34753,81004,93259,20622,75870,82612,17894,61261,30733,55236,32203,58784,74333,29800,33527,30237,16877,24365,60571,57544,30767,69576,80300,41948,18024,33633,71676,67215,47421,53987,51407,15387,85668,77849,22610,90512,14653,21529,24116,15646,23048,57267,16964,33126,10729,72239,87747,30673,98813,90439,14885,60949,53010,54105,92257,28864,20207,24731,70775,91796,73229,48310,11920,99051,48896,90765,87635,18015,58895,79048,23932,50324,42006,49367,75238,56519,85552,33932,32011,48216,86974,55271,23688,68651,54756,37818,89941,58319,26426,79028,45314,79845,79589,41767,64780,28987,35988,49493,94240,59691,33152,58481,57854,78853,88209,40609,72631,62495,20875,13206,65635,15183,78999,69683,70076,21916,91736,40487,13611,60204,74785,47761,16148,82628,76476,69575,42557,28086,44847,83231,73347,95391,92363,78086,81577,12561,13749,85533,27398,20956,16192,11438,56237,89935,10844,20152,35914,58822,44835,81974,96395,40688,35466,65437,31659,34847,17849,77192,49577,30508,94801,65598,77512,24075,22046,96234,51544,92210,13081,92725,17152,61638,51623,24747,45705,26112,59837,76776,93127,86339,83032,47111,67650,79139,62019,24465,52481,39507,82037,77869,22955,38548,46016,16061,88927,73676,94521,91725,27288,33110,69235,69400,49033,15112,59216,82532,54830,83455,42153,61054,23660,18388,76630,86455,62161,16653,44973,15990,65431,38281,54751,90086,20177,14005,16664,82487,84156,15484,99293,23262,23506,84440,85106,96658,74630,26482,47017,80341,75206,46682,77001,11522,53498,28636,30630,23230,88786,86765,75830,33267,36003,50357,48028,27376,22672,14031,72550,62489,84233,41087,64251,93149,63393,91172,95988,27967,54567,28513,29597,51205,53057,21081,41129,40854,56464,47199,71070,33713,89684,85117,10927,15129,81029,36572,13853,62430,21382,93520,29857,46720,74609,79622,86757,34628,74924,52611,81048,17078,15903,92229,53990,32574,99712,26134,30253,40368,84236,57469,81651,85211,68551,76705,81608,39791,86258,31231,79800,66861,32334,53399,11826,38813,90302,49459,89460,66750,29652,83776,96412,53201,95917,51701,76915,24359,31395,82121,39841,68580,59873,90164,69012,86781,96266,86024,84028,62495,35482,14719,46425,82765,30200,36017,36537,11593,76862,98010,82678,33174,34822,14469,55220,99609,50601,29368,15957,53121,43999,48621,31767,15333,40455,34088,62684,65590,39443,40927,19792,79288,72255,88036,43244,18879,75216,53509,88525,62103,41163,89683,19905,57319,10740,74354,46653,10706,62271,75173,81384,26879,47627,20754,44899,86778,72689,58872,41603,53734,98140,99722,50858,94078,99783,65633,84386,70379,50240,22794,42697,89360,52776,38628,47038,85045,92632,31564,27771,10316,45737,48565,76033,34986,10660,68260,23077,14997,10279,34993,96681,11308,71018,94903,78611,51315,16375,24682,40195,29936,48910,68963,90185,91639,64133,76419,25207,87562,42522,16764,56699,21226,41082,40054,21485,76766,10828,73711,70671,63070,41504,56529,87672,75200,58001,33095,43262,43144,80934,88774,29810,16497,65045,66370,30661,69557,66385,40781,59627,14334,27710,71432,79869,64467,86117,60179,40600,85801,51910,49113,50621,14503,28586,67749,76907,39774,33465,35758,26663,89656,13533,44306,13412,25397,93776,48287,31796,93776,24955,61206,98404,53093,86517,82145,84946,10750,92745,50484,71734,86047,22643,39696,92494,61662,88087,38779,68381,18251,20040,67030,15148,90646,72869,15072,63878,88688,43098,73562,35595,38512,84771,82892,41160,14396,56549,39087,70414,18054,92215,82421,97007,70025,86289,49494,87234,42162,56694,91588,83546,46459,70941,82799,83240,80966,81438,21729,32244,80569,80938,69539,30200,76195,38871,66706,90437,14947,30137,66941,51617,76874,72995,28768,17644,79238,41550,27946,26419,32442,10689,31855,93081,46345,65784,60717,22658,67511,26382,78030,17588,42793,24403,95432,25035,49505,36021,82708,79610,55992,43190,40206,89208,69070,92081,57585,71953,73494,29127,87316,73061,15036,60675,80165,20736,89215,86998,59780,76895,25481,36093,25370,19214,40478,92531,27516,12858,42968,21433,33424,27158,46374,55746,17490,16493,58337,24994,36939,83284,42002,97756,23241,65515,71957,84006,97552,66508,90624,33550,49962,19848,73554,24487,89637,61590,65581,55326,88047,84204,41925,40947,71599,33066,44310,19220,95208,80712,45430,43352,35658,74123,77663,73337,44671,83575,97587,58738,43752,45501,94413,96661,20589,96736,47028,87041,53439,78984,72371,45866,17344,91706,65998,86416,25152,56874,96158,90481,31394,88889,85714,81131,78983,46196,65635,76854,61870,35429,12687,48280,16727,13918,55206,72685,67357,60740,65626,58653,89362,91013,23119,74588,36038,13716,84355,83033,56254,96470,42443,34358,68790,59664,86924,88660,16061,87183,86232,42584,79122,31911,10222,10045,75906,41211,82288,75449,40086,90274,78254,16845,30181,13245,97981,14073,25612,99295,16580,23624,55545,22512,85847,70713,26539,60507,98700,29831,61259,10306,88723,62500,74664,21922,56252,16681,48455,31409,84111,73350,38206,62481,65971,22532,75420,32875,90969,13895,85442,32890,53269,71829,46444,70555,94847,97788,66748,85661,31174,97319,88384,33823,78091,85762,82890,80038,44435,88575,32068,55261,71194,67652,68838,73182,19087,47648,14564,79080,19201,45608,61488,76464,20511,48659,57648,81866,18923,13335,28359,95161,33097,36583,20252,74028,88025,74452,12309,49762,21829,66887,71587,97759,61977,59279,55559,54953,23729,59590,18950,48370,35046,31377,24372,59309,79127,63510,51265,85385,88662,51628,16274,76093,81096,83514,63943,43834,66620,77432,48870,53992,92439,87151,90048,63460,95085,40547,95438,81831,68641,47098,95267,37701,28577,50400,58051,52610,88439,14248,75953,50110,65502,48712,42799,22729,16829,34105,77616,21842,40267,73662,75716,61171,45802,24507,74903,91840,33299,27700,14710,37511,76914,39036,62530,66186,78688,94402,62962,43384,60808,52958,89046,73054,92881,96966,55865,44130,54146,81955,46391,64833,20157,44022,14438,13692,42252,83158,80975,72600,12419,54551,75775,60008,17408,45768,10059,46658,91036,62941,47617,49469,20511,30016,93150,93263,25042,31730,55873,10686,31166,13869,42865,67507,59355,99134,31982,76036,30816,99365,21102,32765,44322,67369,74056,69166,30460,92114,15190,27866,39196,95121,39134,19894,70280,56608,65002,33899,43513,27988,59368,51522,22725,52038,75851,26803,18045,92492,34151,92941,96302,46979,78383,71047,91393,85250,18686,19606,27650,64347,29045,11130,30884,34052,41096,41090,63931,73479,43922,38995,60061,13798,14658,90426,10694,49065,13965,75394,88696,58999,28471,35716,36563,72061,58232,39661,15434,55095,52747,59519,22236,83174,69523,69982,46949,79251,65368,30275,10851,64949,10759,42218,48463,42523,43277,42059,61650,63087,34381,43394,68562,58634,17331,70917,43331,89640,50708,51710,99078,29678,10604,50200,18455,22993,76191,10731,86248,49349,90914,74707,92095,76630,48724,86037,91099,36699,45596,66450,67012,40296,44981,98279,31770,14396,94474,74197,22008,69142,50943,18503,16836,78080,42060,28780,54108,56467,71240,10885,73427,58700,70860,57540,14093,27798,47856,81225,97747,43566,95041,26526,53366,50217,74687,94545,64612,10577,76718,38784,61728,52129,43594,42951,77793,51495,71350,99992,17084,31306,72949,21228,37767,73852,64689,80152,29055,99684,21900,16679,81273,58317,39729,37936,25903,85951,10643,19091,57440,84786,55837,23428,21835,76155,80885,75164,75227,97425,55405,55712,76768,29347,88413,77042,76370,66554,92669,93530,44257,90424,89321,58853,65304,84074,88973,63438,86793,80835,78129,96975,51740,20604,74088,37799,33053,36667,58491,52493,92412,69904,58122,76317,97583,27366,91543,60346,80557,97102,65306,95673,77446,46815,49741,21590,49484,34480,84844,12875,91756,76943,87523,48032,75774,12381,76787,90748,63159,98600,94302,77239,80166,57041,68678,37784,83036,65093,41170,94265,82263,71554,14374,22870,40871,35784,22519,94957,42100,36421,73769,34048,52996,19842,10449,36732,41741,62568,90281,99894,37795,84407,80965,48005,65801,69703,92501,58802,88586,60471,75960,17403,29071,69647,60262,90237,48153,86995,18187,64981,55205,75524,93463,86136,70763,72183,29525,19740,44989,73189,81366,98245,26472,64395,75971,66016,15180,40795,45159,81221,23664,81034,86282,80366,33661,90960,18762,11645,87656,80040,18517,84187,34788,22686,45691,85355,91818,80637,60505,53461,63206,32650,92752,51553,12185,13134,50734,84254,33007,31875,78532,67517,18909,75902,30187,36052,45580,34527,61475,32436,61822,58201,90583,10736,78096,13326,50439,82196,26213,55430,19523,80795,28755,41749,12450,37760,85910,92459,45179,28731,87358,10399,66051,95946,73207,27692,13371,10361,21106,15997,18066,44897,39239,87065,44673,97033,59531,77032,72476,35398,41232,99714,23682,32930,39436,17173,46875,20736,20393,11818,37316,69619,80391,73904,72906,84283,30433,75812,87341,13048,31038,17227,37344,46205,69056,66516,21847,12958,42137,32046,26149,89864,51220,40267,29195,26473,19228,62259,72627,58117,61830,42919,71015,98529,63247,51442,67805,37376,36665,23924,50949,30392,57039,44477,35565,39479,60622,55349,67461,20691,86112,82167,13459,77874,99404,25063,41082,68619,54642,52330,52305,46135,22240,19524,57804,10556,48113,24263,54546,56516,45001,23062,98543,14016,33543,93075,34738,62790,25264,59501,66233,15390,32991,71717,56738,85896,25925,60479,23826,33850,50681,96596,28671,61453,66870,25732,81743,16425,98429,97659,62020,21197,39533,11003,56214,58982,83192,88722,19074,53275,11921,47104,26303,58581,94296,95276,32524,22190,86715,51496,61344,50242,71001,24403,48813,84022,97000,91320,49474,30207,87930,13125,71998,69714,84746,35567,38950,96348,78132,69083,97326,93199,67996,68448,25866,27568,76468,14517,60399,87533,31182,63139,27483,15079,65091,34071,80890,99961,83463,34754,97961,86750,88387,15294,31038,42322,17034,60358,92365,82374,48589,87963,63816,81634,22238,92292,51642,29602,66498,49817,81073,29187,96654,21740,50209,46800,27577,14450,78428,18040,43427,24656,60884,47089,85068,18160,95789,13098,50919,67542,50623,35962,67261,33318,76186,90360,11787,96915,46936,58792,22213,39611,87323,28433,44724,14586,64025,99290,30175,39898,27739,37273,40692,13180,52093,66839,29680,54016,89099,76594,62676,22867,63546,20754,94545,54161,27943,24652,93631,97372,78292,76879,99686,69120,86734,32438,69348,62850,74570,18879,84424,38651,91266,74977,50115,17641,21432,41728,10378,52512,55566,50286,44784,24884,57996,57786,38430,81134,45447,45739,48923,74293,48770,53456,41346,81747,29880,20449,90502,72469,36345,65616,28899,26088,99689,17574,69696,46045,48959,92596,80882,52907,40362,73142,40113,44161,22596,27178,47822,81174,68273,16017,94701,35867,56975,85860,60617,17739,36031,62699,63920,60181,54231,39566,99695,97491,65186,66397,16374,57209,66281,49585,56466,67208,55902,33168,74816,58906,33626,14319,61277,72712,74637,54109,45477,55895,10405,14980,81338,88195,45283,33224,21932,74812,83871,27699,29349,91543,62669,20388,11441,17357,86719,78466,19243,65509,18793,74976,40590,48440,68358,29826,41672,10458,81957,59647,74722,71438,43199,69988,38592,95173,13986,26592,87091,53468,72731,71791,56841,76461,27289,45415,58113,10750,32167,42495,58195,25010,72237,60649,91781,60217,77867,71861,16562,76948,90403,74393,60210,72013,55450,61055,52558,88876,81571,64078,97716,42006,70452,38033,29666,98274,25143,19215,89584,34597,14847,64077,71862,65804,24518,98282,60150,56119,13976,91109,62487,23225,27376,11911,90494,33676,84715,36138,36014,37987,75734,12927,97654,70038,95353,59643,78836,48722,29371,61640,19102,44997,63036,92453,21680,54139,88929,74528,89447,24857,33963,45083,23736,19748,36240,74695,23266,90988,30324,29869,67855,70973,86400,34581,83414,54708,72690,48833,99455,44102,39226,40794,72046,77374,42923,42739,98066,47411,62433,54766,14588,43095,54185,25358,83795,55853,14053,71407,83062,97861,36987,30026,57307,45164,81748,92942,71858,36217,41985,20534,32177,35431,79690,86074,50289,99720,17223,40875,61750,92148,57965,95897,81569,19171,41790,32068,85398,86834,93573,88499,37056,20781,75697,37550,34798,85969,95122,66085,88289,93775,18998,96581,10067,59520,29157,57547,27950,44996,11199,38703,54210,25465,54961,76497,39870,16662,70878,44022,36010,57392,68850,83806,35146,80191,89320,20500,49541,48976,39054,56000,50261,67930,34008,98135,91342,44151,88809,35070,89316,50801,65241,16147,53448,38592,18688,90785,87891,88711,65401,41961,73434,65202,51295,52450,21121,89464,65602,96144,97038,58573,40507,73206,98965,73255,56013,14044,18113,34857,20313,67913,62317,88583,21826,12524,91070,86892,35727,82408,27746,16227,12584,60966,92254,41177,54145,15856,77840,67118,32157,54119,83695,64674,24043,33606,90073,80703,52528,11145,28718,49917,85664,28940,31540,80853,69401,30343,82712,81219,53945,22949,55483,55713,86617,15875,46352,53447,60546,41022,63717,47494,80766,13301,19970,97208,27799,89906,80253,28536,33547,57688,65007,26374,97478,93123,40221,36885,37594,60539,86976,50380,62116,86023,73424,85849,93557,57986,76743,52897,29790,97118,48445,40566,42752,46055,34938,80860,42975,71549,16560,39161,93874,14793,32363,40088,28289,72392,10580,31296,53394,60929,19790,92499,26572,57205,90187,39741,10667,91997,11996,94956,22816,50152,72040,39958,70029,35942,12418,26801,13904,32919,83397,77404,63980,30860,48218,31914,33327,34527,74497,16690,11518,77606,24077,14645,80643,38382,88518,96618,49921,63542,40891,46434,87787,91388,96973,92222,98406,33788,16894,75194,98872,95754,61950,73901,96662,78259,66345,14591,64594,23981,72045,63150,67104,55509,25939,41326,88425,26195,59216,64653,44711,30574,58750,43864,81499,62471,98932,61010,35934,36175,26522,35448,40076,60321,37620,60200,13444,62061,97624,22359,60807,92133,45403,96166,87304,70495,41393,11579,13099,88403,64529,47930,23301,77895,55217,76917,71951,63773,59814,29694,38856,93382,87631,79044,25272,79699,90911,98959,14128,55547,39593,76949,51365,41568,18693,80500,87398,23464,64551,39107,36113,66657,79619,85317,32382,25941,87492,42825,70784,45421,41309,20785,86388,25719,24175,19393,71586,31889,22084,77699,47077,99955,91473,65168,58356,48353,18845,15662,89318,12943,35527,18986,36031,46788,67791,34918,34695,30997,95297,78261,58508,47893,92770,74299,26729,65242,37489,11180,59816,44871,23767,43177,47296,16150,91884,25722,49081,88717,85171,72514,95691,10515,50494,85626,45547,58471,10620,85657,51454,59229,55333,81483,33078,60869,37895,79574,43921,35280,85631,46246,40350,77477,10897,88482,45147,28052,17627,27339,51242,21643,41173,25203,98154,87122,29815,84213,67338,38443,11473,49687,32821,83069,82978,13020,27776,37587,11289,44160,73987,55683,26245,17862,67080,91699,34017,60571,45239,88566,29542,20722,25391,63128,60804,59262,84361,14183,50214,22394,93783,69659,56922,62842,70626,99357,97941,12379,54870,15106,89549,57052,51637,97619,79031,53487,41261,48691,60016,48538,18722,98062,36837,60254,74844,13228,19476,91844,32031,39210,45990,97521,99330,65350,36205,53560,49255,80993,37642,91590,32651,57100,69375,94238,40249,56813,99159,97489,94321,52365,74413,48271,66028,23204,31863,55177,84327,84050,95513,96459,14851,46345,97704,46455,67060,43480,51909,93148,28016,56491,80180,61592,38785,99419,95302,53773,93005,66084,16679,32228,92905,20442,79786,89331,54527,50349,29225,51394,56500,28040,75892,27503,43669,79477,27167,82755,22971,43758,33596,27239,80233,87949,84190,82623,91300,52501,36024,25996,62719,81057,24412,72629,28357,44972,26950,51332,50269,65909,55470,73783,66396,15134,13281,26642,73435,51706,93741,13790,52572,96361,92241,36322,17929,88678,22283,42880,54544,38417,25079,82315,95026,58482,69245,49283,45835,38260,63492,70262,79091,51191,78438,35142,50840,79242,30932,23212,36479,13224,27191,69993,80183,31796,57762,24721,51087,55738,28013,79801,31159,64131,36326,98715,72969,41893,63975,53072,61801,65348,89495,69298,74232,33383,50033,98924,99955,39333,40080,22568,80489,27970,38123,95361,29531,66915,60315,61746,44702,62335,54499,93328,38059,69425,56181,48765,29297,19196,22067,23212,55455,95488,97513,54897,72846,60752,85506,95705,22054,34016,81269,76567,37393,33762,19134,32997,94977,95294,67563,30942,34423,50184,54091,38234,77967,90744,64894,42124,30480,66769,21367,18652,34379,30845,12644,23074,25480,90878,54999,14784,80810,70509,82995,85961,91948,65303,86774,72573,67525,44410,22515,42018,25935,19976,74450,58264,90448,27438,39581,36149,56481,79525,59419,27373,82061,80723,71282,14084,56483,25159,95270,14058,78355,35867,37301,26535,43098,16500,86109,47088,11991,51826,13567,65567,11864,38480,98363,28497,39268,71406,60430,79771,48370,85117,92809,43231,57975,25437,48430,49815,82364,56881,92279,38825,88245,64698,51053,98496,78533,10333,48858,67659,29732,99312,84651,20674,23864,60370,34941,55036,79693,90961,93884,66009,19017,63577,21791,15425,36753,54705,81394,28201,29365,17573,99501,73760,74558,11461,92026,93219,53787,94685,83713,62903,45941,95317,66407,19231,89114,46254,14243,36775,16328,63897,35094,35252,27522,17979,68529,37105,97634,88803,77515,49603,97773,38198,95139,14762,36687,77877,25414,33673,64759,42490,65048,77563,99209,79538,54407,28952,32435,79570,33793,37085,88917,42816,32559,59755,72151,58548,63138,37617,97438,90108,27016,94999,77985,15103,40648,44343,86696,20420,45672,86003,88143,19545,71579,95429,50579,99189,30543,24777,55714,90232,86607,78146,14337,51291,95233,97852,38766,31649,42756,13250,82903,48773,23924,87399,47265,24731,23776,86540,43999,52035,27888,58757,25664,55648,85692,39925,33844,28196,95177,61052,44756,38749,67511,46074,88668,53898,44498,36864,71233,45589,67916,75260,38052,44518,29314,45920,95903,19132,13364,86138,20806,77126,91064,45239,85712,70830,99057,83558,68031,43597,99672,14612,18011,50364,69413,25784,58219,33670,86653,85141,47040,47439,59973,41468,89654,55358,57554,95325,75764,30825,42512,96852,85406,46225,68744,17260,18657,37155,31020,90263,93050,98825,27056,68263,50524,36046,92667,81214,43676,86719,73086,52470,33447,60848,23753,78324,53649,80702,23733,75947,71194,89303,70320,68802,70496,68764,63173,14631,21354,75986,46168,75303,98372,13377,45423,77639,67287,73112,74915,17628,97589,17600,78571,81213,12210,36762,93049,84897,25257,98133,92663,68970,30083,98011,67314,60378,16830,74262,85213,66686,18466,86056,32374,56396,90198,52522,93692,63396,31466,31723,59768,69459,40758,81089,65500,65066,76850,78461,29952,11331,16441,95023,43948,27484,55762,88259,88042,50316,75584,11639,53762,43700,77029,39650,98652,85550,17521,82992,78826,49319,81843,81945,44543,80089,89602,81271,16618,83560,89676,75618,53052,85609,54792,68668,28497,59057,36934,89491,95795,59148,16044,54228,24946,10101,94320,73801,57097,34722,24129,10510,66173,18413,17949,66077,50767,13564,70707,75405,58275,58796,94069,70158,27467,23115,90175,36333,73181,25394,35896,60793,25851,25884,96862,11717,96470,73060,62231,54780,26673,95975,32997,59281,74047,61966,69684,35122,12868,34021,73906,87911,17129,38083,49215,42484,46893,94683,57272,70535,81227,14682,24459,86964,25145,48805,52998,32879,55700,60798,91639,61713,83187,42595,53965,44067,37542,25768,22953,20389,71999,55754,24276,89208,83716,21503,25957,77555,37480,48106,70429,70881,21115,53554,49741,95003,46701,49636,73138,19830,47808,11622,92037,59864,18115,44505,79608,88340,63081,11956,51042,94385,32315,77169,97263,62720,18846,13599,79777,57922,74196,96503,90841,11421,23478,35305,12482,15636,78267,81905,33272,30391,13900,17281,81389,81499,20007,83337,19219,48890,41399,69582,66334,19617,64963,69746,80442,83669,48299,14060,15507,69214,65169,37753,91392,62309,40181,98046,74479,38103,66162,74292,43389,33907,46761,94545,71562,88550,24806,23451,84013,65496,68096,63559,31400,35870,15327,55359,60837,54639,27283,36636,59394,53888,54999,88425,43037,85135,31695,48303,58883,99372,39320,21382,89490,83705,39248,18517,39932,12004,27962,96601,78254,88640,82738,15031,18991,12257,85008,29186,94349,80530,24935,90121,54295,19847,97891,76847,59917,59009,52537,77669,92416,59520,37514,70270,76557,37233,73305,98401,70198,79352,32636,83256,51329,21457,88031,95684,83755,69725,35925,55288,11815,28269,89922,79322,72180,50924,66294,62390,21799,86298,25721,12239,36208,37665,18751,66738,39629,72625,20286,33682,29530,71143,79081,15554,54445,85058,26195,25510,67140,91276,16107,79592,28006,80622,49919,89375,64747,75383,31175,98557,40689,87634,81846,90679,25723,28799,65341,47323,14637,48043,19058,79975,81725,79276,68528,79669,22927,35416,68437,10253,96014,11444,56548,25874,51651,12248,54353,37238,15992,30542,81346,46404,14018,70611,93722,34753,47583,21428,95207,54546,59190,77132,48504,36031,72774,52701,82467,75638,29966,19332,94547,49181,57769,13021,60608,66052,79083,58613,89898,22947,88889,88488,63503,42905,24827,12202,78045,39935,99564,60461,17632,53315,17524,64446,72394,59637,39515,30218,77117,58091,14128,31428,31254,32200,83919,98698,66529,52207,73371,12797,31963,53977,16028,62974,26323,63503,44672,59465,56302,17599,79143,54560,16040,45183,66746,76185,88767,65027,25631,46399,14851,30971,95798,25876,37836,31003,31870,33687,33816,46183,34276,81002,89765,66039,73596,19728,99162,80181,36297,50993,43419,48783,64973,46585,14392,44657,73753,26270,50779,17325,89353,97720,83915,68379,58639,90296,18431,60149,18253,22572,20868,70746,43998,71501,56212,31825,41814,29393,96968,41362,68324,69711,15237,30543,29638,77702,22836,25790,66903,32014,12124,98996,61014,28380,65684,79040,66454,35265,58124,74881,30982,25114,31842,64034,30389,92582,46859,86364,35472,62929,74305,33348,91595,36996,33218,31808,11557,26957,48140,50421,17311,13960,64828,38607,37956,44671,48820,27030,72137,66402,27973,46047,86514,41449,34159,93871,29310,44778,27169,31723,67898,89872,72744,19316,90188,39512,31471,32257,81569,64380,42181,37761,33810,18404,21013,74171,44158,37505,38117,11156,47655,75125,83514,97717,16039,60516,72155,67513,44546,21433,31760,89772,96249,11456,46503,92664,98174,64542,34044,27071,44687,38490,54459,87556,71290,28439,40809,91013,94395,57884,85578,60453,58910,80481,92724,56538,26777,47789,31426,51711,15741,90383,21680,86531,58269,18348,58529,94118,65188,14356,20629,23626,28352,82850,10472,81368,74879,43284,88838,34424,88972,44209,82635,41484,79611,78778,70191,78127,32998,48755,56864,82381,16934,40702,45099,71009,21287,15098,86884,50754,64439,25753,72700,87622,15560,24966,94898,14048,59270,33311,11311,63626,79624,28271,19761,29695,38853,96623,17288,19753,19786,72681,29763,49824,23339,57655,14874,94163,59308,42458,67024,16793,21855,94510,79270,13076,40886,20583,82062,13141,36806,76090,50855,19310,29223,91677,18468,88472,91838,91968,39521,27892,86887,97303,28288,83351,11332,34610,90905,95144,28788,25285,58700,44501,82903,27177,87286,69771,44277,95242,40714,98928,25474,27773,66079,86153,40596,22127,12078,12586,95857,55304,14258,22238,79991,30426,40330,90690,33651,79239,58236,72131,84949,22013,19130,77961,32323,63369,10821,25780,40353,72836,74925,29421,65009,88509,56416,30742,72951,13803,67058,24570,35699,28362,79832,56328,32881,36208,55831,84986,74569,54851,54759,26141,70368,15954,30512,32982,10349,44408,12876,12559,68862,79950,31654,57315,50512,48855,75036,82432,30637,87661,66905,88455,10625,80944,68330,38122,51849,75235,71264,54074,36473,91271,11614,68376,36175,74269,75016,86609,90925,64010,77692,93184,62061,71212,57280,91130,49698,63205,50914,80155,65893,58732,49076,27384,39405,21766,23597,28292,98318,13272,16106,90307,99896,18710,80090,12879,36184,45871,42666,67861,89785,86456,62762,40174,10814,28299,95933,38499,77579,45645,27567,61935,13765,35566,75982,68809,82228,38090,74902,23186,29879,27974,37465,58925,59471,71031,23838,66985,74319,46173,20018,84961,94969,72235,20404,63915,73747,60782,25275,13869,80561,40378,22273,37975,37234,14437,74263,72105,74067,76388,78229,21646,67278,38163,18795,10951,25758,54356,89617,28513,90657,53176,71005,78210,23121,13082,73772,50773,80492,80917,24385,11578,24945,33154,30884,32678,39922,36266,13191,16226,31390,75004,43259,51691,66122,91064,31807,85279,42488,62431,30377,75138,25558,35474,92442,42549,75064,21141,25180,15824,48884,20279,16370,80757,68350,43803,23832,98526,93952,16520,94899,92426,17247,18274,77773,80006,41103,14698,56489,79589,53299,21106,92614,77812,93732,90546,86552,45376,45480,96729,93853,89021,57242,26744,76217,88129,50161,45264,33190,71589,33538,80049,95437,62681,94458,69194,87955,37341,38032,90065,24007,70082,15903,46173,30685,35796,21208,67791,24178,30320,19155,55828,23819,60330,31113,18500,62035,48758,11920,96860,96193,75213,67998,98894,62410,73921,97165,21643,40845,52252,28178,51748,97076,56819,51330,96500,46867,17026,33244,67881,15896,74130,61287,84386,14468,86688,33075,53462,29152,60604,78341,78429,48408,57612,70437,18973,88072,88958,62520,50513,93151,44893,49871,52963,20378,19858,26966,75725,10007,97947,64782,26656,78664,77241,64685,60826,77357,71164,77955,69830,44247,28181,77860,35035,36986,17005,61960,98894,42097,51021,10111,35622,55569,81261,84988,23852,27781,90874,83992,54988,67435,74244,71455,90749,36718,78993,29626,41241,81691,59720,99834,84315,42521,14329,40382,88979,50670,68493,76269,93596,32229,69949,32420,40157,13045,10280,80919,90966,31094,24552,53676,14363,36434,57563,52387,48331,90126,30797,47999,46931,87744,94149,69712,43711,18304,69034,96654,44288,74020,25178,86734,95738,94919,73286,16207,76434,11467,89691,27904,52503,72197,56664,79685,45887,39463,87449,85049,95644,22041,24533,39778,55002,77072,87464,48562,66163,65579,87403,85885,32319,31516,94226,16836,83580,84737,50348,10417,69027,93019,69467,27592,57081,94910,74528,49862,94028,56858,25190,79838,31078,98667,68377,28463,89213,62499,13812,39566,78731,50733,98728,60717,27213,11135,25721,46005,42382,57223,26979,93613,64486,84668,11278,55594,81426,49171,38293,62838,50164,71976,22418,97753,46265,90982,19195,92608,66584,84299,86503,16250,97383,99687,34676,10529,22079,59338,62854,17678,90513,43502,60102,76128,71494,31707,72629,44791,70092,11747,39286,11541,63778,64393,47388,59403,95387,64321,59016,53985,23736,27773,23369,65526,18233,39295,84102,70963,93829,89831,31245,47526,93248,76901,19767,96239,53511,20945,79444,77349,75165,31775,51674,88024,61086,65343,31356,93495,13633,94648,53400,64050,88585,25208,59581,51666,39772,82345,54180,57139,26738,93229,69192,24694,47516,42517,62994,31319,56085,56234,49111,65417,39033,67764,38613,25136,73518,84183,28646,83644,54834,11650,94506,42906,54507,32143,70484,48638,41763,51597,29062,57971,40412,16452,68704,33198,63103,34649,57316,61083,37375,21235,76308,45682,80073,84660,48018,31724,10242,54966,32900,63742,68377,82810,62241,76586,21399,44501,71894,41332,81676,46074,19307,48542,26901,62419,94680,41439,63374,58650,58070,97057,14690,61445,48616,37342,52410,27872,41448,43065,84355,70903,41365,83592,92009,61554,16664,97437,48785,81185,39872,56337,87040,48475,43664,84812,17673,91766,23770,41858,50152,19574,64546,55430,80668,55004,24201,93399,77225,91115,66855,86474,60591,52253,68434,49846,47768,90963,39579,53266,40875,97794,41872,20360,62794,20343,87478,67515,53820,81832,13601,11193,41495,76002,33401,78826,67210,18488,59208,94258,52623,98472,50931,65210,98006,12326,50869,10950,51741,64392,25280,86907,96853,10139,47725,81379,41466,18450,63430,76026,27012,18800,48754,28375,28989,62182,55089,11945,52461,46608,24441,14260,32466,62091,55391,27722,10930,35965,94469,89763,52982,19105,24822,74398,90876,38928,82000,63774,73736,76267,97829,22859,80612,13622,30854,85998,89272,84879,86479,84939,58957,88550,38597,51207,25551,90528,19131,18406,93285,73463,10678,77751,78525,15015,31827,36414,30463,60708,91557,67905,99517,45857,10249,36577,32395,47999,83103,56482,80584,31165,63104,78339,53992,99937,75919,74007,99351,47813,30194,37703,70301,78160,60507,80182,14071,90964,95519,15717,65299,11299,68199,37706,42038,40707,19811,81184,95392,20269,57370,37272,28505,54913,52792,84800,11452,59545,75485,34056,47475,36527,33834,88394,63773,70111,57435,79776,18048,25384,87869,63597,59556,34559,90012,15812,66055,48799,97724,76419,65147,56243,87252,68667,63927,85282,44910,53589,95388,18451,17263,49302,43642,49065,75030,39101,75667,47050,31509,23465,32893,77564,72368,95579,97067,81294,63370,79467,14618,73720,89718,20177,83735,17943,68334,55890,41567,34915,85770,70264,71799,77529,17535,99741,95475,69359,86926,22563,29306,58582,58206,54162,67352,12505,23711,77910,11162,42840,30393,44764,59283,13225,39169,66729,64473,22944,34502,45913,89848,83984,25590,50788,47213,22521,45919,11680,85519,79749,20815,84582,23103,53794,57732,26644,67243,89224,41262,89596,57371,53639,44589,76985,36845,55875,40780,88769,52816,65927,27741,60794,71990,76900,63008,38219,70562,27560,11292,62051,74774,58921,25331,65698,17174,46119,92737,27487,44684,81430,41629,95645,25225,41614,44999,22201,43822,67448,95345,77464,24778,10823,97484,69240,69330,31124,76034,64148,40931,66890,32933,11314,59016,23043,50458,53417,36416,96953,68691,93653,37993,36248,60644,18593,25745,51796,95425,79108,82805,56329,45694,87039,42841,51259,22818,58666,36506,44006,71069,45387,81170,35003,83050,89976,97144,56064,78004,31216,66296,92799,99393,76307,84121,53408,23669,20782,43853,66593,65470,64294,36001,91231,37333,10307,26133,30445,95395,45178,36686,92834,92654,48440,69406,12345,40609,13596,32027,66766,14690,44128,89668,19186,57923,86839,22833,11181,57371,84352,89814,34411,79251,79849,47968,91172,30101,14500,79873,71966,82908,47938,55640,91468,37334,78295,73735,86408,92157,74532,70904,92503,23972,17724,37410,10472,46238,46968,37117,16475,43578,66174,21658,63148,63089,72020,56848,53352,63892,30067,31505,59012,85886,97527,94276,11908,84266,35564,21627,40781,83763,64823,79656,14738,49126,55437,69581,41623,12109,43725,67929,34616,35675,69053,58692,12722,30410,19460,75533,57753,60207,54648,80448,78995,25525,91190,27968,72074,85487,59546,72626,97940,62778,55808,26489,45951,36298,70444,65902,36259,61890,63027,24598,47073,16043,98059,60649,49305,64497,59031,69746,34504,48815,29654,69999,39253,23398,58256,36328,14691,37027,19941,89720,43166,94706,28392,12185,33979,86450,94027,46680,73936,75458,89664,55790,80877,62834,35021,35581,57799,96420,24113,37413,60169,29728,17133,86449,48201,17500,55722,82301,47486,52548,95833,50074,57827,82897,23477,17359,42983,83819,59315,94127,37762,19286,93685,58493,53028,97742,29016,52685,85448,26833,41201,91723,25027,74556,39406,21422,12612,87270,53801,11961,96551,82671,99952,77094,93950,37502,33659,26063,63335,12606,32934,49694,37521,79849,73288,35723,45929,42180,39034,43901,21412,96787,71956,48619,24063,24838,22790,48728,12538,63656,43609,52978,49233,21532,89910,39455,69491,87683,46524,67520,10526,42778,14266,75162,18329,60668,39420,66716,71741,97105,82847,29462,17750,67660,49635,89776,41762,79482,88933,77578,26198,27327,38457,91246,86250,98970,67646,58281,37818,21270,80432,58938,22631,35622,37964,91253,28056,91459,29842,45121,91882,84526,69529,12073,91758,41199,15963,42084,21164,73684,69297,64296,75068,75549,65136,98828,46849,34703,44360,40859,44514,97837,67962,75901,53300,20124,42231,60533,76388,46092,95934,96620,16439,92847,84482,91577,38886,86435,63354,97859,48849,16260,76098,95765,12363,45040,55186,15272,83275,83629,17603,99827,93412,70880,24514,56061,33508,43050,26406,87014,90551,95852,94923,39288,25430,69785,41562,47255,64722,91710,86723,75516,37398,18597,90969,74211,17896,33298,14277,43145,29936,34070,66530,12655,70855,46480,36207,20476,32415,75704,93927,59073,31840,86999,35442,62834,75650,59140,64079,10831,55080,92800,89016,52915,14085,66543,89968,92255,75782,30826,59070,48796,77125,99637,31445,55903,54720,50439,64203,99492,42595,67127,20942,40113,76149,65641,24932,61623,64388,61053,74006,78290,19109,22999,94100,63292,64022,32300,66102,65082,59467,48403,32847,24508,23396,30067,25778,13032,54184,69263,44815,79270,67258,75011,26733,24643,97218,69036,91433,70951,16446,80203,60096,35763,89264,52112,97665,58239,11891,45402,75406,76248,28833,89349,94626,76508,85695,79384,23021,43602,56282,20395,68139,66213,66758,35571,28675,36769,40792,91551,48740,95632,46333,86427,59611,64742,46269,55739,27723,28483,19656,55888,15551,90998,40768,33376,29430,32503,41397,55960,28220,89176,99746,66473,89897,40943,68761,48022,98538,67247,60283,28603,73988,74150,44955,58736,97850,95091,48523,58029,57294,97689,60761,24169,31910,42067,84537,58550,63076,12800,67807,39520,20066,44478,32421,63689,92829,43660,98679,74600,49458,92222,21705,24545,25565,25617,64519,37529,66987,78824,19591,28307,16899,96015,55352,80783,94587,41502,99433,51891,26284,24994,49355,65595,78195,42343,23797,71898,39363,62039,25799,36449,69339,17670,48747,51409,13867,70606,51372,20408,73339,28509,73536,17635,71601,84329,55015,93761,44198,71422,98555,31349,22762,54444,38702,19231,77307,54489,72200,93350,31380,23942,45671,74549,76226,48009,60729,99680,17216,43507,57522,33449,95359,71249,59573,34192,62262,13097,12005,99138,24918,99969,84188,83577,52120,85932,27438,72010,32656,68873,92859,55506,37662,39437,79963,32875,99059,52541,39455,68847,73944,17035,11100,99967,64441,53983,70531,61796,11426,97215,34027,17370,91649,66334,94618,53000,41107,53013,82152,20987,22269,57179,63219,20424,78429,59173,20691,90080,42235,15126,72922,95369,66803,29495,30154,49692,86365,46502,93923,58040,35906,43984,58700,24236,27545,80227,33032,66740,21610,27314,42301,80889,27238,51481,65816,27614,89277,54694,74002,68922,34805,79808,24718,26884,92113,73488,53513,42414,41842,71053,34374,61557,45216,43123,57123,10326,69409,13236,98141,82779,49216,17661,22731,31755,63096,53826,61332,85654,79706,76595,45391,97193,69078,22104,49424,94298,98307,52579,32944,38477,55626,74419,18297,18483,58001,50807,63911,31928,18702,54062,94300,18362,31012,96483,11335,92747,71391,31929,76414,96290,89113,74922,59765,35718,56400,74516,25165,70002,23305,69498,13795,41427,50753,28906,87421,61730,65888,38375,25035,71347,56536,55741,62245,16855,69876,65684,75948,30107,15701,11559,59653,30120,96588,32324,56509,33383,69612,67508,70065,87361,66848,16151,59528,32635,81981,71893,51092,28835,43308,14099,96120,58201,10166,43474,88538,61356,81971,60120,93719,72137,66872,64603,12850,76522,92243,75178,86831,12612,43191,65344,79513,32318,41764,12672,69411,83988,59696,64980,70526,35023,98612,91149,25921,48226,56375,16353,16395,53178,71276,47418,42719,12254,16999,83486,41601,74992,29613,34285,30509,78882,57464,65570,74752,52530,56558,84160,57866,55920,16548,32522,19932,54123,81015,57058,94176,32905,84918,66625,98295,28431,18517,14026,16102,90482,17583,11509,98134,34683,71123,33380,77762,56263,29478,10409,74874,63007,15241,90224,71677,97837,76753,68552,91650,26163,68877,52141,68037,95693,20474,91635,23126,50648,38677,35173,40383,91568,72512,90777,18940,75027,25913,73184,91084,73225,51259,72651,57291,91518,31744,63169,87297,22725,84906,18279,68039,81029,57735,85163,80571,90479,77679,46618,72699,91555,16059,87246,78260,59967,26274,79643,63970,50165,27495,23129,65598,51296,18139,34935,11845,95953,96273,64601,81411,44814,91281,24387,16666,57958,26132,97719,52131,46348,27174,88831,39971,25196,43657,35617,13612,82468,40371,32808,69636,80131,73808,26007,95807,79385,24436,64591,96702,71348,12202,20981,85891,53809,80425,90640,34402,50567,41356,81515,98334,62727,81815,79963,52813,35504,96467,27197,93962,10884,92193,39413,38594,90966,90270,99054,82948,13219,18653,49341,32716,81883,18481,86171,22410,26786,97723,22928,43711,77765,30708,20570,16426,41100,87432,21398,86101,40551,97562,60537,46031,56692,62394,94043,27858,46747,82010,54326,82772,94318,20383,32108,41703,25969,78525,39986,61969,89798,58137,91742,70761,15146,64554,45520,54435,89822,20326,14919,13483,76155,48743,42437,60257,50452,17852,22248,19893,28662,52359,41562,16759,88002,31262,47941,11569,51952,19231,46839,24524,33671,42354,15291,74057,68345,80900,59739,42756,80957,72795,89522,31818,56274,71062,98984,71893,63467,95615,33121,69234,39372,40354,74399,12002,40419,57015,61844,15234,13386,51184,37731,19305,82930,47569,34475,68214,27026,56717,89735,73529,20931,54335,78676,26797,45347,22652,18475,82170,52450,16379,78356,30793,61924,19424,66079,92665,79877,67856,23190,10286,70880,54183,22421,22755,80777,25804,70387,22375,95876,89849,45078,27055,26851,68398,68709,37084,76099,64967,22908,32334,14517,95123,22406,79716,66126,62526,80982,43743,73217,44174,13641,16816,12140,76497,98813,54222,16475,32813,88852,62116,68662,19944,79538,87708,79446,17805,87988,57964,63073,44500,97935,13494,95013,49488,31071,46962,38082,74429,46239,78002,88022,18683,27057,38491,74420,59335,52823,56477,65240,21717,40248,20867,70425,27254,38098,26350,43283,58909,44267,82888,82746,63218,99962,90154,49099,82789,68639,90345,17279,33422,51078,61940,37229,69731,90329,11096,86253,16842,22545,71234,34410,45434,54783,85034,44267,44115,84821,96146,59212,49262,22844,89361,50748,64256,97064,27435,70013,50527,96837,16633,82928,66485,52835,21811,61703,60649,49268,42977,22600,67758,80640,27217,58522,67797,14103,56561,53823,11347,39192,73022,32793,87730,12388,79165,53462,76185,82102,18859,65799,31697,33814,84992,58040,11422,51379,83578,40876,65037,28925,81838,17141,29128,41561,97628,64440,73335,87912,69402,72010,26652,26468,89507,53963,90161,36057,98243,38223,65448,60357,61742,99596,75748,97535,98933,18392,72186,96370,99325,72990,47331,51002,18787,60864,76720,34932,93617,26983,51675,34491,63356,93738,42110,42325,24611,46242,22304,44464,76722,10510,80269,72487,74481,67565,14062,96916,70232,69616,82491,13315,62396,45155,93405,72371,47784,11110,15838,83164,57416,66185,92287,41642,56969,17946,23493,87350,48176,67525,76816,48325,87513,63963,14303,56694,42496,55998,79581,76005,15604,21691,29980,32620,89499,61551,86605,66796,13737,86534,93041,94752,33950,49843,79023,87223,36504,54869,80122,16360,46112,86722,95856,32636,45482,37550,34874,43012,78364,89512,21576,84348,97161,27489,36850,63557,67827,10356,49669,66779,58096,36478,32562,74544,97349,31449,30582,50242,44634,58380,81587,35213,16181,22114,17861,35375,19737,46952,66719,71438,78113,20231,93804,84972,98137,44595,40038,24113,31213,44677,47489,80450,88275,82669,87936,83252,62493,57865,72761,78840,16055,34024,99169,94625,37076,24530,68349,35130,54132,13882,95001,26614,54763,28944,72321,48191,36081,94789,98635,43845,35913,78958,16619,51988,71331,75614,25643,33419,52606,97225,14583,16550,57308,87313,82127,94800,89847,10633,50966,44569,43834,20765,86879,47746,80021,14081,66078,60665,71046,35003,62218,30684,65452,72315,70202,78663,32279,60707,26058,24578,55326,31327,85430,42187,81333,35895,24196,29058,57584,46741,30354,94314,25455,26754,96939,71083,84956,50740,97880,10072,10444,42436,54498,74346,60082,77000,50893,13973,43818,97707,95962,36751,68466,24669,80862,69791,16107,75188,93676,81218,60456,14945,42738,33276,57298,28514,37156,20286,29933,88371,43301,26598,20986,81170,51892,96832,85994,79202,59026,87683,50973,47466,32308,13207,18461,21729,81323,40223,24748,83292,25641,50258,51249,35246,35081,79162,56438,18170,68347,26150,24107,41107,83408,18260,55899,11671,93018,63418,81082,13556,87037,22239,68158,30770,33333,63363,53844,22297,77156,33439,44455,87999,46595,25162,48291,33242,30722,62455,11905,75842,57698,72532,40137,36824,60944,69043,18949,65779,38815,58809,82955,67710,26906,89045,46591,79262,75429,88526,28464,84237,42505,10549,22711,72001,84010,13364,49244,15009,25271,47103,97357,48512,23488,47954,96911,57900,92423,67985,17915,18937,22556,56709,68563,24151,59497,31878,35160,64170,33157,41607,14060,67046,26291,15843,20977,26902,60199,98466,65552,59640,54721,51030,47139,22652,49736,74127,58605,86941,99298,56794,65200,82489,86388,23751,80870,13516,26046,95556,77318,43600,72127,58040,72091,34330,60512,57815,54295,19232,45809,30358,39566,74464,92269,66414,39489,48371,60600,74783,55758,51137,66828,93471,63289,77582,97537,93914,19943,75272,43290,20908,95587,30133,74539,23273,77402,57720,77321,38367,96066,91260,50516,95089,63891,32440,81574,40791,45081,37005,84334,51462,30305,81899,40548,22839,88821,10262,51179,61748,50318,67508,24290,90648,78232,36344,44938,91803,66560,88327,38336,45871,36001,67712,97011,10742,47745,77548,21231,57874,13847,64100,54539,12267,88122,99015,91592,88987,69709,62657,17077,93674,69267,89424,72130,61937,88414,88996,89528,77133,20348,64145,89610,90276,25527,82107,29341,80870,28142,60343,46515,69253,45599,65946,84901,90443,31158,51749,32858,41598,52671,42353,29026,37906,66689,77611,75371,86979,69437,49708,45338,24730,60319,18171,30718,84118,51823,35904,43007,33295,12431,37653,19559,25959,38328,91231,78427,59220,25709,27794,63689,51692,81439,51474,50465,73013,87044,42771,48553,55187,90488,13782,90551,12761,94704,64638,46669,18908,69706,31582,27182,22987,41307,98224,94128,56473,85737,82780,47051,75434,85703,98448,95574,84385,75298,39098,72313,81857,47142,90413,25827,86659,51705,70193,42328,64449,52015,82500,23352,77792,44778,80778,74987,74127,15367,14622,32235,66721,92159,20285,33770,73375,75850,57104,48743,86972,33056,56465,24705,27626,22822,71376,48780,31226,47456,12364,38955,35102,14176,53180,32318,25638,23166,22894,90395,23341,15985,18051,29209,87446,42579,48741,68250,94202,54068,45733,61136,28515,61891,83577,54356,93565,32633,80842,29146,66927,27967,39503,92507,74441,37553,65258,55864,53558,93346,68949,97552,90497,12873,78215,16014,74929,40019,40824,64459,62443,43043,71770,84393,23563,61482,45881,49596,92258,44897,54256,56467,83667,23560,88633,91767,21945,47890,67712,10084,78519,34925,20502,16084,11868,66395,78696,73873,19428,78221,13078,96617,15163,59610,53498,92321,59648,42402,96402,41496,26490,86109,83509,39657,96875,93621,41509,16402,12873,26681,45880,41497,63861,30239,62671,11967,31702,62442,59140,83340,42566,36393,24058,15124,92755,13997,57910,25715,47219,77132,69884,22125,88788,88512,68267,96433,10309,10268,31800,43866,95621,14235,40188,23313,21779,96673,21903,52354,75115,66309,79967,76556,60937,48165,27147,34812,45855,49833,47985,95819,22165,56180,54798,12882,76081,97792,16024,37391,42196,79087,35789,94209,97614,15561,79733,56417,34025,22413,70974,11047,44278,26443,39896,98943,80613,84390,50174,24812,35324,27026,70004,42402,11438,43266,27111,37717,64468,77943,41702,79082,64882,62733,17943,84003,47611,89596,57261,84163,47496,80906,18541,69615,85633,10877,39476,46688,34744,19580,60780,55668,37847,74213,33669,93830,59013,41342,90591,99703,89091,59677,60753,68398,61027,11096,15893,99554,84001,83185,81439,35510,82047,94012,57239,52909,37211,58471,64594,82433,23214,51286,52980,22770,29574,60460,26706,26432,58318,88505,67399,34977,63968,73249,27348,71891,74170,43810,64454,46315,66484,16564,91592,44090,52406,39175,28427,90121,37931,24629,72967,74629,43202,11254,33788,72626,29895,61710,60657,67939,86652,96010,49270,79840,67540,64803,32899,43927,39624,95189,44797,43322,86234,39352,87588,62599,57703,53496,26469,26737,78968,53803,79436,73912,25516,23972,14160,94375,99301,27583,14927,61518,41610,70051,28594,35623,16158,45688,38459,80753,97491,32360,47713,54251,87059,34635,61102,88389,96013,85166,12382,55175,42112,96268,55275,47592,22326,42004,95300,50632,25747,92461,95871,10438,40884,87195,85694,71925,95645,44991,94826,53090,17889,10623,77817,47809,53689,77067,85547,63240,99352,38509,94699,90331,70178,46985,87560,84962,65355,99543,98895,58511,11754,37868,59695,91415,46398,37811,77291,87325,88321,57618,82952,31773,94581,83012,70279,63161,51398,74160,25335,49007,81832,21758,87279,30433,10283,98630,53538,59149,62865,13324,40391,19079,94781,52574,76014,80640,60792,20865,60009,28256,60254,85132,40577,18776,60077,43765,47646,79370,52867,85649,71147,26573,86092,33393,13363,82107,53628,83271,52567,35702,33922,86446,53255,19411,33247,67823,90358,88389,83101,62002,18489,65004,83819,50385,88002,99562,44328,90726,70656,76284,84283,62138,11112,47644,21547,36081,78887,61144,84256,24629,52209,32229,93283,41653,28905,19691,92217,60756,36689,68356,12142,41192,33497,41989,22061,91047,53941,64017,50079,75674,34414,98671,63192,97265,24957,58963,51199,21395,99304,46114,67884,82524,16571,42633,95212,93078,59770,51860,17017,33777,91015,86296,41317,21901,60066,94713,79250,74604,69007,59762,33130,34147,56936,10729,82679,69136,68701,17872,11944,99598,58724,28347,24642,24614,60055,61167,88458,91189,27303,68853,64369,71597,50512,89532,13840,84749,73413,23051,40201,56026,14939,19906,21059,31563,32675,96051,79858,74991,98487,87837,83809,93885,81549,61403,15950,85903,20157,63182,47273,47157,21611,82739,33297,72544,99979,90405,61078,37514,70494,69479,36265,60500,76271,48366,45337,61509,53949,99670,84243,68222,96231,86785,12423,75373,32391,46321,25626,72703,99124,71314,23312,55995,67522,65129,99313,87163,87623,88021,83486,71153,96484,39302,13458,22731,91472,82625,39225,43721,32790,93889,50492,85726,28326,40162,10883,50524,13493,33641,43901,44176,47848,89044,96333,74249,78112,47688,57082,35786,55872,15374,17361,21440,31878,51681,22829,88433,61589,72291,14885,46483,80899,12911,31584,36852,35320,28962,81960,73053,73037,90927,90131,82400,44220,91332,80671,16244,35217,24259,64754,13441,63245,85946,66441,38578,85934,28638,56493,53112,29265,73119,66146,95551,98373,74521,90844,81305,94163,55642,29249,38256,94541,73808,60276,64750,66174,95500,48105,61814,38638,77270,27114,42170,29729,61253,61265,34209,10689,67681,16853,85520,78112,82367,76781,88938,52218,92214,52132,69979,89391,36629,12555,66918,20387,81963,34258,43449,62891,43230,14383,55555,49561,57286,36296,48102,37514,92310,93803,57137,29705,88594,30006,91746,14148,81381,16216,68907,86616,49846,21306,20063,28288,18448,63110,79918,65957,49942,63237,64905,58844,44666,65938,56108,59749,70050,78621,28487,29465,19825,39780,56101,96835,40033,30376,86882,42242,90083,29549,26290,59099,69647,31269,54277,61884,85551,48303,76718,30404,74856,53157,27220,19160,54111,13186,96070,95143,14598,81145,19514,79080,44453,87403,23839,32918,17671,14077,22450,87622,46773,58084,28124,13590,43116,34677,60622,60005,97111,77567,76376,63974,72334,78037,19923,58695,92034,77283,84248,62719,74384,29515,47758,38065,72182,36928,76860,50839,83739,18313,80882,17974,18402,60157,90752,86100,23907,70582,20297,31015,24413,76298,86438,29690,72519,63651,88310,35059,86356,51304,21368,36049,62635,46765,14224,12250,75902,49839,93453,75650,40400,89164,83615,52524,89294,63790,15263,98612,68247,32599,95121,54588,97096,20522,84586,40367,10802,52740,95512,87060,28085,80360,29096,68855,90865,91040,41184,38350,16664,46652,75991,44544,98534,78228,18744,32420,89553,79729,57890,27918,99483,58309,38762,30058,51383,48026,96454,27225,94032,61718,85267,29865,78363,57409,59685,65598,41210,54901,19243,57737,94324,39224,82037,71986,17100,82855,29914,77897,31775,30510,33817,90706,63065,62773,46532,19051,14151,38691,50786,85428,70808,94845,14880,50000,97407,42029,14163,78512,56426,48907,65224,69847,21616,50334,28923,32970,95501,62340,48731,29031,50711,11492,73199,98842,27787,33197,98966,38947,62477,57941,47113,11774,38229,85540,79231,12427,26872,54650,38126,66145,17671,44481,48498,80093,77810,10027,58905,65167,28068,82172,10279,82596,98836,59536,22032,19646,26941,67842,38148,73412,82136,37016,17566,59253,10235,56751,79916,39838,23550,73613,21294,60561,27266,52448,19481,86036,77410,18442,81019,32244,52005,42870,17558,51821,61682,77137,97691,66917,11954,31367,74113,14162,90412,96678,76702,17815,16409,92238,12913,32500,51457,83499,84839,38921,81744,57365,80141,87709,66964,63528,29713,50798,91515,96436,37659,23104,92522,70197,73532,71339,76532,22893,89742,55273,97225,50204,77829,68683,94602,71974,70127,13902,61311,32857,41571,94203,54572,20038,65457,78704,81813,35768,12390,21106,46250,32391,76194,92386,43330,82418,62066,44109,57328,90964,61087,70789,89156,30080,51045,93285,44906,56432,35622,86889,34034,68329,64999,60404,35928,49104,95497,87454,71676,20064,90366,76957,79706,47918,57387,58424,27937,79024,62718,70175,21678,91765,85327,45937,86292,40595,13518,17167,29629,58441,65657,30405,90755,56213,32668,17588,11960,46653,18653,91464,31469,68636,10488,10031,88411,72816,68042,83039,76874,78306,48679,49338,94329,63473,89851,78966,51033,26369,72692,82499,78507,56758,12172,56817,58445,34041,11099,88438,37630,55821,56736,50877,94031,81591,88842,88898,11435,99659,93060,49087,92764,34006,96118,81761,55436,82379,50161,30722,96286,76874,54759,29538,43898,91177,38767,94531,71464,88440,17152,92895,56384,40879,86428,64242,54879,32179,71356,17548,44819,98953,72334,99523,97707,36348,33544,14075,73064,36059,25362,24428,45514,32960,57909,73031,89118,49252,24739,84199,15015,26847,34954,97498,79260,32768,23738,80722,64825,84645,22209,15120,29664,29655,70901,26648,19419,26190,44870,76016,37992,42175,4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12,45075,75626,90627,79432,81232,70272,33790,43199,43173,86114,12222,45233,52291,36970,24755,95960,61091,51312,60568,13368,56157,12159,50123,70901,72446,26004,68722,14983,62217,80070,60265,18390,82451,59523,18146,28323,79111,66201,78264,24200,78405,12471,21644,50060,20379,13383,19193,87094,33887,60452,24201,56017,96505,58112,96021,89822,99880,39429,34251,25463,52279,14271,51173,86599,86908,15012,77896,45272,20305,61257,89658,74507,94624,95729,37938,42890,45318,89186,52616,29181,75093,72275,45970,16568,23407,49421,86511,45803,20620,32940,92420,90182,18285,39380,74388,53095,36738,22996,11726,18086,60759,50488,66990,24606,71247,13390,27762,25039,38078,73433,26571,62711,14838,29140,44160,42557,51083,30677,84437,99247,74087,78631,83271,75986,59699,22693,49363,55063,46600,20303,67570,91832,13284,39987,71999,30895,86760,40639,68036,33314,29727,50887,47186,85768,53051,32776,38768,20658,26510,44697,85997,32912,91313,96823,81625,98219,55086,47043,31305,51990,66917,88485,27053,97530,16313,63614,35985,18117,91872,34077,22033,76669,93006,57621,44984,49030,56282,42315,98888,42197,26178,85121,94353,83366,42486,73981,25748,40382,11513,13239,20906,17220,23491,46892,27860,16316,95009,44393,44965,21844,28207,85852,62973,97098,81119,72689,22613,44007,49178,17239,80227,53297,64143,94303,24900,82813,18128,53152,95859,87007,86603,21876,76719,67731,98414,54096,31517,76583,63278,96471,31500,28114,68189,73491,47128,54133,41487,76308,91159,10252,56522,68467,28862,83393,29735,66817,67855,82030,21462,16600,79270,92554,24905,67804,52184,29576,78556,32416,31851,78225,31232,48791,50033,95203,23151,79355,19104,89072,30362,41092,39718,18112,60982,40650,40629,48852,87948,58818,22808,34278,30511,95294,29642,26908,17344,90387,31453,57751,20653,64078,64782,33852,86309,32336,46619,43202,39099,41149,93174,47435,89654,28885,56674,75664,33399,61140,26786,80161,44242,13459,10378,56502,18715,99381,62290,52523,75040,86935,75309,17040,97018,47753,36971,65670,20440,74935,36742,52759,97498,49818,16798,56426,87135,95774,79863,21463,69118,98224,92396,25489,52107,54383,33793,11409,63022,61346,90783,13192,79644,81424,10484,53214,49175,25584,54469,79093,73684,49587,94856,10304,32045,37806,65447,22489,58160,13441,37622,68918,75813,55324,34775,65302,35068,79943,62021,85337,39142,16189,64120,93630,58471,26333,29812,81775,17616,24679,59452,85740,35863,41189,86004,88305,99253,66940,13632,83638,38090,41050,19436,93201,78975,42417,99522,30482,40441,12258,75460,95991,13652,91543,98559,54322,99748,79399,90020,57813,88176,92431,51055,39707,44944,55676,41114,46576,64957,13719,96171,22412,50281,94605,49333,22953,86730,85472,14489,15139,74031,94654,10731,48980,95710,15390,77706,66331,20185,76063,81547,36203,30974,94559,34973,73825,30481,44608,38922,10102,74206,66220,56129,10479,31954,44132,37054,71508,11996,48982,68754,92796,94202,74513,34571,31848,55315,30257,80606,82781,52425,36857,75864,25267,55882,89130,52981,85799,53667,54115,46331,63374,86341,66149,55594,87101,99865,78066,25176,78723,37225,98269,10612,10839,57984,17830,32053,43502,25738,64798,18875,91553,81486,22892,81049,40066,83782,11953,85596,55591,66825,26804,30783,42486,97762,29554,75986,31323,89413,46352,47382,16316,44025,47452,91155,34972,50381,57748,50798,77346,33761,66542,65178,73561,39692,36363,27562,15414,40306,81978,59841,20706,48167,54279,26636,60759,38654,81325,77807,86752,10980,86523,75514,72760,79792,43716,93645,71983,95054,89264,50679,25861,74635,13632,20342,72426,22086,35891,38911,58287,65206,22949,99080,56312,29289,35962,74670,75178,96641,80007,69293,76886,80678,51627,69748,53990,18900,37345,61921,81772,12425,39461,13613,72510,74329,61537,77607,64939,80004,90117,46477,89519,67339,86735,87811,35512,81751,86632,55450,17977,29507,95119,32478,38176,73559,26465,77673,48801,93999,55963,10869,96773,35885,25172,59888,96169,71783,77481,48438,33618,61048,49771,33983,20303,80765,77288,33198,75072,30124,72833,38011,47285,90266,67801,47369,74033,62573,76021,68139,98394,63687,97335,31925,79245,35784,14542,17201,91776,78523,94651,54816,30722,74304,22740,82299,47421,66860,50178,52853,86186,25320,29498,66769,64566,45588,40470,82525,85363,68563,71597,32524,65179,41027,93657,58965,40078,24959,28659,72421,37009,37295,10457,19284,76183,93107,40355,32055,78819,49266,92939,71148,20516,75904,20736,31311,88391,24094,29938,61241,12276,81176,78038,18883,74353,28463,73794,67471,64170,66729,21474,20249,96995,22056,53786,74440,74097,92769,55418,25653,18517,61929,77200,36482,97159,72643,24227,38411,11271,10248,66346,16211,97140,82502,48505,11085,24065,22480,22864,68553,36710,93416,37373,85608,27122,44969,19630,37190,46997,13457,89402,96750,30992,62355,34724,76277,33475,29830,38547,60727,99967,90311,10582,80357,62267,84771,82699,59138,33363,47448,27336,32536,29340,56657,10867,36973,27033,38899,87729,35752,56671,76734,52436,22758,98270,34162,28516,10238,52794,41265,76341,36159,12663,55818,32218,68076,38331,45564,98919,18026,21068,11487,55906,24515,34641,69098,55049,45478,27953,18776,86734,16978,60753,31211,89662,91305,92587,15182,49509,62346,84603,75123,62843,77307,84763,91025,71190,78890,29418,18395,69999,35591,54757,48979,28204,16707,35816,33475,45250,43394,81671,87469,41899,54471,42410,62279,37345,64212,25917,86607,71502,76546,86750,92864,49644,51006,55917,75451,49629,48965,69660,13227,48348,99313,81045,77642,61846,79284,58034,83035,37656,78518,76271,34427,25882,65598,54384,29650,33248,98090,69880,67334,22510,27795,37517,55398,77093,31260,37077,14259,67618,74451,34079,11038,76338,90269,24341,14158,67723,99290,40830,32541,64384,64212,29198,40432,18496,42525,85562,95901,86570,55972,77066,89046,70965,87418,42577,90095,36342,25922,30519,46132,59433,43533,95893,64397,53814,42309,81122,80461,58999,24852,76515,29859,20327,25133,44638,83677,40256,52188,53308,16862,18236,38224,82626,57471,17137,65682,10574,15632,86013,42808,49030,34761,54152,49041,54045,11245,31997,97058,34518,52359,81493,18417,14491,52362,44395,63599,79405,50477,76727,60262,19638,25354,98308,20784,47057,90267,17087,16112,52837,87527,33197,45510,66124,73962,30243,25192,77254,91320,29264,94381,19535,52223,57401,17455,79943,29689,66042,91177,10756,15574,36671,96956,41563,42114,16584,75787,76609,22266,45418,65730,83673,82843,98607,24647,50159,39653,10539,14305,50398,14559,15563,51865,47332,88422,73458,43438,63058,15741,21977,87210,98327,96537,87222,53933,45726,69025,51221,66389,44735,20419,58801,77579,58183,73188,55722,78433,10302,68487,22796,96780,88917,60896,48687,54097,91746,70490,67243,97434,55219,20157,41165,90062,27473,89541,20570,16390,25823,20556,89473,76006,70567,34136,78977,87246,22406,37912,20024,38827,88436,25297,35201,72872,94516,17553,47367,97367,51082,76464,21250,87333,59003,14902,84491,40950,15488,56397,14962,60957,19866,26351,23423,52811,50651,58622,29842,81580,71897,37908,56281,19021,29784,15565,59384,55498,66922,52978,77928,29270,53115,73105,82686,99448,14722,65706,90410,54033,98151,49294,89744,66606,71210,55617,47781,61726,56234,86771,25875,48246,92077,88579,51382,75688,67294,95271,66859,57909,66789,75338,31217,99703,95876,28452,93469,91611,83111,26781,17025,91527,45299,47882,70604,92251,19023,99885,89248,45050,66068,63006,22857,60238,94496,93121,22745,58359,79736,15762,55189,89948,95804,25499,45325,57190,22085,50106,26525,76581,87480,64124,62094,60604,39729,31553,77328,33276,25812,95834,89840,19755,80666,77769,72128,61500,34324,20189,30855,96730,27321,21771,64694,22779,64191,86077,20516,13276,10988,41709,79351,77181,58803,58707,77293,43187,62087,53094,12615,75955,47749,60652,43965,38224,90627,49882,10287,55789,96358,82239,46032,33956,57860,71252,68622,73393,41254,18429,27463,62532,65056,49721,30278,32570,24042,36412,46647,22823,29984,83716,63240,16176,67348,55490,94170,66028,43613,12002,51474,19649,57359,20630,24004,77444,12634,82773,48763,99190,73067,42800,12020,12243,45487,50166,27379,71189,46193,15445,11475,89298,23016,89260,84740,46714,35130,63499,47385,99528,76316,33321,89319,26496,94635,76083,69001,79231,29453,18674,18807,44214,18693,53238,28471,86797,33523,79131,52111,90369,13942,52932,75141,15144,96737,34782,76904,54647,61407,93171,73137,89166,46906,73438,75197,33085,68466,81782,14198,71554,28078,66035,64219,81083,29184,14780,35422,48617,54447,60859,37836,29602,63458,45645,31634,88051,22701,47643,86914,60280,39610,12607,28916,41340,93065,74837,75966,52787,80372,51385,66976,19195,63557,25135,76000,27761,26882,79362,21270,43708,19212,55016,83663,69655,15943,85786,61676,44575,70577,97768,27539,25027,53242,58214,36881,91571,89364,68426,80221,74318,47335,93063,48422,66733,10571,99891,41164,63485,45489,50374,16043,53712,15811,51406,81598,37820,78804,15950,84436,29273,75827,95646,78595,15586,25890,44326,78845,52015,40778,35035,30763,34989,87485,45442,60802,46767,31999,64958,73348,65319,75649,58578,34977,34924,61055,33866,97472,76482,47543,86974,59397,11846,19650,36086,42934,90796,97302,62561,55846,44109,73118,90432,88615,74331,96605,83345,16092,55180,38128,13085,87883,42977,53234,36795,42437,69586,86378,92660,57444,60856,79477,62165,80747,41390,10101,20818,71983,77161,41682,81007,58248,80232,75859,52170,47773,32507,70972,49624,28373,79393,92163,75639,51411,19223,52154,65126,98644,59107,19613,23757,45902,36769,26238,45727,68146,39510,91585,73197,82161,79046,66209,98403,74861,14996,46207,40349,84420,57587,63068,41431,43400,21790,97877,70926,20882,79943,67325,53818,37035,29545,92458,54347,73160,28507,36502,43748,66302,31941,48908,42661,83896,57085,34110,41010,56947,25396,76969,60539,67269,32023,67756,22089,97327,98437,76888,85852,81241,25883,11877,51530,26254,67429,92432,34652,83805,22643,46298,86992,66739,70685,91047,78967,23161,54000,50348,58848,78647,43354,29321,66697,30268,26318,79188,65414,49265,64282,27056,66559,69255,98238,14549,20418,48934,56445,43785,89166,48684,23356,78995,94318,16136,21910,36747,63567,35432,48475,42514,71909,94076,14237,25272,97311,95460,22187,54208,24518,30256,57780,84299,45621,28274,35121,56238,18078,10621,87852,26074,41763,71039,39672,74712,41056,13417,62358,55231,91830,67025,69334,26948,20072,49045,52761,77764,61610,65278,9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Pruebas imágenes de pruebas con el algoritmo Selection Sort con tamaño 10^2:

Menor a Mayor:

Imagen que contiene Tabla

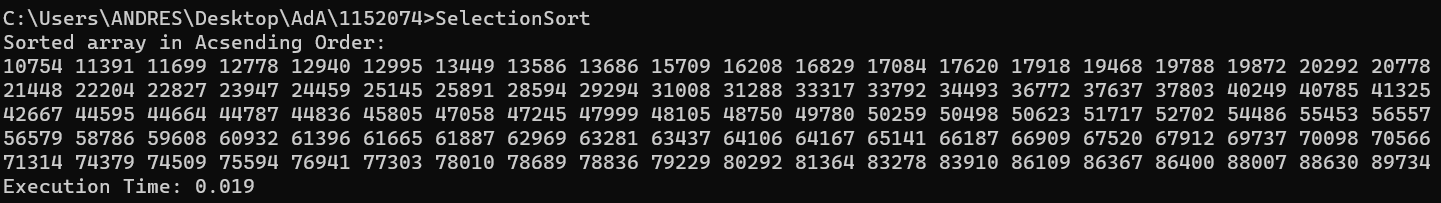
Descripción generada automáticamente

Mayor a Menor:

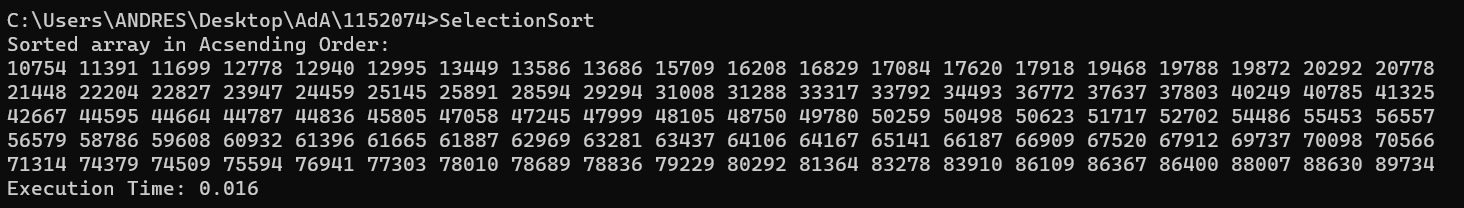
Texto

Descripción generada automáticamente con confianza media

Parcialmente Ordenado:

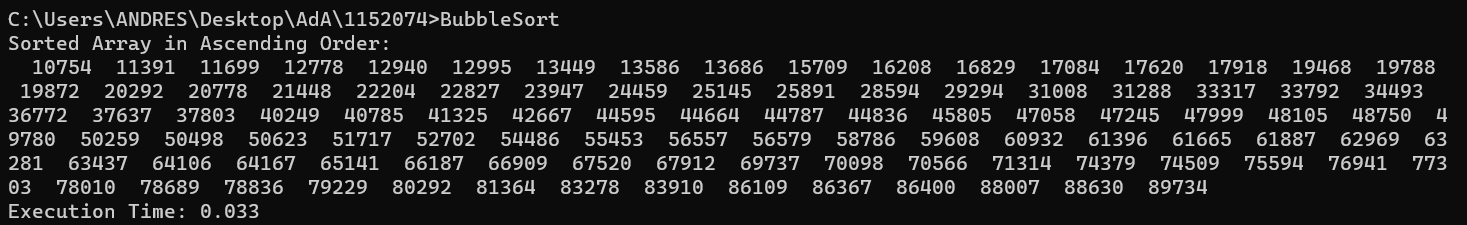


Desordenado:

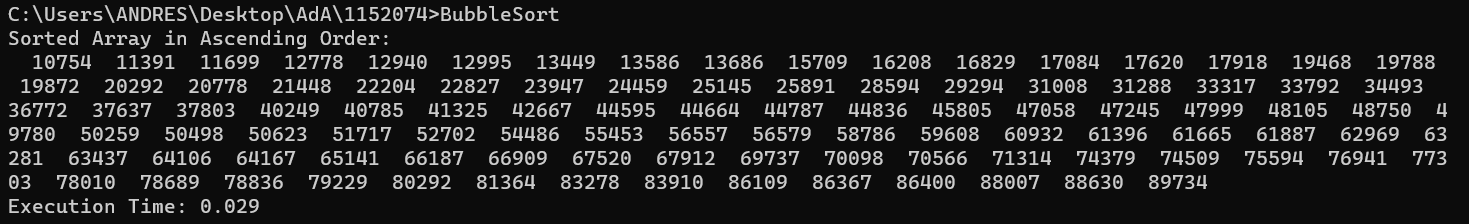


Pruebas imágenes de pruebas con el algoritmo Bubble Sort con tamaño 10^2:

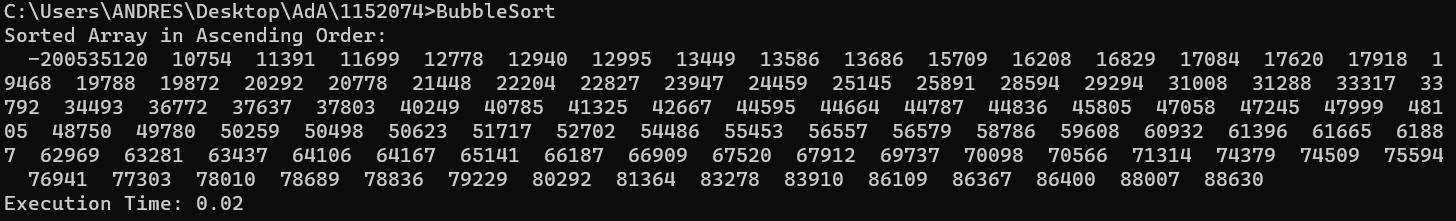
Menor a Mayor:



Mayor a Menor:



Parcialmente Ordenado:



Desordenado:

Texto

Descripción generada automáticamente con confianza baja

Pruebas imágenes de pruebas con el algoritmo Insertion Sort con tamaño 10^2:

Menor a Mayor:

Imagen que contiene Tabla

Descripción generada automáticamente

Mayor a Menor:

Imagen que contiene Texto

Descripción generada automáticamente

Parcialmente Ordenado:

Imagen que contiene Tabla

Descripción generada automáticamente

Desordenado:

Imagen que contiene Tabla

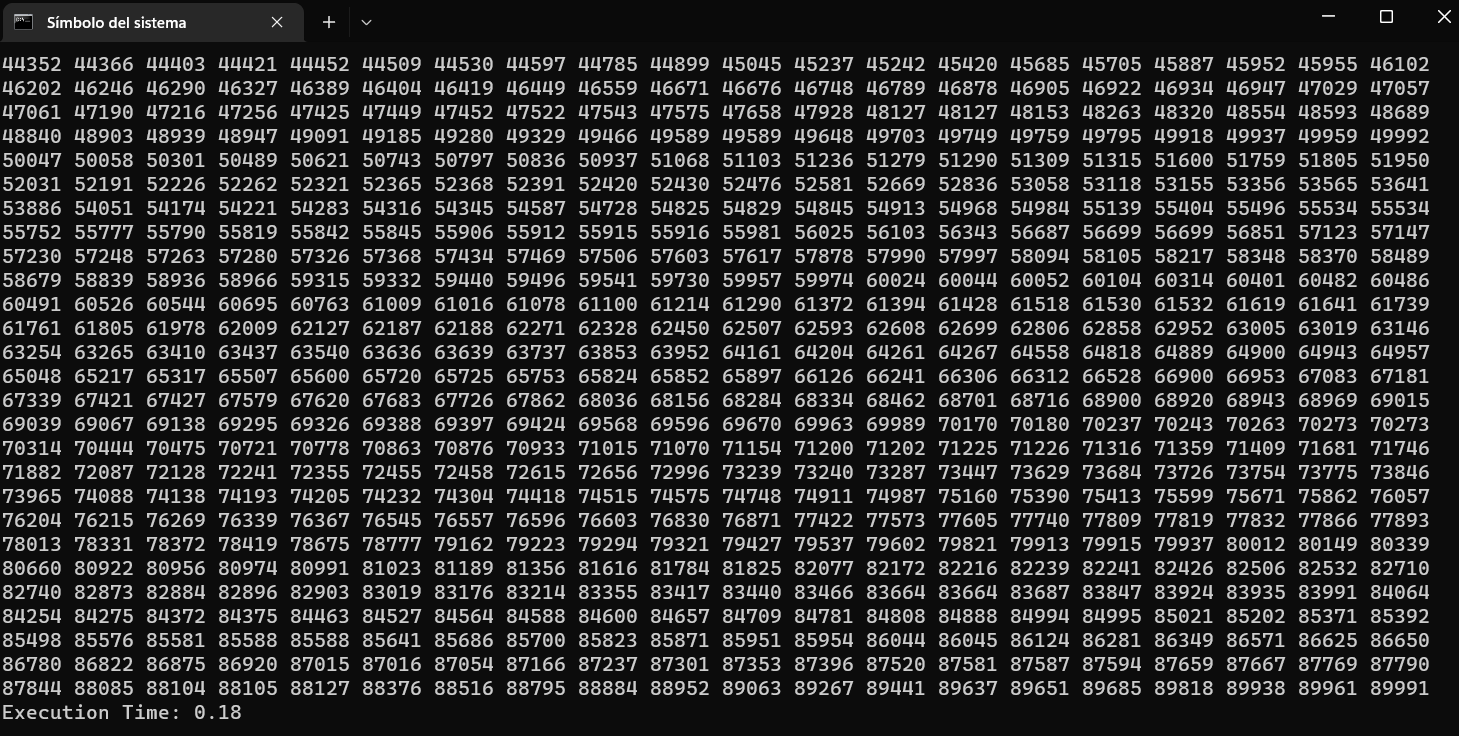
Descripción generada automáticamente

Pruebas imágenes de pruebas con el algoritmo Insertion Sort con tamaño 10^3:

Menor a Mayor:



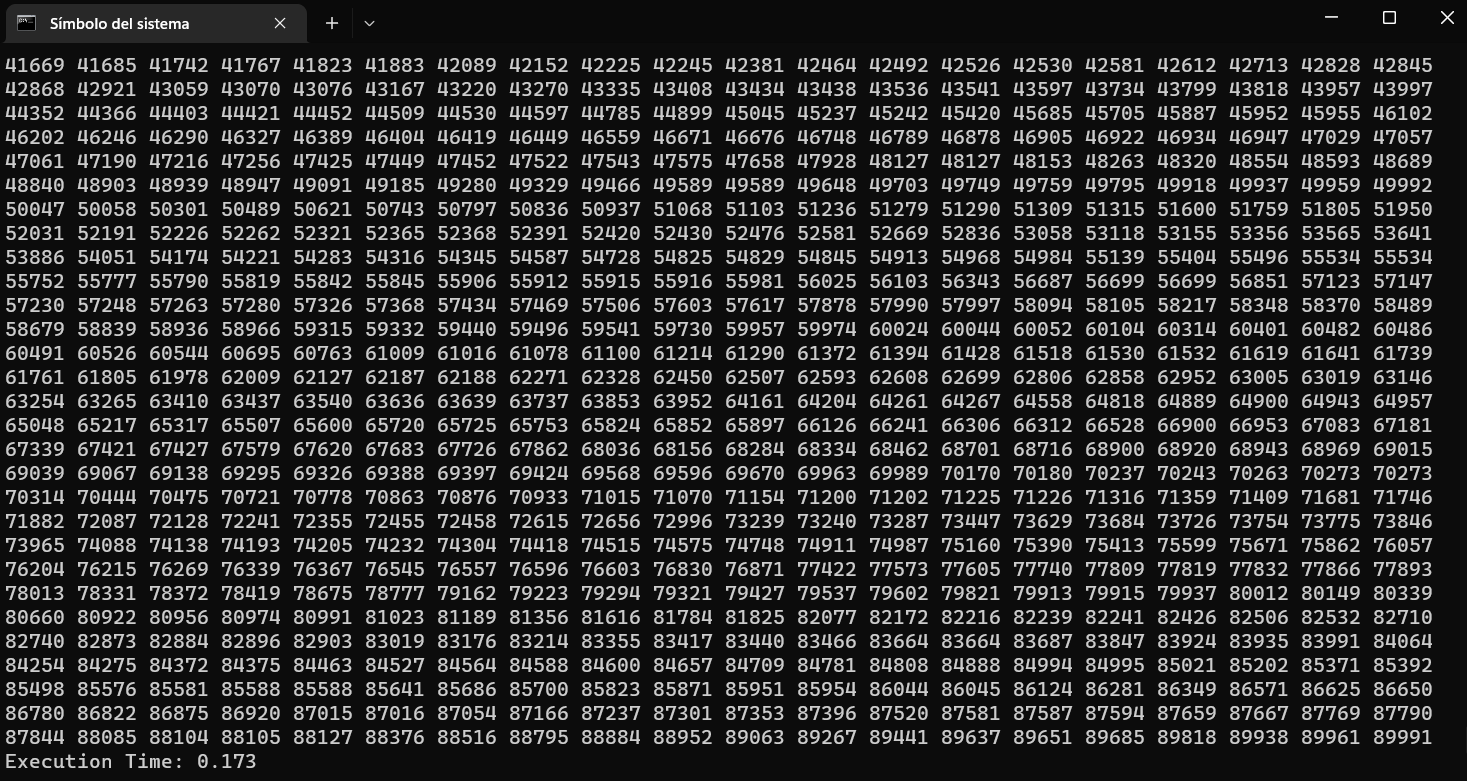
Mayor a Menor:



Parcialmente Ordenando:



Desordenado:



Pruebas imágenes de pruebas con el algoritmo Bubble Sort con tamaño 10^3:

Menor a Mayor:



Mayor a Menor:

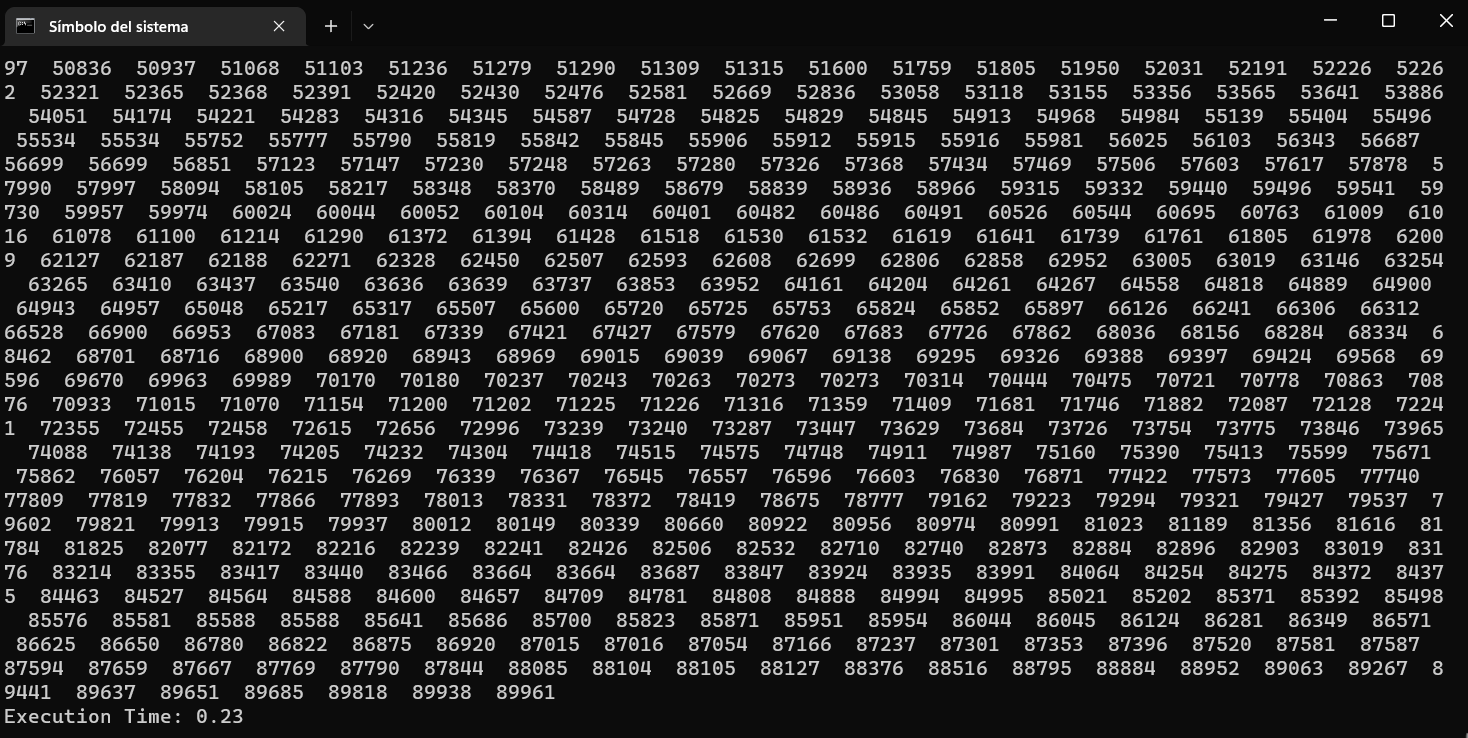


Parcialmente Ordenado:

Texto

Descripción generada automáticamente

Desordenado:



Pruebas imágenes de pruebas con el algoritmo Selection Sort con tamaño 10^3:

Menor a Mayor:



Mayor a Menor:

Texto

Descripción generada automáticamente

Parcialmente Ordenado:



Desordenado:

Imagen que contiene computadora, tabla

Descripción generada automáticamente

Pruebas imágenes de pruebas con el algoritmo Selection Sort con tamaño 10^6:

Menor a Mayor:

Mayor a Menor:

Parcialmente Ordenado:

Desordenado: